

# PIZZA SALES DATA ANALYSIS

## SQL PROJECT

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# OBJECTIVE

- Analyze pizza sales data using SQL
- Identify revenue distribution and sales patterns
- Highlight top-selling pizzas and sizes
- Showcase SQL skills and data insights



## **DATASET:**

- **Tables: pizzas, pizza\_types, orders, order\_details**
- **Contains sales transactions and product details**

## **TOOLS:**

- **MySQL**

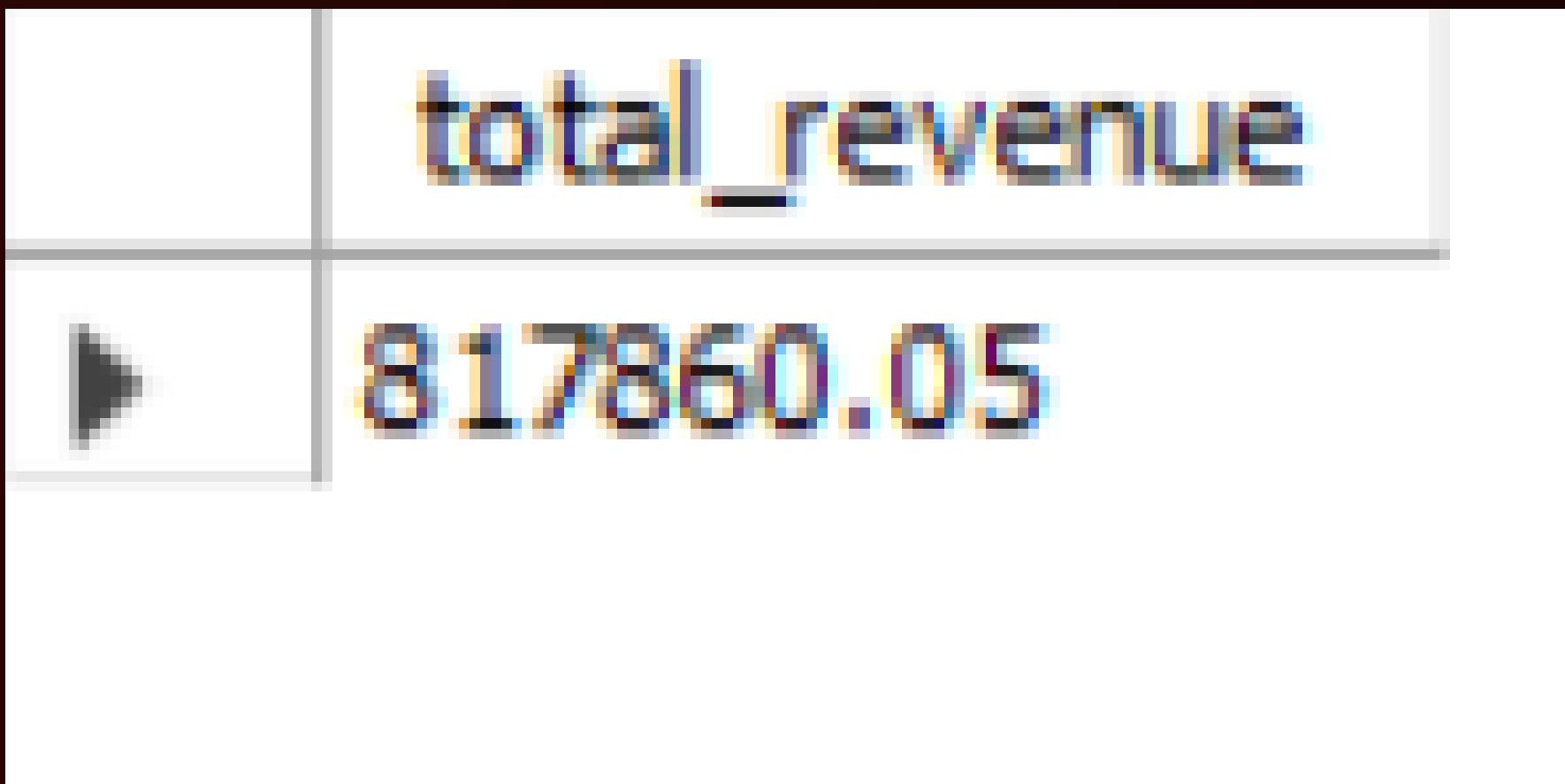
1. Retrieve the total number of orders placed.

```
SELECT  
    COUNT(order_id) AS total_order  
FROM  
    orders;
```

	total_order
▶	21350

2. Calculate the total revenue generated from pizza sales.

```
SELECT
    ROUND(SUM(orders_details.quantity * pizzas.price),2) AS total_revenue
FROM
    orders_details
    JOIN
    pizzas ON pizzas.pizza_id = orders_details.pizza_id;
```



### 3. Identify the highest-priced pizza.

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```
SELECT
    pizza_types.name, pizzas.price
FROM
    pizza_types
    JOIN
    pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id
ORDER BY pizzas.price DESC
LIMIT 1;
```

	name	price
▶	The Greek Pizza	35.95

4. Identify the most common pizza size ordered.

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```
SELECT
    pizzas.size, COUNT(orders_details.quantity) AS order_count
FROM
    pizzas
JOIN
    orders_details ON pizzas.pizza_id = orders_details.pizza_id
GROUP BY pizzas.size
ORDER BY order_count DESC;
```

	size	order_count
	L	18526
	M	15385
	S	14137
	XL	544
	XXL	28

5. List the top 5 most ordered pizza types along with their quantities.

SELECT

    pizza\_types.name,  
    SUM(orders\_details.quantity) AS quantity

FROM

    pizza\_types

    JOIN

    pizzas ON pizza\_types.pizza\_type\_id = pizzas.pizza\_type\_id

    JOIN

    orders\_details ON orders\_details.pizza\_id = pizzas.pizza\_id

GROUP BY pizza\_types.name

ORDER BY quantity DESC

LIMIT 5;

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<b>name</b>	<b>quantity</b>
The Classic Deluxe Pizza	2453
The Barbecue Chicken Pizza	2432
The Hawaiian Pizza	2422
The Pepperoni Pizza	2418
The Thai Chicken Pizza	2371

6. Join the necessary tables to find the total quantity of each pizza category ordered.

SELECT

  pizza\_types.category,  
  SUM(orders\_details.quantity) AS total\_quantity

FROM

  pizza\_types

  JOIN

  pizzas ON pizza\_types.pizza\_type\_id = pizzas.pizza\_type\_id

  JOIN

  orders\_details ON orders\_details.pizza\_id = pizzas.pizza\_id

GROUP BY pizza\_types.category;

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category	total_quantity
Classic	14888
Veggie	11649
Supreme	11987
Chicken	11050

## 7. Determine the distribution of orders by hour of the day.

SELECT

```
HOUR(order_time) AS hours, COUNT(order_id) AS count_of_order  
FROM  
    orders  
GROUP BY HOUR(order_time);
```

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hours	count_of_order
11	1231
12	2520
13	2455
14	1472
15	1468
16	1920
17	2336
18	2399
19	2009
20	1642
21	1198
22	663
23	28
10	8
9	1

8. Join relevant tables to find the category-wise distribution of pizzas.

SELECT

category, COUNT(name) AS count\_of\_pizza

FROM

pizza\_types

GROUP BY category;

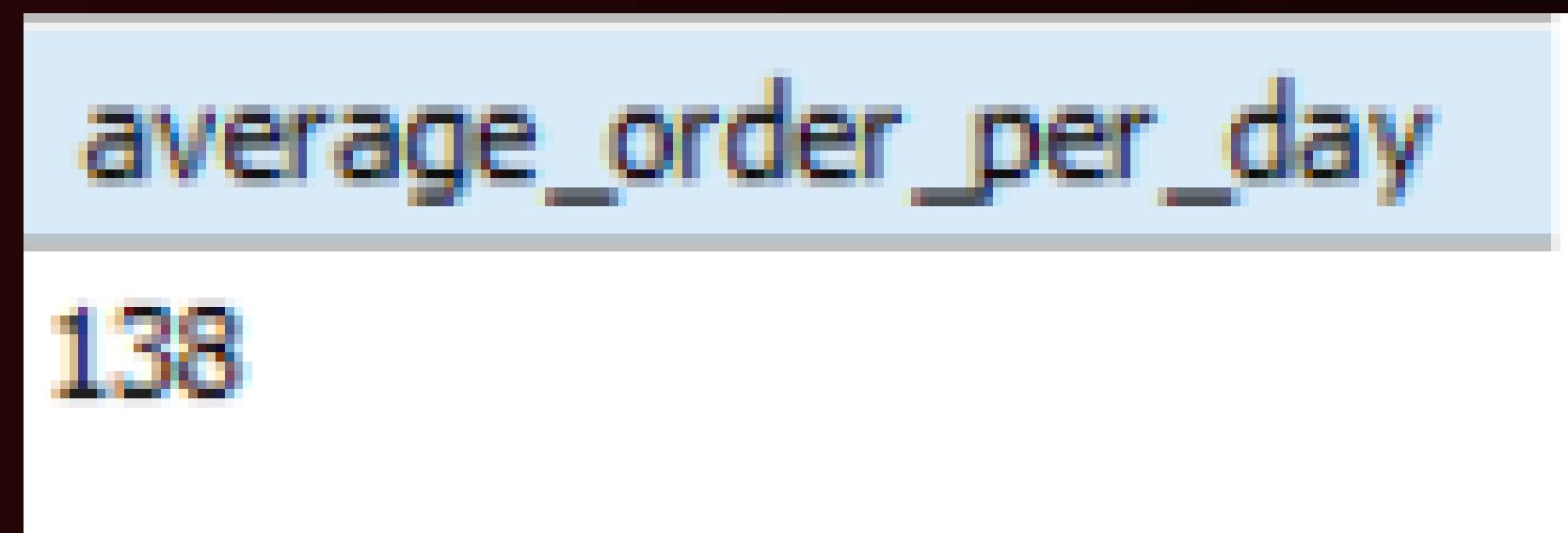
category	count_of_pizza
Chicken	6
Classic	8
Supreme	9
Veggie	9

9. Group the orders by date and calculate the average number of pizzas ordered per day.

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```
SELECT  
    ROUND(AVG(quantity), 0) AS average_order_per_day  
FROM  
(SELECT  
    orders.order_date, SUM(orders_details.quantity) AS quantity  
FROM  
    orders  
JOIN orders_details ON orders.order_id = orders_details.order_id  
GROUP BY orders.order_date) AS order_quantity;
```



10. Determine the top 3 most ordered pizza types based on revenue.

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SELECT

```
    pizza_types.name,  
    ROUND(SUM(orders_details.quantity * pizzas.price),  
        2) AS revenue
```

FROM

```
pizza_types
```

JOIN

```
pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id
```

JOIN

```
orders_details ON orders_details.pizza_id = pizzas.pizza_id
```

GROUP BY pizza\_types.name

ORDER BY revenue DESC

LIMIT 3;

name	revenue
The Thai Chicken Pizza	43434.25
The Barbecue Chicken Pizza	42768
The California Chicken Pizza	41409.5

11. Calculate the percentage contribution of each pizza type to total revenue.

SELECT

```
    pizza_types.category,  
    CONCAT(ROUND(SUM(orders_details.quantity * pizzas.price) / (SELECT  
        ROUND(SUM(orders_details.quantity * pizzas.price),  
        2) AS total_sale
```

FROM

```
    orders_details
```

JOIN

```
    pizzas ON pizzas.pizza_id = orders_details.pizza_id) * 100,  
    2),
```

'%') AS revenue\_percentage

FROM

```
    pizza_types
```

JOIN

```
    pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id
```

JOIN

```
    orders_details ON orders_details.pizza_id = pizzas.pizza_id
```

GROUP BY pizza\_types.category

ORDER BY revenue\_percentage DESC;

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category	revenue_percentage
Classic	26.91%
Supreme	25.46%
Chicken	23.96%
Veggie	23.68%

## 12. Analyze the cumulative revenue generated over time.

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```
SELECT order_date, ROUND(SUM(revenue) OVER(ORDER BY order_date),2) AS  
cumulative_revenue FROM  
(SELECT  
    orders.order_date,  
    ROUND(SUM(orders_details.quantity * pizzas.price),  
        2) AS revenue  
FROM  
    orders_details  
    JOIN  
    pizzas ON pizzas.pizza_id = orders_details.pizza_id  
    JOIN  
    orders ON orders.order_id = orders_details.order_id  
GROUP BY orders.order_date) AS sales;
```

13. Determine the top 3 most ordered pizza types based on revenue for each pizza category.

```
SELECT category, name, revenue FROM
(SELECT category, name, revenue, RANK() OVER(PARTITION BY category ORDER BY revenue
DESC) AS rn FROM
(SELECT
pizza_types.category,
pizza_types.name,
ROUND(SUM(orders_details.quantity * pizzas.price),
2) AS revenue
FROM
pizza_types
JOIN
pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id
JOIN
orders_details ON orders_details.pizza_id = pizzas.pizza_id
GROUP BY pizza_types.category , pizza_types.name) AS a) AS b
WHERE rn <= 3;
```

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category	name	revenue
Chicken	The Thai Chicken Pizza	43434.25
Chicken	The Barbecue Chicken Pizza	42768
Chicken	The California Chicken Pizza	41409.5
Classic	The Classic Deluxe Pizza	38180.5
Classic	The Hawaiian Pizza	32273.25
Classic	The Pepperoni Pizza	30161.75
Supreme	The Spicy Italian Pizza	34831.25
Supreme	The Italian Supreme Pizza	33476.75
Supreme	The Sicilian Pizza	30940.5
Veggie	The Four Cheese Pizza	32265.7
Veggie	The Mexicana Pizza	26780.75
Veggie	The Five Cheese Pizza	26066.5



# THANK YOU