

Project Announcement:

Pizza Sales Analysis 😲



I'm excited to share my latest project, where I deepdived into pizza sales data to extract valuable insights.



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Pizza Sales Analysis Project Overview:

In this project, I explored pizza sales data to uncover valuable insights:

Total Orders & Revenue:

Determined the total orders placed and revenue generated.

Top Pizzas:

Identified the highest-priced pizza, most popular size, and top 5 ordered pizzas

Advanced Analytics:

Performed category-wise distribution, cumulative revenue analysis, and identified the top 3 pizzas by revenue for each category.

Retrieve the total number of orders placed.

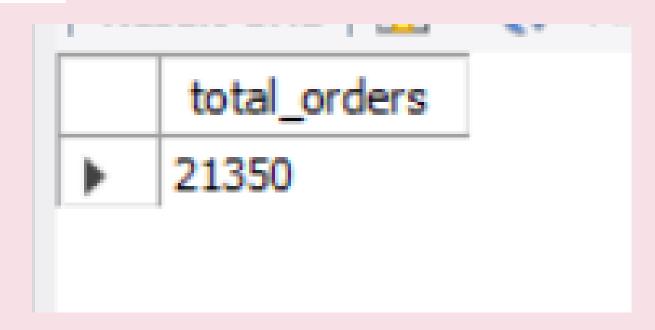
```
-- Retrieve the total number of orders placed.

SELECT

COUNT(order_id) AS total_orders

FROM

orders;
```



Calculate the total revenue generated from pizza sales.

```
-- Calculate the total revenue generated from pizza sales.

SELECT

ROUND(SUM(order_details.quantity * pizzas.price),

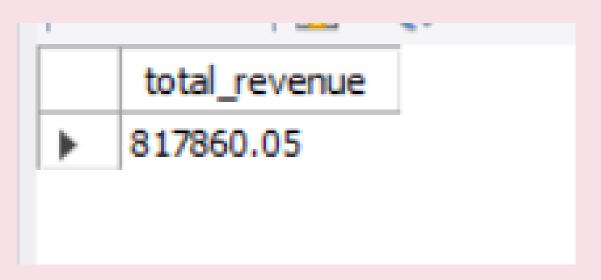
2) AS total_revenue

FROM

order_details

JOIN

pizzas ON pizzas.pizza_id = order_details.pizza_id
```

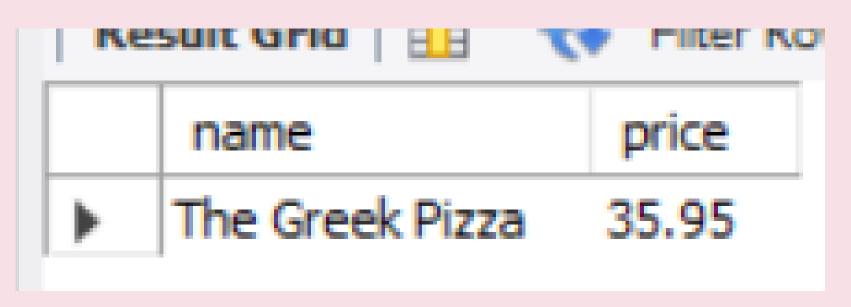


Identify the highest-priced pizza.

```
-- Identify the highest-priced pizza.--

SELECT
    pizza_types.name, pizzas.price
FROM
    pizza_types
        JOIN
    pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id

ORDER BY price DESC
LIMIT 1;
```



Identify the most common pizza size ordered

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

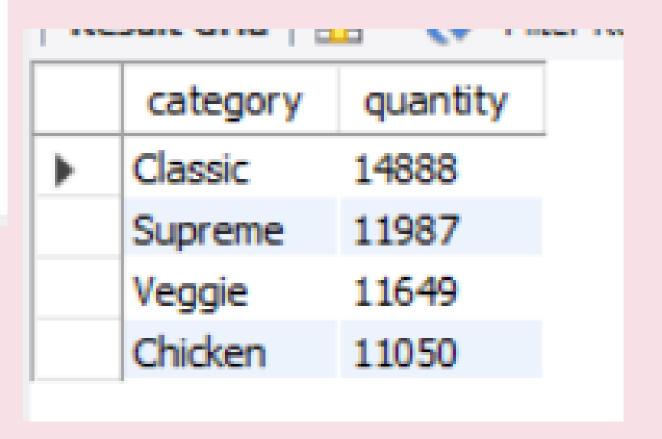
List the top 5 most ordered pizza types along with their quantities

```
-- List the top 5 most ordered pizza types along with their quantities.
SELECT
    pizza_types.name,
    SUM(order_details.quantity) AS Top_5_most_ordered_pizza
FROM
    pizza_types
        JOIN
    pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id
        JOIN
    order_details ON pizzas.pizza_id = order_details.pizza_id
GROUP BY name
ORDER BY Top_5_most_ordered_pizza DESC
LIMIT 5;
```

	name	Top_5_most_ordered_pizza
•	The Classic Deluxe Pizza	2453
	The Barbecue Chicken Pizza	2432
	The Hawaiian Pizza	2422
	The Pepperoni Pizza	2418
	The Thai Chicken Pizza	2371

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

```
-- Join the necessary tables to find the total quantity
  of each pizza category ordered.
SELECT
    pizza_types.category,
    SUM(order_details.quantity) AS quantity
FROM
    pizza_types
        JOIN
    pizzas ON pizzas.pizza_type_id = pizza_types.pizza_type_id
        JOIN
   order_details ON order_details.pizza_id = pizzas.pizza_id
GROUP BY category
ORDER BY quantity DESC;
```



Determine the distribution of orders by hour of the day

```
-- Determine the distribution of orders by hour of the day.

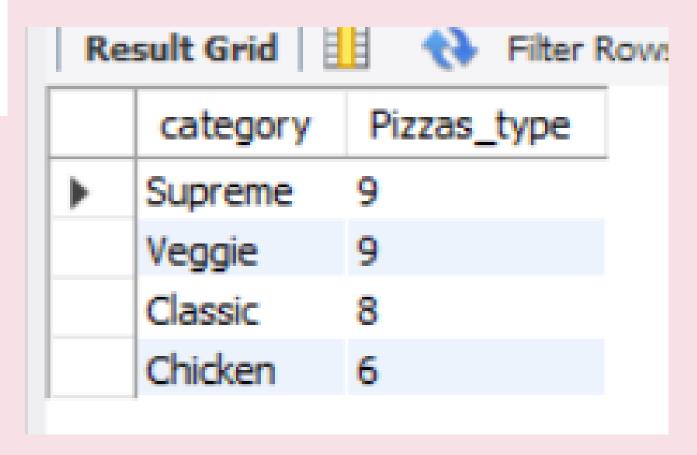
SELECT
HOUR(order_time) AS hour, COUNT(order_id) AS order_count
FROM
orders

GROUP BY HOUR(order_time);
```

hour(order_time)	count(order_id)
14	1472
15	1468
16	1920
17	2336
18	2399
19	2009
20	1642
21	1198
22	663
23	28
10	8

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

```
-- Join relevant tables to find the
-- category-wise distribution of pizzas.
SELECT
    category, COUNT(name) AS Pizzas_type
FROM
    pizza_types
GROUP BY category
ORDER BY pizzas_type DESC;
```



Determine the top 3 most ordered pizza types based on revenue

```
Determine the top 3 most ordered pizza types based on revenue.
SELECT
   pizza_types.name,
   SUM(order_details.quantity * pizzas.price) AS revenue
FROM
   pizza_types
       JOIN
   pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id
       JOIN
   order_details ON pizzas.pizza_id = order_details.pizza_id
GROUP BY 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
```

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

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

SELECT

round(AVG(total_quantity),0 )AS avg_pizza_ordered_per_day

FROM

(SELECT

orders.order_date,

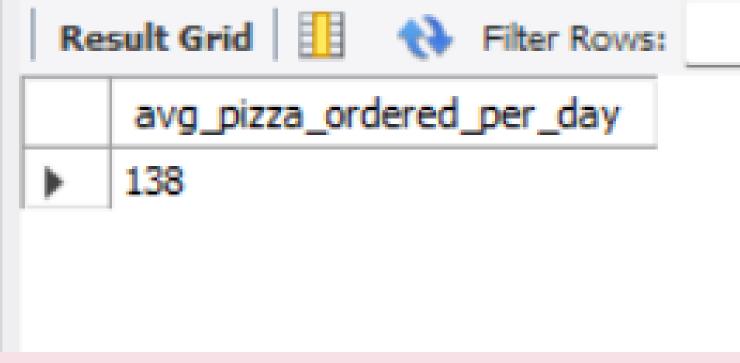
SUM(order_details.quantity) AS total_quantity

FROM

orders

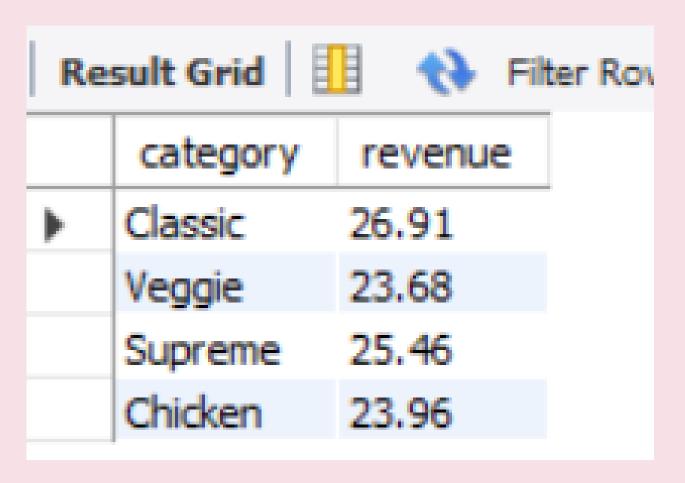
JOIN order_details ON orders.order_id = order_details.order_id

GROUP BY order_date) AS Per_day;
```



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

```
-- Calculate the percentage contribution of each pizza type to total revenu
SELECT
   pizza_types.category,
   (ROUND(SUM(order_details.quantity * pizzas.price) / (SELECT
                   ROUND(SUM(order_details.quantity * pizzas.price),
                               AS total_revenue
               FROM
                   order_details
                       JOIN
                   pizzas ON pizzas.pizza_id = order_details.pizza_id) *
           AS revenue
FROM
   pizza_types
        JOIN
   pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id
        JOIN
   order_details ON order_details.pizza_id = pizzas.pizza_id
GROUP BY category;
```



Analyze the cumulative revenue generated over time

```
-- Analyze the cumulative revenue generated over time
SELECT
   order_date,
   SUM(revenue) OVER (ORDER BY order_date) AS cumulative_revenue
FROM
    (SELECT
       orders.order_date,
       SUM(order_details.quantity * pizzas.price) AS revenue
    FROM
       order_details
    JOIN
        pizzas ON order_details.pizza_id = pizzas.pizza_id
    JOIN
       orders ON orders.order_id = order_details.order_id
    GROUP BY
       orders.order_date
    ) AS sales
ORDER BY
    order_date;
```

Result Grid		♦ Filter Rows:
	order_date	cumulative_revenue
	2015-01-13	29831.300000000003
	2015-01-14	32358.700000000004
	2015-01-15	34343.50000000001
	2015-01-16	36937.65000000001
	2015-01-17	39001.75000000001
_	li e	

Retrieve top 3 pizzas by revenue for each category

```
-- Retrieve top 3 pizzas by revenue for each category
SELECT
    name,
    revenue
FROM
    (SELECT
       pizza_types.category,
       pizza_types.name,
       SUM(order_details.quantity * pizzas.price) AS revenue,
       RANK() OVER(PARTITION BY pizza_types.category ORDER BY SUM(order_details.quantity * pizzas.price) DESC) AS rn
    FROM
       pizza_types
    JOIN
       pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id
    JOIN
       order_details ON order_details.pizza_id = pizzas.pizza_id
    GROUP BY
       pizza_types.category,
                                                                                                      Result Grid
                                                                                                                          Filter Rows:
       pizza_types.name
                                                                                                                                                                  Exp
    ) AS ranked pizzas
                                                                                                          name
                                                                                                                                          revenue
WHERE
                                                                                                         The California Chicken Pizza
                                                                                                                                         41409.5
    rn <= 3;
                                                                                                         The Classic Deluxe Pizza
                                                                                                                                         38180.5
                                                                                                         The Hawaiian Pizza
                                                                                                                                         32273.25
                                                                                                         The Pepperoni Pizza
                                                                                                                                         30161.75
                                                                                                         The Spicy Italian Pizza
                                                                                                                                         34831.25
                                                                                                     Result 5 x
```