Pizza Sales - SQL

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Background

Hello! My name is Mohd Muinuddin. I have utilized the pizza sales dataset . The SQL project combines data from the orders, order details, pizza, and pizza type tables to create a dynamic sales analysis, highlighting key metrics such as best-selling pizzas, order volume trends, and revenue by pizza type.

Project Goals

- Retrieve the total number of orders placed.
- Calculate the total revenue generated from pizza sales.
- Identify the highest-priced pizza.
- Identify the most common pizza size ordered.
- List the top 5 most ordered pizza types along with their quantities.
- Find the total quantity of each pizza category ordered.
- Determine the distribution of orders by hour of the day.
- Find the category-wise distribution of pizzas.
- Group the orders by date and calculate the average number of pizzas ordered per day.
- Determine the top 3 most ordered pizza types based on revenue.

Retrieve the total number of orders placed

```sql
SELECT
    COUNT(order_id) AS total_orders
FROM
    orders;
```

Result Grid

total_orders
21350

Calculate the total revenue generated from pizza sales

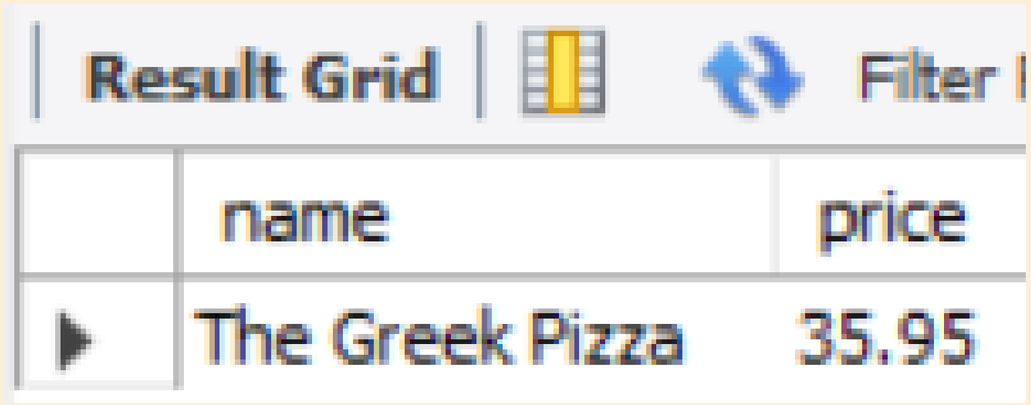
```sql
SELECT
    ROUND(SUM(orders_details.quantity * pizzas.price),
            2) AS total
FROM
    orders_details
        JOIN
    pizzas ON pizzas.pizza_id = orders_details.pizza_id;
```

Result Grid

	total
▶	817860.05

Identify the highest-priced pizza.

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



Identify the most common pizza size ordered

```sql
SELECT
    pizzas.size,
    COUNT(orders_details.order_details_id) 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
LIMIT 1;
```

Result Grid

size	order_count
L	18526

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

```sql
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;
```

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

Find the total quantity of each pizza category ordered

```sql
SELECT
    pizza_types.category,
    SUM(orders_details.quantity) AS Total_quantity
FROM
    pizza_types
        JOIN
    pizzas ON pizzas.pizza_type_id = pizza_types.pizza_type_id
        JOIN
    orders_details ON orders_details.pizza_id = pizzas.pizza_id
GROUP BY pizza_types.category
ORDER BY Total_quantity DESC;
```

	category	Total_quantity
▶	Classic	14888
	Supreme	11987
	Veggie	11649
	Chicken	11050

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

```sql
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;
```

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

Determine the distribution of orders by hour of the day

```sql
SELECT
    HOUR(order_time), COUNT(order_id) AS order_count
FROM
    orders
GROUP BY HOUR(order_time);
```

hour(order_time)	order_count
11	1231
12	2520
13	2455
14	1472
15	1468
16	1920
17	2336
18	2399
19	2009
20	1642
21	1198

Find the category-wise distribution of pizzas

```sql
SELECT
    category, COUNT(name)
FROM
    pizza_types
GROUP BY category;
```

category	COUNT(name)
Chicken	6
Classic	8
Supreme	9
Veggie	9

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

```sql
SELECT
    ROUND(AVG(quantity), 0) AS avg_pizzas_ordered_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;
```

avg_pizzas_ordered_per_day
138

Find the top 3 most ordered pizza based on the revenue

```sql
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

Calculate the category-wise contribution of each pizza type to total revenue

```sql
SELECT
    pizza_types.category,
    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
ORDER BY revenue DESC
LIMIT 3;
```

category	revenue
Classic	220053.1
Supreme	208197
Chicken	195919.5

```sql
WITH RevenueCTE AS (
    SELECT
        pizza_types.category,
        pizza_types.name,
        SUM(orders_details.quantity * pizzas.price) 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
),
RankedCTE AS (
    SELECT
        category,
        name,
        revenue,
        RANK() OVER (PARTITION BY category ORDER BY revenue DESC) AS rn
    FROM
        RevenueCTE
)
SELECT
    category, name, revenue
FROM
    RankedCTE
WHERE
    rn <= 3;
```

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

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	32265.70000000065
Veggie	The Mexicana Pizza	26780.75

Thank You