Pizza Mania’s

SQL Project on Pizza sales

Pizza Mania’s

👤About Me:

- Name: Jay Jayesh Joshi
- Experience: 9 years of experience in a non-data analytics field, now transitioning into data analytics
- Skills: SQL, Python, Power BI, Tableau, Excel, R
- Certification: Data Analyst course from Raj Computer, Ghatkopar
- Goal: To leverage data analytics for business insights and decision-making

📊 Project Overview:

- Objective: Analyzing Pizza Hut sales data to derive business insights
- Technology Used: SQL
- Key Focus Areas:
  - Sales performance analysis
  - Customer order trends
  - Popular pizza categories
  - Revenue optimization

"Using SQL queries to extract, analyze, and interpret data for better business decisions."

Data Model & Schema Overview:-

Pizza Mania's

📂 Data Model Overview:

The dataset consists of four related tables:

pizzas – Contains pizza details like price, size, and type

pizza_types – Defines categories, ingredients, and names of pizzas

orders – Stores order information like order date and time

order_details – Links orders with pizzas and records quantities sold

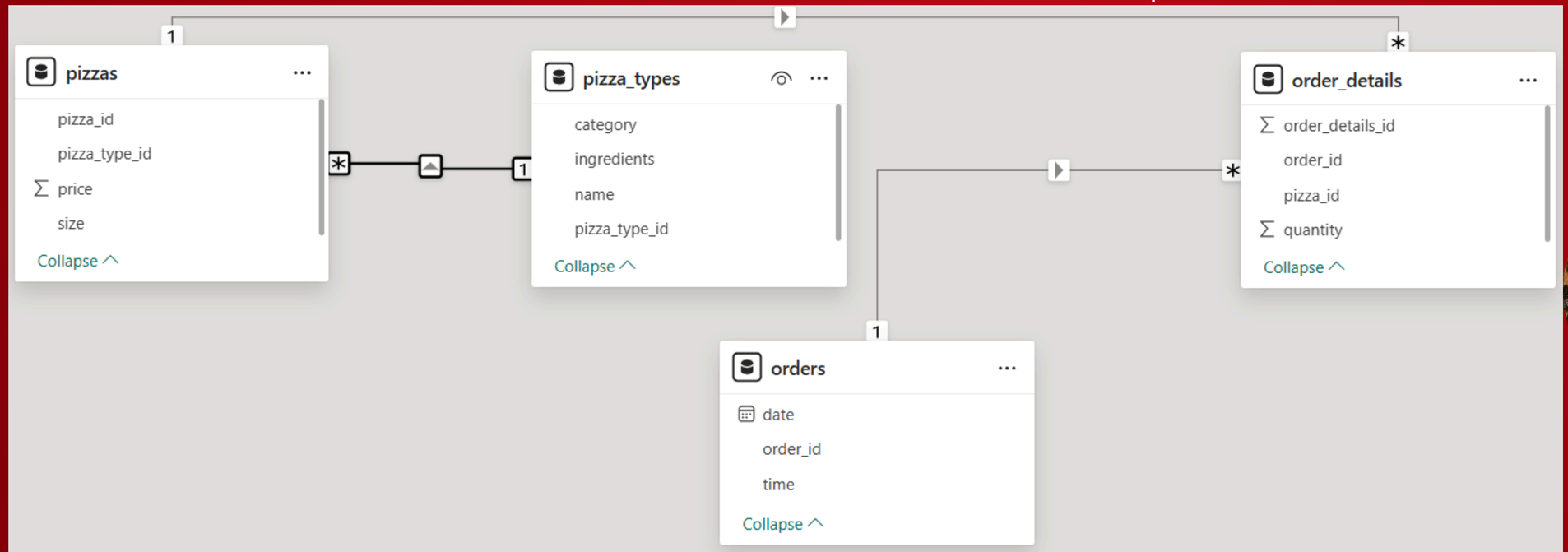
🔗 Relationships in the Data Model:

pizzas is linked to pizza_types through pizza_type_id

orders is linked to order_details through order_id

pizzas is linked to order_details through pizza_id

These relationships form a star schema for efficient querying



RETRIEVE THE TOTAL NUMBER OF ORDERS PLACE.

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

Results | Messages

	total_orders
1	21350

CALCULATE THE TOTAL REVENUE GENERATED FROM PIZZA SALES.

```
SELECT
    ROUND(SUM(order_details1.quantity * pizzas.price), 2) AS total_sales
FROM order_details1
JOIN pizzas
    ON pizzas.pizza_id = order_details1.pizza_id;
```

Results | Messages

	total_sales
1	817860.05

IDENTIFY THE HIGHEST-PRICED PIZZA.

```sql
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;
```

Results | Messages

	name	price
1	The Greek Pizza	35.950000762939

Pizza Mania's

LIST THE TOP 5 MOST ORDERED PIZZA TYPES ALONG WITH THEIR QUANTITIES

```sql
SELECT
    pizza_types.name,
    SUM(order_details1.quantity) AS quantity
FROM pizza_types
JOIN pizzas
    ON pizza_types.pizza_type_id = pizzas.pizza_type_id
JOIN order_details1
    ON order_details1.pizza_id = pizzas.pizza_id
GROUP BY pizza_types.name
ORDER BY quantity DESC
LIMIT 5;
```

Results | Messages

	name	quantity
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

JOIN THE NECESSARY TABLES TO FIND THE TOTAL QUANTITY OF EACH PIZZA CATEGORY ORDERED.

```sql
SELECT
    pizza_types.category,
    SUM(order_details1.quantity) AS quantity
FROM pizza_types
JOIN pizzas
    ON pizza_types.pizza_type_id = pizzas.pizza_type_id
JOIN order_details1
    ON order_details1.pizza_id = pizzas.pizza_id
GROUP BY pizza_types.category
ORDER BY quantity DESC;
```

Results | Messages

	category	quantity
1	Classic	14888
2	Supreme	11987
3	Veggie	11649
4	Chicken	11050

Pizza Mania's

GROUP THE ORDERS BY DATE AND CALCULATE THE AVERAGE NUMBER OF PIZZAS ORDERED PER DAY.

```sql
SELECT
    ROUND(AVG(quantity), 0) AS avg_pizza_ordered_per_day
FROM (
    SELECT
        orders.date,
        SUM(order_details1.quantity) AS quantity
    FROM orders
    JOIN order_details1
        ON orders.order_id = order_details1.order_id
    GROUP BY orders.date
) AS order_quantity;
```

Results | Messages

	avg_pizza_ordered_per_day
1	138

DETERMINE THE TOP 3 MOST ORDERED PIZZA TYPES BASED ON REVENUE

```sql
SELECT
    pizza_types.name,
    SUM(order_details1.quantity * pizzas.price) AS revenue
FROM pizza_types
JOIN pizzas
    ON pizza_types.pizza_type_id = pizzas.pizza_type_id
JOIN order_details1
    ON order_details1.pizza_id = pizzas.pizza_id
GROUP BY pizza_types.name
ORDER BY revenue DESC
LIMIT 3;
```

Results | Messages

	name	revenue
1	The Thai Chicken Pizza	43434.25
2	The Barbecue Chicken Pizza	42768
3	The California Chicken Pizza	41409.5

Pizza Mania's

CALCULATE THE PERCENTAGE CONTRIBUTION OF EACH PIZZA TYPE TO TOTAL REVENUE

```sql
SELECT
    pizza_types.category,
    ROUND(
        SUM(order_details1.quantity * pizzas.price) /
        (
            SELECT
                ROUND(SUM(order_details1.quantity * pizzas.price), 2)
            FROM order_details1
            JOIN pizzas
                ON pizzas.pizza_id = order_details1.pizza_id
        ) * 100,
        2
    ) AS revenue_percentage
FROM pizza_types
JOIN pizzas
    ON pizza_types.pizza_type_id = pizzas.pizza_type_id
JOIN order_details1
    ON order_details1.pizza_id = pizzas.pizza_id
GROUP BY pizza_types.category
ORDER BY revenue_percentage DESC;
```

Results | Messages

	category	revenue
1	Classic	26.91
2	Supreme	25.46
3	Chicken	23.96
4	Veggie	23.68

Pizza Mania's

DETERMINE THE TOP 3 MOST ORDERED PIZZA TYPES BASED ON REVENUE FOR EACH PIZZA CATEGORY.

```sql
SELECT
    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,
            SUM(order_details1.quantity * pizzas.price) AS revenue
        FROM pizza_types
        JOIN pizzas
            ON pizza_types.pizza_type_id = pizzas.pizza_type_id
        JOIN order_details1
            ON order_details1.pizza_id = pizzas.pizza_id
        GROUP BY pizza_types.category, pizza_types.name
    ) AS a
) AS b
WHERE rn <= 3;
```

Results | Messages

	name	revenue
1	The Thai Chicken Pizza	43434.25
2	The Barbecue Chicken Pizza	42768
3	The California Chicken Pizza	41409.5
4	The Classic Deluxe Pizza	38180.5
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
9	The Sicilian Pizza	30940.5
10	The Four Cheese Pizza	32265.7010040283
11	The Mexicana Pizza	26780.75
12	The Five Cheese Pizza	26066.5

Pizza Mania's

🎉 Thank You! 🎉

Main Content:

✅ Summary of Key Learnings :

Data analysis using SQL helped derive insights into top-selling pizzas, revenue distribution, and order patterns. Advanced SQL functions like joins, aggregations, window functions (RANK()), and subqueries were used for deep analysis.

✅ Acknowledgments:

Tools Used: MySQL / PostgreSQL / SQL Server (mention the SQL platform you used). Techniques Used: Grouping, Aggregations, Window Functions, Ranking, and Revenue Analysis

✅ Next Steps:

Further analysis can include customer behavior trends, seasonal sales variations, and pricing strategy optimization.

Implement visualizations using Power BI, Tableau, or Excel for better insights.

Contact & Connect:
www.linkedin.com/in/jay-joshi-97667114b
GitHub : https://github.com/jayjoshi02

🚀 Excited to continue exploring data analytics!
🙏 Thanks for watching & learning with me!

Pizza Mania’s

Thank you!