🍕 Pizza Sales Analysis Project | SQL & Power BI

◇ Project Overview

The purpose of this project was to analyze **pizza sales data** and generate meaningful business insights using **SQL for data analysis** and **Power BI for visualization**. The project focuses on understanding sales performance, customer ordering behavior, product popularity, and time-based trends.

◇ Step 1: Understanding the Dataset

I started by understanding the structure of the dataset, which includes:

- Order details (order ID, date, time)
- Pizza details (name, category, size)
- Quantity sold
- Total price

This step helped me identify which columns were important for sales, revenue, and trend analysis.

◇ Step 2: Data Analysis Using SQL

I used **MySQL** to write clear and business-oriented queries. The analysis included:

📌 Key Performance Metrics

- Total Revenue
- Total Orders
- Total Pizzas Sold
- Average Order Value

📌 Trend Analysis

- Daily trend of orders to find busiest weekdays
- Monthly trend of orders to identify peak months

- Hourly trend of orders to understand peak business hours

📌 Product Performance Analysis

- Sales percentage by pizza category
- Sales percentage by pizza size
- Top 5 and bottom 5 pizzas by:
    - Revenue
    - Quantity sold
    - Number of orders

These queries helped convert raw transactional data into meaningful insights.

🔷 Step 3: Data Visualization Using Power BI

After completing SQL analysis, I imported the data into **Power BI** and created an **interactive dashboard**.

📊 Dashboard Highlights

- KPI cards for revenue, orders, and average order value
- Bar charts for daily and monthly order trends
- Pie charts for category-wise and size-wise sales
- Best and worst seller analysis using bar visuals
- Filters to interact with pizza category and time period
- The dashboard makes complex data easy to understand for both technical and non-technical users.

🔷 Step 4: Key Insights from the Analysis

- Certain pizza categories contribute more to overall revenue
- Large-size pizzas generate the highest sales
- Mid-week days and specific months show higher order volumes

- A few pizzas consistently perform better across revenue and quantity

◇ Step 5: Tools & Technologies Used

- **SQL (MySQL) –** Data extraction & analysis
- **Power BI** – Data visualization & dashboard creation
- **Excel/CSV –** Data source handling

◇ Step 6: Learnings & Outcomes

- Improved SQL query writing and analytical thinking
- Hands-on experience in connecting SQL insights with Power BI dashboards
- Better understanding of business-focused data analysis
- Strengthened ability to communicate insights visually

◇ Conclusion

This project represents an **end-to-end data analytics workflow**, starting from raw data analysis using SQL to insight delivery through Power BI dashboards. It has been a strong learning experience and an important milestone in my data analytics journey.