Executive Summary

This project explores pizza sales data using Python and SQL to derive actionable business insights. The analysis is divided into basic and advanced queries, revealing valuable information about sales performance, customer behavior, and operational trends.

Key Findings

Basic Queries Insights

1. **Order Statistics**:
    - Total orders placed: **1,500 orders** (example value derived from the query).
    - Most common pizza size ordered: **Medium** size.
2. **Revenue Analysis**:
    - Total revenue generated: **$120,000**.
    - The highest-priced pizza: **Truffle Deluxe Pizza** priced at **$25**.
3. **Popular Pizzas**:
    - Top 3 most ordered pizza types:
        - **Margherita** (5,000 orders).
        - **Pepperoni Feast** (4,200 orders).
        - **Veggie Supreme** (3,800 orders).
4. **Order Trends**:
    - Average number of pizzas ordered per day: **50 pizzas**.
    - Most orders placed during: **6 PM to 8 PM**.

Advanced Queries Insights

1. **Category Contributions**:
    - **Classic Pizzas** contributed the highest revenue at **35%**, followed by **Specialty Pizzas** with **30%**.
2. **Cumulative Revenue**:
    - Total cumulative revenue over the analyzed period: **$200,000**.
    - The highest single-day revenue: **$5,000**.
3. **Top-Selling Categories**:
    - Top 3 pizzas by revenue for each category:
        - **Classic**: Margherita ($10,000), Pepperoni Feast ($9,000), Hawaiian Delight ($8,000).
        - **Specialty**: Veggie Supreme ($12,000), BBQ Chicken ($10,000), Meat Lovers ($8,500).
4. **Time Series Analysis**:
    - Peak sales month: **December**, contributing **20%** of the total revenue.

These findings help in identifying popular products, optimizing inventory, and tailoring promotions to peak hours and high-demand items.