**Pizza Sales and Performance Analytics**

**Project Problem Statement:**

You are hired as a Data Analyst by a local pizza chain that wants to optimize its business operations, understand customer preferences, and maximize revenue. The company maintains its data in a structured relational database comprising orders, pizzas, pizza types, and sales details.

However, the management currently lacks actionable insights into their data. Your job is to extract meaningful insights using SQL queries to support decision-making related to sales performance, popular items, and customer behavior over time.

**Project Objective:**

**The objective of this project is to:**

1. **Explore the pizza store database schema** and understand relationships between tables.
2. **Write complex SQL queries to perform:**
   * Sales analysis
   * Product performance evaluation
   * Time-based trend analysis
   * Category and ingredient-based segmentation
3. **Generate insights to answer business questions such as:**
   * Which pizzas are the most popular?
   * What is the revenue trend by month or day?
   * Which pizza sizes or categories generate the most revenue?
   * What are the top ingredients used in best-selling pizzas?
4. **Apply advanced SQL concepts, including:**
   * Aggregate functions
   * Joins (INNER, LEFT, etc.)
   * Subqueries
   * Window functions (optional/advanced)
   * CTEs
   * Grouping and filtering
5. **Present data-driven recommendations** based on query results to improve the store’s operations and sales strategy.

**Database Schema Overview:**

* **orders**
  + order\_id (PK)
  + date
  + time
* **order\_details**
  + order\_detail\_id (PK)
  + order\_id (FK to orders)
  + pizza\_id (FK to pizza)
  + quantity
* **pizza**
  + pizza\_id (PK)
  + pizza\_type\_id (FK to pizza\_types)
  + size
  + price
* **pizza\_types**
  + pizza\_type\_id (PK)
  + name
  + category (e.g., Classic, Chicken, Veggie)
  + ingredients (comma-separated)

**Sample Business Questions (to be answered using SQL):**

1. Total revenue generated by the pizza store.
2. Monthly revenue trends.
3. Top 5 most ordered pizzas by quantity.
4. Which pizza size contributes the most to total revenue?
5. Category-wise pizza sales and revenue.
6. The most frequently used ingredients in best-selling pizzas.
7. Number of orders per day of the week.
8. Top 3 pizzas by revenue in each category.
9. Average order size (number of pizzas per order).
10. Peak hours of ordering.