Bike Store SQL Analytics Project

This project simulates real-world retail analytics problems using a **bike sales dataset** (customers, stores, products, orders, order items, brands, and categories).
The goal is to demonstrate advanced SQL skills for data analysis and business insights — the type of work expected in **data analyst / business intelligence roles**.

Why This Project Matters

- Demonstrates advanced concepts like **joins, grouping, aggregations, revenue calculations, and filtering**.
- Builds business-driven insights from a **normalized retail database schema**.

Project Objectives

This project focuses on solving **real-world business questions** for a bike retailer, such as:

Customer Engagement

Which customers have placed the most orders?
Helps identify the most engaged customers for loyalty and retention programs.

Product Insights

Show all products with their category and brand name.
Provides visibility into the product catalog and brand distribution.

Which products are currently low in stock across stores?
Supports inventory management and restocking decisions.

Which products have never been ordered?
Identifies slow-moving or discontinued items.

Sales Performance

Which customers have spent the most money?
Helps prioritize high-value customers for marketing campaigns.

Which brand generated the highest number of products sold?
Supports strategic supplier relationships.

Which product categories sell the most units?
Highlights customer preferences and top-selling product lines.

Which month generated the highest sales revenue?
Identifies seasonal trends and peak demand periods.

Store Operations

What is the total revenue generated by each store?
Enables performance comparison across store locations.

How many distinct customers placed orders at each store?
Measures store reach and customer penetration.

What is the total stock available in each store?
Helps managers monitor inventory levels.

Staff Performance

Which staff members handled more than 50 orders?
Supports employee performance reviews and operational planning.

Which staff processed each customer's orders?
Provides visibility into staff-customer interactions.

Order Tracking

Which orders are unshipped?
Helps identify fulfillment bottlenecks.

List all orders with customer and staff details.
Creates a consolidated view of order responsibility.