

Electronics Retail SQL Analytics Project

This project simulates real-world **retail analytics problems** using an **electronics 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

- Shows ability to **translate business questions into SQL queries**.
 - Demonstrates advanced concepts like **window functions, CTEs, joins, grouping, and revenue calculations**.
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Project Objectives

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

1. **Store Expansion Analysis**
 - *Which store had the earliest sales in each state?*
 - Useful for understanding where new regions began to generate revenue first.
2. **Customer Engagement**
 - *How many customers per state have never placed an order?*
 - Identifies underperforming customer segments by region.
3. **Repeat Purchases**
 - *Which product categories generate the highest repeat purchases?*
 - Critical for loyalty programs and subscription opportunities.

4. **Product Longevity**

- *What's the oldest product line (by first sale date) in each brand?*
- Helps spot product categories with enduring customer demand.

5. **Discount Dependence**

- *Which states rely most heavily on discounts?*
- Important for finance teams checking margin pressures across markets.

6. **Customer Lifetime Value (LTV)**

- *Which product categories drive the highest lifetime revenue per customer?*
 - Directs marketing spend toward the most valuable product categories.
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