End – End Data Analytics Project Using SQL

Zepto Product Analysis Project

This project involves a **comprehensive SQL-based analysis** of product data from **Zepto**, India's leading quick-commerce platform. The analysis explores inventory patterns, pricing strategies, discount structures, and product availability across multiple categories to derive actionable business insights.

Objective

To analyse Zepto's product catalogue and uncover insights that can help optimize inventory management, improve pricing strategies, and enhance customer value proposition.

Dataset

The dataset (zepto_v2.csv) contains **2,215 product records** across 12 major categories including:

- Fruits & Vegetables
- Cooking Essentials
- Dairy, Bread & Batter
- Personal Care
- Packaged Food
- Beverages
- Biscuits
- And more...

Key Areas of Analysis

- **Data Cleaning & Exploration**: Handling null values, removing zero-price products, standardizing prices
- **Inventory Analysis**: Stock availability, out-of-stock patterns, high-value product tracking
- **Category Performance**: Revenue estimation, inventory weight distribution
- **Discount Analysis**: Category-wise discount patterns, premium product pricing
- **Product Value**: Price-per-gram calculations, weight-based categorization

Tools Used

- **Database**: PostgreSQL
- **Language**: SQL
- **Analysis**: Data querying, aggregation, and business intelligence

Key Findings

- **82.7%** products in stock, **17.3%** out of stock
- **Cooking Essentials** and **Fruits & Vegetables** contribute **65.6%** of estimated revenue
- **Ice Cream & Desserts** category offers highest average discounts (**18.5%**)
- Staples like Tata Salt and Maggi Noodles provide best value (lowest price per gram)

Business Recommendations

- Replenish high-value out-of-stock items
- Increase inventory for core categories
- Optimize discount strategies for premium products
- Promote best-value items to drive customer traffic