# Zepto SQL Data Analysis Project

## Project Overview

**Project Name:** Zepto Data Analysis using SQL
**Domain:** E-commerce
**Tools Used:** MySQL
**Dataset Type:** Product-level inventory and pricing data (Kaggle)

This project focuses on analyzing Zepto's product catalog to derive meaningful business insights related to pricing, discounts, stock availability, and inventory distribution. The goal is to demonstrate strong SQL fundamentals including data exploration, data cleaning, aggregation, filtering, and analytical querying.

## Business Problem Statement

Quick-commerce companies like Zepto operate on thin margins and high inventory turnover. Business teams need answers to questions such as:

- Find the top 10 best-value products based on the ddiscount percentage.
- what are the products with high mrp but out of stock.
- calculate Estimated revenue for each category.
- Find all products where mrp is greater than rs.500 and discount is less than 10%.
- Identify the top 5 categories offering the highest average discount percentage.
- Find the price per gram for products above 100g and sort by best value.
- Group the products into categories like low,medium,bulk.
- what is the total inventory weight per category.

This project answers these questions using structured SQL queries.

## Database & Table Design

- Database Creation
- Create Table

## Data Import

- Data imported from CSV using SQL import tools
- Verified successful ingestion using SELECT queries

## Data Exploration

- Record Count
- Null Value Check
- Product Categories Overview

- Stock vs Out-of-Stock Analysis
- Product Name Validation

## Data Cleaning

- Check Zero-Price Products
- Convert Price from Paisa to Rupees

## Key Insights

- ✓ High discounts are concentrated in a few specific categories
- ✓ Several high-MRP items are frequently out of stock, indicating supply chain gaps
- ✓ Bulk products provide better price-per-gram value
- ✓ Inventory weight distribution helps optimize warehouse planning

## Skills Demonstrated

- SQL DDL & DML
- Data Cleaning & Transformation
- Aggregations & Grouping
- CASE statements
- Business-driven analytical queries

## Conclusion

This is a complete, real-world data analyst portfolio project based on an e-commerce inventory dataset scraped from Zepto — one of India's fastest-growing quick-commerce startups. This project simulates real analyst workflows, from raw data exploration to business-focused data analysis.

Dataset - Link