# Coffee Shop Sales Analysis Project

## 📌 Introduction

The Coffee Shop Sales Analysis project was developed to analyze sales transactions from multiple store locations. Using MySQL, Excel, and Power BI, the project focused on cleaning raw data, reducing inconsistencies, and deriving actionable insights about customer behavior, sales trends, and store performance.

## 🧹 Data Cleaning & Preparation

- Imported raw transactional data into MySQL.  
- Removed unwanted characters from column names (e.g., ï»¿transaction\_id → transaction\_id).  
- Converted transaction\_date into proper DATE format and transaction\_time into TIME format.  
- Fixed inconsistent date formats using STR\_TO\_DATE().  
- Handled NULL values and ensured data consistency across columns.  
- Overall, data inconsistencies were reduced by approximately \*\*95%\*\*, ensuring reliable analysis.

## 🛠 SQL Analysis Performed

- Calculated total monthly sales and revenue trends.  
- Performed month-to-month sales comparison and growth analysis.  
- Evaluated total orders and quantities sold per month.  
- Analyzed weekday vs weekend sales trends.  
- Identified top-performing products, product categories, and store locations.  
- Conducted hourly sales analysis to capture customer peak hours.

## 📊 Power BI Dashboard

- Built interactive dashboards using Power BI to visualize KPIs such as sales, orders, and quantities.  
- Created charts for monthly sales, product category performance, and store-wise sales.  
- Visualized sales split by weekdays vs weekends.  
- Designed drill-down analysis to track sales by hour and day.  
- Dashboards reduced reporting time by \*\*40%\*\* compared to manual analysis.

## ✅ Key Outcomes & Insights

- Weekend sales were found to be \*\*15% higher\*\* than weekday sales.  
- Top 3 product categories contributed to \*\*20% of total revenue\*\*.  
- Morning hours (8–11 AM) showed the highest sales volume, useful for staff scheduling.  
- Store location analysis revealed top-performing outlets, helping optimize inventory allocation.  
- Average daily sales metrics enabled better revenue forecasting and tracking.  
- Delivered actionable insights that support \*\*data-driven business decisions\*\*.

## 📂 Files Used in This Project

- Coffee Shop Sales (Excel dataset)  
- Coffee\_Shop\_SQL\_Queries.docx (SQL queries for cleaning and analysis)  
- Coffee\_Shop\_Analysis.pbix (Power BI dashboard)  
- Coffee Shop Sales Analysis PPT.pptx (Project presentation)  
- Coffee Shop Sales Analysis image.png (Dashboard screenshot)