Business Problem Statement

A leading retail company aims to gain a deeper understanding of its customers' shopping behavior to enhance sales, customer satisfaction, and long-term loyalty. The management team has observed shifts in purchasing patterns across various demographics, product categories, and sales channels (online vs. offline).

Key Objectives:

- Identify factors that drive consumer decisions and repeat purchases, such as discounts, reviews, seasons, or payment preferences.

- Answer the overarching question: "How can the company leverage consumer shopping data to identify trends, improve customer engagement, and optimize marketing and product strategies?"

Project Deliverables.

To address the business problem, the following five deliverables are required:

1. **Data Preparation & Modeling (Python):** Clean and transform the raw dataset to ensure it is ready for analysis.

2. **Data Analysis (SQL):** Organize data into a structured format, simulate business transactions, and execute queries to extract insights on customer segments, loyalty, and purchase drivers.

3. **Visualization & Insights (Power BI):** Develop an interactive dashboard that highlights key patterns and trends to enable data-driven decision-making by stakeholders.

4. **Report and Presentation:** * Write a clear project report summarizing findings and business recommendations.

    o Prepare a presentation to visually communicate insights and actionable recommendations to stakeholders.

5. **GitHub Repository:** Compile all Python scripts, SQL queries, and dashboard files into a well-structured repository.