**Retail Business Performance & Profitability Analysis**

Internship Project Report

**Introduction**

This project analyzes retail business data from a sample Superstore dataset to evaluate sales, profitability, and product performance. Using SQL and Power BI, the aim is to identify high and low-performing product categories, regional trends, and the effect of discounts on profitability.

**Abstract**

The dataset consists of transactional data including product categories, regions, sales, profit, discounts, and shipping details. SQL was used to extract meaningful insights such as top-selling products, loss-making items, and monthly sales trends. Power BI was used to visualize the data interactively for business decision-making support.

**Tools Used**

* SQLite / DB Browser for SQLite
* Microsoft Power BI
* Microsoft Excel
* Kaggle

**Steps Involved in Building the Project**

1. **Data Preparation**  
   The Superstore dataset was converted from Excel to CSV and imported into SQLite. A table schema was created with appropriate data types.
2. **SQL-Based Analysis**  
   We wrote multiple queries to calculate:
   * Total sales, profit, orders, and quantities
   * Sales and profit by category and sub-category
   * Monthly sales trends (using extracted Month-Year)
   * Discount vs profit analysis (via aggregation)
   * Top 10 products and loss-making items
3. **Data Visualization**  
   Using Power BI, we created:
   * KPI cards for total revenue, orders, and profit
   * Line charts for monthly sales trends
   * Bar charts for product profitability
   * Scatter plots (Profit vs Discount)
   * Region-wise maps and heatmaps
4. **Insights & Observations**
   * Categories like Technology and Office Supplies were high-profit contributors
   * Sub-categories such as Bookcases and Tables had negative profits due to high discounts
   * The South region showed lower sales compared to West and East
   * Some products offered heavy discounts but were not profitable

**Conclusion**

This analysis highlights how even a simple retail dataset can uncover valuable insights into business performance. The correlation between discount levels and profitability is crucial for future pricing strategies. With well-structured SQL queries and an interactive Power BI dashboard, stakeholders can quickly identify problem areas and make strategic improvements in product and inventory planning.