**📑 Project Report**

**Title:**

**SQL Sales Data Analysis**

**1. Introduction**

This project analyzes a Retail Sales Dataset using MySQL. The dataset includes transaction details such as product categories, quantities sold, sales amount, customer demographics, and transaction dates. The purpose of this analysis is to derive business insights regarding product sales, customer trends, and monthly growth.

**2. Dataset Description**

| **Column Name** | **Description** |
| --- | --- |
| Transaction ID | Unique transaction identifier |
| Date | Transaction date |
| Customer ID | Unique customer identifier |
| Gender | Customer gender |
| Age | Customer age |
| Product Category | Product category |
| Quantity | Number of products purchased |
| Price per Unit | Price of a single product unit |
| Total Amount | Total amount spent per transaction |

**3. SQL Queries and Insights**

| **Query No** | **Analysis Description** | **Insight** |
| --- | --- | --- |
| 1 | View all data | **Complete transaction data preview** |
| 2 | Find total revenue | **456000** |
| 3 | List unique product categories | **Beauty, Clothing, Electronics** |
| 4 | Top best-selling product | **Clothing** |
| 5 | Monthly sales trends | Sales trends over different months |
| 6 | Gender-wise revenue | Revenue contribution by each gender |
| 7 | Top 5 customers by purchase value | Highest spending customers |
| 8 | Repeat customers | Customers with more than one purchase |
| 9 | Average order value per customer | Customer-wise average transaction value |
| 10 | Month-over-month sales growth | Monthly growth percentage in sales |

**4. Key Insights Summary**

* **Top-selling product:** Clothing
* **Highest revenue month:** May
* **Gender with highest revenue:** Female
* **Top customer ID:** CUST015
* **Overall sales growth:** 96.58%

**5. Conclusion**

This SQL project successfully demonstrated the use of SQL in performing data extraction, transformation, and analysis to draw actionable insights from retail sales data. The results can help businesses optimize their product strategies, target key customer segments, and monitor sales performance over time.