**Project Objectives – Sales Analysis Database**

The **Sales Analysis Database** is designed to **store, analyze, and optimize sales performance** using SQL queries. This project will help businesses make **data-driven decisions** by tracking revenue, customer behavior, product performance, and inventory levels.

**🔹 Key Objectives**

**1.Revenue & Sales Performance Tracking**

✅ Calculate **total revenue** and **monthly sales trends**.  
✅ Identify **top-selling products** and **seasonal sales patterns**.  
✅ Analyze sales growth over time using **month-over-month revenue changes**.

**2.Customer Insights & Behavior Analysis**

✅ Track **total spending per customer** to find high-value customers.  
✅ Segment customers based on **purchase frequency** (repeat buyers vs. one-time buyers).  
✅ Identify **inactive customers** who haven’t purchased recently for re-engagement.  
✅ Analyze customer behavior based on **age, location, and gender**.

**3.Product & Inventory Management**

✅ Identify **best-selling products** and **slow-moving inventory**.  
✅ Track stock levels to prevent **out-of-stock situations**.  
✅ Evaluate **profitability per product** by subtracting costs from revenue.  
✅ Identify **products frequently bought together** for cross-selling.

**4.Market Trends & Business Growth Insights**

✅ Identify **peak sales days** of the week and busiest sales hours.  
✅ Analyze **category-wise performance** to optimize product offerings.  
✅ Detect **year-over-year (YoY) growth rates** and market expansion opportunities.  
✅ Forecast **future sales trends** using **moving averages** and predictive analytics.

**5.Customer Retention & Marketing Optimization**

✅ Identify **loyal customers** and recommend **loyalty programs**.  
✅ Segment customers into **high, medium, and low spenders** for targeted marketing.  
✅ Analyze **customer churn rate** and suggest retention strategies.  
✅ Detect patterns in **discount or promotional impacts** on sales.

**6.Financial & Business Decision Support**

✅ Evaluate **total profit margins** by comparing revenue and product costs.  
✅ Identify **high-value customers** to optimize business strategy.  
✅ Suggest optimal **pricing strategies** based on sales data.  
✅ Automate **report generation** for **Power BI dashboards** and **management reports**.

**🎯 How This Project Benefits Businesses**

📌 **Retail & E-commerce:** Helps track sales performance and customer purchase patterns.  
📌 **Inventory Management:** Prevents stockouts and ensures high-demand products are available.  
📌 **Marketing & Sales Strategy:** Improves targeted marketing and sales forecasting.  
📌 **Decision-Making Support:** Provides data-driven insights for business growth.