Project Title: Superstore Sales Analysis

Project Description: The Superstore Sales Analysis project aims to explore, analyze, and derive actionable insights from a retail superstore's sales dataset. The analysis will provide a comprehensive understanding of the sales, profit trends, customer behaviour, product performance, shipping efficiency, and regional sales distribution. By leveraging SQL queries to generate 50 key insights, the project seeks to identify opportunities for business growth, operational efficiency, and enhanced customer satisfaction.

The project covers a wide range of analytical dimensions, including sales trends, customer segmentation, product profitability, discount effectiveness, shipping performance, and returns management. The insights will help stakeholders make data-driven decisions to optimize marketing strategies, improve logistics, and maximize profitability.

Project Objectives:

1. Generate 50 key business insights using SQL queries.
2. Provide actionable recommendations based on the analysis.
3. Create a Tableau Dashboard for Sales, Orders and Profit tracking.

Project Deliverables:

1. **SQL Queries**: A comprehensive set of SQL scripts to derive the 50 insights.
2. **Insights Report**: A detailed report documenting findings and recommendations.
3. **Dashboard (Must)**: An interactive dashboard visualizing key metrics and trends across Orders, Sales and Profits.
4. **Documentation**: Well-structured documentation covering project objectives, methodologies, and usage of SQL scripts.

Dataset **Description**: The dataset contains the following columns:

- **Row ID**: Unique identifier for each record.
- **Order ID**: Identifier for the order.
- **Order Date**: Date the order was placed.
- **Ship Date**: Date the order was shipped.
- **Ship Mode**: Shipping method (e.g., Standard Class, Second Class).
- **Customer ID**: Identifier for the customer.
- **Customer Name**: Name of the customer.
- **Segment**: Customer segment (e.g., Consumer, Corporate).
- **Country**: Country of the order.
- **City**: City of the order.
- **State**: State of the order.
- **Postal Code**: Postal code of the delivery address.
- **Region**: Region of the order (e.g., West, South).
- **Product ID**: Identifier for the product.
- **Category**: Product category (e.g., Furniture, Office Supplies).
- **Sub-Category**: Sub-category of the product.
- **Product Name**: Name of the product.
- **Sales**: Sales amount.
- **Quantity**: Quantity of products sold.
- **Discount**: Discount applied.
- **Profit**: Profit from the transaction.
- **Order Returned**: Indicates if the order was returned.

Requirements:

Technical Requirements

1. **Database Setup**:
    - Database: Microsoft SQL Server (or equivalent).
    - Dataset imported into a table named SalesData.
2. **SQL Queries**:
    - Queries covering sales trends, customer behaviour, product analysis, regional performance, and returns.
3. **Tools and Technologies**:
    - SQL Server Management Studio (SSMS) or any compatible SQL tool.
    - Optional: Data visualization tool (e.g., Tableau, Power BI, Excel).

Insights to Be Generated

The 50 SQL queries (detailed in the analysis plan) should derive the following insights:

1. General analysis: Total sales, profit, orders, etc.
2. Sales trends: Monthly, yearly, weekly trends, etc.
3. Customer analysis: Top customers, retention rate, etc.
4. Product performance: Best-sellers, profitability, etc.
5. Regional analysis: Top-performing regions, states, cities, etc.
6. Shipping analysis: Shipping modes, delivery efficiency, etc.
7. Returns analysis: Return rates, impact on profit, etc.
8. Profitability and discount analysis: Profit margins, correlation with discounts, etc.
9. Advanced insights: Market basket analysis, Average Delivery time etc.

Project Workflow

1. **Data Preparation**:
    - Import the dataset into the database.
    - Ensure data types (e.g., date columns) are properly formatted.

2. **SQL Query Development**:
    - Write and execute SQL queries to generate the insights.
    - Validate the results for accuracy.
3. **Analysis and Interpretation**:
    - Document findings for each query.
    - Highlight trends, patterns, and anomalies.
4. **Visualization**:
    - Create graphs and charts for key insights.
    - Develop a dashboard summarizing major findings.
5. **Reporting**:
    - Compile insights into a structured report.
    - Include actionable recommendations for stakeholders.

Potential Use Cases:

1. Identifying high-value customers and targeting them with personalized campaigns.
2. Understanding regional performance to allocate resources effectively.
3. Analyzing product performance to manage inventory better.
4. Evaluating the impact of discounts and optimizing pricing strategies.
5. Reducing return rates by addressing high-return products or regions.

Success Criteria:

1. All 50 insights are successfully generated and validated.
2. Recommendations align with business goals and drive measurable improvements.
3. The analysis framework is reusable and scalable for future datasets.
