Sales and Inventory store

Project Title: Sales and Inventory Management System

Objective: Create a database with a snowflake schema for managing sales and inventory data for a fictional company. Populate the tables with sample data and create problem statements for querying the data.

Database Schema:

1. **Dim_Products**
    - Columns: ProductID (Primary Key), ProductName, CategoryID (Foreign Key), SupplierID (Foreign Key), UnitPrice, StockQuantity
2. **Dim_Categories**
    - Columns: CategoryID (Primary Key), CategoryName
3. **Dim_Suppliers**
    - Columns: SupplierID (Primary Key), SupplierName, ContactName, ContactEmail, Phone
4. **Fact_Sales**
    - Columns: SaleID (Primary Key), ProductID (Foreign Key), CustomerID (Foreign Key), SaleDate, QuantitySold, TotalAmount
5. **Dim_Customers**
    - Columns: CustomerID (Primary Key), FirstName, LastName, Email, Phone

Sample Data: You can insert sample data into these tables to make your project more realistic. You can create entries for products, categories, suppliers, sales, and customers.

Problem Statements:

1. Retrieve the list of all products along with their category names and supplier names.
2. Calculate the total sales revenue for each category for the year 2023.
3. Find the top 5 best-selling products in terms of total quantity sold.
4. Identify customers who have made purchases worth more than $1000 in total.
5. List the suppliers who have not supplied any products.
6. Find the products that are out of stock (StockQuantity is 0).
7. Calculate the total revenue generated by each supplier.
8. Determine the month with the highest sales revenue in 2023.
9. List the customers who have made purchases in the last 30 days.

10. Calculate the average order value for each customer.

Bonus Tasks:

11. Implement stored procedures or functions for specific tasks, such as updating product prices or adding new sales records.
12. Create views to simplify complex queries, such as a view that joins the fact and dimension tables for sales analysis.