# Project Title: Sales Analysis for an E-commerce Website

**Project Description:** You have been given a dataset from an e-commerce website that contains information about sales transactions. The dataset contains the following tables:

1. **Customers**: Contains information about the customers, including customer ID, name, email, phone number, and address.

2. **Products**: Contains information about the products sold on the website, including product ID, name, description, category, and price.

3. **Orders**: Contains information about the orders placed by customers, including order ID, customer ID, order date, and total amount.

4. **Order_Items**: Contains information about the items included in each order, including order ID, product ID, quantity, and price.

**Your task is to use SQL to analyze the sales data and answer the following questions:**

1. What are the total sales revenue and the total number of orders for each month?

2. What are the top 5 best-selling products in terms of quantity and revenue?

3. Who are the top 10 customers in terms of total spending?

4. What is the average order value for each month?

5. What is the customer retention rate for the given period (e.g. month, quarter, year)?

6. Which category of products generates the highest revenue?

**Project Tasks:**

1. **Data Exploration:** Review the dataset and understand the structure and content of each table. Familiarize yourself with the relationships between the tables.

2. **Data Cleaning:** Identify and clean any inconsistencies or errors in the data, such as missing values, duplicate records, or data entry errors.

3. **Data Analysis:** Write SQL queries to extract and analyze the data based on the questions provided. Use appropriate SQL functions, aggregations, and joins to obtain the desired results.

4. **Data Visualization:** Create visualizations, such as bar charts, line charts, or pie charts, to present your findings in a visually appealing and informative way.

5. **Documentation:** Document your analysis process, including the SQL queries used, any assumptions made, and the results obtained. Provide insights and recommendations based on your analysis.

6. **Bonus Task:** If you're up for a challenge, try incorporating advanced SQL concepts, such as window functions, subqueries, or common table expressions, to further enhance your analysis.