

Project Overview

In this project, you are to analyze a fictional Retail Store. You will answer various business questions using the MySQL skills you have learned. The dataset includes information about products, customers, orders, and sales.

Dataset

The dataset consists of the following tables:

products

product_id (INT)
product_name (VARCHAR)
category (VARCHAR)
price (DECIMAL)
customers

customer_id (INT)
customer_name (VARCHAR)
gender (VARCHAR)
age (INT)
city (VARCHAR)
orders

order_id (INT)
customer_id (INT)
order_date (DATE)
total_amount (DECIMAL)
order_items

order_item_id (INT)
order_id (INT)
product_id (INT)
quantity (INT)
unit_price (DECIMAL)

Business Questions

Sales Analysis

1. What is the total revenue generated by XYZ Retail Store?
2. Which product category has generated the most revenue?
3. What are the top 5 best-selling products based on quantity sold?

Customer Insights

1. How many unique customers have made purchases?
2. Which city has the highest number of customers?
3. What is the average age of customers?

Order Analysis

1. How many orders have been placed in the last year?
2. What is the average order value (total_amount)?
3. Which month has the highest total sales?

Product Performance

1. List all products that have never been sold.
2. Identify the top 3 customers who have spent the most.
3. Which product has the highest unit price?

Customer Segmentation

1. Group customers by age range (e.g., 18-25, 26-35, etc.) and find the total revenue generated by each age group.
2. Find the percentage of male and female customers.

Instructions for Students

- Connect to the Database
- Use the MySQL database and import the provided dataset.
- Answer the Business Questions
- Write SQL queries to answer each of the business questions.
- Use the appropriate SQL statements (SELECT, FROM, WHERE, GROUP BY, ORDER BY, HAVING, LIMIT, JOINS, UNIONS, CASE) as needed.
- Document Your Findings
- Prepare a report summarizing your findings from the analysis.
- Include the SQL queries you used and the results obtained.
- Upload your files to your github account.