

ISYS 464, Fall 23, Assignment 5, Due Date: Wednesday, 11/1/2023

Use the Sales database for this assignment.

Part 1: Update the Sales database

- a. Add a new customer with this data: CID: C6, Cname: **your full name**, Rating: A, City: San Francisco
- b. Add a new order: OID: O7, CID: C6, SID: S3, Odate: 2019-10-9. And this order includes two detail lines:OID: O7, PID: P1, Qty: 10; And OID: O7, PID: P5, Qty:5.
- c. Add another new order: OID: O8, CID: C6, SID: S1, Odate: 2019-10-10. And this order includes two detail lines:OID: O8, PID: P2, Qty: 5; And OID: O8, PID: P7, Qty:10.

Part 2: Use SQL Select commands to answer the following questions:

Part 2.1: You must first verify your solutions with ChatGPT before running using MySQL for problems 1 to 5.

1. Find customers who live in San Francisco and have rating A or B, and show CID, CustomerName, Rating (Use an alias CustomerName for Cname).
2. Create a query to show total sales by customers and show: CID, customerName, TotalSales.
3. Create a query to show total sales submitted by customer C6.
4. Display SID, SalesName, and dollar amount of each salesperson's commission which is 10% of the sales the salesperson handled. (Note: compute the sum of 10% of price*qty).
5. Displays the names of sales person who have handled at least two orders in year 2019 and show SID, SalesName, NumberOfOrders.

Part 2.2: You may ask ChatGPT to generate solutions for you for problems 6 to 10.

6. Sort customer records by the City and Rating field and show: City, Rating, CustomerName.
7. Retrieve the orders submitted in 2019 by customers who live in San Francisco, and show: CID, Cname, OID, Odate.
8. Display customers with their order data ordered by CID field, and show: CID, Cname, OID, Odate, SalesName (Use an alias SalesName for Sname).
9. Create a query to show total sales by products and show: PID, Pname, TotalSales (note: compute the sum of price*qty by product).
10. Find the customer with the most dollar amount of total purchases and display CID, Cname, and total purchases.

Part 2.3: Ask ChatGPT to write two SQL statements to retrieve information it considers helpful in analyzing the sales data related to products, customers, salesperson or order date.

Submit the SQL SELECT statements with the outputs, and dialogues with ChatGPT from Part 2.1 and 2.3.