Order Entry Database – SQL Data Manipulation Language

The simplified Order Entry database was designed to support transactions related to customer purchases of computer and electronics products either over the phone or online. The SQL code for all 12 problems should be entered into a single `MySQL4_OrdEntry.sql` file, separated by comments, but each problem should be run in Workbench independently. Unless otherwise noted, you must use INNER JOIN style. The results should be copy/pasted or exported into a single Excel file `Assign3_OrdEntry.xlsx`, one result per sheet. In addition, all these problems, to the extent possible and needed, should be repeated with MS Access, using `AccDB4_University.accdb` file. This is a good way of verifying the results.

Each of the questions is worth **0.25** points.

1. List the customer number, customer name (first and last), the sum of the quantity of products ordered, and the total order amount (sum of the product price times the quantity) for orders placed in January 2030. Only include products in which the product name contains the string `Ink Jet` or `Laser`. Only include the customers who have ordered more than two Ink Jet or Laser products in January 2030.
2. List the product number, product name, sum of the quantity of products ordered, and total order amount (sum of the product price times the quantity) for orders placed in January 2030. Only include products that have more than five products ordered in January 2030. Sort the result in descending order of the total amount.
3. List the order number, the order date, the customer number, the customer name (first and last), the customer state, and the shipping state in which the customer state differs from shipping state.
4. List the employee number, the employee name (first and last), the commission rate, the supervising employee name (first and last), and the commission rate of the supervisor.
5. List the employee number, the employee name (first and last), and total amount of commissions on orders taken in January 2030. The amount of a commission is the sum of the dollar amount of products ordered times the commission rate of the employee.
6. List the product name and the price of all products ordered by Beth Taylor in January 2030.
7. For Colorado customers, compute the number of order details placed in January 2030 in which the order detail contains products made by Connex. The result should include the customer number, last name, and the number of order details placed in January 2030.
8. For each employee with a commission rate of less than 0.04, compute the number of orders taken in January 2030. The result should include the employee number, employee last name, and number of orders taken.
9. For each employee with commission rate greater than 0.03, compute the total commission earned from orders taken in January 2030. The total commission earned is the total order amount times the commission rate. The result should include the employee number, employee last name, and the total commission earned.
10. Insert yourself as a new row in the `Customer` table, and your roommate or best friend as a new row in the `Employee` table. Copy/paste both tables and highlight the added records in yellow.
11. Insert a new `OrderTbl` row with you as the customer, your roommate/best friend as the employee, and your choice of values for the other columns of the `OrderTbl` table. Copy/paste table and highlight the added record in yellow. Insert two rows in `OrderLine` table corresponding to the new `OrderTbl` row. Copy/paste both tables and highlight the added records in yellow.
12. Delete your order placed in the previous problem. What happened to corresponding order lines? Delete yourself and your roommate/best friend from the appropriate tables. Copy/paste the appropriate tables to show the records were removed.

Submission: You must submit `MySQL4_OrdEntry.sql` SQL script, and the `Assgn3_OrdEntry.xlsx` Excel file on Canvas by the designated due date.