Order Entry Database – Introduction to SQL

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 following assumes MySQL database has all the tables, relationships and data, i.e., the first assignment was fully completed.

The SQL code for all 12 problems should be entered into a single `MySQL3_OrdEntry.sql` file, separated by comments, but each problem should be run in Workbench independently. The results should be copy/pasted into a single Excel file `Assign2_OrdEntry.xlsx`, one result per sheet.

In addition, all these problems, to the extent possible and needed, should be repeated with MS Access, using `AccDB3_OrdEntry.accdb` file. This is a good way of verifying the results.

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

1. List all columns of the `Product` table for products costing more than $50. Order the result by product manufacturer (`ProdMfg`) and product names.
2. List the customer number, the name (first and last), the city, and the balance of customers who reside in Denver with a balance greater than $150 or who reside in Seattle with balance greater than $300.
3. List the cities and states where orders are going to. Remove duplicates from the result.
4. List the columns of the `OrderTbl` table for phone orders placed in January 2030. A phone order has an associated employee.
5. List all columns of `Product` table that contain the words `Ink Jet` in the product name.
6. List the order number, order date, and customer number of orders placed after January 23, 2030, shipped to Washington recipients.
7. List the order number, order date, customer number, and name (first and last) of orders placed in January 2030 by Colorado customers (`CustState`) but sent to Washington recipients (`OrdState`). Use INNER JOIN style.
8. List the order number, order date, customer number, customer name (first and last), employee number, and employee name (first and last) of January 2030 orders placed by Colorado customers. Use cross-product style.
9. List the employee number, name (first and last), and phone of employees who have taken orders in January 2030 from customers with balances greater than $300. Remove duplicate rows in the result. Use cross-product style.
10. List the customer number, name (first and last), product number, product name, and order detail amount (`Qty * ProdPrice`) for products ordered on January 23, 2030, in which the order detail amount exceeds $150. Use cross-product style.
11. List the average balance and number of customers by city. Only include the customers residing in Washington State (WA). Eliminate cities in the result with less than two customers.
12. List the order number and total amount for orders placed on January 23, 2030. The total amount of an order is the sum of the quantity times the product price of each product on the order. Use INNER JOIN style.

Submission: You must submit `MySQL3_OrdEntry.sql` SQL script, and the `Assgn2_OrdEntry.xlsx` Excel file on Canvas by the designated due date.