**SQL Assignment 1**

Copy your queries and paste it under each question. Upload the file to the Canvas submission folder.

Using Teradata ViewPoint

Database: db\_pvfc11\_big

1. List all raw materials that are made of cherry and that have dimensions (thickness and width) of 12 by 12.

SELECT \*

FROM "db\_pvfc11\_big"."RawMaterial\_T"

WHERE Material = 'Cherry'

AND Thickness = 12

AND Width = 12;

2. Retrieve the product line ID and the average standard price for all products in each product line.

SELECT ProductLineID, AVG(ProductStandardPrice) AS AvgStandardPrice

FROM "db\_pvfc11\_big"."Product\_T"

GROUP BY ProductLineID;

3. Retrieve the product line ID and the average standard price for products whose standard price greater than $200 in each product line. Include in the answer set only those product lines that have an average standard price of at least $500.

SELECT ProductLineID, AVG(ProductStandardPrice) AS AvgStandardPrice

FROM "db\_pvfc11\_big"."Product\_T"

WHERE ProductStandardPrice > 200

GROUP BY ProductLineID

HAVING AVG(ProductStandardPrice) >= 500;

4. For each order, display the order ID, the number of separate products included in the order, and the total number of product units (for all products) ordered.

SELECT OrderID,

COUNT(DISTINCT ProductID) AS NumProducts,

SUM(OrderedQuantity) AS TotalUnitsOrdered

FROM "db\_pvfc11\_big"."OrderLine\_T"

GROUP BY OrderID;

5. For each customer, list the CustomerID and total number of orders placed.

SELECT CustomerID, COUNT(OrderID) AS TotalOrders

FROM "db\_pvfc11\_big"."Order\_T"

GROUP BY CustomerID;

6. Display the product ID and the number of orders placed for each product. Show the results in decreasing order by the number of times the product has been ordered and label this result column NumOrders.

SELECT ProductID, COUNT(OrderID) AS NumOrders

FROM "db\_pvfc11\_big"."OrderLine\_T"

GROUP BY ProductID

ORDER BY NumOrders DESC;

7. For each customer, list the customer ID and the total number of orders placed in and after 2010.

SELECT CustomerID, COUNT(OrderID) AS TotalOrders

FROM "db\_pvfc11\_big"."Order\_T"

WHERE OrderDate >= '2010-01-01'

GROUP BY CustomerID;

8. For employees who live in TN or FL, list the age at which they were hired. (*Hint: age hired can be computed using EmployeeDateHired - EmployeeBirthDate*)

SELECT EmployeeID,

EmployeeBirthDate,

EmployeeDateHired,

(EXTRACT(YEAR FROM EmployeeDateHired) - EXTRACT(YEAR FROM EmployeeBirthDate)) AS AgeHired

FROM "db\_pvfc11\_big"."Employee\_T"

WHERE EmployeeState IN ('TN', 'FL');

9. Display the territory ID and the number of sales persons in the territory for all territories that have more than one sales person. Label the number of salespersons as NumSalesPersons.

SELECT SalesTerritoryID, COUNT(SalespersonID) AS NumSalesPersons

FROM "db\_pvfc11\_big"."Salesperson\_T"

GROUP BY SalesTerritoryID

HAVING COUNT(SalespersonID) > 1;

10. List MaterialName, Material, and Width for raw materials that are not cherry or oak and whose width is greater than 10 inches.

SELECT MaterialName, Material, Width

FROM "db\_pvfc11\_big"."RawMaterial\_T"

WHERE Material NOT IN ('Cherry', 'Oak')

AND Width > 10;