Assignment 2 – SQL

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Q1. List all produce that is currently available to order. List the name and price. List the result by produce name in alphabetical order.

SELECT DISTINCT Produce.Name, ProducePrice.Price

FROM ProducePrice NATURAL JOIN Produce

WHERE available = 'Y'

AND toDate IS NULL

ORDER BY Produce.Name;

Name	Price
Australian Black Grapes seedless	7.95
Australian Clemintines (Mandarins)	4.20
Australian Red Grapes	6.95
Avocado	2.95
Baby Beets	3.99
Baby Cos Lettuce	1.95
Banana	3.99
Basil	3.99
Bean shoots	2.90
Beetroot	3.45

138 Rows returned

Q2. List all produce that has four or more different prices (exclude produce that is not available)

SELECT DISTINCT Produce.Name

FROM Produce INNER JOIN ProducePrice

ON Produce.PLU = ProducePrice.PLU

WHERE Produce.available = 'Y'

GROUP BY Produce.Name

HAVING COUNT(DISTINCT(ProducePrice.Price)) >= 4;

Name
Avocado
Butternut Pumpkin
Carrots
Curley Parsley
Golden Grapes
Green Asparagus
Green kale
Japla Pumpkin
Lebanese Cucumber
Lemon Thyme

19 Rows returned

Q3. List the number of orders for each month of each year. Order the result by month then year.

SELECT COUNT(ID) AS numberOfOrders, MONTHNAME(orderDate) AS Month,

YEAR(orderDate) AS Year

FROM Orders

GROUP BY MONTHNAME(orderDate), YEAR(orderDate);

	numberOfOrders	Month	Year
▶	105	August	2020
	136	September	2020
	131	October	2020
	130	November	2020
	126	December	2020
	157	January	2021
	85	February	2021

7 Rows returned

Q4. List all clients who placed an order in one month and received the produce in a different month. Be sure to eliminate duplicates from your result set.

SELECT DISTINCT Clients.clientID, CONCAT(Clients.FirstName, ' ', Clients.LastName) AS clientName

FROM Clients NATURAL JOIN Orders

WHERE MONTHNAME(orderDate) != MONTHNAME(deliveryDate);

clientID	clientName
30030	Giancarlo Terzini
30040	Xinhue Zhang
30050	Tom Nguyen
30060	Clarissa Wright
30070	Philip Teleman
30080	Kim Chang
30100	Cecile Debussy
30130	Jesse Pirelli
30140	Tony Correlli
30150	Jose Phillipe Marcos Dominguez

18 Rows returned

Q5. List the name of the produce that has never been available to order.

SELECT DISTINCT Produce.Name

FROM Produce

WHERE Produce.available = 'N'

AND Produce.PLU NOT IN

      (SELECT PLU

       FROM LineItem);

Name
▶ Heirloom Radish

1 Row returned

Q6. List the name of the produce that has always been available to order but has never been ordered.

SELECT Produce.Name

FROM Produce

WHERE Produce.available = 'Y'

AND Produce.PLU NOT IN

     (SELECT PLU

      FROM LineItem

      WHERE orderID IN

         (SELECT OrderID

          FROM Orders)

   );

	Name
▶	Silverbeet

1 Row returned

Q7. List the order number, full client name and amount charged which needs to be refunded for produce ordered but not shipped

SELECT Orders.ID AS orderNumber, CONCAT(Clients.FirstName, ' ', Clients.LastName) AS fullClientName, SUM(LineItem.Qty * ProducePrice.Price) AS amountRefunded

FROM Clients

INNER JOIN Orders ON Orders.ClientID = Clients.clientID

INNER JOIN LineItem ON LineItem.orderID = Orders.ID

INNER JOIN ProducePrice ON ProducePrice.PLU = LineItem.PLU

WHERE Shipped = 'N'

GROUP BY orderNumber, fullClientName;

orderNumber	fullClientName	amountRefunded
1017	Giancarlo Terzini	149.25
1904	Clarissa Wright	208.95
1005	Philip Teleman	149.25
1033	Philip Teleman	238.80
1077	Philip Teleman	208.95
1429	Philip Teleman	291.55
1773	Philip Teleman	179.10
1050	Kim Chang	59.70
1419	Cecile Debussy	417.90
1731	Cecile Debussy	29.85

25 Rows returned

Q8. List all trade customers who have ordered less than 10 orders in 2020. Order the by trade name in alphabetical order.

SELECT Clients.TradingName AS tradeCustomers, COUNT(Orders.ID) AS orderCount

FROM Clients NATURAL JOIN Orders

WHERE YEAR(orderDate) = 2020

AND Clients.Type = 'Trade'

GROUP BY tradeCustomers

HAVING COUNT(Orders.ID) < 10

ORDER BY Clients.TradingName;

tradeCustomers	orderCount
Bluebonnet BBQ	5
Harrald's	4
The Que Club Restaurant and Store	5

3 Rows returned

Q9. List the total cost of all orders for all trade clients excluding produce not shipped.

SELECT Clients.TradingName AS tradeClients, SUM(LineItem.Qty * ProducePrice.Price)

AS totalCost

FROM Clients

INNER JOIN Orders ON Clients.clientID = Orders.clientID

INNER JOIN LineItem ON Orders.ID = LineItem.orderID

INNER JOIN ProducePrice ON ProducePrice.PLU = LineItem.PLU AND

ProducePrice.priceListNum = LineItem.pricelistnum

WHERE Shipped = 'Y'

AND Clients.Type = 'Trade'

GROUP BY tradeClients;

tradeClients	totalCost
400 Degrees Pizza Emporium	26248.60
Padre Coffee	19840.29
Good Days	19914.86
University Cafe	23361.72
FAT - Fried and Tasty	28374.51
Thalia Thai	25337.54
El Mirage	17997.21
Rin Sura	19786.82
East Brunswick Hotel	17263.85
The Napier Hotel	15034.55

15 Rows returned

Q10.

a. Write the SQL DDL to create a view that lists the client name, month name, order count per month, order cost per month.

CREATE VIEW vClientRecord AS

SELECT CONCAT(Clients.FirstName, ' ', Clients.LastName) AS clientName,

MONTHNAME(Orders.orderDate) AS monthName, COUNT(DISTINCT Orders.ID) AS orderCountPerMonth,

SUM(ProducePrice.Price * LineItem.Qty) AS orderCostPerMonth

FROM Clients

INNER JOIN Orders ON Orders.ClientID = Clients.clientID

INNER JOIN LineItem ON LineItem.orderID = Orders.ID

INNER JOIN ProducePrice ON ProducePrice.priceListNum = LineItem.pricelistnum AND

ProducePrice.PLU = LineItem.PLU

GROUP BY clientName, monthName;

0 Rows Returned

Q10.

b. Using the View you created in Task 10a, write a query to identify who placed the highest in order cost, and the highest in order count in the month of January 2021.

SELECT clientName, orderCountPerMonth, orderCostPerMonth

FROM vClientRecord

Where monthName = 'January'

GROUP BY clientName

ORDER BY orderCountPerMonth DESC, orderCostPerMonth DESC

LIMIT 1;

	clientName	orderCountPerMonth	orderCostPerMonth
▶	Xinhue Zhang	15	4410.39

1 Row returned