1.Write a SELECT statement that returns two columns based on the Vendors table. The first column, Contact, is the vendor contact name in this format: Vendor Last name followed by first two letters of Vendor First name (for example, the format must look like, “Alberto Fr.”) The second column, Phone, is the VendorPhone column without the area code. Only return rows for those vendors in the 209 area code. Sort the results set by first name, then last name. Use Examples database.

ROWS:41

Used the SELECT statement to display the first column, Contact, which is the vendor contact name in this format: Vendor Last name followed by first two letters of Vendor First name. SUBSTRING is used to get second column, Phone, which is the VendorPhone column without the area code. I have used LEFT function to get the vendor phone numbers with area code 209

SELECT VendorContactLName + ' ' + LEFT(VendorContactFName, 2) + '.' AS Contact,

SUBSTRING (VendorPhone,7,8) AS Phone

FROM Vendors

where LEFT(VendorPhone,4) = '(209'

ORDER BY Contact;

-----SATWIK HOSAMANI---------

Graphical user interface, text, application

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2.Write a SELECT statement that returns the InvoiceNumber and balance due for every invoice with a non-zero balance and an InvoiceDueDate that’s less than 12 days from today (i.e. InvoiceDueDate < today’s date + 12)

ROWS:11

In this question we needed to retrive the current date so I used GETDATE function and

since I needed to compare it with current and 12 days I added 12,calculation of balance is

InvoiceTotal - CreditTotal - PaymentTotal.To sort Balance > 0, and adding one more condition

using AND operator which returns a Invoice date

SELECT InvoiceNumber,

InvoiceTotal-CreditTotal-PaymentTotal AS Balance

FROM Invoices

WHERE InvoiceTotal-CreditTotal-PaymentTotal > 0 AND

InvoiceDueDate < GETDATE() +12;

------SATWIK HOSAMANI-----

Graphical user interface, text, application

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3. Modify the search expression for InvoiceDueDate from the solution for question 2. Rather than 12 days from today, return invoices due before the last day of the current month.

ROWS:11

Select statement is used to retrieve the required columns just as the previous question InvoiceNumber and Balance, Balance=InvoiceTotal - CreditTotal - PaymentTotal.

This is part which is modified using the where clause Balance> 0, and another condition using AND operator which returns a Invoice date which is due before the last date of current month.The CAST, YEAR, MONTH, and GETDATE functions to cast the last date of current month.

SELECT InvoiceNumber,

InvoiceTotal - CreditTotal - PaymentTotal AS Balance

FROM Invoices

WHERE InvoiceTotal - CreditTotal - PaymentTotal > 0 AND

InvoiceDueDate <

CAST(CAST(YEAR(GETDATE()) AS char(4)) + '-' +

CAST(MONTH(GETDATE()) + 1 AS char(2)) + '-01' AS datetime) - 1;

------------------SATWIK HOSAMANI----------

Graphical user interface, text, application, Word

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4. Add a column to the query described in question 2 that uses the RANK() function to return a column named BalanceRank that ranks the balance due in ascending order.

ROWS:11

Select statement is used to select Invoice number and Balance ,Balance=InvoiceTotal - CreditTotal - PaymentTotalRank() used to assign rank to the column .Sorting is done using 2 conditions balance and Invoice date which producesInvoiceDueDate that's 12 days less than todays date

USE AP;

SELECT InvoiceNumber, InvoiceTotal - CreditTotal - PaymentTotal AS Balance,

RANK() OVER (ORDER BY InvoiceTotal - CreditTotal - PaymentTotal ASC) As BalanceRank FROM Invoices

WHERE InvoiceTotal - CreditTotal - PaymentTotal > 0 AND InvoiceDueDate < GETDATE() + 12;

-------SATWIK HOSAMANI-----

Graphical user interface, text, application, Word

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REMARKS:  
In the lab,We have gained practical knowledge of working with string, numeric and date-time data types.Also explored different functions LEFT ,RIGHT ,SUBSTRING,GETDATE .

Q3 was a little difficult for me to crack.The Lab questions were more well phrased and easy to understand. Thank youOverall, this lab was challenging and lead to clear understanding of concepts in Unit 5