**Question-1**

**You have a table “Trans” having following data structure:**

**CustomerID INT, TransDate DATETIME, TransType CHAR (1), Amount MONEY**

**Trans Table has following data:**

**Write the following queries:**

**1.1. Display Trans Table records with following columns CustomerID, TransDate, WeekDay, TransType, Amount Where**

**TransType should display “Credit” for “C” and “Debit for “D” And WeekDay is TransDate of WeekDay, e.g. Today’s**

**Date is “Apr 17 2006” and Today WeekDay is “Monday”**

Ans- SELECT

CustomerID,

TransDate,

DATENAME(dw, TransDate) AS WeekDay,

CASE

WHEN TransType = 'C' THEN 'Credit'

WHEN TransType = 'D' THEN 'Debit'

END AS TransType,

Amount

FROM

Trans

**2. Display Trans Table records with following columns CustomerID, TransDate, Credit Amount, Debit Amount, Where**

**Credit Amount is Amount When TransType = ‘C’ Where Debit Amount is Amount When TransType = ‘D’ Display Null**

**Value as “0.00” Display Amount with Two Decimal. Display TransDate with “MM/dd/yyyy” Format**

Ans- SELECT

CustomerID,

CONVERT(varchar, TransDate, 101) AS TransDate,

ISNULL(CAST(SUM(CASE WHEN TransType = 'C' THEN Amount ELSE 0 END) AS decimal(10,2)), '0.00') AS [Credit Amount],

ISNULL(CAST(SUM(CASE WHEN TransType = 'D' THEN Amount ELSE 0 END) AS decimal(10,2)), '0.00') AS [Debit Amount]

FROM

Trans

GROUP BY

CustomerID,

CONVERT(varchar, TransDate, 101)

3. **Same as 2, but display the records where TransDate Month belongs to “4” month And Year = 2005.**

Ans- SELECT

CustomerID,

CONVERT(varchar, TransDate, 101) AS TransDate,

ISNULL(CAST(SUM(CASE WHEN TransType = 'C' THEN Amount ELSE 0 END) AS decimal(10,2)), '0.00') AS [Credit Amount],

ISNULL(CAST(SUM(CASE WHEN TransType = 'D' THEN Amount ELSE 0 END) AS decimal(10,2)), '0.00') AS [Debit Amount]

FROM

Trans

WHERE

MONTH(TransDate) = 4 AND YEAR(TransDate) = 2005

GROUP BY

CustomerID,

CONVERT(varchar, TransDate, 101)

**4. Same as 2, but display the records where TransDate is StartDate of the Month**

Ans- SELECT

CustomerID,

CONVERT(varchar, DATEADD(day, -(DAY(TransDate)-1), TransDate), 101) AS TransDate,

ISNULL(CAST(SUM(CASE WHEN TransType = 'C' THEN Amount ELSE 0 END) AS decimal(10,2)), '0.00') AS [Credit Amount],

ISNULL(CAST(SUM(CASE WHEN TransType = 'D' THEN Amount ELSE 0 END) AS decimal(10,2)), '0.00') AS [Debit Amount]

FROM

Trans

GROUP BY

CustomerID,

DATEADD(day, -(DAY(TransDate)-1), TransDate)

**5. Same as 2, but display the records where TransDate is EndDate of the Month**

Ans-SELECT

CustomerID,

CONVERT(varchar, EOMONTH(TransDate), 101) AS TransDate,

ISNULL(CAST(SUM(CASE WHEN TransType = 'C' THEN Amount ELSE 0 END) AS decimal(10,2)), '0.00') AS [Credit Amount],

ISNULL(CAST(SUM(CASE WHEN TransType = 'D' THEN Amount ELSE 0 END) AS decimal(10,2)), '0.00') AS [Debit Amount]

FROM

Trans

GROUP BY

CustomerID,

EOMONTH(TransDate)

**6. Display Trans Table records with following columns CustomerID, Year, Credit Total Amount, Debit Total Amount I**

**need Total for each CustomerID, Year Where Credit Total Amount and Debit Total Amount is Sum of Amount Null**

**Amount should display as 0.00.**

Ans-SELECT

CustomerID,

YEAR(TransDate) AS [Year],

ISNULL(SUM(CASE WHEN TransType = 'C' THEN Amount ELSE 0 END), 0.00) AS [Credit Total Amount],

ISNULL(SUM(CASE WHEN TransType = 'D' THEN Amount ELSE 0 END), 0.00) AS [Debit Total Amount]

FROM

Trans

GROUP BY

CustomerID,

YEAR(TransDate)