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-- 1
Select Itemid, Description, listprice
from PET..Merchandise
where (ListPrice >= (SELECT AVG(listprice) from PET..Merchandise));

-- 2
SELECT m.ItemID, AVG(o.Cost) as "Average Cost", AVG(s.SalePrice) as "Average Sale Price"
FROM PET..OrderItem as "o" INNER JOIN PET..Merchandise as "M" ON (o.ItemID = m.ItemID)
INNER JOIN PET..SaleItem as "S" ON (m.ItemID = s.ItemID)
GROUP BY m.ItemID
HAVING (AVG(s.SalePrice) > AVG(o.Cost) * 1.5);

-- 3
SELECT e.EmployeeID, sum(i.SalePrice) as "TotalSales", (sum(i.SalePrice)/ (SELECT sum
(SalePrice) from PET..SaleItem)) as "PctSales"
FROM (PET..Employee as "e"
INNER JOIN PET..Sale as "s" ON (e.EmployeeID = s.EmployeeID)
INNER JOIN PET..SaleItem as "i" ON (s.SaleID = i.SaleID))
GROUP BY e.EmployeeID

-- 4

--Create View for Temporary Calc

USE [CIS31036]
DROP VIEW [PET].[Q4View];
GO
CREATE VIEW [PET].[Q4View] AS
SELECT s.SupplierID, s.Name, (po.cost) as "Total Cost of order", o.ShippingCost as
"shipping cost", sum(po.cost)/o.ShippingCost as "pctShip"
FROM PET..Supplier as "S" INNER JOIN PET..MerchandiseOrder as "o" ON (s.SupplierID =
o.SupplierID)
INNER JOIN PET..OrderItem as "po" ON (o.PONumber = po.PONumber)
GROUP BY s.SupplierID, s.Name, po.Cost, po.PONumber, o.ShippingCost;

GO
SELECT TOP 1 s.SupplierID, s.Name, avg(s.pctShip) as "pctShipCost"
FROM CIS31036.PET.Q4View as s
GROUP BY s.SupplierID, s.Name
ORDER BY "pctShipCost" DESC

-- 5
-- Using TOP and Order By to Show the Biggest GrandTotal :) - Nga
SELECT TOP 1 c.CustomerID, c.LastName, c.FirstName, sum(a.SalePrice) as "Animal
Total", sum(i.SalePrice) as "MercTotal", (sum(a.SalePrice) + sum(i.SalePrice)) as
"GrandTotal"
FROM PET..Customer as "c" INNER JOIN PET..Sale "s" ON (c.CustomerID = s.CustomerID)
INNER JOIN PET..SaleAnimal as "a" ON (s.SaleID = a.SaleID)
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INNER JOIN PET..SaleItem as "i" ON (s.SaleID = i.SaleID)
GROUP BY c.CustomerID, c.LastName, c.FirstName
ORDER BY GrandTotal DESC

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SELECT c.CustomerID, c.LastName, c.FirstName, (SELECT sum(i1.SaleID)
                                              FROM PET..Customer as "c1" INNER JOIN
PET..Sale as "s1" ON (c1.CustomerID = s1.CustomerID)
                                              INNER JOIN PET..SaleItem as "i1" ON
(s1.SaleID = i1.SaleID)
                                              WHERE c1.CustomerID = c.CustomerID
                                              ) as "MayTotal"
FROM PET..Customer as "c"
INNER JOIN PET..Sale as "s" ON (c.CustomerID = s.CustomerID)
INNER JOIN PET..SaleItem as "i" ON (s.SaleID = i.SaleID)

WHERE c.CustomerID IN (SELECT s2.CustomerID
                      FROM PET..Sale as "s2" INNER JOIN PET..SaleItem as "i2" ON
(s2.SaleID = i2.SaleID)
                      WHERE (s2.SaleDate >= '2004-05-01' and s2.SaleDate <=
'2004-05-31')
                      GROUP BY s2.CustomerID
                      HAVING sum(i2.SalePrice) > 100
                      )
and
c.CustomerID IN (SELECT s2.CustomerID
                FROM PET..Sale as "s2" INNER JOIN PET..SaleItem as "i2" ON
(s2.SaleID = i2.SaleID)
                WHERE (s2.SaleDate >= '2004-10-01' and s2.SaleDate <=
'2004-10-31')
                GROUP BY s2.CustomerID
                HAVING sum(i2.SalePrice) > 50
                )

GROUP BY c.CustomerID, c.LastName, c.FirstName

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SELECT m.Description, m.ItemID, sum(ord.Quantity) as "purchased", sum(i.Quantity) as
"sold"
FROM PET..MerchandiseOrder as "po"
INNER JOIN PET..OrderItem as "ord" ON (po.PONumber = ord.PONumber)
INNER JOIN PET..Merchandise as "m" ON (ord.ItemID = m.ItemID)
INNER JOIN PET..SaleItem as "i" ON (m.ItemID = i.ItemID)
INNER JOIN PET..Sale as "sale" ON (i.SaleID = sale.SaleID)
WHERE (
    m.ItemID = '16' -- Dog Food-Can Premuim
    and
    (
        (po.OrderDate >= '2004-01-01' and po.OrderDate <= '2004-07-01')
    )
)

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        and
        (sale.SaleDate >= '2004-01-01' and sale.SaleDate <= '2004-07-01')
    )
)
GROUP BY m.Description, m.ItemID

SELECT *
FROM PET..MerchandiseOrder as "po"
    INNER JOIN PET..OrderItem as "ord" ON (po.PONumber = ord.PONumber)
    INNER JOIN PET..Merchandise as "m" ON (ord.ItemID = m.ItemID)
    INNER JOIN PET..SaleItem as "i" ON (m.ItemID = i.ItemID)
    INNER JOIN PET..Sale as "sale" ON (i.SaleID = sale.SaleID)
WHERE (
    m.ItemID = '16' -- Dog Food-Can Premuim
    and
    (
        (sale.SaleDate >= '2004-01-01' and sale.SaleDate <= '2004-07-01')
    )
)

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SELECT m.ItemID, m.Description, m.ListPrice, sales.SaleDate
FROM PET..Merchandise as "m" inner JOIN PET..SaleItem as "i" ON (m.ItemID = i.ItemID)
right OUTER JOIN PET..Sale as "sales" ON (i.SaleID = sales.SaleID)
WHERE sales.SaleDate not between '2004-07-01' and '2004-07-31' or sales.SaleDate is
    null

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SELECT m.ItemID, m.Description, m.ListPrice
from PET..Merchandise as "m"
WHERE
-- Determine what was purchased
(m.ItemID NOT IN (
SELECT m.ItemID
FROM PET..Sale as "sales" inner join PET..SaleItem as "i" ON (i.SaleID = sales.SaleID)
    right join PET..Merchandise as "m" ON (m.ItemID = i.ItemID)
WHERE sales.SaleDate between '2004-07-01' and '2004-07-31' -- and sales.SaleDate is
    null
))

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SELECT m.itemid, m.description, m.QuantityOnHand, oi.ItemID
FROM PET..MerchandiseOrder MO full outer join PET..OrderItem OI ON (MO.PONumber =
    OI.PONumber)
    FULL OUTER JOIN PET..Merchandise M ON (oi.ItemID = m.ItemID)
WHERE M.QuantityOnHand > 100 and (MO.orderdate not like '%2004%' or MO.OrderDate is

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null)

-- 10
SELECT m.ItemID, m.Description, m.QuantityOnHand
FROM PET..Merchandise as "m"
WHERE
-- Determine what was purchased
(m.ItemID NOT IN (
SELECT DISTINCT m.ItemID
FROM PET..MerchandiseOrder MO left join PET..OrderItem OI ON (MO.PONumber =
OI.PONumber)
left JOIN PET..Merchandise M ON (oi.ItemID = m.ItemID)
WHERE mo.OrderDate not like '2004%' or mo.OrderDate is null
) and m.QuantityOnHand > 100)

-- 11

-- Create table
GO

Create Table CIS31036.PET.C_Category (
    category varchar(4),
    low int,
    high int
)

GO --insert categories
Insert into CIS31036.PET.C_Category (category, low, high) VALUES ('Weak',0,200);
insert into CIS31036.PET.C_Category (category, low, high) VALUES ('Good',200, 800);
insert into CIS31036.PET.C_Category (category, low, high) VALUES ('Best', 800, 10000);

GO --Test insert
SELECT * from CIS31036.PET.C_Category;

USE CIS31036;
GO
CREATE VIEW PET.C_Totals AS
SELECT c.CustomerID, c.LastName, c.FirstName, (sum(a.SalePrice) + sum(i.SalePrice))
as "GrandTotal"
FROM PET..Customer as "c" INNER JOIN PET..Sale "s" ON (c.CustomerID = s.CustomerID)
INNER JOIN PET..SaleAnimal as "a" ON (s.SaleID = a.SaleID)
INNER JOIN PET..SaleItem as "i" ON (s.SaleID = i.SaleID)
GROUP BY c.CustomerID, c.LastName, c.FirstName

GO

SELECT cu.CustomerID, cu.LastName, cu.FirstName, c.category
FROM CIS31036.PET.C_Totals as cu
INNER JOIN CIS31036.PET.C_Category as c ON (cu.GrandTotal >= c.low and cu.GrandTotal <

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-- 12
SELECT s.Name, 'Animal' as "Order Type"
FROM PET..Supplier s inner join PET..AnimalOrder ao ON (s.SupplierID = ao.SupplierID)
WHERE ao.OrderDate between '2004-07-01' and '2004-07-31'

UNION

SELECT s.Name, 'Merchandise' as "Order Type"
FROM PET..Supplier s
INNER JOIN PET..MerchandiseOrder as po ON (s.SupplierID = po.SupplierID)
WHERE po.OrderDate between '2004-07-01' and '2004-07-31'
```