--A8

--Pedro Gregorio

--1-List the products with a list price greater than the average list price of all products.

SELECT ITEMID, DESCRIPTION, LISTPRICE

FROM PET..MERCHANDISE

WHERE ListPrice > (SELECT AVG(ListPrice)

FROM PET..Merchandise)

--2-Which merchandise items have an average sale price more than 50 percent higher than their average purchase cost?

SELECT M.ITEMID, AVG(O.COST) AS 'Average Cost', AVG(S.SALEPRICE) AS 'Average Sale Price'

FROM PET..OrderItem O INNER JOIN PET..Merchandise M ON O.ItemID = M.ItemID

INNER JOIN PET..SaleItem S ON M.ItemID = S.ItemID

GROUP BY M.ItemID

HAVING AVG(SalePrice) > 1.5 \* AVG(Cost)

--3-List the employees and their total merchandise sales expressed as a percentage of total merchandise sales for all employees.

SELECT distinct E.EMPLOYEEID, E.LASTNAME, Sum((si.Quantity \* si.SalePrice)) AS 'TotalSales', SUM((si.Quantity \* si.SalePrice))/(SELECT SUM(si.quantity \* si.Saleprice)

FROM PET..Employee E INNER JOIN PET..Sale S ON E.EmployeeID = S.EmployeeID

INNER JOIN pet..SaleItem SI on s.SaleID = si.SaleID) \* 100 AS 'PctSales'

FROM PET..Employee E INNER JOIN PET..Sale S ON E.EmployeeID = S.EmployeeID

INNER JOIN pet..SaleItem SI on s.SaleID = si.SaleID

group by e.EMPLOYEEID, E.LASTNAME

order by TotalSales desc

--4-On average, which supplier charges the highest shipping cost as a percent of the merchandise order total?

SELECT TOP 1 S.SUPPLIERID, S.NAME, MO.SHIPPINGCOST/(SUM((OI.QUANTITY \* OI.COST) + MO.SHIPPINGCOST)) \*100 AS 'PctShipCost'

FROM PET..SUPPLIER S INNER JOIN PET..MerchandiseOrder MO ON S.SupplierID = MO.SupplierID

INNER JOIN PET..OrderItem OI ON MO.PONumber = OI.PONumber

GROUP BY S.SupplierID, S.Name, MO.ShippingCost

ORDER BY PctShipCost desc

--5-Which customer has given us the most total money for animals and merchandise?

SELECT TOP 1 C.CUSTOMERID, C.LASTNAME, C.FIRSTNAME, (SELECT sum(Quantity \* SalePrice)

FROM PET..SaleItem SI INNER JOIN PET..SALE S ON SI.SaleID = S.SaleID

WHERE C.CustomerID = S.CustomerID) AS 'MERCTOTAL',

(SELECT Sum(SalePrice)

FROM PET..SaleAnimal SA INNER JOIN PET..SALE S ON SA.SaleID = S.SaleID

WHERE C.CustomerID = S.CustomerID) AS 'ANIMALTOTAL',

(SELECT sum(Quantity \* SalePrice)

FROM PET..SaleItem SI INNER JOIN PET..SALE S ON SI.SaleID = S.SaleID

WHERE C.CustomerID = S.CustomerID)

+

(SELECT Sum(SalePrice)

FROM PET..SaleAnimal SA INNER JOIN PET..SALE S ON SA.SaleID = S.SaleID

WHERE C.CustomerID = S.CustomerID) AS 'GRANDTOTAL'

FROM PET..Customer C INNER JOIN PET..SALE S ON C.CustomerID = S.CustomerID

GROUP BY C.CustomerID,C.LastName,C.FirstName

ORDER BY GRANDTOTAL DESC

--6-Which customers who bought more than $100 in merchandise in May also spent more than $50 on merchandise in October?

SELECT DISTINCT C.CUSTOMERID, C.LASTNAME, C.FIRSTNAME, (SELECT SUM(SI.QUANTITY \* SI.SALEPRICE)

FROM PET..SALEITEM SI INNER JOIN PET..SALE S ON SI.SALEID = S.SaleID

WHERE C.CUSTOMERID = S.CustomerID

AND MONTH(S.SaleDate) = 5) AS 'MAYTOTAL'

FROM PET..CUSTOMER C INNER JOIN PET..SALE S ON C.CustomerID = S.CustomerID

INNER JOIN PET..SaleItem SI ON SI.SaleID = S.SaleID

WHERE (SELECT SUM(SI.QUANTITY \* SI.SALEPRICE)

FROM PET..SALEITEM SI INNER JOIN PET..SALE S ON SI.SALEID = S.SaleID

WHERE C.CUSTOMERID = S.CustomerID

AND MONTH(S.SaleDate) = 5) > 100

AND

(SELECT SUM(SI.QUANTITY \* SI.SALEPRICE)

FROM PET..SALEITEM SI INNER JOIN PET..SALE S ON SI.SALEID = S.SaleID

WHERE C.CUSTOMERID = S.CustomerID

AND MONTH(S.SaleDate) = 10) > 50

--7-What was the net change in quantity on hand for premium canned dog food between January 1 and July 1?

SELECT DESCRIPTION, ITEMID, (SELECT SUM(OI.QUANTITY)

FROM PET..MerchandiseOrder MO INNER JOIN PET..OrderItem OI ON MO.PONumber = OI.PONumber

INNER JOIN PET..MERCHANDISE M ON M.ITEMID = OI.ITEMID

WHERE M.Description = 'Dog Food-Can-Premium' AND MO.OrderDate <= '2004-07-01' and MO.OrderDate > '2004-01-01') AS 'PURCHASED',

(SELECT SUM(SI.QUANTITY)

FROM PET..SaleItem SI INNER JOIN PET..SALE S ON SI.SaleID = S.SaleID

INNER JOIN PET..MERCHANDISE M ON M.ITEMID = SI.ItemID

WHERE M.Description = 'Dog Food-Can-Premium' AND S.SaleDate < '2004-07-01' and S.SaleDate > '2004-01-01') AS 'SOLD',

((SELECT SUM(OI.QUANTITY)

FROM PET..MerchandiseOrder MO INNER JOIN PET..OrderItem OI ON MO.PONumber = OI.PONumber

INNER JOIN PET..MERCHANDISE M ON M.ITEMID = OI.ITEMID

WHERE M.Description = 'Dog Food-Can-Premium' AND MO.OrderDate <= '2004-07-01' and MO.OrderDate > '2004-01-01')

-

(SELECT SUM(SI.QUANTITY)

FROM PET..SaleItem SI INNER JOIN PET..SALE S ON SI.SaleID = S.SaleID

INNER JOIN PET..MERCHANDISE M ON M.ITEMID = SI.ItemID

WHERE M.Description = 'Dog Food-Can-Premium' AND S.SaleDate < '2004-07-01' and S.SaleDate > '2004-01-01')) AS 'NETINCREASE'

FROM PET..Merchandise

WHERE Description = 'Dog Food-Can-Premium'

--8-Which merchandise items with a list price of more than $50 had no sales July?

SELECT M.ITEMID, M.DESCRIPTION, M.LISTPRICE

FROM PET..Merchandise M INNER JOIN PET.. SaleItem SI ON M.ItemID = SI.ItemID

INNER JOIN PET..Sale S ON S.SaleID = SI.SaleID

WHERE M.LISTPRICE > '50' AND

MONTH(S.SALEDATE) <> 7

GROUP BY M.ItemID, M.DESCRIPTION, M.LISTPRICE

--9---Which merchandise items with more than 100 units on hand have not been ordered in 2004? Use an outer join to answer the question.

SELECT DISTINCT M.ITEMID, M.DESCRIPTION, M.QUANTITYONHAND

FROM PET..Merchandise M left OUTER JOIN PET..OrderItem OI ON M.ItemID = OI.ItemID

left OUTER JOIN pet..MerchandiseOrder MO ON MO.PONumber = OI.PONumber

WHERE M.QuantityOnHand > 100

AND OI.PONumber is null

--10-Which merchandise items with more than 100 units on hand have not been ordered in 2004? Use a subquery to answer the question.

SELECT DISTINCT M.ITEMID, M.DESCRIPTION, M.QUANTITYONHAND, M.ITEMID

FROM PET..Merchandise M left OUTER JOIN PET..OrderItem OI ON M.ItemID = OI.ItemID

left OUTER JOIN pet..MerchandiseOrder MO ON MO.PONumber = OI.PONumber

WHERE M.QuantityOnHand > 100 and OI.PONumber IS NULL OR YEAR(Mo.OrderDate) IN (SELECT OrderDate FROM pet..MerchandiseOrder WHERE YEAR(OrderDate) <> 2004)

--11------DONE

--CREATION OF THE TABLE

CREATE TABLE TableCategory (

Category varchar (10),

Low int,

High int,

);

--insert values in

INSERT INTO TableCategory (Category, Low, High )

VALUES ('Weak', '0', '200'),

('Good','200','800'),

('Best','800','10000');

SELECT t1.CustomerID, C.LastName, C.FirstName, Sum(t1.Grandtotal) AS 'GrandTotal', (SELECT CATEGORY FROM TableCategory Where sum(t1.Grandtotal) <= High And

sum(t1.Grandtotal) >= Low) AS 'Category'

FROM

((Select S.CustomerID, Sum(SI.QUANTITY \* Si.SALEPRICE) as 'Grandtotal'

From pet..Sale S INNER JOIN PET..SaleItem SI ON S.SaleID = SI.SaleID

WHERE SI.SaleID not in (SELECT SaleID FROM pet..SaleAnimal)

GROUP by S.CustomerID)

UNION

(SELECT S.CustomerID, Sum(SA.SalePrice)

FROM pet..SaleAnimal SA inner join pet..Sale S on s.SaleID = SA.SaleID

GROUP BY S.CustomerID)) as t1 INNER JOIN PET..CUSTOMER C ON C.CustomerID = T1.CustomerID

GROUP BY t1.CustomerID, C.LastName, C.FirstName

ORDER BY Grandtotal DESC

--12-List all suppliers (animals and merchandise) who sold us items in June. Identify whether they sold use animals or merchandise.

SELECT S.NAME, S.SupplierID, 'MerchSupplier' AS 'OrderType'

FROM PET..Supplier S LEFT OUTER JOIN PET..MerchandiseOrder M ON S.SUPPLIERID = M.SUPPLIERID

WHERE MONTH(M.ORDERDATE) = 6

Union

SELECT S.NAME, S.SupplierID, 'AnimalSupplier' AS 'OrderType'

FROM PET..Supplier S LEFT OUTER JOIN PET..ANIMALORDER A ON S.SUPPLIERID = A.SUPPLIERID

WHERE MONTH(A.OrderDate) = 6