

```

1
2 --Lab 3-1
3
4 SELECT c.CustomerID, c.TerritoryID,
5 COUNT(o.SalesOrderid) [Total Orders]
6 FROM Sales.Customer c
7 LEFT OUTER JOIN Sales.SalesOrderHeader o
8     ON c.CustomerID = o.CustomerID
9 WHERE DATEPART(year, OrderDate) = 2007
10 GROUP BY c.TerritoryID, c.CustomerID;
11
12 SELECT c.CustomerID,
13     c.TerritoryID,
14     COUNT(soh.SalesOrderID) [Total Orders],
15     CASE
16         WHEN COUNT(soh.SalesOrderID) = 0
17             THEN 'No Order'
18         WHEN COUNT(soh.SalesOrderID) = 1
19             THEN 'One Time'
20         WHEN COUNT(soh.SalesOrderID) BETWEEN 2 AND 5
21             THEN 'Regular'
22         WHEN COUNT(soh.SalesOrderID) BETWEEN 6 AND 10
23             THEN 'Often'
24         ELSE 'Loyal'
25     END AS [Order Frequency]
26 FROM Sales.Customer c
27 LEFT OUTER JOIN Sales.SalesOrderHeader soh
28     ON c.CustomerID = soh.CustomerID
29 WHERE DATEPART(year, OrderDate) = 2007
30 GROUP BY c.TerritoryID, c.CustomerID;
31
32
33 --Lab 3-2
34
35 SELECT c.CustomerID, c.TerritoryID,
36     COUNT(o.SalesOrderid) [Total Orders]
37 FROM Sales.Customer c
38 LEFT OUTER JOIN Sales.SalesOrderHeader o
39     ON c.CustomerID = o.CustomerID
40 WHERE DATEPART(year, OrderDate) = 2007
41 GROUP BY c.TerritoryID, c.CustomerID;
42
43
44 SELECT c.CustomerID, c.TerritoryID,
45     COUNT(o.SalesOrderid) [Total Orders],
46     DENSE_RANK() OVER (PARTITION BY c.TerritoryID ORDER BY COUNT(o.SalesOrderid) DESC) [Rank]
47 FROM Sales.Customer c
48 LEFT OUTER JOIN Sales.SalesOrderHeader o
49     ON c.CustomerID = o.CustomerID
50 WHERE DATEPART(year, OrderDate) = 2007
51 GROUP BY c.TerritoryID, c.CustomerID;
52
53
54 --Lab 3-3
55
56 SELECT TOP 1 WITH TIES SP.BusinessEntityID, SP.Bonus AS HighestBonus
57 FROM [Sales].[SalesPerson] SP
58 JOIN [Sales].[SalesTerritory] ST
59     ON SP.TerritoryID = ST.TerritoryID
60 JOIN [HumanResources].[Employee] E
61     ON SP.BusinessEntityID = E.BusinessEntityID
62 WHERE E.Gender = 'F' AND ST.[Group] = 'North America'
63 ORDER BY SP.Bonus DESC;
64
65
66 --Lab 3-4
67
68 select month, temp.SalesPersonID, round(TotalSale, 2) [Total Sales], Bonus from
69 (
70     select month(OrderDate) Month, SalesPersonID, sum(TotalDue) TotalSale,
71         rank() over (partition by month(OrderDate) order by sum(TotalDue) desc) as rank

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72  from Sales.SalesOrderHeader
73  where SalesPersonID is not null and year(OrderDate) = 2007
74  group by month(OrderDate), SalesPersonID) temp
75 join Sales.SalesPerson s
76 on temp.SalesPersonID = s.BusinessEntityID
77 where rank =1
78 order by month;
79
80
81 --Lab 3-5
82
83 select sh.CustomerID, sh.AccountNumber
84  from Sales.SalesOrderHeader sh
85  join Sales.SalesOrderDetail sd
86  on sh.SalesOrderID = sd.SalesOrderID
87  join Production.Product p
88  on sd.ProductID = p.ProductID
89  where sh.OrderDate > '5-1-2008'
90         and p.Color = 'Red'
91 intersect
92  select sh.CustomerID, sh.AccountNumber
93  from Sales.SalesOrderHeader sh
94  join Sales.SalesOrderDetail sd
95  on sh.SalesOrderID = sd.SalesOrderID
96  join Production.Product p
97  on sd.ProductID = p.ProductID
98  where sh.OrderDate > '5-1-2008'
99         and p.Color = 'Yellow'
100 order by CustomerID;
101
102

```