

USE AdventureWorks2008R2

--3.1

```
select a.*, case when a.Total_Orders between 1 and 120 then 'Do more!'
when a.Total_Orders between 121 and 320 then 'Fine!' else 'Excellent!' end as
Feedback
from (
SELECT SalesPersonID, p.LastName, p.FirstName,
COUNT(o.SalesOrderid) [Total_Orders]
FROM Sales.SalesOrderHeader o
JOIN Person.Person p
ON o.SalesPersonID = p.BusinessEntityID
GROUP BY o.SalesPersonID, p.LastName, p.FirstName) a
ORDER BY a.LastName, a.FirstName
```

--3.2

```
SELECT o.TerritoryID, s.Name, o.SalesPersonID,
COUNT(o.SalesOrderid) [Total Orders], RANK() OVER (PARTITION BY o.TerritoryID ORDER
BY
COUNT(o.SalesOrderid) DESC) AS [Rank]
FROM Sales.SalesOrderHeader o
JOIN Sales.SalesTerritory s
ON o.TerritoryID = s.TerritoryID
WHERE SalesPersonID IS NOT NULL
GROUP BY o.TerritoryID, s.Name, o.SalesPersonID
ORDER BY o.TerritoryID;
```

--3.3

```
select a.ShipToAddressID,a.ProductID,a.qty
from(select b.*, RANK() OVER (PARTITION BY b.ShipToAddressID ORDER BY b.qty DESC)
AS rnk
from( select h.ShipToAddressID,d.ProductID, sum(d.OrderQty) as qty
from Sales.SalesOrderDetail d join Sales.SalesOrderHeader h on d.SalesOrderID =
h.SalesOrderID
group by h.ShipToAddressID,d.ProductID) b ) a
where a.rnk = 1 and a.qty > 100 order by a.ShipToAddressID
```

--3.4

```
select a.OrderDate,a.ProductID,a.qty
from(select h.OrderDate ,d.ProductID, sum(d.OrderQty) as qty, RANK() OVER
(PARTITION BY h.OrderDate ORDER BY
sum(d.OrderQty) DESC) AS rnk
from Sales.SalesOrderDetail d join Sales.SalesOrderHeader h on d.SalesOrderID =
h.SalesOrderID
group by h.OrderDate,d.ProductID ) a where a.rnk = 1 order by a.OrderDate
```

--3.5

```
select CustomerID
from (select h.CustomerID, count(distinct d.ProductID) as qty
from Sales.SalesOrderDetail d join Sales.SalesOrderHeader h on d.SalesOrderID =
h.SalesOrderID
where h.CustomerID not in (select a.CustomerID from (select
h.CustomerID ,d.ProductID , count(d.ProductID) cnt
from Sales.SalesOrderDetail d join Sales.SalesOrderHeader h on d.SalesOrderID =
h.SalesOrderID
group by h.CustomerID ,d.ProductID
having count( d.ProductID) > 1 )a )
group by h.CustomerID
```

```
having count(distinct d.ProductID)>10 )a  
order by qty desc
```