**Queries for Business Data Analysis**

Selecting top customers

Select top 10 \* from Customers

Selecting orders between certain dates and time

select \* from Orders where OrderDate between '1996-07-04 00:00:00.000' and '1996-08-01 00:00:00.000'

OR you can use other if you want just year

select \* from Orders where year(OrderDate)=1997

If you want to know what were the sales in last month of all years of which you have data

select \* from Orders where month(OrderDate)=12

If you want to know what were the sales in last month of a specific year

select \* from Orders where year(OrderDate)=1997 and month(OrderDate)=12

If you want to know data of certain supplier with certain category

Select \* from Products where SupplierID=5 and CategoryID=4

If you want to know data of certain supplier or certain category

Select \* from Products where SupplierID=5 or CategoryID=4

If you want to know data of multiple categories

Select \* from Products where CategoryID=5 or CategoryID=4

OR

Select \* from Products where CategoryID in (4,5,6,7,8)

How much revenue a customer has generated

Select CompanyName,sum(Freight) AS [Total Spending] from Customers cust join Orders ord

on cust.CustomerID=ord.CustomerID

Group by CompanyName

If you want to know how much customers have spent by categories

Select CompanyName,CategoryName ,sum(Freight) AS [Total Spending]

from Customers cust join Orders ord

on cust.CustomerID=ord.CustomerID

join [Order Details] ordd

on ord.OrderID=ordd.OrderID

join Products prod

on ordd.ProductID=prod.ProductID

join Categories cat

on prod.CategoryID=cat.CategoryID

group by CompanyName,CategoryName

order by CompanyName

If you want to know about maximum customer have spent

Select CompanyName,CategoryName ,max(Freight) AS [Maximum Spending]

from Customers cust join Orders ord

on cust.CustomerID=ord.CustomerID

join [Order Details] ordd

on ord.OrderID=ordd.OrderID

join Products prod

on ordd.ProductID=prod.ProductID

join Categories cat

on prod.CategoryID=cat.CategoryID

group by CompanyName,CategoryName

If you want to know average how much customer has spent

Select CompanyName,CategoryName ,avg(Freight) AS [Total Spending as average]

from Customers cust join Orders ord

on cust.CustomerID=ord.CustomerID

join [Order Details] ordd

on ord.OrderID=ordd.OrderID

join Products prod

on ordd.ProductID=prod.ProductID

join Categories cat

on prod.CategoryID=cat.CategoryID

group by CompanyName,CategoryName

If you want to know abou customer whose sum spent is greater than 500

Select CompanyName,CategoryName ,sum(Freight) AS [Total Spending SUM]

from Customers cust join Orders ord

on cust.CustomerID=ord.CustomerID

join [Order Details] ordd

on ord.OrderID=ordd.OrderID

join Products prod

on ordd.ProductID=prod.ProductID

join Categories cat

on prod.CategoryID=cat.CategoryID

group by CompanyName,CategoryName

having sum(Freight)>500

order by CompanyName

Order by

SELECT ROW\_NUMBER() OVER(ORDER BY Categories.CategoryID) AS [row num],

SUBSTRING (CategoryName,1,2) AS [2LETTERS], CategoryName, [Description],ProductName, GETDATE() AS [TODAY DATE]

FROM Categories JOIN Products

ON Categories.CategoryID=Products.CategoryID

ORDER By CategoryName,ProductName

Partition by

SELECT ROW\_NUMBER() OVER(PARTITION BY Categories.categoryID ORDER BY Products.Productid) AS [row num],

SUBSTRING (CategoryName,1,2) AS [2LETTERS], CategoryName, [Description],ProductName, GETDATE() AS [TODAY DATE]

FROM Categories JOIN Products

ON Categories.CategoryID=Products.CategoryID

ORDER By Categories.CategoryName

Selecting one category of in text formate

SELECT ROW\_NUMBER() OVER(PARTITION BY Categories.categoryID ORDER BY Products.Productid) AS [row num],

SUBSTRING (CategoryName,1,2) AS [2LETTERS], CategoryName, [Description],ProductName, GETDATE() AS [TODAY DATE]

FROM Categories JOIN Products

ON Categories.CategoryID=Products.CategoryID

WHERE CategoryName='Beverages'

ORDER By Categories.CategoryName

Applying Char Index

SELECT ROW\_NUMBER() OVER(PARTITION BY Categories.categoryID ORDER BY Products.Productid) AS [row num],

UPPER( SUBSTRING(CategoryName,1,2) ) AS [2LETTERS], CategoryName AS [Category],

CHARINDEX(',',[Description],1),

[Description],ProductName

FROM Categories JOIN Products

ON Categories.CategoryID=Products.CategoryID

WHERE CategoryName='Beverages'

ORDER By Categories.CategoryName

Picking up some text from certain column and making another column

SELECT

ROW\_NUMBER() OVER(PARTITION BY Categories.categoryID ORDER BY Products.Productid) AS [row num] ,

UPPER( SUBSTRING(CategoryName,1,2) ) AS [2LETTERS], CategoryName AS [Category],

SUBSTRING([description],1, CHARINDEX(',',[Description],1) -1) AS [ShortDesc],

[Description],ProductName

FROM Categories JOIN Products

ON Categories.CategoryID=Products.CategoryID

WHERE CategoryName='Beverages'

ORDER By Categories.CategoryName

Adding text in existing column

SELECT

ROW\_NUMBER() OVER(PARTITION BY Categories.categoryID ORDER BY Products.Productid) AS [row num] ,

UPPER( SUBSTRING(CategoryName,1,2) ) AS [2LETTERS],

'Today ' + CategoryName AS [Category],

SUBSTRING([description],1, CHARINDEX(',',[Description],1) -1) AS [ShortDesc],

[Description],ProductName

FROM Categories JOIN Products

ON Categories.CategoryID=Products.CategoryID

WHERE CategoryName='Beverages'

ORDER By Categories.CategoryName

Getting details of order

Select \* from Customers where CustomerID='CHOPS'

Select \* from Orders Where OrderID=10254

Select \* from [Order Details] Where OrderID=10254

Select \* from Products Where ProductID=24

Getting company name and order ID

Select OrderID,Companyname

from Orders join customers

ON Orders.CustomerID=Customers.CustomerID

Where OrderID=10254

Getting Orderid, company name, order date, freight and phone number

Select OrderID,Companyname, Customers.customerid, OrderDate,Freight,Phone

from Orders join customers

ON Orders.CustomerID=Customers.CustomerID

Where OrderID=10254

Renamming tables or fields temporarily and extracting order information

Select ord.orderid,Companyname, ordd.ProductID,Freight,Phone, Cust.CustomerID

From Orders AS ord join Customers AS Cust

ON ord.customerID=Cust.CustomerID

JOIN [Order Details] ordd

ON ord.orderID=ordd.orderID

join products as prod

ON ordd.ProductID=prod.ProductID

where ord.OrderID=10254

If you want to find customers buy products from certain categories every time.

Select Companyname, CategoryName

From Orders AS ord join Customers AS Cust

ON ord.customerID=Cust.CustomerID

JOIN [Order Details] ordd

ON ord.orderID=ordd.orderID

join products as prod

ON ordd.ProductID=prod.ProductID

Join Categories as cat

ON prod.CategoryID=cat.CategoryID

where ord.OrderID=10254

If you want to find customers buy products from various categories and removing duplicates from every category

Select DISTINCT Companyname, cat.CategoryName

From Orders AS ord join Customers AS Cust

ON ord.customerID=Cust.CustomerID

JOIN [Order Details] ordd

ON ord.orderID=ordd.orderID

join products as prod

ON ordd.ProductID=prod.ProductID

Join Categories as cat

ON prod.CategoryID=cat.CategoryID

where ord.OrderID=10248