

# 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 about 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

```