Northwind Database Practice Queries

1. Create a report that shows the CategoryName and Description from the categories table sorted by CategoryName.

```
select categoryname, description from Categories;
```

2. Create a report that shows the ContactName, CompanyName, ContactTitle and Phone number from the customers table sorted by Phone.

```
select ContactName, CompanyName, ContactTitle, Phone
from Customers
order by phone;
```

3. Create a report that shows the capitalized FirstName and capitalized LastName renamed as FirstName and Lastname respectively and HireDate from the employees table sorted from the newest to the oldest employee.

```
select UPPER(firstname) as FirstName, UPPER(lastname) as LastName,
hiredate
from Employees
order by HireDate desc;
```

4. Create a report that shows the top 10 OrderID, OrderDate, ShippedDate, CustomerID, Freight from the orders table sorted by Freight in descending order.

```
select top 10 orderid, orderdate, shippeddate, customerid, freight
from orders
order by freight desc;
```

5. Create a report that shows all the CustomerID in lowercase letter and renamed as ID from the customers table.

```
select LOWER(customerid) as ID
from customers;
```

6. Create a report that shows the CompanyName, Fax, Phone, Country, HomePage from the suppliers table sorted by the Country in descending order then by CompanyName in ascending order.

```
select companyname, fax, phone, country, homepage
from suppliers
order by country desc, companyname;
```

7. Create a report that shows CompanyName, ContactName of all customers from ‘Buenos Aires' only.

```
select companyname, contactname
from Customers
where city = 'Buenos Aires';
```

8. Create a report showing ProductName, UnitPrice, QuantityPerUnit of products that are out of stock.

```
select productname, unitprice, quantityperunit
from Products
where UnitsInStock = 0;
```

9. Create a report showing all the ContactName, Address, City of all customers not from Germany, Mexico, Spain.

```
select contactname, address, city
from customers
where city NOT IN ('Germany','Mexico','Spain');
```

10. Create a report showing OrderDate, ShippedDate, CustomerID, Freight of all orders placed on 21 May 1996.

```
select orderdate, shippeddate, customerid, freight
from orders
where orderdate = '1996-05-21 00:00:00.000';
```

11. Create a report showing FirstName, LastName, Country from the employees not from United States.

```
select firstname, lastname, country
from employees
where country NOT LIKE 'USA';
```

12. Create a report that shows the EmployeeID, OrderID, CustomerID, RequiredDate, ShippedDate from all orders shipped later than the required date.

```
select employeeid, orderid, customerid, requireddate, shippeddate
from Orders
where ShippedDate > RequiredDate;
```

13. Create a report that shows the City, CompanyName, ContactName of customers from cities starting with A or B.

```
select city, companyname, contactname
from customers
where city LIKE 'A%' or city LIKE 'B%'
order by city;
```

14. Create a report showing all the even numbers of OrderID from the orders table.

```
select orderid
from orders
where orderid % 2 = 0;
```

15. Create a report that shows all the orders where the freight cost more than $500.

```
select * from Orders
where Freight > 500;
```

16. Create a report that shows the ProductName, UnitsInStock, UnitsOnOrder, ReorderLevel of all products that are up for reorder.

```
select productname, unitsinstock, reorderlevel
from Products
where reorderlevel = 0;
```

17. Create a report that shows the CompanyName, ContactName number of all customer that have no fax number.

```
select companyname, contactname
from customers
where Fax IS NULL;
```

18. Create a report that shows the FirstName, LastName of all employees that do not report to anybody.

```
select firstname, lastname
```

```
from Employees
where ReportsTo IS NULL;
```

19. Create a report showing all the odd numbers of OrderID from the orders table.

```
select orderid
from orders
where orderid % 2 = 1;
```

20. Create a report that shows the CompanyName, ContactName, Fax of all customers that do not have Fax number and sorted by ContactName.

```
select companyname, contactname, fax
from Customers
where Fax IS NULL
order by ContactName;
```

21. Create a report that shows the City, CompanyName, ContactName of customers from cities that has letter L in the name sorted by ContactName.

```
select city, companyname, contactname
from Customers
where City LIKE '%L%'
order by ContactName;
```

22. Create a report that shows the FirstName, LastName, BirthDate of employees born in the 1950s.

```
select firstname, lastname, birthdate
from Employees
where BirthDate >= '1950-01-01' and BirthDate < '1960-01-01';
```

23. Create a report that shows the FirstName, LastName, the year of Birthdate as birth year from the employees table.

```
select firstname, lastname, YEAR(birthdate) as BirthYear
from Employees;
```

24. Create a report showing OrderID, total number of Order ID as NumberofOrders from the orderdetails table grouped by OrderID and sorted by NumberofOrders in descending order. **HINT: you will need to use a Groupby statement.**

```
select orderid, COUNT(orderid) as NumberofOrders
from [Order Details]
group by OrderID
order by NumberofOrders desc;
```

25. Create a report that shows the SupplierID, ProductName, CompanyName from all product Supplied by Exotic Liquids, Specialty Biscuits, Ltd., Escargots Nouveaux sorted by the supplier ID

```
select s.supplierid, p.productname, s.companyname
from Suppliers s
JOIN Products p
ON s.SupplierID = p.SupplierID
where s.CompanyName IN ('Exotic Liquids', 'Specialty Biscuits',
'Ltd.', 'Escargots Nouveaux')
order by s.SupplierID;
```

26. Create a report that shows the ShipPostalCode, OrderID, OrderDate, RequiredDate, ShippedDate, ShipAddress of all orders with ShipPostalCode beginning with "98124".

```
select shippostalcode, orderid, orderdate, requireddate, shippeddate,
shipaddress
from orders
where shippostalcode LIKE '98124';
```

27. Create a report that shows the ContactName, ContactTitle, CompanyName of customers that the has no "Sales" in their ContactTitle.

```
select contactname, contacttitle, companyname
from Customers
where ContactTitle NOT LIKE '%Sales%';
```

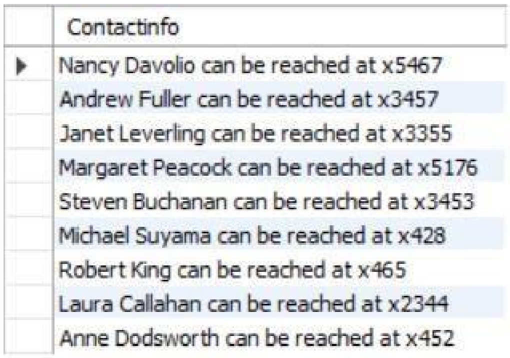
28. Create a report that shows the LastName, FirstName, City of employees in cities other than "Seattle";

```
select lastname, firstname, city
from Employees
where city NOT LIKE 'Seattle';
```

29. Create a report that shows the CompanyName, ContactTitle, City, Country of all customers in any city in Mexico or other cities in Spain other than Madrid.

```
select companyname, contacttitle, city, country
from Customers
where country IN ('Mexico','Spain') and city != 'Madrid';
```

Create a select statement that outputs the following:



	Contactinfo
▶	Nancy Davolio can be reached at x5467
	Andrew Fuller can be reached at x3457
	Janet Leverling can be reached at x3355
	Margaret Peacock can be reached at x5176
	Steven Buchanan can be reached at x3453
	Michael Suyama can be reached at x428
	Robert King can be reached at x465
	Laura Callahan can be reached at x2344
	Anne Dodsworth can be reached at x452

```
select CONCAT(firstname,' ', lastname ,' ',  'can be reached at ', 'x',
extension) as ContactInfo
from Employees;
```

30. Create a report that shows the ContactName of all customers that do not have letter A as the second alphabet in their Contactname.

```
select contactname
from Customers
where ContactName NOT LIKE '_A%';
```

31. Create a report that shows the average UnitPrice rounded to the next whole number, total price of UnitsInStock and maximum number of orders from the products table. All saved as AveragePrice, TotalStock and MaxOrder respectively.

```
select ROUND(AVG(unitprice), 0) as AvgUnitPrice, SUM(unitsinstock) as
TotalStock, MAX(unitsonorder) as MaxOrder
from Products;
```

32. Create a report that shows the SupplierID, CompanyName, CategoryName, ProductName and UnitPrice from the products, suppliers and categories table.

```
select s.supplierid, s.companyname, c.categoryname,
p.productname, p.unitprice
from Products p
JOIN Suppliers s
ON s.SupplierID = p.SupplierID
JOIN Categories c
ON c.CategoryID = p.CategoryID;
```

33. Create a report that shows the CustomerID, sum of Freight, from the orders table with sum of freight greater $200, grouped by CustomerID. **HINT: you will need to use a Groupby and a Having statement.**

```
select customerid, SUM(freight) as SFreight
from Orders
group by CustomerID
HAVING SUM(freight) > 200;
```

34. Create a report that shows the OrderID ContactName, UnitPrice, Quantity, Discount from the order details, orders and customers table with discount given on every purchase.

```
select od.orderid, c.contactname, od.unitprice,
od.quantity, od.discount
from [Order Details] od
JOIN Orders o
ON o.OrderID = od.OrderID
JOIN Customers c
ON c.CustomerID = o.CustomerID
where od.Discount != 0;
```

35. Create a report that shows the EmployeeID, the LastName and FirstName as employee, and the LastName and FirstName of who they report to as manager from the employees table sorted by Employee ID. **HINT: This is a SelfJoin.**

```
select a.EmployeeID, CONCAT(a.LastName,' ', a.FirstName) as employee,
CONCAT(b.LastName, ' ', b.FirstName) as manager
from Employees a
LEFT JOIN Employees b
ON b.EmployeeID = a.ReportsTo
order by a.EmployeeID;
```

36. Create a report that shows the average, minimum and maximum UnitPrice of all products as AveragePrice, MinimumPrice and MaximumPrice respectively.

```
select AVG(unitprice) as AvgUnitPrice, MIN(unitprice) as MinPrice,
MAX(unitprice) MaxPrice
from Products;
```

37. Create a view named CustomerInfo that shows the CustomerID, CompanyName, ContactName, ContactTitle, Address, City, Country, Phone, OrderDate, RequiredDate, ShippedDate from the customers and orders table. **HINT: Create a View.**

```
CREATE VIEW CustomerInfo AS
select c.CustomerID, c.CompanyName, c.ContactName, c.ContactTitle,
c.Address, c.City, c.Country, c.Phone, o.OrderDate, o.RequiredDate,
o.ShippedDate
from Customers c
JOIN Orders o
ON c.CustomerID = o.CustomerID;
```

38. Change the name of the view you created from customerinfo to customer details.

```
 EXEC sp_rename 'dbo.CustomerInfo', 'CustomerDetails';
```

39. Create a view named ProductDetails that shows the ProductID, CompanyName, ProductName, CategoryName, Description, QuantityPerUnit, UnitPrice, UnitsInStock, UnitsOnOrder, ReorderLevel, Discontinued from the supplier, products and categories tables. **HINT: Create a View**

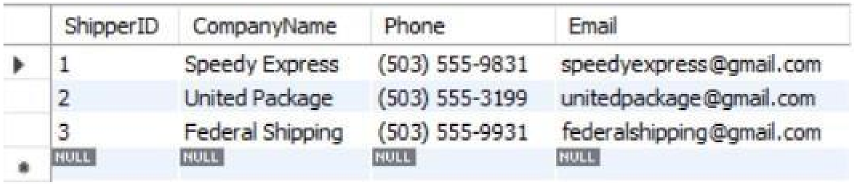
40. Drop the customer details view.

41. Create a report that fetch the first 5 character of categoryName from the category tables and renamed as ShortInfo

```
select SUBSTRING(CategoryName, 1, 5) as Short_Info
from Categories;
```

42. Create a copy of the shipper table as shippers_duplicate. Then insert a copy of shippers data into the new table **HINT: Create a Table, use the LIKE Statement and INSERT INTO statement.**

43. Create a select statement that outputs the following from the shippers_duplicate Table:



ShipperID	CompanyName	Phone	Email
1	Speedy Express	(503) 555-9831	speedyexpress@gmail.com
2	United Package	(503) 555-3199	unitedpackage@gmail.com
3	Federal Shipping	(503) 555-9931	federalshipping@gmail.com
NULL	NULL	NULL	NULL

44. Create a report that shows the CompanyName and ProductName from all product in the Seafood category.

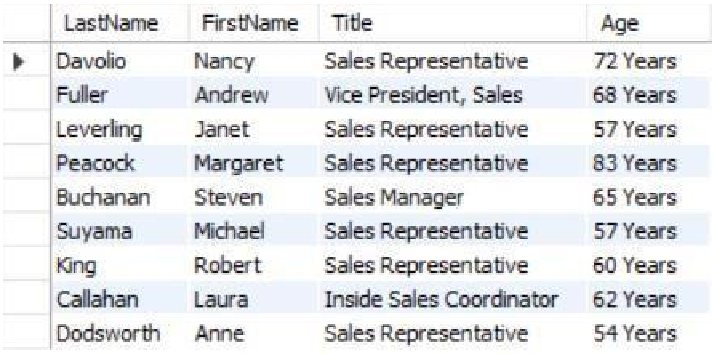
```
select s.companyname, p.ProductName
from Categories c
JOIN Products p
ON c.CategoryID = p.CategoryID
JOIN Suppliers s
ON s.SupplierID = p.SupplierID
where CategoryName = 'Seafood';
```

45. Create a report that shows the CategoryID, CompanyName and ProductName from all product in the categoryID 5.

```
select c.categoryid, s.companyname, p.productname
from Categories c
JOIN Products p
ON c.CategoryID = p.CategoryID
JOIN Suppliers s
ON s.SupplierID = p.SupplierID
where c.CategoryID = 5;
```

46. Delete the shippers_duplicate table.

47. Create a select statement that ouputs the following from the employees table. **NB:** The age might differ depending on the year you are attempting this query.

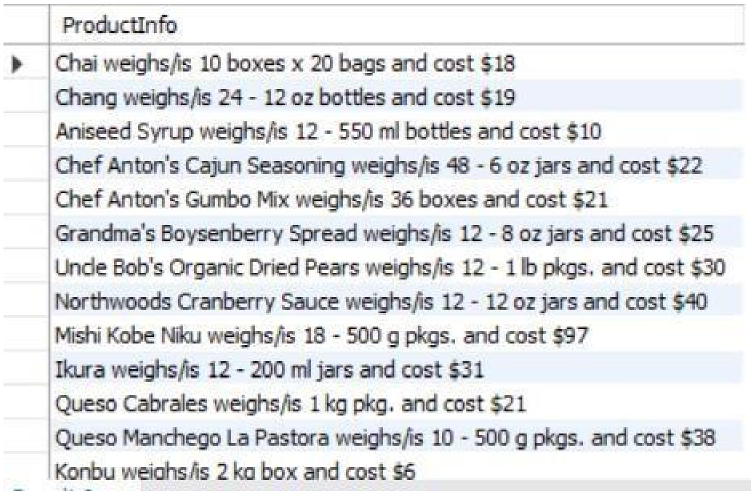


	LastName	FirstName	Title	Age
▶	Davolio	Nancy	Sales Representative	72 Years
	Fuller	Andrew	Vice President, Sales	68 Years
	Leverling	Janet	Sales Representative	57 Years
	Peacock	Margaret	Sales Representative	83 Years
	Buchanan	Steven	Sales Manager	65 Years
	Suyama	Michael	Sales Representative	57 Years
	King	Robert	Sales Representative	60 Years
	Callahan	Laura	Inside Sales Coordinator	62 Years
	Dodsworth	Anne	Sales Representative	54 Years

48. Create a report that the CompanyName and total number of orders by customer renamed as number of orders since December 31, 1994. Show number of Orders greater than 10.

```
select c.companyname, COUNT(c.customerid) as NumberofOrders
from Customers c
JOIN Orders o
ON c.CustomerID = o.CustomerID
where o.OrderDate >= '1994-12-31'
group by c.CompanyName
having COUNT(c.customerid) > 10;
```

49. Create a select statement that ouputs the following from the product table **NB:** It should return 77rows.



	ProductInfo
▶	Chai weighs/is 10 boxes x 20 bags and cost $18
	Chang weighs/is 24 - 12 oz bottles and cost $19
	Aniseed Syrup weighs/is 12 - 550 ml bottles and cost $10
	Chef Anton's Cajun Seasoning weighs/is 48 - 6 oz jars and cost $22
	Chef Anton's Gumbo Mix weighs/is 36 boxes and cost $21
	Grandma's Boysenberry Spread weighs/is 12 - 8 oz jars and cost $25
	Uncle Bob's Organic Dried Pears weighs/is 12 - 1 lb pkgs. and cost $30
	Northwoods Cranberry Sauce weighs/is 12 - 12 oz jars and cost $40
	Mishi Kobe Niku weighs/is 18 - 500 g pkgs. and cost $97
	Ikura weighs/is 12 - 200 ml jars and cost $31
	Queso Cabrales weighs/is 1 kg pkg. and cost $21
	Queso Manchego La Pastora weighs/is 10 - 500 g pkgs. and cost $38
	Konbu weighs/is 2 kg box and cost $6

```
 select CONCAT(productname, ' ','weight/is',' ', quantityperunit, ' ',
'and cost ','$', ROUND(UnitPrice, 1)) as ProductInfo
from Products;
```