Northwind-Full 39 Queries

Exercise 1

Write a SELECT query to display Full name of all employees in lower-case as following:

Full name	titleOfCourtesy
davolio nancy	Ms.
fuller andrew	Dr.
leverling janet	Ms.
peacock margaret	Mrs.
buchanan steven	Mr.
suyama michael	Mr.
king robert	Mr.
callahan laura	Ms.
dodsworth anne	Ms.

Exercise 2

Write a SELECT query to display Full name of all employees in upper-case as following:

Full name
DAVOLIO NANCY
FULLER ANDREW
LEVERLING JANET
PEACOCK MARGARET
BUCHANAN STEVEN
SUYAMA MICHAEL
KING ROBERT
CALLAHAN LAURA
DODSWORTH ANNE

Exercise 3

Write a SELECT query to display all employees that are from United States as following:

EmployeeID	LastName	FirstName	Title	City	Country
1	Davolio	Nancy	Sales Representative	Seattle	USA
2	Fuller	Andrew	Vice President, Sales	Tacoma	USA
3	Leverling	Janet	Sales Representative	Kirkland	USA
4	Peacock	Margaret	Sales Representative	Redmond	USA
8	Callahan	Laura	Inside Sales Coordinator	Seattle	USA

Exercise 4

Write a SELECT query to display all customers that are from UK as following:

CustomerID	CompanyName	ContactName	ContactTitle	Country
AROUT	Around the Horn	Thomas Hardy	Sales Representative	UK
BSBEV	B's Beverages	Victoria Ashworth	Sales Representative	UK
CONSH	Consolidated Holdings	Elizabeth Brown	Sales Representative	UK
EASTC	Eastern Connection	Ann Devon	Sales Agent	UK
ISLAT	Island Trading	Helen Bennett	Marketing Manager	UK
NORTS	North/South	Simon Crowther	Sales Associate	UK
SEVES	Seven Seas Imports	Hari Kumar	Sales Manager	UK

Exercise 5

Write a SELECT query to display all customers that are from Mexico as following:

CustomerID	CompanyName	address	city	Country
ANATR	Ana Trujillo Emparedados y helados	Avda. de la Constitución 2222	México D.F.	Mexico
ANTON	Antonio Moreno Taquería	Mataderos 2312	México D.F.	Mexico
CENTC	Centro comercial Moctezuma	Sierras de Granada 9993	México D.F.	Mexico
PERIC	Pericles Comidas clásicas	Calle Dr. Jorge Cash 321	México D.F.	Mexico
TORTU	Tortuga Restaurante	Avda. Azteca 123	México D.F.	Mexico

Exercise 6

Write a SELECT query to display all customers that are from Sweden as following:

CustomerID	CompanyName	phone	address	city	Country
BERGS	Berglunds snabbköp	0921-12 34 65	Berguvsvägen 8	Luleå	Sweden
FOLKO	Folk och fä HB	0695-34 67 21	Åkergatan 24	Bräcke	Sweden

Exercise 7

In Products table, values of UnitsInStock tell you the total units in the inventory of every product. Write a SELECT query to display product id, product name, unit price of all products such that their total units in the inventory is between 5 and 10 as following:

productid	productName	Unitprice	UnitsInStock
8	Northwoods Cranberry Sauce	40.00	6
30	Nord-Ost Matjeshering	25.89	10
32	Mascarpone Fabioli	32.00	9
45	Rogede sild	9.50	5
49	Maxilaku	20.00	10
68	Scottish Longbreads	12.50	6

Exercise 8

In Products table, the value of UnitsOnOrder tells you the total ordered units for every product. Write a SELECT query to display product id, product name, unit price, re-order level… of all products that have total ordered units between 60 and 100 as following:

ProductID	ProductName	unitprice	reorderlevel	UnitsOnOrder
3	Aniseed Syrup	10.00	25	70
31	Gorgonzola Telino	12.50	20	70
45	Rogede sild	9.50	15	70
48	Chocolade	12.75	25	70
49	Maxilaku	20.00	15	60
64	Wimmers gute Semmelknödel	33.25	30	80
66	Louisiana Hot Spiced Okra	17.00	20	100

Exercise 9

Write a SELECT query to display total orders of every employee in 1996 as following:

EmployeeID	LastName	FirstName	Title	year	total orders
1	Davolio	Nancy	Sales Representative	1996	26
2	Fuller	Andrew	Vice President, Sales	1996	16
3	Leverling	Janet	Sales Representative	1996	18
4	Peacock	Margaret	Sales Representative	1996	31
5	Buchanan	Steven	Sales Manager	1996	11
6	Suyama	Michael	Sales Representative	1996	15
7	King	Robert	Sales Representative	1996	11
8	Callahan	Laura	Inside Sales Coordinator	1996	19
9	Dodsworth	Anne	Sales Representative	1996	5

Exercise 10

Write a SELECT query to display total orders of every employee in 1998 as following:

EmployeeID	LastName	FirstName	City	Country	total orders
1	Davolio	Nancy	Seattle	USA	42
2	Fuller	Andrew	Tacoma	USA	39
3	Leverling	Janet	Kirkland	USA	38
4	Peacock	Margaret	Redmond	USA	44
5	Buchanan	Steven	London	UK	13
6	Suyama	Michael	London	UK	19
7	King	Robert	London	UK	25
8	Callahan	Laura	Seattle	USA	31
9	Dodsworth	Anne	London	UK	19

Exercise 11

Write a SELECT query to display total orders of every employee from 1/1/1998 to 31/7/1998 - orderDate as following:

EmployeeID	LastName	FirstName	hiredate	total orders
1	Davolio	Nancy	1992-05-01 00:00:00.000	42
2	Fuller	Andrew	1992-08-14 00:00:00.000	39
3	Leverling	Janet	1992-04-01 00:00:00.000	38
4	Peacock	Margaret	1993-05-03 00:00:00.000	44
5	Buchanan	Steven	1993-10-17 00:00:00.000	13
6	Suyama	Michael	1993-10-17 00:00:00.000	19
7	King	Robert	1994-01-02 00:00:00.000	25
8	Callahan	Laura	1994-03-05 00:00:00.000	31
9	Dodsworth	Anne	1994-11-15 00:00:00.000	19

Exercise 12

Write a SELECT query to display total orders of every employee from 1/1/1997 to 30/6/1997 as following:

EmployeeID	LastName	FirstName	hiredate	homephone	total orders
1	Davolio	Nancy	1992-05-01 00:00:00.000	(206) 555-9857	20
2	Fuller	Andrew	1992-08-14 00:00:00.000	(206) 555-9482	19
3	Leverling	Janet	1992-04-01 00:00:00.000	(206) 555-3412	35
4	Peacock	Margaret	1993-05-03 00:00:00.000	(206) 555-8122	36
5	Buchanan	Steven	1993-10-17 00:00:00.000	(71) 555-4848	7
6	Suyama	Michael	1993-10-17 00:00:00.000	(71) 555-7773	14
7	King	Robert	1994-01-02 00:00:00.000	(71) 555-5598	18
8	Callahan	Laura	1994-03-05 00:00:00.000	(206) 555-1189	28
9	Dodsworth	Anne	1994-11-15 00:00:00.000	(71) 555-4444	8

Exercise 13

An order will be taxed 10% if its freight cost is larger than or equal to 100$.

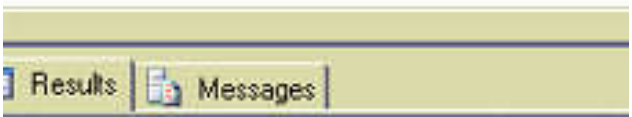
Otherwise, an order will be taxed 5% if its freight cost is smaller than 100$.

Write a SELECT query to show the freight with taxes of orders placed between 1/8/1996 and 5/8/1996 as following:

	OrderID	OrderDay	OrderMonth	OrderYear	Freight	tax	Freight with tax
1	10270	1	8	1996	136,54	10%	150,194
2	10271	1	8	1996	4,54	5%	4,767
3	10272	2	8	1996	98,03	5%	102,9315
4	10273	5	8	1996	76,07	5%	79,8735

Exercise 14

Write a SELECT query to display the full name, title of courtesy and sex for all employees such that:



- If title of courtesy is ‘Mr.’ then sex is set to ‘Male’
- If title of courtesy is ‘Ms.’ or ‘Mrs.’ then sex is set to ‘Female’

Exercise 15

Write a SELECT query to display the full name, title of courtesy and sex for all employees such that:

- If title of courtesy is ‘Mr.’ or ‘Dr.’ then sex is set to ‘M’
- If title of courtesy is ‘Ms.’ or ‘Mrs.’ then sex is set to ‘F’

	full name	titleofcourtesy	sex
1	Fuller Andrew	Dr.	M
2	Buchanan Steven	Mr.	M
3	Suyama Michael	Mr.	M
4	King Robert	Mr.	M
5	Davolio Nancy	Ms.	F
6	Leverling Janet	Ms.	F
7	Peacock Margaret	Mrs.	F
8	Callahan Laura	Ms.	F
9	Dodsworth Anne	Ms.	F

Exercise 16

Write a SELECT query to display the full name, title of courtesy and sex for all employees such that:

- If title of courtesy is ‘Mr.’ then sex is set to ‘Male’
- If title of courtesy is ‘Ms.’ or ‘Mrs.’ then sex is set to ‘Female’
- If title of courtesy is not ‘Mr.’ and not ‘Mrs.’ and not ‘Ms.’ then sex is set to ‘Unknown’

	full name	titleofcourtesy	sex
1	Buchanan Steven	Mr.	Male
2	Suyama Michael	Mr.	Male
3	King Robert	Mr.	Male
4	Davolio Nancy	Ms.	Female
5	Leverling Janet	Ms.	Female
6	Peacock Margaret	Mrs.	Female
7	Callahan Laura	Ms.	Female
8	Dodsworth Anne	Ms.	Female
9	Fuller Andrew	Dr.	Unknown

Exercise 17

Write a SELECT query to display the full name, title of courtesy and sex for all employees such that:

- If title of courtesy is ‘Mr.’ then sex is set to 1
- If title of courtesy is ‘Ms.’ or ‘Mrs.’ then sex is set to 0
- If title of courtesy is not ‘Mr.’ and not ‘Mrs.’ and not ‘Ms.’ then sex is set to 2

	full name	titleofcourtesy	sex
1	Buchanan Steven	Mr.	1
2	Suyama Michael	Mr.	1
3	King Robert	Mr.	1
4	Davolio Nancy	Ms.	0
5	Leverling Janet	Ms.	0
6	Peacock Margaret	Mrs.	0
7	Callahan Laura	Ms.	0
8	Dodsworth Anne	Ms.	0
9	Fuller Andrew	Dr.	2

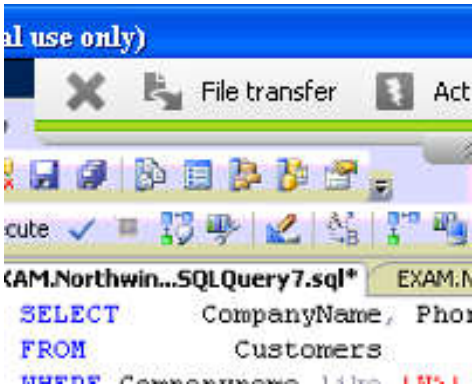
Exercise 21

Write a query to determine the revenues for all products from 1/7/1996 to 5/7/1996 as following (Revenue = Quantity * Unitprice). **Note**: The output must be order by category id and then product id.

	CategoryID	CategoryName	ProductID	ProductName	day	month	year	Revenue
	4	Dairy Products	11	Queso Cabrales	4	7	1996	168.00
	4	Dairy Products	72	Mozzarella di Giovanni	4	7	1996	174.00
	5	Grains/Cereals	42	Singaporean Hokkien Fried Mee	4	7	1996	98.00
	7	Produce	14	Tofu	5	7	1996	167.40
	7	Produce	51	Manjimup Dried Apples	5	7	1996	1696.00

Exercise 23

Write a query to display the names and telephone numbers of all employees and all customers satisfy the condition: all customers have names start with 'W'.



Exercise 24

Write a query to display information about the customer that placed the order with Id equal to 10643 as following:

CustomerID	CompanyName	ContactName	ContactTitle
ALFKI	Alfreds Futterkiste	Maria Anders	Sales Representative

Exercise 25

Write a query to display the product ids, product names and total units ordered of all products that satisfy: the total units ordered must be greater than or equal to 1200 units.

	ProductID	ProductName	Total Ordered
1	56	Gnocchi di nonna Alice	1263
2	31	Gorgonzola Telino	1397
3	59	Raclette Courdavault	1496
4	60	Camembert Pierrot	1577

Exercise 26

Write a query to display the product ids, product names, supplier id, category id and total units ordered of all products that satisfy: the total units ordered must be greater than or equal to 1400 units.

ProductID	ProductName	SupplierID	CategoryID	Total ordered
60	Camembert Pierrot	28	4	1577
59	Raclette Courdavault	28	4	1496

Exercise 27

Write a query to display the categories that have maximum total product as following:

```
FROM Categories LEFT OUTER JOIN
     Products ON Categories.Cate
GROUP BY Categories.CategoryID,
```

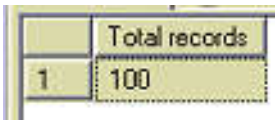
Exercise 28

Write a query to display the categories that have minimum total product as following:

```
FROM Categories LEFT OUTER JOIN
     Products ON Categories.Cate
GROUP BY Categories.CategoryID
```

Exercise 29

Write a query to display the total record in Customer and Employees tables:



	Total records
1	100

Exercise 31

Write a query to display information about employees who have maximum total orders as following:

	EmployeeID	LastName	FirstName	Title	Total_Orders
1	4	Peacock	Margaret	Sales Representative	156

Exercise 32

In Products table, the value of UnitsInStock tells you the total unit in the inventory for every product. Write a query to display information about products that have maximum total unit in inventory as following:

ProductID	ProductName	SupplierID	CategoryID	UnitsInStock
75	Rhönbräu Klosterbier	12	1	125

Exercise 33

In Products table, the value of UnitsInStock tells you the total unit in the inventory for every product. Write a query to display information about products that have minimum total unit in inventory as following:

```
SELECT      ProductID, ProductName, SupplierID, Cat
FROM          Products
WHERE UnitsInStock IN
(
SELECT min(UnitsInStock)
FROM Products
--GROUP BY ProductID
```

Exercise 34

In Products table, the value of UnitsOnOrder tells you the total ordered unit for every product. Write a query to display information about products that have maximum total ordered unit as following:

ProductID	ProductName	SupplierID	CategoryID	UnitsOnOrder
66	Louisiana Hot Spiced Okra	2	2	100

Exercise 35

In Products table, the value of ReOrderLevel tells you the re-order level for every product. Write a query to display information about products that have maximum re-order level as following:

ProductID	ProductName	SupplierID	CategoryID	reorderlevel
11	Queso Cabrales	5	4	30
25	NuNuCa Nuß-Nougat-Creme	11	3	30
27	Schoggi Schokolade	11	3	30
40	Boston Crab Meat	19	8	30
50	Valkoinen suklaa	23	3	30
56	Gnocchi di nonna Alice	26	5	30
64	Wimmers gute Semmelknödel	12	5	30
70	Outback Lager	7	1	30

Exercise 36

Write a query to display the information about employees who have maximum total delayed-orders as following:

EmployeeID	LastName	FirstName	Delayed Orders
4	Peacock	Margaret	10

Exercise 37

Write a query to display the information about employees who have at least one delayed-order and have minimum total delayed-orders as following:

EmployeeID	LastName	FirstName	Delayed Orders
5	Buchanan	Steven	1

Exercise 38

Write a query to display product ids and product names of all products that have total ordered-units in three-highest level (top 3 to top 1) as following:

ProductID	ProductName	Total Ordered
31	Gorgonzola Telino	1397
59	Raclette Courdavault	1496
60	Camembert Pierrot	1577

Exercise 39

Write a query to display product ids and product names of all products that have total ordered-units in five-highest level (top 5 to top 1) as following:

ProductID	ProductName	Total Ordered
16	Pavlova	1158
56	Gnocchi di nonna Alice	1263
31	Gorgonzola Telino	1397
59	Raclette Courdavault	1496
60	Camembert Pierrot	1577