

1. SELECT * FROM nwCategories;

#	CategoryID	CategoryName	Description
1	1	Beverages	Soft drinks, coffees, teas, beers, an...
2	2	Condiments	Sweet and savory sauces, relishes,...
3	3	Confections	Desserts, candies, and sweet breads
4	4	Dairy Products	Cheeses
5	5	Grains/Cereals	Breads, crackers, pasta, and cereal
6	6	Meat/Poultry	Prepared meats
7	7	Produce	Dried fruit and bean curd
8	8	Seafood	Seaweed and fish

2. SELECT CompanyName, Address, City, Region, PostalCode, Phone
FROM nwSuppliers
WHERE Country = 'France'
OR Country = 'Germany';

#	CompanyName	Address	City	Region	PostalCode	Phone
1	Heli S, flwaren GmbH & Co. KG	Tiergartenstrafle 5	Berlin		10785	(010) 9984510
2	Plutzer Lebensmittelgroflm%rkte AG	Bogenallee 51	Frankfurt		60439	(069) 992755
3	Nord-Ost-Fisch Handelsgesellschaf...	Frahmredder 112a	Cuxhaven		27478	(04721) 8713
4	Aux joyeux ecclĒsiastiques	203 Rue des Francs-Bourgeois	Paris		75004	(1) 03.83.00.68
5	Escargots Nouveaux	22 rue H. Voiron	Montceau		71300	85.57.00.07
6	Gai p,turage	Bat. B 3 rue des Alpes	Annecy		74000	38.76.98.06

3. SELECT ContactName, ContactTitle
FROM nwSuppliers
WHERE SupplierID
BETWEEN 5 AND 20
ORDER BY ContactName;

#	ContactName	ContactTitle
1	Antonio del Valle Saavedra	Export Administrator
2	Beate Vileid	Marketing Manager
3	Carlos Diaz	Marketing Manager
4	Chandra Leka	Owner
5	Cheryl Saylor	Regional Account Rep.
6	Elio Rossi	Sales Representative
7	GuyIĒne Nodier	Sales Manager
8	Ian Devling	Marketing Manager
9	Lars Peterson	Sales Agent
10	Martin Bein	International Marketing Mgr.
11	Mayumi Ohno	Marketing Representative
12	Michael Bj`rn	Sales Representative
13	Peter Wilson	Sales Representative
14	Petra Winkler	Sales Manager
15	Robb Merchant	Wholesale Account Agent
16	Sven Petersen	Coordinator Foreign Mark...

4. SELECT ProductName, QuantityPerUnit, UnitPrice, UnitsInStock
FROM nwProducts
WHERE UnitPrice < 10.00;

#	ProductName	QuantityPerUnit	UnitPrice	UnitsInStock
1	Konbu	2 kg box	6.00	24
2	Teatime Chocolate Biscuits	10 boxes x 12 pieces	9.20	25
3	Tunnbrød	12 - 250 g pkgs.	9.00	61
4	Guaraní Fantástica	12 - 355 ml cans	4.50	20
5	Geitost	500 g	2.50	112
6	Jack's New England Clam Chowder	12 - 12 oz cans	9.65	85
7	Rogede sild	1k pkg.	9.50	5
8	Zaanse koeken	10 - 4 oz boxes	9.50	36
9	Filo Mix	16 - 2 kg boxes	7.00	38
10	Tourtière	16 pies	7.45	21
11	Rhön-Weisklosterbier	24 - 0.5 l bottles	7.75	125

5. SELECT ProductID, ProductName, UnitsInStock, UnitPrice
FROM nwProducts
WHERE UnitsInStock > 0
AND UnitsInStock <= ReorderLevel

#	ProductID	ProductName	UnitsInStock	UnitPrice
1	2	Chang	17	19.00
2	3	Aniseed Syrup	13	10.00
3	11	Queso Cabrales	22	21.00
4	21	Sir Rodney's Scones	3	10.00
5	30	Nord-Ost Matjeshering	10	25.89
6	32	Mascarpone Fabiola	9	32.00
7	37	Gravad lax	11	26.00
8	43	Ipoh Coffee	17	46.00
9	45	Rogede sild	5	9.50
10	48	Chocolade	15	12.75
11	49	Maxilaku	10	20.00
12	56	Gnocchi di nonna Alice	21	38.00
13	64	Wimmers gute Sem...	22	33.25
14	66	Louisiana Hot Spice...	4	17.00
15	68	Scottish Longbreads	6	12.50
16	70	Outback Lager	15	15.00
17	74	Longlife Tofu	4	10.00

6. SELECT LastName, FirstName
FROM nwEmployees
WHERE DATEDIFF(CURDATE(), HireDate) / 365 > 5
AND Country != 'USA'
ORDER BY LastName;

#	LastName	FirstName
1	Dodsworth	Anne
2	King	Robert
3	Suyama	Michael

7. SELECT ProductName, UnitPrice
FROM nwProducts
WHERE UnitPrice = (
SELECT MAX(UnitPrice)
FROM nwProducts);

#	ProductName	UnitPrice
1	Côte de Blaye	263.50

8. SELECT ProductID, ProductName, (UnitsInStock * UnitPrice) as 'Total Inventory Value'
 FROM nwProducts
 WHERE (UnitsInStock * UnitPrice) > 2000
 ORDER BY 'Total Inventory Value' DESC;

#	ProductID	ProductName	Total Inventory Value
1	6	Grandma's Boysenberry Spread	3000.00
2	9	Mishi Kobe Niku	2813.00
3	12	Queso Manchego La Pastora	3268.00
4	18	Carnarvon Tigers	2625.00
5	20	Sir Rodney's Marmalade	3240.00
6	22	Gustaf's Knäckebröd	2184.00
7	27	Schoggi Schokolade	2151.10
8	36	Inlagd Sill	2128.00
9	38	Côte de Blaye	4479.50
10	40	Boston Crab Meat	2263.20
11	55	Pâté chinois	2760.00
12	59	Raclette Courdavault	4345.00
13	61	Sirop d'Érable	3220.50

9. SELECT ProductID, ProductName, UnitPrice
 FROM nwProducts
 WHERE QuantityPerUnit
 LIKE '%cans' AND Discontinued = 1;

#	ProductID	ProductName	UnitPrice
1	24	Guaraní Fantástica	4.50
2	28	Rössle Sauerkraut	45.60
*	NULL	NULL	NULL

10. SELECT distinct(ShipCountry) FROM nwOrders
 WHERE ShipCountry != 'USA'
 AND MONTH(ShippedDate) = 9
 AND YEAR(ShippedDate) = 2013;

#	ShipCountry
1	Sweden
2	Italy
3	Brazil
4	Mexico
5	France
6	Venezuela
7	Ireland
8	Germany
9	Spain

Use distinct can separate the overlap country

11. SELECT AVG(UnitPrice) FROM nwProducts;

#	AVG(UnitPrice)
1	28.866364

12. SELECT count(*)
FROM nwCustomers
WHERE Country = 'France';

#	count(*)
1	8

13. SELECT CustomerID, CompanyName
FROM nwCustomers
WHERE CustomerID = ANY(
SELECT CustomerID
FROM nwOrders
GROUP BY CustomerID
HAVING count(8) > 20);

#	CustomerID	CompanyName
1	ERNSH	Ernst Handel
2	QUICK	QUICK-Stop
3	SAVEA	Save-a-lot Markets
*	NULL	NULL

When used with a subquery, the word IN is an alias for = ANY

IN and = ANY are not synonyms when used with an expression list. IN can take an expression list, but = ANY cannot.

14. SELECT SupplierID, SUM(UnitsInStock * UnitPrice)
AS 'value of inventory'
FROM nwProducts
GROUP BY SupplierID
HAVING count(*) > 3;

#	SupplierID	value of inventory
1	2	2833.80
2	7	4409.65
3	8	3575.00
4	12	3301.85

15. SELECT CompanyName, ProductName, UnitPrice
FROM nwSuppliers, nwProducts
WHERE nwSuppliers.Country = 'USA'
AND nwSuppliers.SupplierID = nwProducts.SupplierID;

#	CompanyName	ProductName	UnitPrice
1	New Orleans Cajun Delights	Chef Anton's Cajun Seasoning	22.00
2	New Orleans Cajun Delights	Chef Anton's Gumbo Mix	21.35
3	Grandma Kelly's Homestead	Grandma's Boysenberry Spread	25.00
4	Grandma Kelly's Homestead	Uncle Bob's Organic Dried Pears	30.00
5	Grandma Kelly's Homestead	Northwoods Cranberry Sauce	40.00
6	Bigfoot Breweries	Sasquatch Ale	14.00
7	Bigfoot Breweries	Steeleye Stout	18.00
8	New England Seafood Cannery	Boston Crab Meat	18.40
9	New England Seafood Cannery	Jack's New England Clam Chowder	9.65
10	New Orleans Cajun Delights	Louisiana Fiery Hot Pepper Sauce	21.05
11	New Orleans Cajun Delights	Louisiana Hot Spiced Okra	17.00
12	Bigfoot Breweries	Laughing Lumberjack Lager	14.00

```

16. SELECT LastName, FirstName, Title, Extension
    FROM nwEmployees
    WHERE EmployeeID = ANY(
        SELECT EmployeeID
        FROM nwOrders
    GROUP BY EmployeeID
    HAVING count(*) > 100);

```

#	LastName	FirstName	Title	Extension
1	Davolio	Nancy	Sales Representative	5467
2	Leverling	Janet	Sales Representative	3355
3	Peacock	Margaret	Sales Representative	5176
4	Callahan	Laura	Inside Sales Coordinator	2344

```

17. SELECT CustomerID, CompanyName
    FROM nwCustomers
    WHERE CustomerID != ALL(
        SELECT CustomerID
        FROM nwOrders);

```

#	CustomerID	CompanyName
1	FISSA	FISSA Fabrica Inter. Salchichas S.A.
2	PARIS	Paris specialites
*	NULL	NULL

```

18. SELECT CompanyName, ContactName, CategoryName, Description, ProductName, UnitsOnOrder
    FROM nwProducts, nwCategories, nwSuppliers
    WHERE UnitsInStock = 0
    AND nwSuppliers.SupplierID = nwProducts.SupplierID
    AND nwProducts.CategoryID = nwCategories.CategoryID;

```

#	CompanyName	ContactName	CategoryName	Description	ProductName	UnitsOnOrder
1	New Orleans Cajun Delights	Shelley Burke	Condiments	Sweet and savory sauces, relishes,...	Chef Anton's Gumbo Mix	0
2	Pavlova Ltd.	Ian Devling	Meat/Poultry	Prepared meats	Alice Mutton	0
3	Plutzer Lebensmittelgroßmärkte AG	Martin Bein	Meat/Poultry	Prepared meats	Thüringer Rostbratwurst	0
4	Formaggi Fortini s.r.l.	Elio Rossi	Dairy Products	Cheeses	Gorgonzola Telino	70
5	G'day Mate	Wendy Mackenzie	Meat/Poultry	Prepared meats	Perth Pasties	0

```

19. SELECT ProductName, ContactName, Country UnitInStock
    FROM nwProducts, nwSuppliers
    WHERE QuantityPerUnit
    LIKE '%bottle%'
    AND nwProducts.SupplierID = nwSuppliers.SupplierID;

```

#	ProductName	ContactName	UnitInStock
1	Chang	Charlotte Cooper	UK
2	Aniseed Syrup	Charlotte Cooper	UK
3	Genen Shouyu	Mayumi Ohno	Japan
4	Sasquatch Ale	Cheryl Saylor	USA
5	Steeleye Stout	Cheryl Saylor	USA
6	Côte de Blaye	GuyLéne Nodier	France
7	Chartreuse verte	GuyLéne Nodier	France
8	Sirop d'Érable	Chantal Goulet	Canada
9	Louisiana Fiery Hot Pepper Sauce	Shelley Burke	USA
10	Laughing Lumberjack Lager	Cheryl Saylor	USA
11	Outback Lager	Ian Devling	Australia
12	Rheinischer Klosterbier	Martin Bein	Germany

20. SELECT nwCustomers.CompanyName, nwCustomers.Country, round(sum(nwOrderDetails.Quantity * nwOrderDetails.UnitPrice * (1 - nwOrderDetails.discount)), 2)
AS netvalue from nwCustomers
JOIN nwOrders on nwOrders.CustomerID = nwCustomers.CustomerID
JOIN nwOrderDetails
ON nwOrderDetails.OrderID = nwOrders.OrderID
GROUP BY nwOrders.CustomerID
HAVING SUM(nwOrderDetails.Quantity * nwOrderDetails.UnitPrice * (1 - nwOrderDetails.discount)) >= 30000
ORDER BY netvalue DESC;

#	CompanyName	Country	netvalue
1	QUICK-Stop	Germany	110277.30
2	Ernst Handel	Austria	104874.98
3	Save-a-lot Markets	USA	104361.95
4	Rattlesnake Canyon Grocery	USA	51097.80
5	Hungry Owl All-Night Grocers	Ireland	49979.90
6	Hanari Carnes	Brazil	32841.37
7	Koniglich Essen	Germany	30908.38

21. SELECT LastName, FirstName,
(SELECT count(nwOrders.EmployeeID)
FROM nwOrders WHERE nwEmployees.EmployeeID = nwOrders.EmployeeID)
AS CountOrder
FROM nwEmployees;

#	LastName	FirstName	CountOrder
1	Davolio	Nancy	123
2	Fuller	Andrew	96
3	Leverling	Janet	127
4	Peacock	Margaret	156
5	Buchanan	Steven	42
6	Suyama	Michael	67
7	King	Robert	72
8	Callahan	Laura	104
9	Dodsworth	Anne	43

```

22. SELECT LastName, FirstName, (
      SELECT count(nwOrders.EmployeeID)
      FROM nwOrders
      WHERE nwEmployees.EmployeeID = nwOrders.EmployeeID)
      AS CountOrder
      FROM nwEmployees
      ORDER BY CountOrder DESC;

```

#	LastName	FirstName	CountOrder
1	Peacock	Margaret	156
2	Leverling	Janet	127
3	Davolio	Nancy	123
4	Callahan	Laura	104
5	Fuller	Andrew	96
6	King	Robert	72
7	Suyama	Michael	67
8	Dodsworth	Anne	43
9	Buchanan	Steven	42

```

23. CREATE TABLE Top_Items (
      ItemID int NOT NULL,
      ItemCode int NOT NULL,
      ItemName varchar(40) NOT NULL,
      InventoryDate DATE NOT NULL,
      SupplierID int NOT NULL,
      ItemQuantity int NOT NULL,
      ItemPrice decimal(9,2) NOT NULL,

      PRIMARY KEY (ItemID)
    );

```

#	Tables_in_northwinds
1	Top_Items
2	nwCategories
3	nwCustomers
4	nwEmployees
5	nwOrderDetails
6	nwOrders
7	nwProducts
8	nwShippers
9	nwSuppliers

```

24. INSERT INTO Top_Items(ItemID, ItemCode, ItemName, InventoryDate, ItemQuantity, ItemPrice,
      SupplierID)
      SELECT ProductID, CategoryID, ProductName, CURDATE(), UnitsInStock, UnitPrice,
      SupplierID
      FROM nwProducts
      WHERE (UnitPrice * UnitsInStock) > 2500;

```

#	ItemID	ItemCode	ItemName	InventoryDate	SupplierID	ItemQuantity	ItemPrice
1	6	2	Grandma's Boysenberry Spread	2018-03-04	3	120	25.00
2	9	6	Mishi Kobe Niku	2018-03-04	4	29	97.00
3	12	4	Queso Manchego La Pastora	2018-03-04	5	86	38.00
4	18	8	Carnarvon Tigers	2018-03-04	7	42	62.50
5	20	3	Sir Rodney's Marmalade	2018-03-04	8	40	81.00
6	38	1	Côte de Blaye	2018-03-04	18	17	263.50
7	55	6	Pâté chinois	2018-03-04	25	115	24.00
8	59	4	Raclette Courdavault	2018-03-04	28	79	55.00
9	61	2	Sirop d'Érable	2018-03-04	29	113	28.50

```

25. DELETE FROM Top_Items
    WHERE SupplierID = ANY (
        SELECT SupplierID
        FROM nwSuppliers
        WHERE Country = 'Canada'
    );

```

#	ItemID	ItemCode	ItemName	InventoryDate	SupplierID	ItemQuantity	ItemPrice
1	6	2	Grandma's Boysenberry Spread	2018-03-04	3	120	25.00
2	9	6	Mishi Kobe Niku	2018-03-04	4	29	97.00
3	12	4	Queso Manchego La Pastora	2018-03-04	5	86	38.00
4	18	8	Carnarvon Tigers	2018-03-04	7	42	62.50
5	20	3	Sir Rodney's Marmalade	2018-03-04	8	40	81.00
6	38	1	Côte de Blaye	2018-03-04	18	17	263.50
7	59	4	Raclette Courdavault	2018-03-04	28	79	55.00

```

26. ALTER TABLE Top_Items
    ADD InventoryValue decimal(9,2) NOT NULL AFTER InventoryDate;

```

#	ItemID	ItemCode	ItemName	InventoryDate	InventoryValue	SupplierID	ItemQuantity	ItemPrice
1	6	2	Grandma's Boysenberry Spread	2018-03-04	0.00	3	120	25.00
2	9	6	Mishi Kobe Niku	2018-03-04	0.00	4	29	97.00
3	12	4	Queso Manchego La Pastora	2018-03-04	0.00	5	86	38.00
4	18	8	Carnarvon Tigers	2018-03-04	0.00	7	42	62.50
5	20	3	Sir Rodney's Marmalade	2018-03-04	0.00	8	40	81.00
6	38	1	Côte de Blaye	2018-03-04	0.00	18	17	263.50
7	59	4	Raclette Courdavault	2018-03-04	0.00	28	79	55.00

27. UPDATE Top_Items

SET InventoryValue = (ItemPrice * ItemQuantity);

#	ItemID	ItemCode	ItemName	InventoryDate	InventoryValue	SupplierID	ItemQuantity	ItemPrice
1	6	2	Grandma's Boysenberry Spread	2018-03-04	3000.00	3	120	25.00
2	9	6	Mishi Kobe Niku	2018-03-04	2813.00	4	29	97.00
3	12	4	Queso Manchego La Pastora	2018-03-04	3268.00	5	86	38.00
4	18	8	Carnarvon Tigers	2018-03-04	2625.00	7	42	62.50
5	20	3	Sir Rodney's Marmalade	2018-03-04	3240.00	8	40	81.00
6	38	1	Côte de Blaye	2018-03-04	4479.50	18	17	263.50
7	59	4	Raclette Courdavault	2018-03-04	4345.00	28	79	55.00

28. SELECT * FROM Top_Items;

#	ItemID	ItemCode	ItemName	InventoryDate	InventoryValue	SupplierID	ItemQuantity	ItemPrice
1	6	2	Grandma's Boysenberry Spread	2018-03-04	3000.00	3	120	25.00
2	9	6	Mishi Kobe Niku	2018-03-04	2813.00	4	29	97.00
3	12	4	Queso Manchego La Pastora	2018-03-04	3268.00	5	86	38.00
4	18	8	Carnarvon Tigers	2018-03-04	2625.00	7	42	62.50
5	20	3	Sir Rodney's Marmalade	2018-03-04	3240.00	8	40	81.00
6	38	1	Côte de Blaye	2018-03-04	4479.50	18	17	263.50
7	59	4	Raclette Courdavault	2018-03-04	4345.00	28	79	55.00

29. DROP TABLE Top_Items;

SHOW TABLES;

#	Tables_in_northwinds
1	nwCategories
2	nwCustomers
3	nwEmployees
4	nwOrderDetails
5	nwOrders
6	nwProducts
7	nwShippers
8	nwSuppliers