

```
mysql> CREATE TABLE Suppliers (
    ->     Id INT PRIMARY KEY,
    ->     CompanyName VARCHAR(255),
    ->     ContactName VARCHAR(255),
    ->     ContactTitle VARCHAR(255),
    ->     City VARCHAR(100),
    ->     Country VARCHAR(100),
    ->     Phone VARCHAR(50),
    ->     Fax VARCHAR(50)
[ -> );
Query OK, 0 rows affected (0.02 sec)
```

```
[mysql> CREATE DATABASE order_supply_schema;
Query OK, 1 row affected (0.01 sec)
```

```
[mysql> USE order_supply_schema
Database changed
mysql> █
```

```
mysql> CREATE TABLE Products (
    ->     Id INT PRIMARY KEY,
    ->     ProductName VARCHAR(255),
    ->     SupplierId INT,
    ->     UnitPrice DECIMAL(10, 2),
    ->     Package VARCHAR(100),
    ->     IsDiscontinued BIT,
    ->     FOREIGN KEY (SupplierId) REFERENCES Suppliers(Id)
[ -> );
Query OK, 0 rows affected (0.05 sec)
```

```
mysql> CREATE TABLE Products (
->     Id INT PRIMARY KEY,
->     ProductName VARCHAR(255),
->     SupplierId INT,
->     UnitPrice DECIMAL(10, 2),
->     Package VARCHAR(100),
->     IsDiscontinued BIT,
->     FOREIGN KEY (SupplierId) REFERENCES Suppliers(Id)
[ -> );
Query OK, 0 rows affected (0.05 sec)
```

```
mysql> CREATE TABLE Customers (
->     Id INT PRIMARY KEY,
->     FirstName VARCHAR(255),
->     LastName VARCHAR(255),
->     City VARCHAR(100),
->     Country VARCHAR(100),
->     Phone VARCHAR(50)
-> );
Query OK, 0 rows affected (0.02 sec)
```

```
mysql>
mysql> CREATE TABLE Orders (
->     Id INT PRIMARY KEY,
->     OrderDate DATETIME,
->     OrderNumber VARCHAR(100),
->     CustomerId INT,
->     TotalAmount DECIMAL(10, 2),
->     FOREIGN KEY (CustomerId) REFERENCES Customers(Id)
-> );
Query OK, 0 rows affected (0.01 sec)
```

```
mysql>
mysql> CREATE TABLE OrderItem (
->     Id INT PRIMARY KEY,
->     OrderId INT,
->     ProductId INT,
->     Quantity DECIMAL(10, 2),
->     UnitPrice DECIMAL(10, 2),
->     FOREIGN KEY (OrderId) REFERENCES Orders(Id),
->     FOREIGN KEY (ProductId) REFERENCES Products(Id)
[ -> );
Query OK, 0 rows affected (0.02 sec)
```

```
+-----+  
| Tables_in_order_supply_schema |  
+-----+  
| Customers          |  
| OrderItem          |  
| Orders             |  
| Products           |  
| Suppliers          |  
+-----+  
5 rows in set (0.02 sec)
```

Query 1

```
mysql> SELECT CompanyName  
      -> FROM Suppliers  
      [ -> WHERE Country = 'France';  
+-----+  
| CompanyName          |  
+-----+  
| Aux joyeux ecclésiastiques |  
| Escargots Nouveaux    |  
| Gai pâturage          |  
+-----+  
3 rows in set (0.02 sec)
```

Query 2

```
mysql> SELECT COUNT(*) AS JanuaryOrders  
      -> FROM Orders  
      [ -> WHERE MONTH(OrderDate) = 1;  
+-----+  
| JanuaryOrders |  
+-----+  
|      88      |  
+-----+  
1 row in set (0.03 sec)
```

### Query 3

```
mysql> SELECT Customers.FirstName, Customers.LastName
    -> FROM Customers
    -> JOIN Orders ON Customers.Id = Orders.CustomerId
    -> GROUP BY Customers.Id
    -> HAVING COUNT(Orders.Id) >= 3;
+-----+-----+
| FirstName | LastName |
+-----+-----+
| Maria     | Anders   |
| Ana       | Trujillo |
| Antonio   | Moreno   |
| Thomas    | Hardy    |
| Christina | Berglund |
| Hanna     | Moos     |
| Frédérique | Citeaux  |
| Martín    | Sommer   |
| Laurence  | Lebihan  |
| Elizabeth | Lincoln  |
| Victoria  | Ashworth |
| Patricio  | Simpson  |
| Yang      | Wang     |
| Pedro     | Afonso   |
| Elizabeth | Brown    |
| Sven      | Ottlieb  |
| Janine    | Labrune  |
| Ann       | Devon    |
| Roland    | Mendel   |
| Aria      | Cruz     |
| Martine   | Rancé    |
| Maria     | Larsson  |
| Peter     | Franken  |
| Carine    | Schmitt  |
| Paolo     | Accorti  |
| Lino      | Rodriguez|
| Eduardo   | Saavedra |
| José      | Pedro Freyre |
| André     | Fonseca  |
| Howard   | Snyder   |
| Mario     | Pontes   |
| Carlos    | Hernández |
| Yoshi     | Latimer  |
| Patricia | McKenna  |
| Helen     | Bennett  |
+-----+-----+
```

Query 4:

```
mysql> SELECT ProductName, UnitPrice
-> FROM Products
[ -> WHERE UnitPrice > 100;
+-----+-----+
| ProductName | UnitPrice |
+-----+-----+
| Thüringer Rostbratwurst | 123.79 |
| Côte de Blaye | 263.50 |
+-----+
2 rows in set (0.03 sec)
```

Query 5

```
mysql> SELECT Products.ProductName, SUM(OrderItem.Quantity) AS TotalQuantity
-> FROM OrderItem
-> JOIN Products ON OrderItem.ProductId = Products.Id
-> GROUP BY Products.Id
-> ORDER BY TotalQuantity DESC
[ -> LIMIT 1;
+-----+-----+
| ProductName | TotalQuantity |
+-----+-----+
| Camembert Pierrot | 1577.00 |
+-----+
1 row in set (0.02 sec)
```

Query 6:

```
mysql> SELECT ProductName, UnitPrice
-> FROM Products
-> ORDER BY UnitPrice DESC
[ -> LIMIT 3;
+-----+-----+
| ProductName | UnitPrice |
+-----+-----+
| Côte de Blaye | 263.50 |
| Thüringer Rostbratwurst | 123.79 |
| Mishi Kobe Niku | 97.00 |
+-----+
3 rows in set (0.00 sec)
```

### Query 7

```
mysql> SELECT FirstName, LastName
-> FROM Customers
-> WHERE Id NOT IN (
->     SELECT CustomerId
->     FROM Orders
->     WHERE YEAR(OrderDate) = 2014
-> );
+-----+-----+
| FirstName | LastName |
+-----+-----+
| Francisco | Chang   |
| Aria       | Cruz    |
| Diego      | Roel    |
| Martine    | Rancé   |
| Manuel     | Pereira |
| Yoshi      | Latimer |
| John       | Steel   |
| Jean       | Fresnière |
| Marie      | Bertrand|
| Paul       | Henriot |
+-----+-----+
10 rows in set (0.03 sec)
```

### Query 8

```
mysql> SELECT Products.ProductName, Products.UnitPrice, Suppliers.CompanyName
-> FROM Products
-> JOIN Suppliers ON Products.SupplierId = Suppliers.Id
-> WHERE Products.IsDiscontinued = 1;
+-----+-----+-----+
| ProductName          | UnitPrice | CompanyName |
+-----+-----+-----+
| Chef Anton's Gumbo Mix | 21.35    | New Orleans Cajun Delights |
| Mishi Kobe Niku       | 97.00    | Tokyo Traders           |
| Alice Mutton          | 39.00    | Pavlova, Ltd.            |
| Guaraná Fantástica    | 4.50     | Refrescos Americanas LTDA |
| Rössle Sauerkraut     | 45.60    | Plutzer Lebensmittelgroßmärkte AG |
| Thüringer Rostbratwurst | 123.79   | Plutzer Lebensmittelgroßmärkte AG |
| Singaporean Hokkien Fried Mee | 14.00    | Leka Trading           |
| Perth Pasties          | 32.80    | G'day, Mate              |
+-----+-----+-----+
8 rows in set (0.01 sec)
```

Query 9

```
mysql> SELECT Suppliers.CompanyName
      -> FROM Suppliers
      -> JOIN Products ON Suppliers.Id = Products.SupplierId
      -> GROUP BY Suppliers.Id
[ -> HAVING COUNT(Products.Id) > 5;
Empty set (0.00 sec)
```

Query 10

```
mysql> SELECT Customers.City, SUM(Orders.TotalAmount) AS TotalRevenue
      -> FROM Customers
      -> JOIN Orders ON Customers.Id = Orders.CustomerId
      -> WHERE Customers.Country = 'USA'
[ -> GROUP BY Customers.City;
+-----+-----+
| City          | TotalRevenue |
+-----+-----+
| Eugene        |    19711.13 |
| Elgin         |     3063.20 |
| Walla Walla   |      357.00 |
| San Francisco |     3490.02 |
| Portland       |     7619.60 |
| Anchorage     |    16325.15 |
| Albuquerque   |    52245.90 |
| Boise          |   115673.39 |
| Lander         |    12489.70 |
| Butte          |     1947.24 |
| Kirkland       |     1571.20 |
| Seattle         |   29073.45 |
+-----+-----+
12 rows in set (0.00 sec)
```

## Query 11

```
mysql> SELECT Products.ProductName
    -> FROM Products
    -> JOIN OrderItem ON Products.Id = OrderItem.ProductId
    -> JOIN Orders ON OrderItem.OrderId = Orders.Id
    -> JOIN Customers ON Orders.CustomerId = Customers.Id
    -> GROUP BY Products.Id
    -> HAVING COUNT(DISTINCT Customers.City) > 3;
+-----+
| ProductName
+-----+
| Chai
| Chang
| Aniseed Syrup
| Chef Anton's Cajun Seasoning
| Chef Anton's Gumbo Mix
| Grandma's Boysenberry Spread
| Uncle Bob's Organic Dried Pears
| Northwoods Cranberry Sauce
| Mishi Kobe Niku
| Ikura
| Queso Cabrales
| Queso Manchego La Pastora
| Konbu
| Tofu
| Genen Shouyu
| Pavlova
| Alice Mutton
| Carnarvon Tigers
| Teatime Chocolate Biscuits
| Sir Rodney's Marmalade
| Sir Rodney's Scones
| Gustaf's Knäckebröd
| Tunnbröd
| Guaraná Fantástica
| NuNuCa Nuß-Nougat-Creme
| Gumbär Gummibärchen
| Schoggi Schokolade
| Rössle Sauerkraut
| Thüringer Rostbratwurst
| Nord-Ost Matjeshering
| Gorgonzola Telino
| Mascarpone Fabioli
| Geitost
| Sasquatch Ale
| Inlagd Sill
| Gravad lax
| Côte de Blaye
| Chartreuse verte
| Boston Crab Meat
| Jack's New England Clam Chowder
| Singaporean Hokkien Fried Mee
| Ipoh Coffee
| Gula Malacca
| Rogede sild
| Spegesild
| Zaanse koeken
| Chocolade
| Maxilaku
| Valkoinen suklaa
| Manjimup Dried Apples
| Filo Mix
| Perth Pasties
| Tourtière
| Pâté chinois
| Gnocchi di nonna Alice
| Ravioli Angelo
| Escargots de Bourgogne
| Raclette Courdavault
| Camembert Pierrot
| Sirop d'éable
| Tarte au sucre
| Vegie-spread
| Wimmers gute Semmelknödel
| Louisiana Fiery Hot Pepper Sauce
| Louisiana Hot Spiced Okra
| Laughing Lumberjack Lager
| Scottish Longbreads
| Gudbrandsdalsost
| Outback Lager
| Flotemysost
| Mozzarella di Giovanni
| Röd Kaviar
| Longlife Tofu
| Rhönbräu Klosterbier
| Lakkalikööri
| Original Frankfurter grüne Soße
+-----+
77 rows in set (0.01 sec)
```

### Query 12

```
mysql> SELECT Suppliers.CompanyName, AVG(Orders.TotalAmount) AS AverageOrderValue
-> FROM Suppliers
-> JOIN Products ON Suppliers.Id = Products.SupplierId
-> JOIN OrderItem ON Products.Id = OrderItem.ProductId
-> JOIN Orders ON OrderItem.OrderId = Orders.Id
-> GROUP BY Suppliers.Id;
+-----+-----+
| CompanyName | AverageOrderValue |
+-----+-----+
| Exotic Liquids | 2018.461277 |
| New Orleans Cajun Delights | 1833.715429 |
| Grandma Kelly's Homestead | 2089.942778 |
| Tokyo Traders | 1889.809804 |
| Cooperativa de Quesos 'Las Cabras' | 2001.732308 |
| Mayumi's | 1299.847794 |
| Pavlova, Ltd. | 1953.296810 |
| Specialty Biscuits, Ltd. | 1902.436032 |
| PB Knäckebröd AB | 1423.552941 |
| Refrescos Americanas LTDA | 1273.906078 |
| Heli Süßwaren GmbH & Co. KG | 2124.788983 |
| Plutzer Lebensmittelgroßmärkte AG | 2241.557709 |
| Nord-Ost-Fisch Handelsgesellschaft mbH | 1997.654063 |
| Formaggi Fortini s.r.l. | 1914.541731 |
| Norske Meierier | 1822.154762 |
| Bigfoot Breweries | 1839.931231 |
| Svensk Sjöföda AB | 1996.142549 |
| Aux joyeux ecclésiastiques | 4505.744444 |
| New England Seafood Cannery | 1762.955227 |
| Leka Trading | 1949.732927 |
| Lyngbysild | 2079.320732 |
| Zaanse Snoepfabriek | 1415.537037 |
| Karkki Oy | 1720.324143 |
| G'day, Mate | 1653.178571 |
| Ma Maison | 1507.866377 |
| Pasta Buttini s.r.l. | 1963.202055 |
| Escargots Nouveaux | 1539.552778 |
| Gai pâturage | 2680.425333 |
| Forêts d'érables | 2298.884722 |
+-----+-----+
29 rows in set (0.04 sec)
```

### Query 13

```
mysql> SELECT Products.ProductName
-> FROM Products
-> GROUP BY Products.ProductName
-> HAVING COUNT(DISTINCT Products.SupplierId) > 1;
Empty set (0.01 sec)
```

#### Query 14

```
mysql> SELECT DISTINCT Suppliers.CompanyName
-> FROM Suppliers
-> JOIN Products ON Suppliers.Id = Products.SupplierId
-> WHERE Products.UnitPrice > (SELECT AVG(UnitPrice) FROM Products);
+-----+
| CompanyName
+-----+
| Grandma Kelly's Homestead
| Tokyo Traders
| Cooperativa de Quesos 'Las Cabras'
| Pavlova, Ltd.
| Specialty Biscuits, Ltd.
| Heli Süßwaren GmbH & Co. KG
| Plutzer Lebensmittelgroßmärkte AG
| Formaggi Fortini s.r.l.
| Aux joyeux ecclésiastiques
| Leka Trading
| G'day, Mate
| Pasta Buttini s.r.l.
| Gai pâturage
| Forêts d'érables
| Norske Meierier
+-----+
15 rows in set (0.01 sec)
```

#### Query 15

```
mysql> SELECT Customers.FirstName, Customers.LastName
-> FROM Customers
-> JOIN Orders ON Customers.Id = Orders.CustomerId
-> JOIN OrderItem ON Orders.Id = OrderItem.OrderId
-> JOIN Products ON OrderItem.ProductId = Products.Id
-> JOIN Suppliers ON Products.SupplierId = Suppliers.Id
-> GROUP BY Customers.Id
-> HAVING COUNT(DISTINCT Suppliers.Country) > 2;
+-----+-----+
| FirstName | LastName
+-----+-----+
| Maria     | Anders
| Ana       | Trujillo
| Antonio   | Moreno
| Thomas    | Hardy
| Christina | Berglund
| Hanna     | Moos
| Frédérique | Citeaux
| Martín    | Sommer
| Laurence  | Lebihan
| Elizabeth | Lincoln
| Victoria  | Ashworth
| Patricio  | Simpson
| Yang       | Wang
| Pedro      | Afonso
| Elizabeth | Brown
| Sven       | Ottlieb
| Janine    | Labrune
| Ann        | Devon
| Roland    | Mendel
| Aria       | Cruz
| Martine   | Rancé
| Maria     | Larsson
| Peter     | Franken
| Carine    | Schmitt
| Paolo     | Accorti
| Lino      | Rodriguez
| Eduardo   | Saavedra
| José      | Pedro Freyre
| André     | Fonseca
| Howard    | Snyder
| Manuel   | Pereira
| Mario     | Pontes
| Carlos    | Hernández
+-----+-----+
```

Giovanni	Rovelli
Catherine	Dewey
Jean	Fresnière
Alexander	Feuer
Simon	Crowther
Yvonne	Moncada
Rene	Phillips
Henriette	Pfalzheim
Guillermo	Fernández
Georg	Pipps
Isabel	de Castro
Bernardo	Batista
Lúcia	Carvalho
Horst	Kloss
Sergio	Gutiérrez
Paula	Wilson
Maurizio	Moroni
Janete	Limeira
Michael	Holz
Alejandra	Camino
Jonas	Bergulfsen
Jose	Pavarotti
Hari	Kumar
Jytte	Petersen
Dominique	Perrier
Art	Braunschweiger
Pascale	Cartrain
Liz	Nixon
Liu	Wong
Karin	Josephs
Miguel	Angel Paolino
Anabela	Domingues
Helvetica	Nagy
Palle	Ibsen
Mary	Saveley
Paul	Henriot
Rita	Müller
Pirkko	Koskitalo
Paula	Parente
Karl	Jablonski
Matti	Karttunen
Zbyszek	Piestrzeniewicz

87 rows in set (0.02 sec)