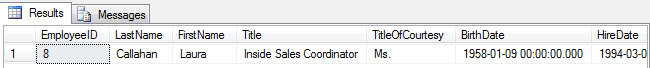
1. **Show all info about the employee with ID 8.**

SELECT EmployeeID, LastName, FirstName, title, TitleOfCourtesy, BirthDate, HireDate,

Address, City, Region, PostalCode, Country, HomePhone, Extension, Photo, Notes,

ReportsTo, PhotoPath FROM Employees WHERE EmployeeID=8

SELECT \* FROM Employees WHERE EmployeeID=8



1. **Show the list of first and last names of the employees from London.**

SELECT FirstName, LastName FROM Employees

WHERE city='London'

|  |  |
| --- | --- |
| **FirstName** | **LastName** |
| Steven | Buchanan |
| Michael | Suyama |
| Robert | King |
| Anne | Dodsworth |

1. **Show the list of first and last names of the employees whose first name begins with letter A**

SELECT FirstName, LastName FROM Employees

WHERE FirstName LIKE 'A%'

|  |  |
| --- | --- |
| **FirstName** | **LastName** |
| Andrew | Fuller |
| Anne | Dodsworth |

1. **Show the list of first, last names and ages of the employees whose age is greater than 55. The result should be sorted by last name.**

SELECT FirstName, LastName, DATEDIFF(YEAR, BirthDATE, GETDATE()) AS AGE FROM Employees

WHERE DATEDIFF( YEAR, BirthDATE, GETDATE())>55

Order BY LastName

|  |  |  |
| --- | --- | --- |
| **FirstName** | **LastName** | **Age** |
| Steven | Buchanan | 61 |
| Laura | Callahan | 58 |
| Nancy | Davolio | 68 |
| Andrew | Fuller | 64 |
| Robert | King | 56 |
| Margaret | Peacock | 79 |

1. **Calculate the count of employees from London.**

SELECT COUNT(EmployeeID) AS LondonEmployees FROM Employees

WHERE City='London'

|  |
| --- |
| **LondonEmployees** |
| 4 |

1. **Calculate the greatest, the smallest and the average age among the employees from London.**

SELECT MAX(DATEDIFF(YEAR, BirthDATE, GETDATE())) as MaxAge,

MIN (DATEDIFF(YEAR, BirthDATE, GETDATE())) as MinAge,

AVG(DATEDIFF(YEAR, BirthDATE, GETDATE())) as AvgAge

FROM Employees WHERE city='London';

|  |  |  |
| --- | --- | --- |
| **MaxAge** | **MinAge** | **AvgAge** |
| 61 | 50 | 55 |

1. **Calculate the greatest, the smallest and the average age of the employees for each city.**

SELECT City,

MAX(DATEDIFF(YEAR, BirthDATE, GETDATE())) as MaxAge,

MIN (DATEDIFF(YEAR, BirthDATE, GETDATE())) as MinAge,

AVG(DATEDIFF(YEAR, BirthDATE, GETDATE())) as AvgAge

FROM Employees

Group By City

|  |  |  |  |
| --- | --- | --- | --- |
| **City** | **MaxAge** | **MinAge** | **AvgAge** |
| Kirkland | 53 | 53 | 53 |
| London | 61 | 50 | 55 |
| Redmond | 79 | 79 | 79 |
| Seattle | 68 | 58 | 63 |
| Tacoma | 64 | 64 | 64 |

1. **Show the list of cities in which the average age of employees is greater than 60 (the average age is also to be shown)**

SELECT DISTINCT City,

AVG(DATEDIFF(YEAR, BirthDATE, GETDATE())) as AvgAge FROM Employees

GROUP BY City

HAVING AVG(DATEDIFF(YEAR, BirthDATE, GETDATE()))>60

|  |  |
| --- | --- |
| **City** | **AvgAge** |
| Redmond | 79 |
| Seattle | 63 |
| Tacoma | 64 |

1. **Show the first and last name(s) of the eldest employee(s). Use a subquery.**

SELECT FirstName, LastName From Employees

WHERE BirthDate = (SELECT MIN(Birthdate) FROM Employees);

Select top 1 EmployeeAge.FirstName, EmployeeAge.LastName, EmployeeAge.Age

FROM

(SELECT FirstName, LastName, DATEDIFF(year,birthdate, getdate()) as Age

from Employees) as EmployeeAge

Order By EmployeeAge.Age Desc

|  |  |
| --- | --- |
| **FirstName** | **LastName** |
| Margaret | Peacock |

1. **Show first, last names and ages of 3 eldest employees.**

SELECT TOP(3) LastName, FirstName,

DATEDIFF(YEAR, BirthDate, GETDATE()) AS Age

FROM Northwind.dbo.Employees

WHERE Birthdate IS NOT NULL

order By BirthDate ASC

|  |  |  |
| --- | --- | --- |
| **LastName** | **FirstName** | **Age** |
| Peacock | Margaret | 79 |
| Davolio | Nancy | 68 |
| Fuller | Andrew | 64 |

1. **Show the list of all cities where the employees are from.**

SELECt Distinct City FROM Employees

|  |
| --- |
| **City** |
| Kirkland |
| London |
| Redmond |
| Seattle |
| Tacoma |

1. **Show first, last names and dates of birth of the employees who celebrate their birthdays this month**.

SELECt FirstName, LastName, BirthDate FROM Employees

WHERE MONTH(BirthDate)=MONTH(GETDATE())

|  |  |  |
| --- | --- | --- |
| **FirstName** | **LastName** | **BirthDate** |
| Andrew | Fuller | 1952-02-19 00:00:00.000 |

1. **Show first and last names of the employees who used to serve orders shipped to Madrid.**

SELECT Distinct e.FirstName, e.LastName

FROM Northwind.dbo.Employees e

JOIN Northwind.dbo.Orders o ON e.EmployeeID=o.EmployeeID

WHERE o.ShipCity='Madrid'

|  |  |
| --- | --- |
| **FirstName** | **LastName** |
| Margaret | Peacock |
| Nancy | Davolio |
| Anne | Dodsworth |
| Andrew | Fuller |

1. **Show first and last names of the employees as well as the count of orders each of them have received during the year 1997 (use left join).**

SELECT e.FirstName, e.LastName, COUNT(o.OrderID) AS ContOfOrders

FROM Northwind.dbo.Employees e

LEFT JOIN Northwind.dbo.Orders o ON e.EmployeeID=o.EmployeeID

WHERE YEAR(o.OrderDate)=1997

GROUP BY e.LastName, e.FirstName

|  |  |  |
| --- | --- | --- |
| **FirstName** | **LastName** | **ContOfOrders** |
| Andrew | Fuller | 41 |
| Anne | Dodsworth | 19 |
| Janet | Leverling | 71 |
| Laura | Callahan | 54 |
| Margaret | Peacock | 81 |
| Michael | Suyama | 33 |
| Nancy | Davolio | 55 |
| Robert | King | 36 |
| Steven | Buchanan | 18 |

1. **Show first and last names of the employees as well as the count of orders each of them have received during the year 1997 (use a subquery).**

SELECT Employees.FirstName, Employees.LastName,

(SELECT COUNT(Orders.OrderID)

FROM Orders WHERE DATEPART(YYYY,OrderDate) = '1997'

AND employees.EmployeeID = Orders.employeeID)AS'Count of orders'

FROM Employees

ORDER BY Employees.FirstName, Employees.LastName;

|  |  |  |
| --- | --- | --- |
| **FirstName** | **LastName** | **CountofOrders** |
| Andrew | Fuller | 41 |
| Anne | Dodsworth | 19 |
| Janet | Leverling | 71 |
| Laura | Callahan | 54 |
| Margaret | Peacock | 81 |
| Michael | Suyama | 33 |
| Nancy | Davolio | 55 |
| Robert | King | 36 |
| Steven | Buchanan | 18 |

1. **Show first and last names of the employees as well as the count of their orders shipped after required date during the year 1997 (use left join).**

SELECT e.LastName, e.FirstName, COUNT(o.OrderID) AS ContOfOrders

FROM Northwind.dbo.Employees e

LEFT JOIN Northwind.dbo.Orders o ON e.EmployeeID=o.EmployeeID

WHERE YEAR(o.OrderDate)=1997 and ShippedDate>RequiredDate

GROUP BY e.LastName, e.FirstName

|  |  |  |
| --- | --- | --- |
| **LastName** | **FirsName** | **ContOfOrders** |
| Fuller | Andrew | 3 |
| Dodsworth | Anne | 2 |
| Leverling | Janet | 2 |
| Callahan | Laura | 3 |
| Peacock | Margaret | 6 |
| Suyama | Michael | 1 |
| Davolio | Nancy | 1 |
| King | Robert | 4 |

1. **Show the count of orders made by each customer from France.**

SELECT c.ContactName, COUNT (o.OrderID) AS CountOfOrders

FROM Northwind.dbo.Orders o

INNER JOIN Northwind.dbo.Customers c On o.CustomerID=c.CustomerID

WHERE c.Country='France'

GROUP BY c.ContactName

|  |  |
| --- | --- |
| **ContactName** | **CountOfOrders** |
| Annette Roulet | 14 |
| Carine Schmitt | 3 |
| Daniel Tonini | 4 |
| Dominique Perrier | 4 |
| Frédérique Citeaux | 11 |
| Janine Labrune | 4 |
| Laurence Lebihan | 17 |
| Martine Rancé | 5 |
| Mary Saveley | 10 |
| Paul Henriot | 5 |
| Annette Roulet | 14 |

1. **Show the list of french customers’ names who have made more than one order (use grouping).**

SELECT c.ContactName, COUNT (o.OrderID) AS CountOfOrders

FROM Northwind.dbo.Orders o

INNER JOIN Northwind.dbo.Customers c On o.CustomerID=c.CustomerID

WHERE c.Country='France'

GROUP BY c.ContactName

HAVING COUNT (o.OrderID)>1

|  |  |
| --- | --- |
| **ContactName** | **CountOfOrders** |
| Annette Roulet | 14 |
| Carine Schmitt | 3 |
| Daniel Tonini | 4 |
| Dominique Perrier | 4 |
| Frédérique Citeaux | 11 |
| Janine Labrune | 4 |
| Laurence Lebihan | 17 |
| Martine Rancé | 5 |
| Mary Saveley | 10 |
| Paul Henriot | 5 |

1. **Show the list of french customers’ names who have made more than one order (use a subquery).**

SELECT c.ContactName

FROM Northwind.dbo.Customers c

WHERE c.Country='France' AND c.CustomerID IN

(SELECT CustomerID FROM Northwind.dbo.Orders o

GROUP BY CustomerID

HAVING COUNT (o.OrderID)>1)

ORDER BY c.ContactName

|  |
| --- |
| **ContactName** |
| Annette Roulet |
| Carine Schmitt |
| Daniel Tonini |
| Dominique Perrier |
| Frédérique Citeaux |
| Janine Labrune |
| Laurence Lebihan |
| Martine Rancé |
| Mary Saveley |
| Paul Henriot |

1. **Show the list of customers’ names who used to order the ‘Tofu’ product (use a subquery).**

SELECT DISTINCT c.ContactName

FROM Northwind.dbo.Customers c

WHERE c.CustomerID IN

(SELECT CustomerID FROM Northwind.dbo.Orders o

WHERE o.OrderID IN

(SELECT ord.OrderID FROM Northwind.dbo.[Order Details] ord

WHERE ord.ProductID IN

(SELECT p.ProductID FROM Northwind.dbo.Products p

WHERE p.ProductName='Tofu')))

|  |
| --- |
| **ContactName** |
| Ana Trujillo |
| Bernardo Batista |
| Christina Berglund |
| Georg Pipps |
| Guillermo Fernández |
| Henriette Pfalzheim |
| Howard Snyder |
| Jose Pavarotti |
| Karin Josephs |
| Laurence Lebihan |
| Patricia McKenna |
| Paula Wilson |
| Peter Franken |
| Philip Cramer |
| Pirkko Koskitalo |
| Roland Mendel |
| Yoshi Latimer |
| Yvonne Moncada |

**22. Show the list of french customers’ names who used to order non-french products (use left join).**

SELECT DISTINCT c.ContactName

FROM Northwind.dbo.Customers c

LEFT JOIN Northwind.dbo.Orders o ON c.CustomerID=o.CustomerID

LEFT JOIN Northwind.dbo.[Order Details] ord ON ord.OrderID=o.OrderID

LEFT JOIN Northwind.dbo.Products p ON p.ProductID=ord.ProductID

LEFT JOIN Northwind.dbo.Suppliers s ON s.SupplierID=p.SupplierID

WHERE c.Country='France' AND s.Country<>'France'

|  |
| --- |
| **ContactName** |
| Annette Roulet |
| Carine Schmitt |
| Daniel Tonini |
| Dominique Perrier |
| Frédérique Citeaux |
| Janine Labrune |
| Laurence Lebihan |
| Martine Rancé |
| Mary Saveley |
| Paul Henriot |

**23. Show the list of french customers’ names who used to order non-french products (use a subquery).**

SELECT DISTINCT c.ContactName

FROM Northwind.dbo.Customers c

WHERE c.CustomerID IN

(SELECT CustomerID FROM Northwind.dbo.Orders o

WHERE o.OrderID IN

(SELECT ord.OrderID FROM Northwind.dbo.[Order Details] ord

WHERE ord.ProductID IN

(SELECT p.ProductID FROM Northwind.dbo.Products p

WHERE p.SupplierID IN

(SELECT s.SupplierID FROM Northwind.dbo.Suppliers s

WHERE c.Country='France' AND s.Country<>'France'))))

|  |
| --- |
| **ContactName** |
| Annette Roulet |
| Carine Schmitt |
| Daniel Tonini |
| Dominique Perrier |
| Frédérique Citeaux |
| Janine Labrune |
| Laurence Lebihan |
| Martine Rancé |
| Mary Saveley |
| Paul Henriot |

**24. Show the list of french customers’ names who used to order french products.**

SELECT DISTINCT c.ContactName

FROM Northwind.dbo.Customers c

LEFT JOIN Northwind.dbo.Orders o ON c.CustomerID=o.CustomerID

LEFT JOIN Northwind.dbo.[Order Details] ord ON ord.OrderID=o.OrderID

LEFT JOIN Northwind.dbo.Products p ON p.ProductID=ord.ProductID

LEFT JOIN Northwind.dbo.Suppliers s ON s.SupplierID=p.SupplierID

WHERE c.Country='France' AND s.Country='France'

SELECT DISTINCT c.ContactName

FROM Northwind.dbo.Customers c

WHERE c.CustomerID IN

(SELECT CustomerID FROM Northwind.dbo.Orders o

WHERE o.OrderID IN

(SELECT ord.OrderID FROM Northwind.dbo.[Order Details] ord

WHERE ord.ProductID IN

(SELECT p.ProductID FROM Northwind.dbo.Products p

WHERE p.SupplierID IN

(SELECT s.SupplierID FROM Northwind.dbo.Suppliers s

WHERE c.Country='France' AND s.Country='France'))))

|  |
| --- |
| **ContactName** |
| Dominique Perrier |
| Frédérique Citeaux |
| Laurence Lebihan |
| Martine Rancé |

**25. Show the total ordering sum calculated for each country of customer.**

SELECT DISTINCT c.Country, SUM(ord.UnitPrice\*ord.Quantity)AS TotalOrderingSum

from Northwind.dbo.Customers c

INNER JOIN Northwind.dbo.Orders o ON c.CustomerID=o.CustomerID

INNER JOIN Northwind.dbo.[Order Details]ord ON o.OrderID=ord.OrderID

GROUP BY c.Country

|  |  |
| --- | --- |
| **Country** | **TotalOrderingSum** |
| Finland | 19778,45 |
| USA | 263566,98 |
| Italy | 16705,15 |
| Brazil | 114968,48 |
| Germany | 244640,63 |
| Switzerland | 32919,50 |
| Mexico | 24073,45 |
| Sweden | 59523,70 |
| Argentina | 8119,10 |
| Austria | 139496,63 |
| UK | 60616,51 |
| Poland | 3531,95 |
| Canada | 55334,10 |
| Ireland | 57317,39 |
| Norway | 5735,15 |
| France | 85498,76 |
| Belgium | 35134,98 |
| Spain | 19431,89 |
| Venezuela | 60814,89 |
| Denmark | 34782,25 |
| Portugal | 12468,65 |

**27. Show the list of product categories along with total ordering sums calculated for the orders made for the products of each category, during the year 1997.**

SELECT cat.CategoryName, SUM(ord.UnitPrice\*ord.Quantity)AS TotalOrderingSum

from Northwind.dbo.Customers c

INNER JOIN Northwind.dbo.Orders o ON c.CustomerID=o.CustomerID

INNER JOIN Northwind.dbo.[Order Details]ord ON o.OrderID=ord.OrderID

INNER JOIN Northwind.dbo.Products p ON ord.ProductID=p.ProductID

INNER JOIN Northwind.dbo.Categories cat ON p.CategoryID=cat.CategoryID

WHERE YEAR(o.OrderDate)=1997

GROUP BY cat.CategoryName

|  |  |
| --- | --- |
| CategoryName | TotalOrderingSum |
| Seafood | 71320,65 |
| Meat/Poultry | 87621,03 |
| Condiments | 59679,00 |
| Confections | 87227,77 |
| Produce | 57718,55 |
| Dairy Products | 123910,80 |
| Beverages | 110424,00 |
| Grains/Cereals | 60486,95 |

**30. Show the list of cities where employees and customers are from and where orders have been made to. Duplicates should be eliminated**

SELECT DISTINCT c.City

FROM Northwind.dbo.Employees e

INNER JOIN Northwind.dbo.Orders o ON e.EmployeeID=o.EmployeeID

INNER JOIN Northwind.dbo.Customers c ON o.CustomerID=c.CustomerID

WHERE e.city=o.ShipCity

union all

SELECT DISTINCT c.City

FROM Northwind.dbo.Employees e

INNER JOIN Northwind.dbo.Orders o ON e.EmployeeID=o.EmployeeID

INNER JOIN Northwind.dbo.Customers c ON o.CustomerID=c.CustomerID

WHERE c.City=o.ShipCity

|  |
| --- |
| **City** |
| London |
| Seattle |
| Aachen |
| Albuquerque |
| Anchorage |
| Århus |
| Barcelona |
| Barquisimeto |
| Bergamo |
| Berlin |
| Bern |
| Boise |
| Bräcke |
| Brandenburg |
| Bruxelles |
| Buenos Aires |
| Butte |
| Campinas |
| Caracas |
| Charleroi |
| Cork |
| Cowes |
| Cunewalde |
| Elgin |
| Eugene |
| Frankfurt a.M. |
| Genève |
| Graz |
| Helsinki |
| I. de Margarita |
| Kirkland |
| Kobenhavn |
| Köln |
| Lander |
| Leipzig |
| Lille |
| Lisboa |
| London |
| Luleå |
| Lyon |
| Madrid |
| Mannheim |
| Marseille |
| México D.F. |
| Montréal |
| München |
| Münster |
| Nantes |
| Oulu |
| Paris |
| Portland |
| Reggio Emilia |
| Reims |
| Resende |
| Rio de Janeiro |
| Salzburg |
| San Cristóbal |
| San Francisco |
| Sao Paulo |
| Seattle |
| Sevilla |
| Stavern |
| Strasbourg |
| Stuttgart |
| Torino |
| Toulouse |
| Tsawassen |
| Vancouver |
| Versailles |
| Walla Walla |
| Warszawa |

**31. Insert 5 new records into Employees table. Fill in the following fields: LastName, FirstName, BirthDate, HireDate, Address, City, Country, Notes. The Notes field should contain your own name (to distinguish your records from the ones inserted by other trainees).**

INSERT INTO Northwind.dbo.Employees

(LastName, FirstName, BirthDate, HireDate, Address, City, Country, Notes)

VALUES

('Ivanauskaite','Olesia','1992-28-06 00:00:00.000','2015-06-05 00:00:00.000','Dorshenka 6','Ivano-Frankivsk','Ukraine','OIE'),

('Ivanauskaite','Kristina','1989-06-08 00:00:00.000','2011-28-03 00:00:00.000','Dorshenka 6','Ivano-Frankivsk','Ukraine','OIE'),

('Ivanauskene','Galyna','1967-27-11 00:00:00.000','1989-01-08 00:00:00.000','Dorshenka 6','Nadvirna','Ukraine','OIE'),

('Ivanauskas','Yevgenijus','1965-24-06 00:00:00.000','1989-15-12 00:00:00.000','Dorshenka 6','Ivano-Frankivsk','Ukraine','OIE'),

('Ivanauskas','Orest','1980-15-05 00:00:00.000','2005-22-01 00:00:00.000','Pavlyka 9','Ivano-Frankivsk','Ukraine','OIE')

**32. Fetch the records you have inserted by the SELECT statement**

SELECT LastName, FirstName, BirthDate, HireDate, Address, City, Country, Notes

FROM Northwind.dbo.Employeesem

WHERE Notes LIKE 'OIE'

**33. Change the City field in one of your records using the UPDATE statement (first run the SELECT statement to check whether you are updating the appropriate records!).**

UPDATE Northwind.dbo.Employees

SET Northwind.dbo.Employees.City='Lviv'

WHERE Northwind.dbo.Employees.FirstName='Olesia'

**34. Change the HireDate field in all your records to current date (first run the SELECT statement to check whether you are updating the appropriate records!).**

UPDATE Northwind.dbo.Employees

SET Northwind.dbo.Employees.HireDate=GETDATE()

WHERE Northwind.dbo.Employees.Notes LIKE 'OIE'

**35. Delete one of your records (first run the SELECT statement to check whether you are deleting the appropriate record!).**

DELETE Northwind.dbo.Employees

WHERE Northwind.dbo.Employees.LastName='Ivanauskaite'