

SQL Project Answers

-- Notes for Trainers

/*

Be wary of copying SQL from Microsoft Word to SSMS, as the quote character is not copied correctly.

A few of these answers are flexible, they do not have to match EXACTLY, for example where the question has not specified which columns to include. The best approach is to ask them to imagine they are on site and the only info they have from the end user is this text (the question) and the user is on holiday for a week. How would they ensure they went the extra mile and deliver the best possible solution for the user? This may also include using column aliases for every column in the SELECT to ensure it looks as nice as possible, capitalisation and spaces etc.

Also note that FORMAT for numbers are not currently covered in the slides.

*/

--Question 1.1

```
SELECT CustomerID AS "Customer ID", CompanyName AS "Customer Name", Address  
+ ', ' + City + ', ' + PostalCode + ', ' + Country AS "Address"  
FROM Customers  
WHERE City IN ('Paris', 'London'); /* Best Answer */
```

--OR

```
WHERE City = 'Paris' OR City = 'London'; /* Not as good but still  
correct */
```

--Should result in 8 Rows:

CustomerID	CompanyName	Address	City	PostalCode	Country
AROUT	Around the Horn	120 Hanover Sq.	London	WA1 1DP	UK
BSBEV	B's Beverages	Fauntleroy Circus	London	EC2 5NT	UK
CONSH	Consolidated Holdings	Berkeley Gardens 12 Brewery	London	WX1 6LT	UK
EASTC	Eastern Connection	35 King George	London	WX3 6FW	UK
NORTS	North/South	South House 300 Queensbridge	London	SW7 1RZ	UK
PARIS	Paris spécialités	265, boulevard Charonne	Paris	75012	France
SEVES	Seven Seas Imports	90 Wadhurst Rd.	London	OX15 4NB	UK
SPECD	Spécialités du monde	25, rue Lauriston	Paris	75016	France

SQL Project Answers

--Question 1.2

--Question 1.2

```
SELECT ProductName, QuantityPerUnit
FROM Products
WHERE QuantityPerUnit LIKE '%Bottle%';
```

--Should result in 12 Rows:

ProductName	QuantityPerUnit
Chang	24 - 12 oz bottles
Aniseed Syrup	12 - 550 ml bottles
Genen Shouyu	24 - 250 ml bottles
Sasquatch Ale	24 - 12 oz bottles
Steeleye Stout	24 - 12 oz bottles
Côte de Blaye	12 - 75 cl bottles
Chartreuse verte	750 cc per bottle
Sirop d'érable	24 - 500 ml bottles
Louisiana Fiery Hot Pepper Sauce	32 - 8 oz bottles
Laughing Lumberjack Lager	24 - 12 oz bottles
Outback Lager	24 - 355 ml bottles
Rhönbräu Klosterbier	24 - 0.5 l bottles

--Question 1.3

```
SELECT ProductName, QuantityPerUnit, CompanyName, Country
FROM Products p
INNER JOIN Suppliers s ON p.SupplierID = s.SupplierID
WHERE QuantityPerUnit LIKE '%Bottle%';
```

--Should result in 12 Rows:

ProductName	QuantityPerUnit	CompanyName	Country
Chang	24 - 12 oz bottles	Exotic Liquids	UK
Aniseed Syrup	12 - 550 ml bottles	Exotic Liquids	UK
Genen Shouyu	24 - 250 ml bottles	Mayumi's	Japan
Sasquatch Ale	24 - 12 oz bottles	Bigfoot Breweries	USA
Steeleye Stout	24 - 12 oz bottles	Bigfoot Breweries	USA
Côte de Blaye	12 - 75 cl bottles	Aux joyeux ecclésiastiques	France
Chartreuse verte	750 cc per bottle	Aux joyeux ecclésiastiques	France
Sirop d'érable	24 - 500 ml bottles	Forêts d'érables	Canada
Louisiana Fiery Hot Pepper Sauce	32 - 8 oz bottles	New Orleans Cajun Delights	USA
Laughing Lumberjack Lager	24 - 12 oz bottles	Bigfoot Breweries	USA
Outback Lager	24 - 355 ml bottles	Pavlova, Ltd. Plutzer	Australia
Rhönbräu Klosterbier	24 - 0.5 l bottles	Lebensmittelgroßmärkte AG	Germany

SQL Project Answers

--Question 1.4

```
SELECT c.CategoryName "Category Name", COUNT(*) as "No of Products"
FROM Products p
      INNER JOIN Categories c ON p.CategoryID=c.CategoryID
GROUP BY c.CategoryName
ORDER BY COUNT(*) DESC;
```

--Should result in 8 Rows:

Category Name	No of Products
Confections	13
Beverages	12
Condiments	12
Seafood	12
Dairy Products	10
Grains/Cereals	7
Meat/Poultry	6
Produce	5

--Question 1.5

```
SELECT TitleOfCourtesy + ' ' + FirstName + ' ' + LastName As Employee, City
FROM Employees
WHERE Country = 'UK';
```

--Should result in 4 Rows:

Employee	City
Mr. Steven Buchanan	London
Mr. Michael Suyama	London
Mr. Robert King	London
Ms. Anne Dodsworth	London

--Question 1.6

```
SELECT COUNT(*) AS 'No of Orders >100 from US or UK'
FROM Orders
WHERE Freight>100 AND ShipCountry IN ('USA','UK');
```

No of Orders >100 from US or UK
49

--Question 1.8

--SIMPLIFIED ANSWER:

```
SELECT OrderID AS 'Order ID',
      FORMAT((UnitPrice * Quantity) * Discount,'C') AS 'Discount Amount'
FROM [Order Details]
ORDER BY [Discount Amount] DESC;
```

-- This SQL results in 2155 rows returned. Due to the ORDER BY it is still possible to get the right answer (Discount Amount 2108).

SQL Project Answers

--TOP ANSWER:

```
SELECT Orderid AS "Order ID",  
       FORMAT((UnitPrice * Quantity) * Discount, 'C') AS "Total  
Discount"  
FROM [Order Details]  
WHERE ((UnitPrice * Quantity) * Discount) =  
(  
SELECT MAX(  
    (UnitPrice * Quantity) * Discount) -- AS 'Discount Amount'  
FROM [Order Details]  
)  
;
```

Order ID	Total Discount
10353	\$2,108.00
10372	\$2,108.00

Question 1.8

-- Uses a SELF JOIN

```
SELECT e.FirstName + ' ' + e.LastName AS "Employee Name",  
       b.FirstName + ' ' + b.LastName AS "Reports To"  
FROM Employees e  
LEFT JOIN Employees b ON e.ReportsTo=b.EmployeeID  
ORDER BY "Reports To", "Employee Name";
```

Employee Name	Reports To
Janet Leverling	Andrew Fuller
Laura Callahan	Andrew Fuller
Margaret Peacock	Andrew Fuller
Nancy Davolio	Andrew Fuller
Steven Buchanan	Andrew Fuller
Anne Dodsworth	Steven Buchanan
Michael Suyama	Steven Buchanan
Robert King	Steven Buchanan