מטלה 1

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Question 1 :

The result will be a table that joins two other tables : one is the order table and the second is the shipper table (from orders as o join shippers as s).
In addition of the columns «CompagnyName» and «Phone» i twill be another columun with name :
«pass» if the «RequiredDate» is less than the «CURDATE»
OR «Days Left» and we put inside, the minimum between «CURDATE» and «RequiredDate»
In our table, i twill be only the elements that are not shipped and that have a date of shipment for the week (INTERVAL 7 DAY). Then with the shipperID, it assign the results.

Question 2 :

Code SQL :

```
SELECT p.ProductID, p.ProductName, SUM(o_d.Quantity) AS totalQuantity,
        CONCAT('$', ROUND(SUM(o_d.UnitPrice) , 2)) AS totalPrice,
        CONCAT('$', ROUND(o_d.UnitPrice , 2)) AS WeightedAvgPrice,
        CONCAT('$', ROUND(AVG(o_d.UnitPrice) , 2)) AS AvgPrice,
        CONCAT('$', ROUND(p.UnitPrice , 2)) AS CurrentPrice
FROM `order details` AS o_d JOIN `products`AS p
ON o_d.ProductID = p.ProductID
GROUP BY ProductID
ORDER BY p.UnitPrice;
```

On SQL :

```
1 •   SELECT p.ProductID, p.ProductName, SUM(o_d.Quantity) AS totalQuantity,
2         CONCAT('$', ROUND(SUM(o_d.UnitPrice) , 2)) AS totalPrice,
3         CONCAT('$', ROUND(o_d.UnitPrice , 2)) AS WeightedAvgPrice,
4         CONCAT('$', ROUND(AVG(o_d.UnitPrice) , 2)) AS AvgPrice,
5         CONCAT('$', ROUND(p.UnitPrice , 2)) AS CurrentPrice
6     FROM `order details` AS o_d JOIN `products`AS p
7     ON o_d.ProductID = p.ProductID
8     GROUP BY ProductID
9     ORDER BY p.UnitPrice;
```

Question 3 :

My SQL code :

```
SELECT ProductID, ProductName, s.SupplierID, s.CompanyName, s.Phone, (100-UnitsInStock)
AS `to order`
From products AS p JOIN suppliers AS s
ON p.SupplierID = s.SupplierID
WHERE UnitsInStock < 10
```

On SQL :

```
1 •  SELECT ProductID, ProductName, s.SupplierID, s.CompanyName, s.Phone, (100-UnitsInStock) AS `to order`
2    From products AS p JOIN suppliers AS s
3    ON p.SupplierID = s.SupplierID
4    WHERE UnitsInStock < 10
```

Result on SQL:

ProductID	ProductName	SupplierID	CompanyName	Phone	to order
5	Chef Anton's Gumbo Mix	2	New Orleans Cajun Delights	(100) 555-4822	100
8	Northwoods Cranberry Sauce	3	Grandma Kelly's Homestead	(313) 555-5735	94
17	Alice Mutton	7	Pavlova, Ltd.	(03) 444-2343	100
21	Sir Rodney's Scones	8	Specialty Biscuits, Ltd.	(161) 555-4448	97
29	Thringer Rostbratwurst	12	Plutzer Lebensmittelgromrkte AG	(069) 992755	100
31	Gorgonzola Telino	14	Formaggi Fortini s.r.l.	(0544) 60323	100
32	Mascarpone Fabioli	14	Formaggi Fortini s.r.l.	(0544) 60323	91
45	Rogede sild	21	Lyngbysild	43844108	95
53	Perth Pasties	24	G'day, Mate	(02) 555-5914	100
66	Louisiana Hot Spiced Okra	2	New Orleans Cajun Delights	(100) 555-4822	96
68	Scottish Longbreads	8	Specialty Biscuits, Ltd.	(161) 555-4448	94
74	Longlife Tofu	4	Tokyo Traders	(03) 3555-5011	96

Question 4 :

My SQL code :

```
SELECT oo.EmployeeID, FirstName, LastName, HomePhone, date_add(max(oo.OrderDate),
INTERVAL 7 DAY) AS `insulation ends at…`
FROM orders AS o JOIN orders AS oo JOIN employees AS e
WHERE oo.EmployeeID != 8 AND (o.EmployeeID = 8 AND o.OrderDate=oo.OrderDate)
AND oo.OrderDate >= DATE('1998-05-01 00:00:00')
AND e.EmployeeID = oo.EmployeeID
GROUP BY oo.EmployeeID
```

On SQL :

```
1  SELECT oo.EmployeeID, FirstName, LastName, HomePhone, date_add(max(oo.OrderDate), INTERVAL 7 DAY) AS `insulation ends at…`
2  FROM orders AS o JOIN orders AS oo JOIN employees AS e
3  WHERE oo.EmployeeID != 8 AND (o.EmployeeID = 8 AND o.OrderDate=oo.OrderDate)
4  AND oo.OrderDate >= DATE('1998-05-01 00:00:00')
5  AND e.EmployeeID = oo.EmployeeID
6  GROUP BY oo.EmployeeID
```

Result on SQL :

	EmployeeID	FirstName	LastName	HomePhone	insulation ends at…
▶	1	Nancy	Davolio	(206) 555-9857	1998-05-13 00:00:00
	7	Robert	King	(71) 555-5598	1998-05-13 00:00:00
	4	Margaret	Peacock	(206) 555-8122	1998-05-13 00:00:00

Question 5 :

My SQL code :

```
SELECT ProductName, CompanyName, year(o.OrderDate) AS OrderYear,
        CASE WHEN quarter(o.OrderDate)=1 THEN round(o_d.Quantity*o_d.UnitPrice)
                ELSE 0 END AS `Qrt1`,
        CASE WHEN quarter(o.OrderDate)=2 THEN round(o_d.Quantity*o_d.UnitPrice)
                ELSE 0 END AS`Qrt2`,
        CASE WHEN quarter(o.OrderDate)=3 THEN round(o_d.Quantity*o_d.UnitPrice)
                ELSE 0 END AS `Qrt3`,
        CASE WHEN quarter(o.OrderDate)=4 THEN round(o_d.Quantity*o_d.UnitPrice)
                ELSE 0 END AS `Qrt4`
FROM orders AS o, `order details` AS o_d, products AS p, customers AS c
WHERE o.OrderID = o_d.OrderID
AND o.CustomerID = c.CustomerID
AND o_d.ProductID = p.ProductID
ORDER BY ProductName ASC, CompanyName ASC;
```

On SQL :

```
1  SELECT ProductName, CompanyName, year(o.OrderDate) AS OrderYear,
2      CASE WHEN quarter(o.OrderDate)=1 THEN round(o_d.Quantity*o_d.UnitPrice)
3              ELSE 0 END AS `Qrt1`,
4      CASE WHEN quarter(o.OrderDate)=2 THEN round(o_d.Quantity*o_d.UnitPrice)
5              ELSE 0 END AS`Qrt2`,
6      CASE WHEN quarter(o.OrderDate)=3 THEN round(o_d.Quantity*o_d.UnitPrice)
7              ELSE 0 END AS `Qrt3`,
8      CASE WHEN quarter(o.OrderDate)=4 THEN round(o_d.Quantity*o_d.UnitPrice)
9              ELSE 0 END AS `Qrt4`
10 FROM orders AS o, `order details` AS o_d, products AS p, customers AS c
11 WHERE o.OrderID = o_d.OrderID
12 AND o.CustomerID = c.CustomerID
13 AND o_d.ProductID = p.ProductID
14 ORDER BY ProductName ASC, CompanyName ASC;
```

Result on SQL :

ProductName	CompanyName	OrderYear	Qrt1	Qrt2	Qrt3	Qrt4
Alice Mutton	Antonio Moreno Taquera	1997	0	702	0	0
Alice Mutton	Berglunds snabbkp	1997	312	0	0	0
Alice Mutton	Blido Comidas preparadas	1997	0	0	0	1560
Alice Mutton	Blondesddsl pre et fils	1996	0	0	936	0
Alice Mutton	Bon app'	1998	624	0	0	0
Alice Mutton	Bottom-Dollar Markets	1998	234	0	0	0
Alice Mutton	Bottom-Dollar Markets	1997	1560	0	0	0
Alice Mutton	Du monde entier	1998	585	0	0	0
Alice Mutton	Ernst Handel	1997	0	0	0	1287
Alice Mutton	Ernst Handel	1997	1404	0	0	0