□SELECT I.OrderId, I.ProductId, I.Quantity,

SUM(Quantity) OVER (PARTITION BY I.OrderId),

QuantityPercent = CAST((CAST(Quantity AS decimal) / (SUM(Quantity) OVER (PARTITION BY I.OrderId)) * 100

FROM [Order] O JOIN OrderItem I ON O.Id = I.OrderId

	Orderld	ProductId	Quantity	(No column name)	QuantityPercent
1	1	11	12	27	44.44
2	1	42	10	27	37.04
3	1	72	5	27	18.52
4	2	14	9	49	18.37
5	2	51	40	49	81.63
6	3	41	10	60	16.67
7	3	51	35	60	58.33
8	3	65	15	60	25.00
9	4	22	6	41	14.63

∃SELECT *, [Day in Week] = CASE DATENAME(dw, OrderDate) WHEN 'Monday' THEN N'Thứ 2'

WHEN 'Tuesday' THEN N'Thứ 3'

WHEN 'Wednesday' THEN N'Thứ 4'

WHEN 'Thursday' THEN N'Thứ 5'

WHEN 'Friday' THEN N'Thứ 6'

WHEN 'Saturday' THEN N'Thứ 7'

ELSE N'Chủ Nhật' END

FROM [Order]

	ld	OrderDate	OrderNumber	CustomerId	TotalAmount	Day in Week
1	1	2012-07-04 00:00:00.000	542378	85	440.00	Thứ 4
2	2	2012-07-05 00:00:00.000	542379	79	1863.40	Thứ 5
3	3	2012-07-08 00:00:00.000	542380	34	1813.00	Chủ Nhật
4	4	2012-07-08 00:00:00.000	542381	84	670.80	Chủ Nhật
5	5	2012-07-09 00:00:00.000	542382	76	3730.00	Thứ 2
6	6	2012-07-10 00:00:00.000	542383	34	1444.80	Thứ 3
7	7	2012-07-11 00:00:00.000	542384	14	625.20	Thứ 4
8	8	2012-07-12 00:00:00.000	542385	68	2490.50	Thứ 5
9	9	2012-07-15 00:00:00.000	542386	88	517.80	Chủ Nhật
9	9	2012-07-15 00:00:00.000	542386	88	517.80	Chủ N

SELECT I.OrderId, I.ProductId, P.ProductName, I.UnitPrice, I.Quantity, COALESCE(S.Fax, S.Phone) AS ContactInfo, CASE COALESCE(S.Fax, S.Phone) WHEN Fax THEN 'Fax' ELSE 'Phone' END AS ContactType

FROM OrderItem I JOIN Product P ON I.ProductId = P.Id JOIN Supplier S ON P.SupplierId = S.Id

	Orderld	ProductId	ProductName	UnitPrice	Quantity	ContactInfo	Contact Type
1	1	11	Queso Cabrales	14.00	12	(98) 598 76 54	Phone
2	1	42	Singaporean Hokkien Fried Mee	9.80	10	555-8787	Phone
3	1	72	Mozzarella di Giovanni	34.80	5	(0544) 60603	Fax
4	2	14	Tofu	18.60	9	(06) 431-7877	Phone
5	2	51	Manjimup Dried Apples	42.40	40	(02) 555-4873	Fax
6	3	41	Jack's New England Clam Chowder	7.70	10	(617) 555-3389	Fax
7	3	51	Manjimup Dried Apples	42.40	35	(02) 555-4873	Fax
8	3	65	Louisiana Fiery Hot Pepper Sauce	16.80	15	(100) 555-4822	Phone
9	4	22	Gustaf's Knäckebröd	16.80	6	031-987 65 91	Fax

```
□SELECT DB_ID('Northwind') AS [Northwind Database ID],

OBJECT_ID('Northwind.dbo.Supplier') AS [Supplier Table ID],

SUSER_ID() AS [Current User ID],

SUSER_NAME() AS [Current User Name]

□SELECT user_updates, user_seeks, user_scans, user_lookups

FROM sys.dm_db_index_usage_stats us

WHERE us.object_id = OBJECT_ID('Northwind.dbo.Order')

Northwind Database ID | Supplier Table ID | Current User ID | Current User Name

1 10 | 469576711 | 259 | Ruby-PC\Ruby
```

	user_updates	user_seeks	user_scans	user_lookups
1	0	36	0	0
2	0	2	16	2

```
□WITH SupplierCategory(Country, City, OrderID, alevel)

     SELECT DISTINCT Country, City = CAST('' AS NVARCHAR(255)), OrderID = CAST('' AS NVARCHAR(255)), alevel = 0
     FROM Supplier
     UNION ALL
     SELECT S.Country, City = CAST(S.City AS NVARCHAR(255)), OrderID = CAST('' AS NVARCHAR(255)), alevel = SC.ale
     FROM SupplierCategory SC JOIN Supplier S ON SC.Country = S.Country
     WHERE SC.alevel = 0
     UNION ALL
     SELECT S.Country, City = CAST(S.City AS NVARCHAR(255)), OrderID = CAST(0.Id AS NVARCHAR(255)), alevel = SC.a
     FROM SupplierCategory SC JOIN Supplier S ON SC.Country = S.Country AND SC.City = S.City
                              JOIN [Customer] C ON S.Country = C.Country AND S.City = C.City
                              JOIN [Order] O ON C.Id = O.CustomerId
     WHERE SC.alevel = 1
 SELECT [Country_] = CASE WHEN alevel = 0 THEN Country ELSE '' END,
         [City_] = CASE WHEN alevel = 1 THEN City ELSE '' END,
[OrderID_] = OrderID,
         [Level_] = alevel
 FROM SupplierCategory
 ORDER BY Country, City, OrderID, alevel
```

	Country_	City_	OrderID_	Level_
1	Australia			0
2		Melboume		1
3		Sydney		1
4	Brazil			0
5		Sao Paulo		1
6			100	2
7			125	2
8			139	2
9			159	2
10			167	2
11			219	2
12			240	2
13			247	2

SELECT O.Id, O.CustomerId, O.OrderDate, O.TotalAmount, SUM(I.Quantity) AS TotalQuantity

FROM [Order] O JOIN OrderItem I ON O.Id = I.OrderId JOIN Customer C ON O.CustomerId = C.Id

WHERE C.Country LIKE '%France%'

GROUP BY O.Id, O.CustomerId, O.OrderDate, O.TotalAmount

HAVING SUM(I.Quantity) > 50

ORDER BY O.Id

	ld	CustomerId	OrderDate	TotalAmount	TotalQuantity
1	50	7	2012-09-04 00:00:00.000	1420.00	80
2	93	9	2012-10-29 00:00:00.000	2564.40	72
3	113	7	2012-11-22 00:00:00.000	7390.20	138
4	115	9	2012-11-25 00:00:00.000	1549.60	94
5	161	23	2013-01-08 00:00:00.000	1622.40	51
6	166	41	2013-01-14 00:00:00.000	2123.20	78
7	189	7	2013-02-05 00:00:00.000	2210.80	99
8	202	7	2013-02-18 00:00:00.000	1838.20	69
9	212	84	2013-02-27 00:00:00.000	1688.00	76