

```

Create View uvw_AllProductInOrder
As
Select oi.OrderId, o.OrderNumber, o.OrderDate,
Productlist=STUFF(
(
Select ',' + CONVERT(nvarchar(10),ois.ProductId)
From OrderItem as ois
Where oi.OrderId = ois.OrderId
for xml path('')
),1,1, ''),
sum(oi.UnitPrice*oi.Quantity) as [TotalAmount]
From Product p inner join OrderItem oi on oi.ProductId = p.Id
inner join [Order] o on o.Id = oi.OrderId
Group by oi.OrderId, o.OrderNumber, o.OrderDate
Go

```

100 %

Messages

Commands completed successfully.

Completion time: 2022-05-20T23:19:19.1250338+07:00

1.

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Select *
From uvw_DetailProductInOrder as dpio
Where MONTH(dpio.OrderDate) = 7

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ProductId	ProductInfo	UnitPrice	OrderId	OrderNumber	OrderDate	Quantity
11	Queso Cabrales 1 kg pkg.	21.00	1	542378	2012-07-04 00:00:00.000	12
42	Singaporean Hokkien Fried Mee 32 - 1 kg pkgs.	14.00	1	542378	2012-07-04 00:00:00.000	10
72	Mozzarella di Giovanni 24 - 200 g pkgs.	34.80	1	542378	2012-07-04 00:00:00.000	5
14	Tofu 40 - 100 g pkgs.	23.25	2	542379	2012-07-05 00:00:00.000	9
51	Manjimup Dried Apples 50 - 300 g pkgs.	53.00	2	542379	2012-07-05 00:00:00.000	40
41	Jack's New England Clam Chowder 12 - 12 oz cans	9.65	3	542380	2012-07-08 00:00:00.000	10
51	Manjimup Dried Apples 50 - 300 g pkgs.	53.00	3	542380	2012-07-08 00:00:00.000	35
65	Louisiana Fiery Hot Pepper Sauce 32 - 8 oz bottles	21.05	3	542380	2012-07-08 00:00:00.000	15
22	Gustaf's Knäckebröd 24 - 500 g pkgs.	21.00	4	542381	2012-07-08 00:00:00.000	6
57	Ravioli Angelo 24 - 250 g pkgs.	19.50	4	542381	2012-07-08 00:00:00.000	15
65	Louisiana Fiery Hot Pepper Sauce 32 - 8 oz bottles	21.05	4	542381	2012-07-08 00:00:00.000	20
20	Sir Rodney's Marmalade 30 gift boxes	81.00	5	542382	2012-07-09 00:00:00.000	40
33	Geitost 500 g	2.50	5	542382	2012-07-09 00:00:00.000	25
60	Camembert Pierrot 15 - 300 g rounds	34.00	5	542382	2012-07-09 00:00:00.000	40
31	Gorgonzola Telino 12 - 100 g pkgs	12.50	6	542383	2012-07-10 00:00:00.000	20
39	Chartreuse verte 750 cc per bottle	18.00	6	542383	2012-07-10 00:00:00.000	42
49	Maxilaku 24 - 50 g pkgs.	20.00	6	542383	2012-07-10 00:00:00.000	40
24	Guaraná Fantástica 12 - 355 ml cans	4.50	7	542384	2012-07-11 00:00:00.000	15

Query executed successfully.

MSI\SQLEXPRESS (15.0 RTM) MSI\GP65 (128) Northwind 00:00:00 136 rows

2.

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]Select *
From uvw_AllProductInOrder as apio
Where (len(apio.ProductList) - len(replace(apio.ProductList,',',''))) >= 2

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Results		Messages			
	OrderId	OrderNumber	OrderDate	ProductList	TotalAmount
1	1	542378	2012-07-04 00:00:00.000	11,42.72	440.00
2	3	542380	2012-07-08 00:00:00.000	41,51.65	1813.00
3	4	542381	2012-07-08 00:00:00.000	22,57.65	670.80
4	5	542382	2012-07-09 00:00:00.000	20,33.60	3730.00
5	6	542383	2012-07-10 00:00:00.000	31,39.49	1444.80
6	7	542384	2012-07-11 00:00:00.000	24,55.74	625.20
7	8	542385	2012-07-12 00:00:00.000	2,16,36.59	2490.50
8	10	542387	2012-07-16 00:00:00.000	27,39.77	1119.90
9	11	542388	2012-07-17 00:00:00.000	2,5.32	2018.60
10	13	542390	2012-07-19 00:00:00.000	41,57,62.70	1746.20
11	15	542392	2012-07-22 00:00:00.000	5,7.56	624.80
12	16	542393	2012-07-23 00:00:00.000	16,24,30.74	2464.80
13	20	542397	2012-07-29 00:00:00.000	40,59.76	4031.00
14	25	542402	2012-08-02 00:00:00.000	20,31.72	1456.00
15	26	542403	2012-08-05 00:00:00.000	10,31,33,40.76	2142.40
16	31	542408	2012-08-12 00:00:00.000	44,59,63.73	1488.80
17	33	542410	2012-08-14 00:00:00.000	24,55.75	613.20
18	34	542411	2012-08-14 00:00:00.000	19,24.35	86.50

Query executed successfully.

MSN\SQLSERVER (15.0 RTM) | MSI\GP65 (128) | Northwind | 00:00:00 | 410 rows

3. Hai view được tạo đều chứa thuộc dạng readonly. Muốn hai view thành readonly ta dùng câu lệnh “with read only”.

4.

	DetailProductInOrder	AllProductInOrder
1	100ms	110ms
2	88ms	80ms
3	100ms	104ms
4	82ms	102ms
5	84ms	95ms
average	90.8ms	98.2ms

=>view DetailProductInOrder chạy nhanh hơn