Group Sorting and Filtering

GreatFriends.Biz

Filtering in SQL Query Data Source

Query for this session : Order Line Total 2014

```
1  -- Microsoft SQL Server Reporting Services Class 2018
2  -- Loy Vanich (Laploy@gmail.com)
3  -- 0170 Group Sorting
4  SELECT
5      soh.OrderDate AS [Date],
6      soh.SalesOrderNumber AS [Order],
7      pps.Name AS Subcat, pp.Name as Product,
8      SUM(sd.OrderQty) AS Qty,
9      SUM(sd.LineTotal) AS LineTotal
10 FROM Sales.SalesPerson sp
11     INNER JOIN Sales.SalesOrderHeader AS soh
12         ON sp.BusinessEntityID = soh.SalesPersonID
13     INNER JOIN Sales.SalesOrderDetail AS sd
14         ON sd.SalesOrderID = soh.SalesOrderID
15     INNER JOIN Production.Product AS pp
16         ON sd.ProductID = pp.ProductID
17     INNER JOIN Production.ProductSubcategory AS pps
18         ON pp.ProductSubcategoryID = pps.ProductSubcategoryID
19     INNER JOIN Production.ProductCategory AS ppc
20         ON ppc.ProductCategoryID = pps.ProductCategoryID
21     GROUP BY ppc.Name, soh.OrderDate, soh.SalesOrderNumber, pps.Name, pp.Name,
22     soh.SalesPersonID
23 HAVING ppc.Name = 'Clothing'
24 AND (soh.OrderDate BETWEEN '2014-01-01' AND '2014-12-31')
```

Write and test query in SSMS
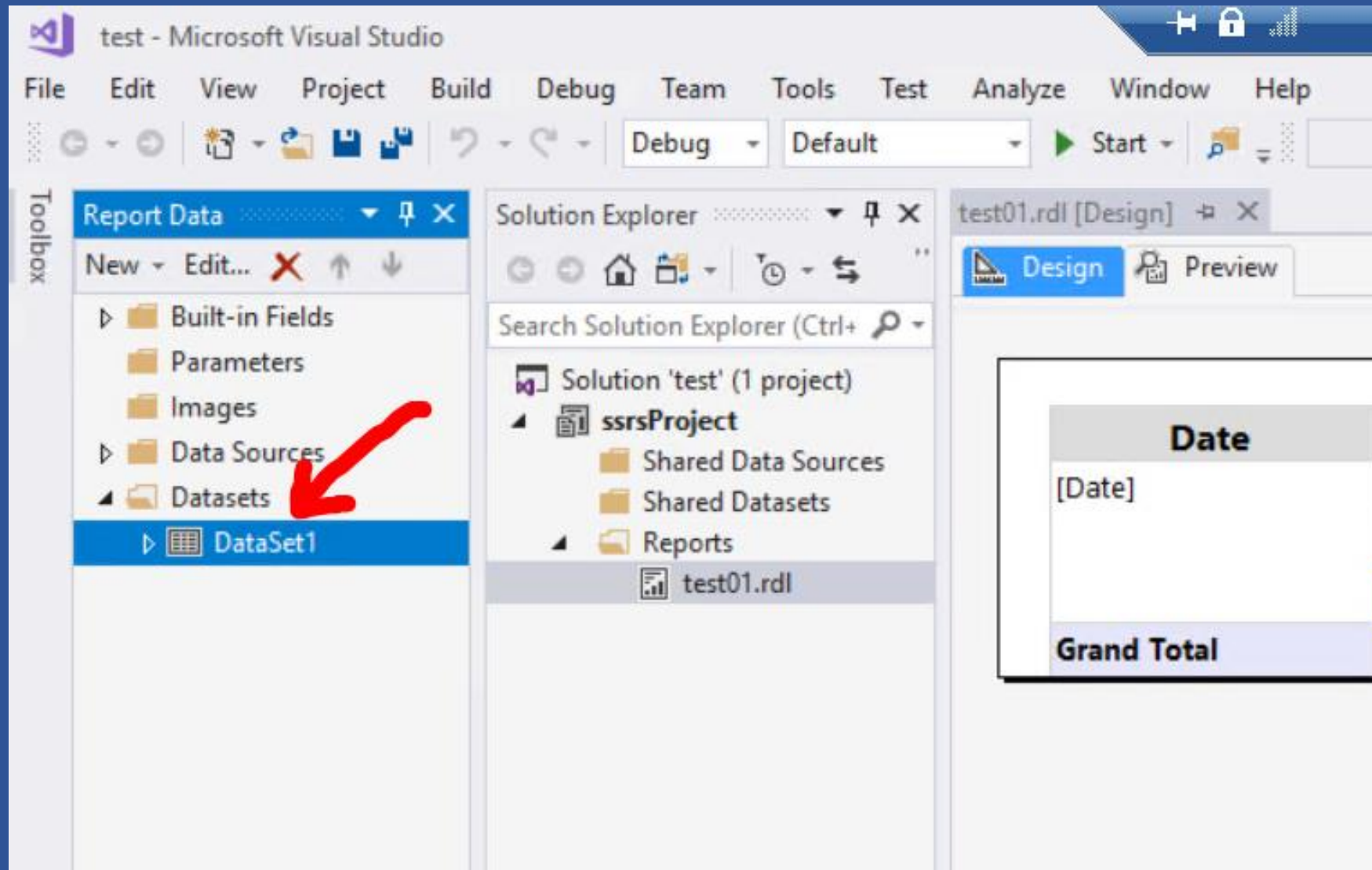
```
10     FROM Sales.SalesPerson sp
11         INNER JOIN Sales.SalesOrderHeader AS soh
12             ON sp.BusinessEntityID = soh.SalesPersonID
13         INNER JOIN Sales.SalesOrderDetail AS sd
14             ON sd.SalesOrderID = soh.SalesOrderID
15         INNER JOIN Production.Product AS pp
16             ON sd.ProductID = pp.ProductID
17         INNER JOIN Production.ProductSubcategory AS pps
18             ON pp.ProductSubcategoryID = pps.ProductSubcategoryID
19         INNER JOIN Production.ProductCategory AS ppc
20             ON ppc.ProductCategoryID = pps.ProductCategoryID
21     GROUP BY ppc.Name, soh.OrderDate, soh.SalesOrderNumber, pps.Name, pp.Name,
22         soh.SalesPersonID
23     HAVING ppc.Name = 'Clothing'
24     AND (soh.OrderDate BETWEEN '2014-01-01' AND '2014-12-31')
```

121 %

▦ Results   📄 Messages

	Date	Order	Subcat	Product	Qty	LineTotal
1	2014-01-28 00:00:00.000	SO65090	Gloves	Full-Finger Gloves, L	2	49.387000
2	2014-01-28 00:00:00.000	SO65090	Gloves	Full-Finger Gloves, M	1	24.693500
3	2014-01-28 00:00:00.000	SO65090	Gloves	Full-Finger Gloves, S	1	24.693500
4	2014-01-29 00:00:00.000	SO65151	Vests	Classic Vest, M	2	76.200000
5	2014-01-29 00:00:00.000	SO65152	Jerseys	Short-Sleeve Classic Jersey, XL	2	64.788000
6	2014-01-29 00:00:00.000	SO65152	Socks	Racing Socks, L	5	26.970000
7	2014-01-29 00:00:00.000	SO65152	Socks	Racing Socks, M	2	10.788000

Open report project from the previous session / Report Data / DataSet1

Add this Line to Query in Data Source

Data source:

DataSource1 New...

Query type:

● Text ○ Table ○ Stored Procedure

Query:

```
            INNER JOIN Sales.SalesOrderHeader AS soh
                    ON sp.BusinessEntityID = soh.SalesPersonID
            INNER JOIN Sales.SalesOrderDetail AS sd
                    ON sd.SalesOrderID = soh.SalesOrderID
            INNER JOIN Production.Product AS pp
                    ON sd.ProductID = pp.ProductID
            INNER JOIN Production.ProductSubcategory AS pps
                    ON pp.ProductSubcategoryID = pps.ProductSubcategoryID
            INNER JOIN Production.ProductCategory AS ppc
                    ON ppc.ProductCategoryID = pps.ProductCategoryID
            GROUP BY ppc.Name, soh.OrderDate, soh.SalesOrderNumber, pps.Name,
pp.Name,
                    soh.SalesPersonID
HAVING ppc.Name = 'Clothing'
AND (soh.OrderDate BETWEEN '2014-01-01' AND '2014-12-31')
```

Query Designer... Import... Refresh Fields

Preview Report / ** note: only 2014 rows are included **

	Date	Order	Product	Qty	Line Total
⊞	January 28, 2014	**Daily Total**		4	$98.77
⊞	January 29, 2014	**Daily Total**		1885	$54,727.44
⊞	February 28, 2014	**Daily Total**		4	$233.97
⊞	March 1, 2014	**Daily Total**		2409	$65,249.84
⊞	March 30, 2014	**Daily Total**		10	$276.54
⊞	March 31, 2014	**Daily Total**		3100	$85,046.96
⊞	April 30, 2014	**Daily Total**		14	$529.01
⊞	May 1, 2014	**Daily Total**		2999	$83,642.49
Grand Total				10425	$289,805.01

Group Sorting

Design/ Row Groups = Date / Group Properties . . .

Sorting / Add / Order Z to A

Preview/ ** notice the date is in reverse order **

Date	Order	Product	Qty	Line Total
⊞ May 1, 2014	**Daily Total**		2999	$83,642.49
⊞ April 30, 2014	**Daily Total**		14	$529.01
⊞ March 31, 2014	**Daily Total**		3100	$85,046.96
⊞ March 30, 2014	**Daily Total**		10	$276.54
⊞ March 1, 2014	**Daily Total**		2409	$65,249.84
⊞ February 28, 2014	**Daily Total**		4	$233.97
⊞ January 29, 2014	**Daily Total**		1885	$54,727.44
⊞ January 28, 2014	**Daily Total**		4	$98.77
Grand Total			10425	$289,805.01

Filtering using Group filter

- Remove last line of SQL Query to show every year
- Remove Group Sorting
- Change filter of Date Group to keep only year 2013
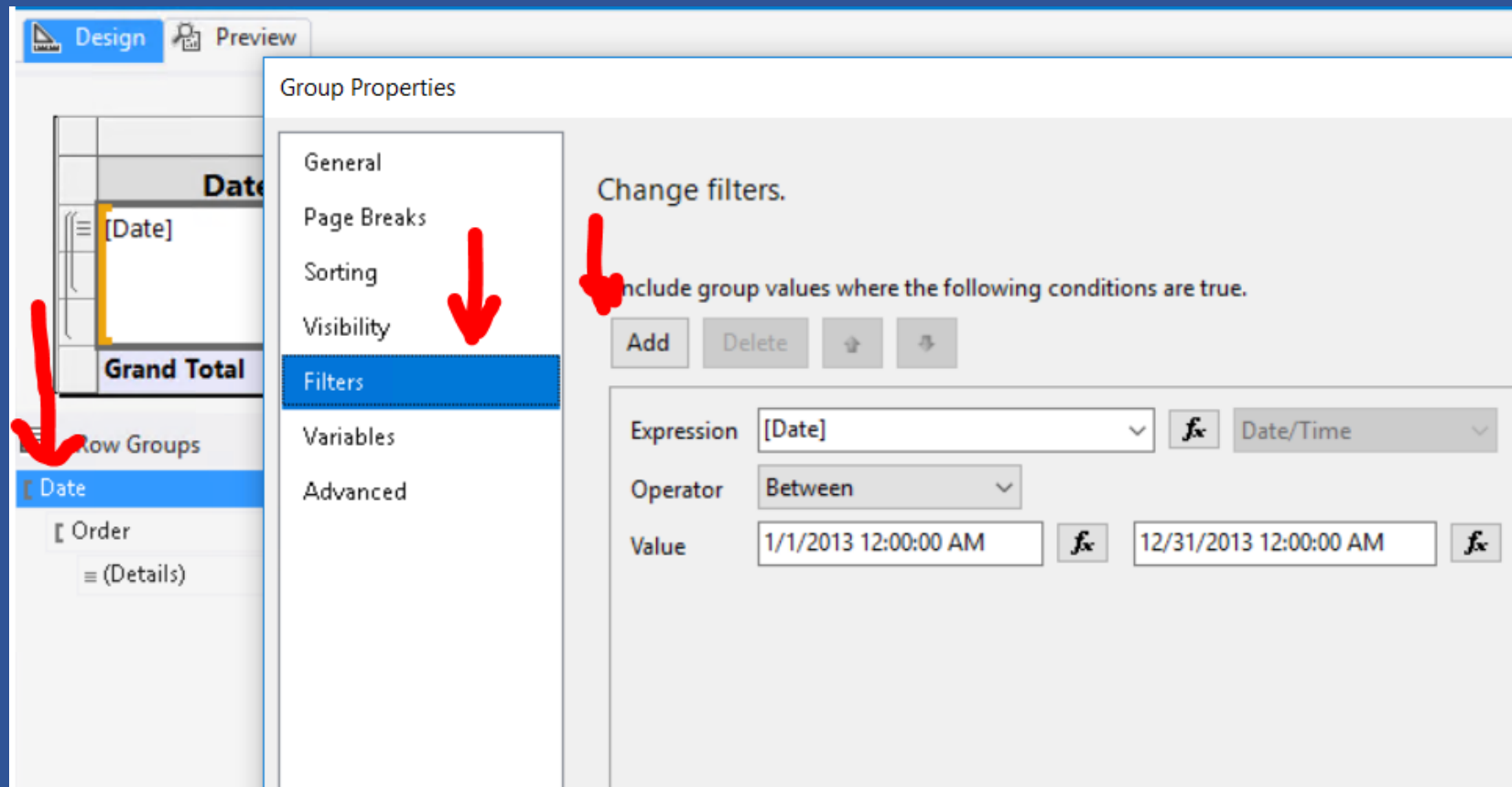
Preview result

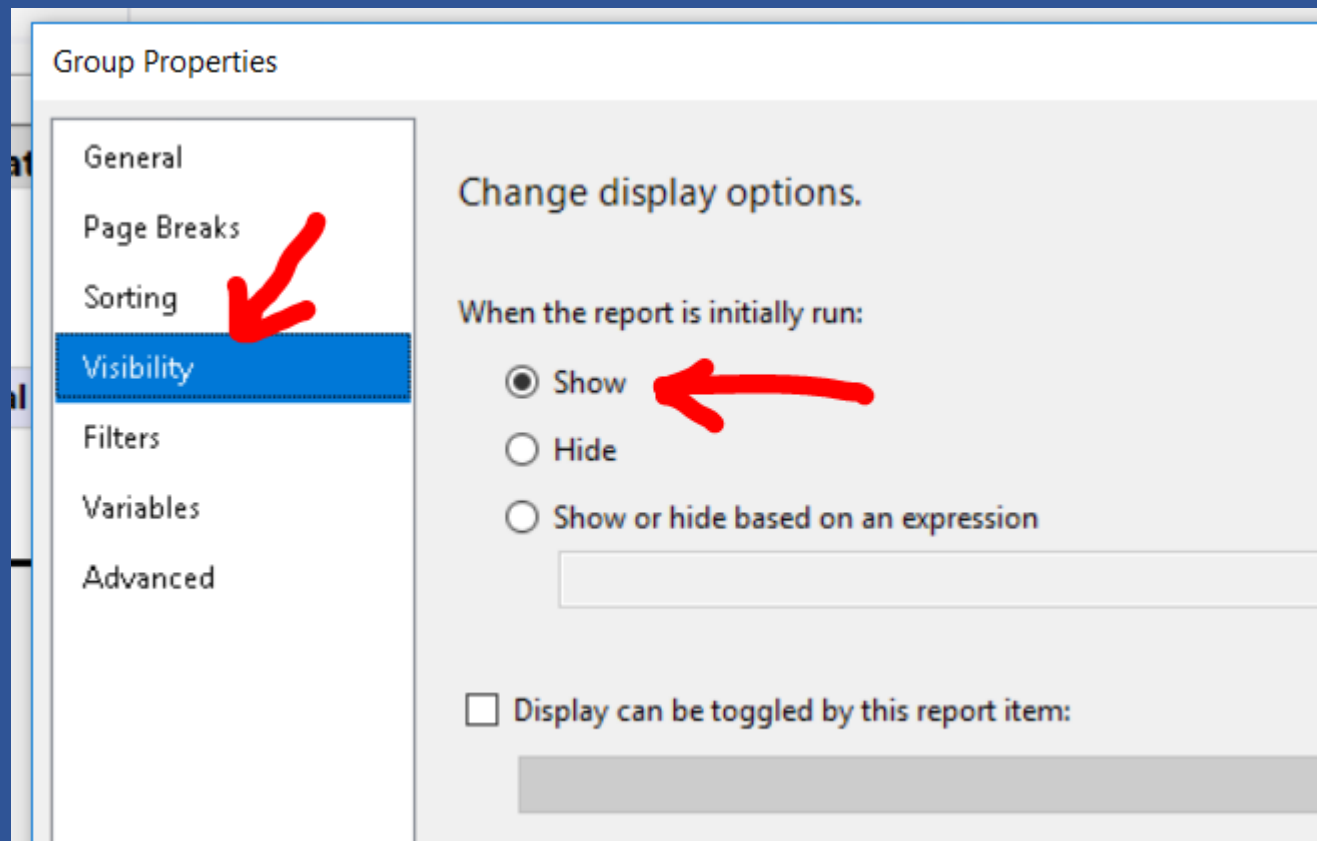| Date	Order	Product	Qty	Line Total
⊞ January 28, 2013	**Daily Total**		1130	$34,013.92
⊞ February 28, 2013	**Daily Total**		1750	$52,798.70
⊞ March 30, 2013	**Daily Total**		2551	$75,561.27
⊞ April 30, 2013	**Daily Total**		2059	$63,050.79
⊞ May 30, 2013	**Daily Total**		3199	$82,062.72
⊞ June 30, 2013	**Daily Total**		4937	$129,210.60
⊞ July 31, 2013	**Daily Total**		4512	$120,955.70
⊞ August 30, 2013	**Daily Total**		2583	$68,240.81
⊞ September 30, 2013	**Daily Total**		3387	$90,704.93
⊞ October 30, 2013	**Daily Total**		3146	$85,481.41
⊞ November 30, 2013	**Daily Total**		1575	$44,573.65
⊞ December 31, 2013	**Daily Total**		1841	$52,691.23
Grand Total			64569	$1,780,769.91

Create user sortable report

- Add new report name = SortTest.rdl
- Add Data Source
- Add Data Set

Use the same data set from previous report but add this line to the end

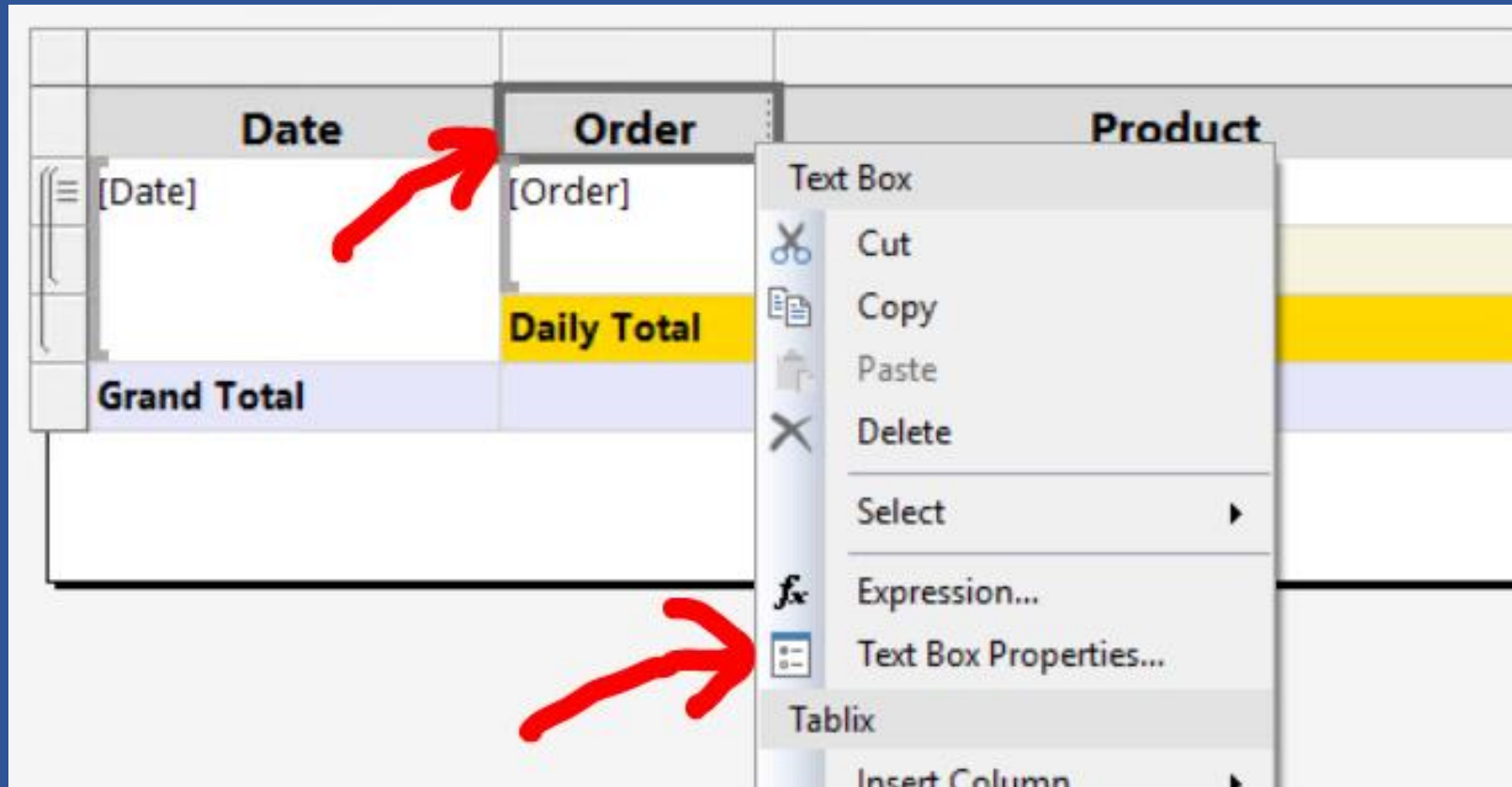AND (soh.OrderDate BETWEEN '2013-01-01' AND '2013-02-01')

- Copy table from previous report
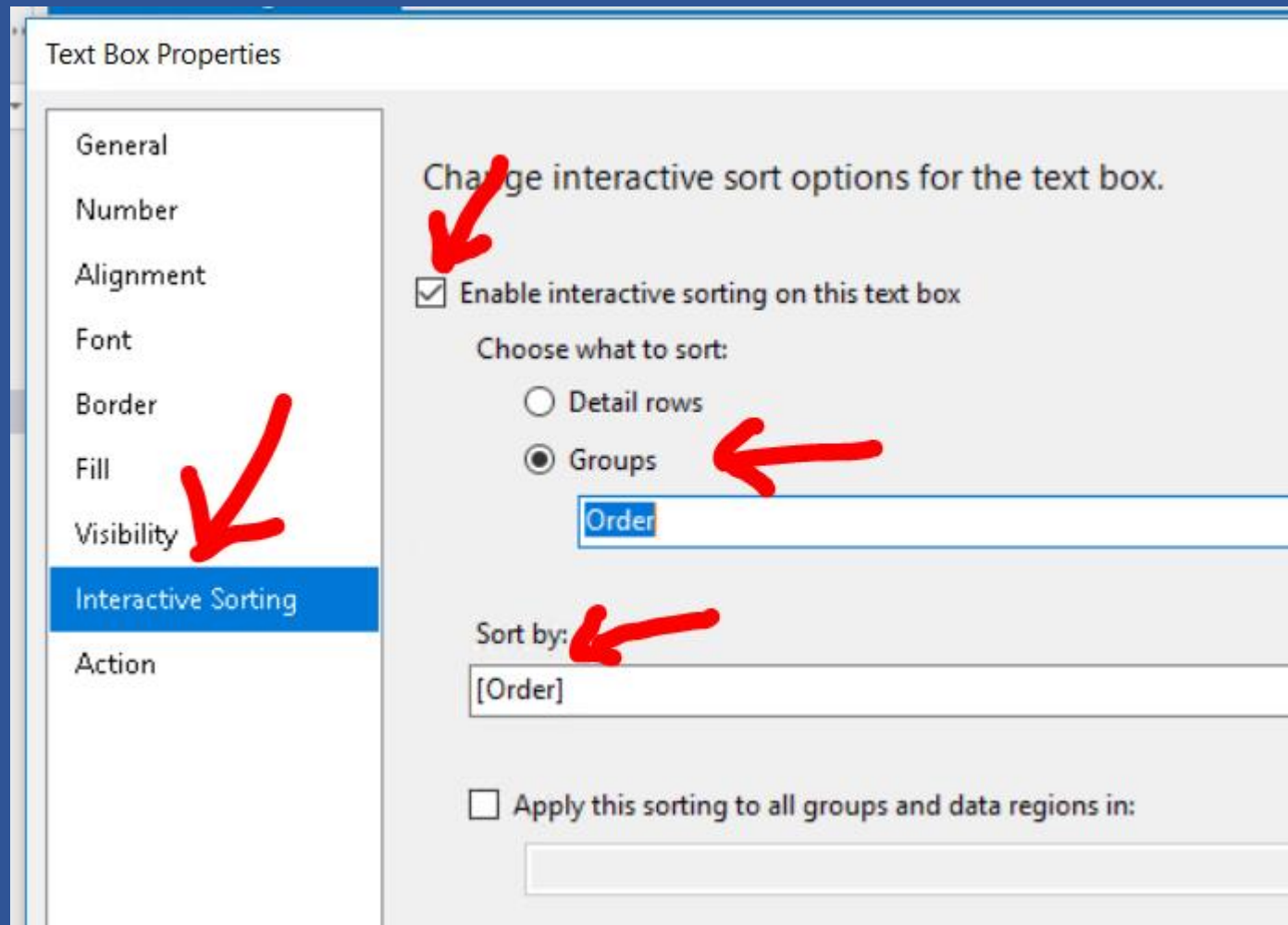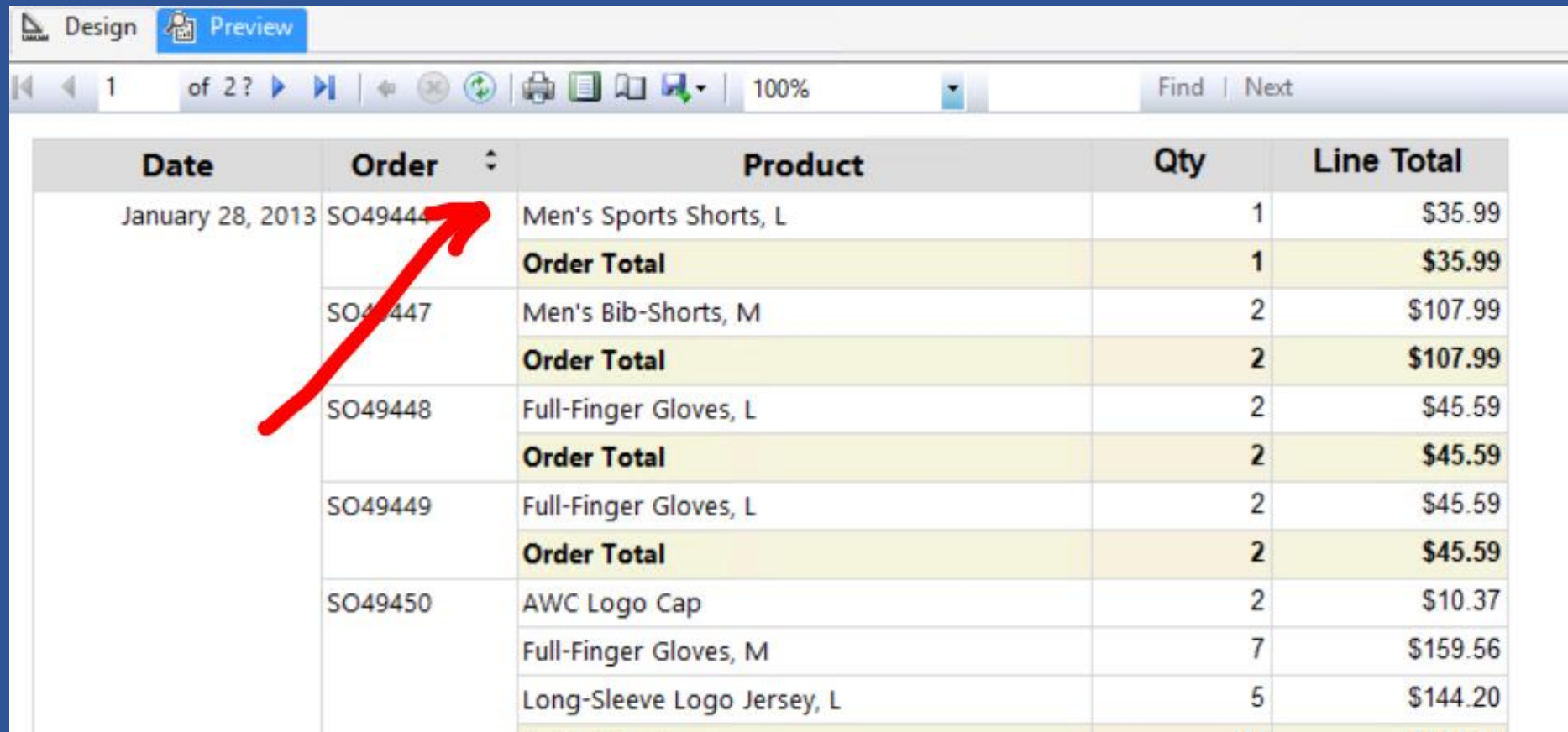- Make all group Visibility as Show

In Design view / your new report should look like so

Date	Order	Product	Qty	Line Total
January 28, 2013	SO49444	Men's Sports Shorts, L	1	$35.99
		Order Total	**1**	**$35.99**
	SO49447	Men's Bib-Shorts, M	2	$107.99
		Order Total	**2**	**$107.99**
	SO49448	Full-Finger Gloves, L	2	$45.59
		Order Total	**2**	**$45.59**
	SO49449	Full-Finger Gloves, L	2	$45.59
		Order Total	**2**	**$45.59**
	SO49450	AWC Logo Cap	2	$10.37
		Full-Finger Gloves, M	7	$159.56
		Long-Sleeve Logo Jersey, L	5	$144.20
		Order Total	**14**	**$314.13**
	SO49451	Full-Finger Gloves, L	2	$45.59
		Full-Finger Gloves, S	4	$91.18

In Design pane right-click Order / Text Box properties . . .

Design | Preview

|◄ ◄ 1 of 2? ► ►| | 100% | Find | Next

Date	Order ⇕	Product	Qty	Line Total
January 28, 2013	SO49444	Men's Sports Shorts, L	1	$35.99
		Order Total	**1**	**$35.99**
	SO49447	Men's Bib-Shorts, M	2	$107.99
		Order Total	**2**	**$107.99**
	SO49448	Full-Finger Gloves, L	2	$45.59
		Order Total	**2**	**$45.59**
	SO49449	Full-Finger Gloves, L	2	$45.59
		Order Total	**2**	**$45.59**
	SO49450	AWC Logo Cap	2	$10.37
		Full-Finger Gloves, M	7	$159.56
		Long-Sleeve Logo Jersey, L	5	$144.20

To sort by LineTotal

Change interactive sort options for the text box.

☑ Enable interactive sorting on this text box

Choose what to sort:

○ Detail rows

◉ Groups

Order

Sort by:

[LineTotal]

To sort by product

Change interactive sort options for the text box.

☑ Enable interactive sorting on this text box

Choose what to sort:

○ Detail rows

◉ Groups

Order

Sort by:

[Product]

☐ Apply this sorting to all groups and data regions in: