1: How to Populate Tables Using a ForEach Tag

Prerequisite Tutorials

Before doing this tutorial, we recommend you have done...

1. The Start Here Tutorial

Training Overview

This Training Guide walks you through how to populate tables with data from a ForEach tag.

Step 1- Connect to Data

ForEach tags in Windward Designer iterate over every record returned by the tags select. It is common for documents to use tables of information taken from the database, and the ForEach tag is the tool to use when you want your automated documents to display tables. ForEach tags can be leveraged to create additional rows of a table for every record, allowing your table to extend for as many rows are required to accommodate the data. Follow the steps bellow to learn how to populate a table using a ForEach tag:

1. Open Microsoft Word. Now that you've installed Windward Designer, you will see two new tabs in the Microsoft Office Ribbon – the "Windward" Tab and the "Windward Tools" Tab.

2. Click on the "**Windward Tab**" and click on the "**Data Sources**" button located on the left-hand side of the ribbon. This opens the Connection Editor where you will manage all of your data connections.

3. In the Connection Editor window, select the data connection labeled "**SqlServer**" under "Recent Inactive" and click the "**Connect**" button.

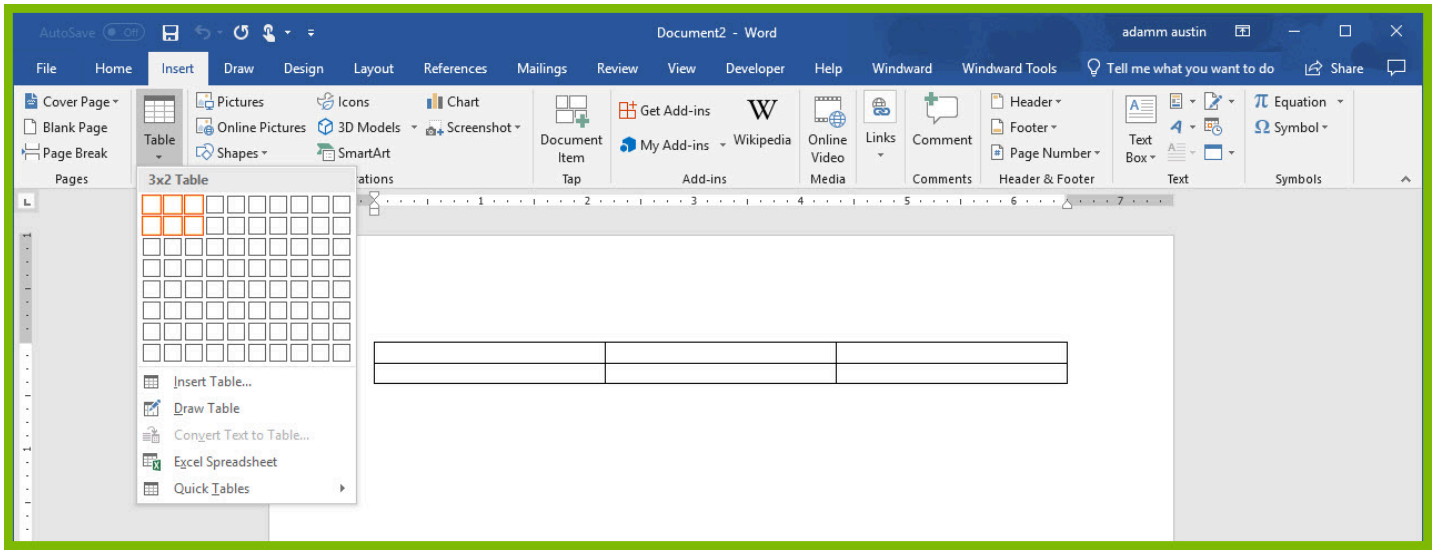
4. Close the Connection Editor by clicking "**Close**." You have now successfully connected to the sample data!

Step 2- Design Table Template

1. Place your cursor on the first line of the template.

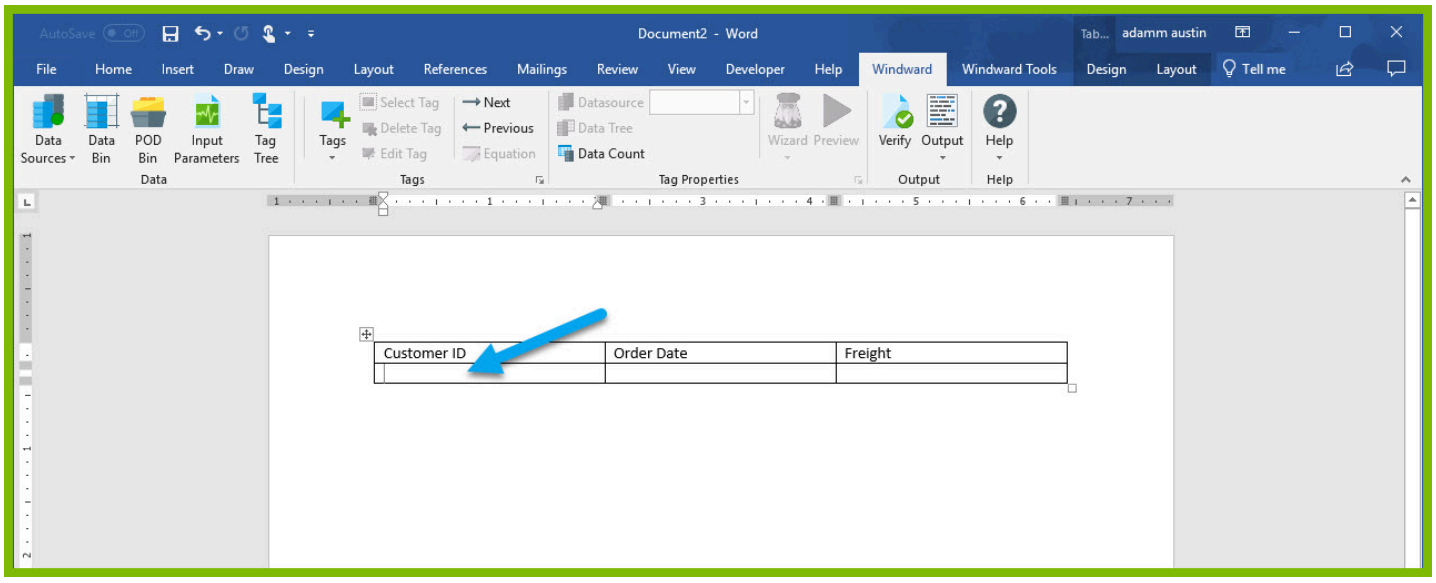
2. Go to the "Insert" ribbon, and click "**Table**"

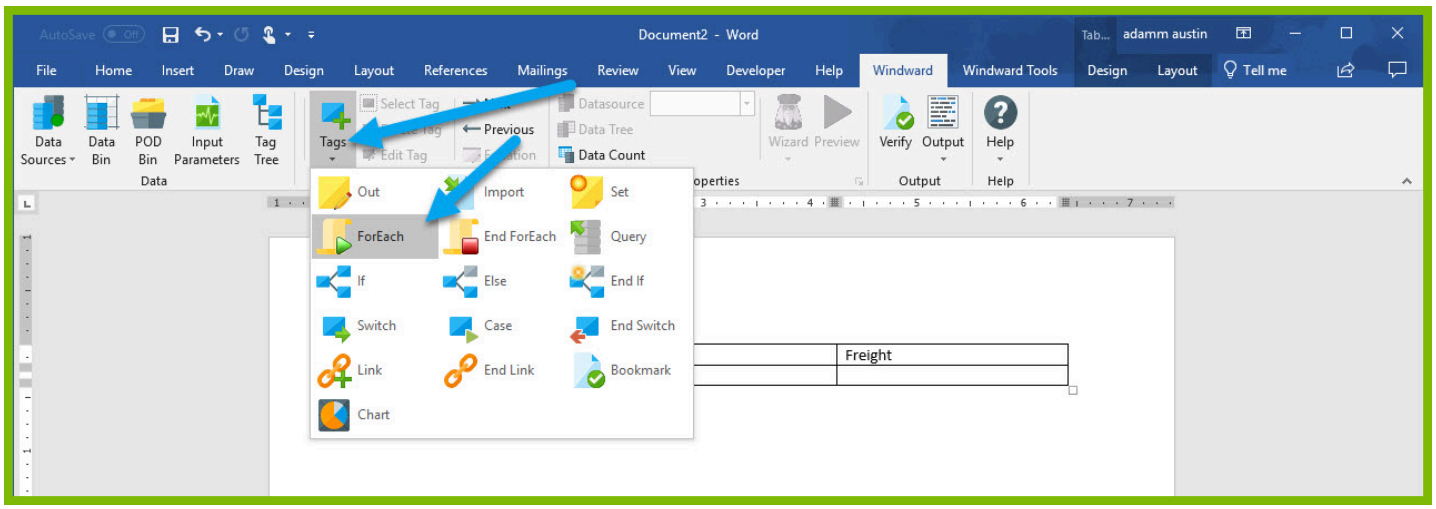
3. In the drop-down, select a 3X2 table to insert.



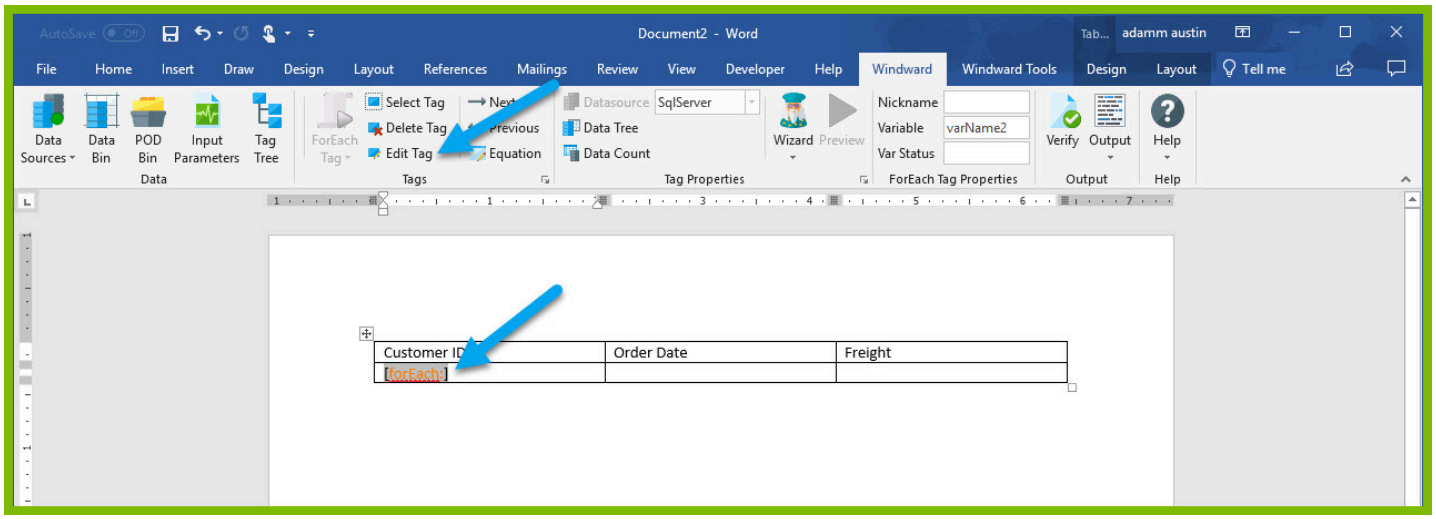
4. Give the columns of your table headers “Customer ID,“ “Order Date,” and “Freight.”:

5. Place your cursor in the cell under “Customer ID,” and insert a ForEach tag.



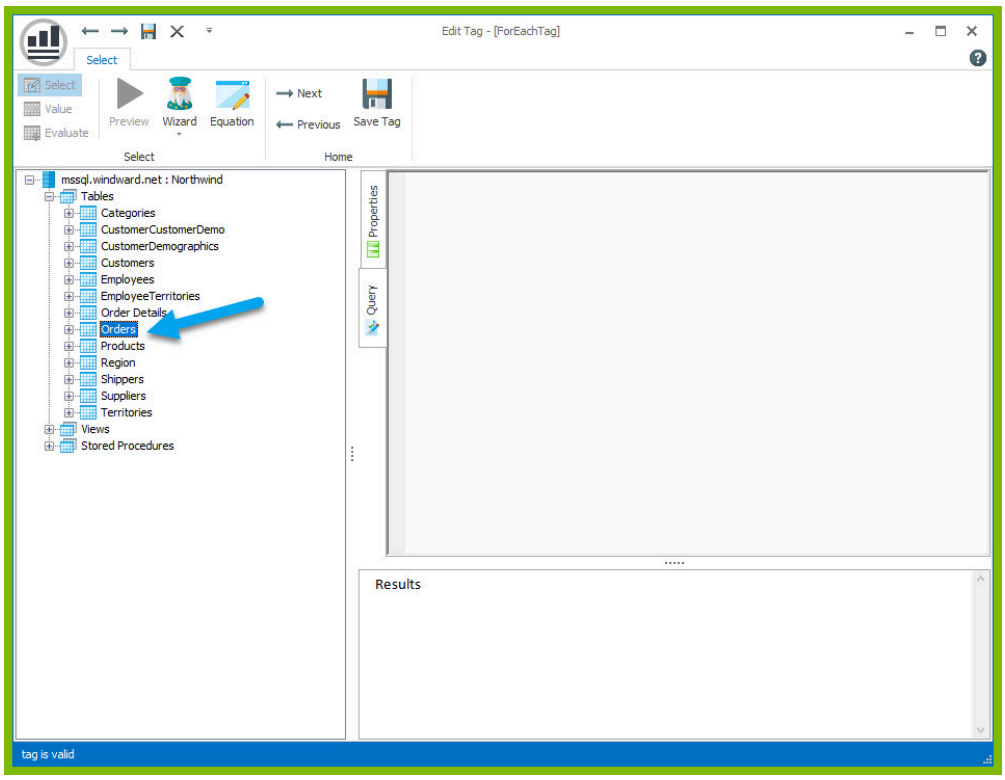


6. Place your cursor on the **"[forEach:]"** tag that was inserted in your template and click the **"Edit Tag"** button in the Windward ribbon to open the Tag Editor.

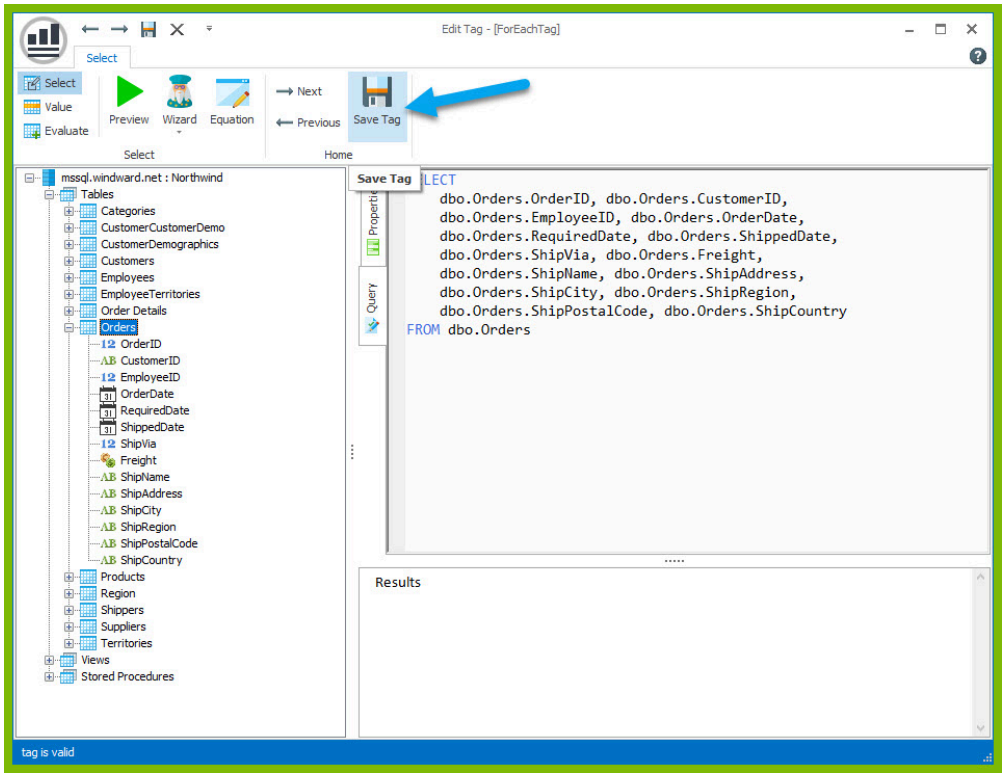


7. In the Tag Tree, expand the table mssql.windward.net : Northwind -> Tables and double-click the **"Orders"** table. This will automatically write a select for every column in the Orders table.

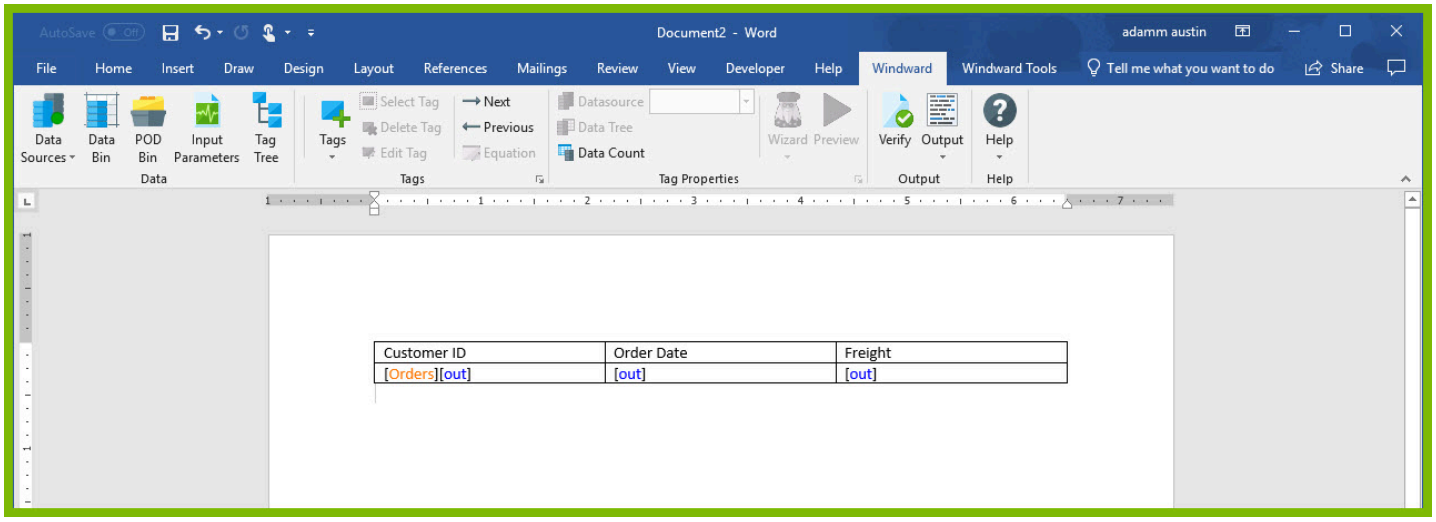
8. Go to the "**Properties"** and assign your tag a nickname "Orders".



9. Click the "**Save Tag**" button.

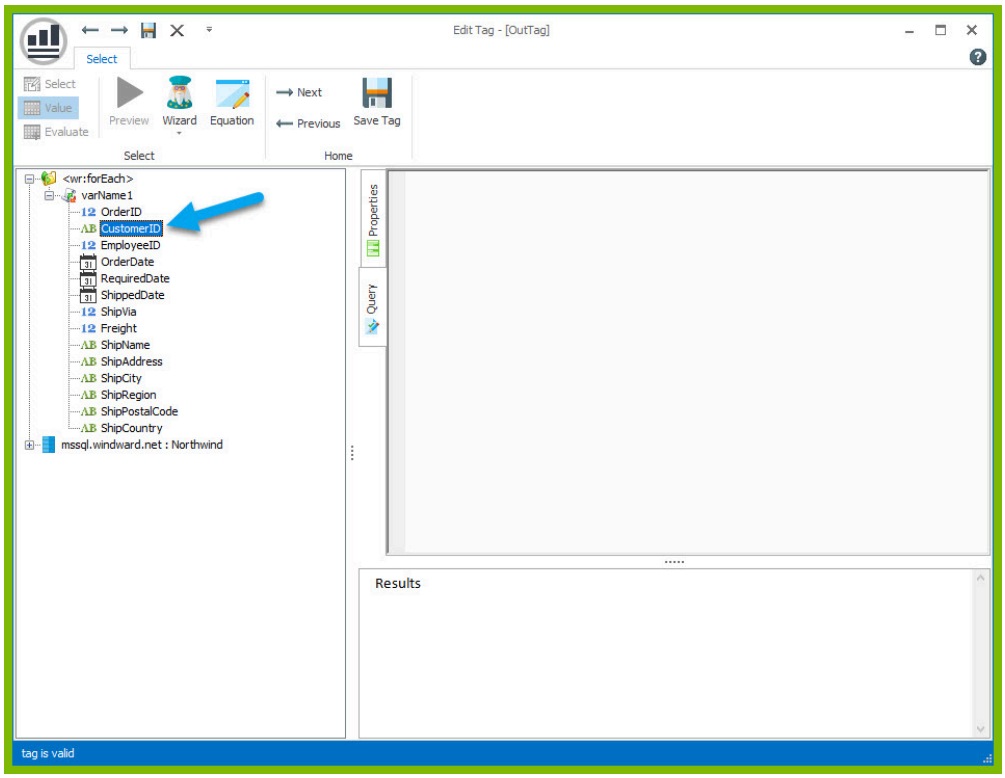


10. To output data in our table, we will need to add out tags. Place your cursor after the ForEach tag in the “Customer ID” column and place an out tag. Place an out tag in the other two columns.

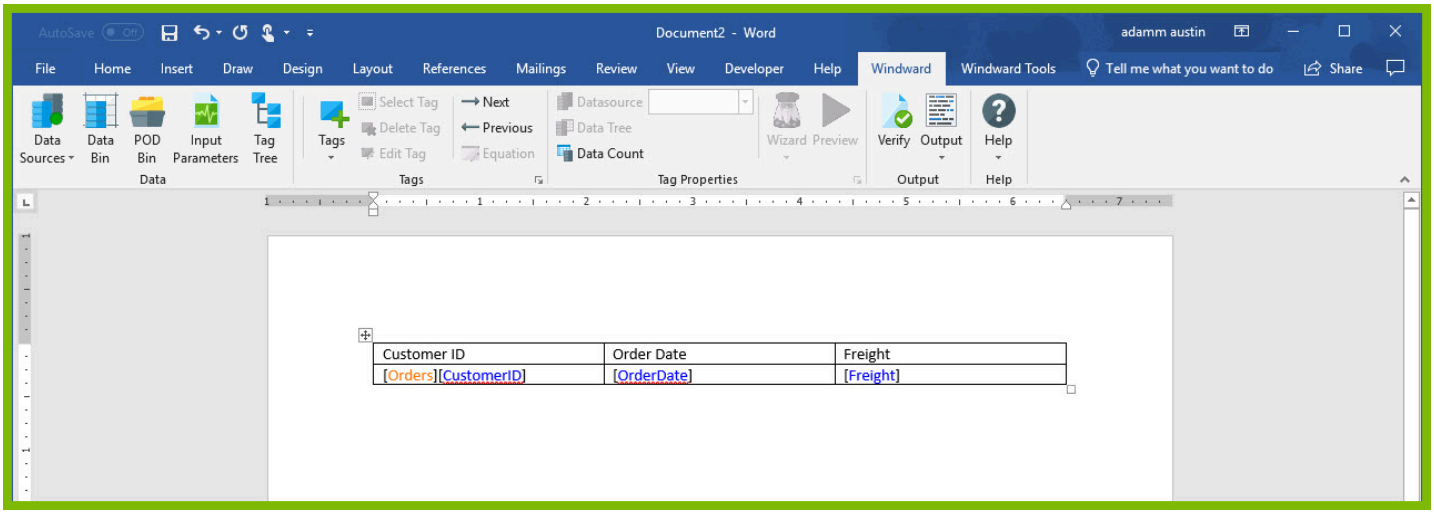


11. Open the Tag Editor for the Out tag in the “Customer ID” column.

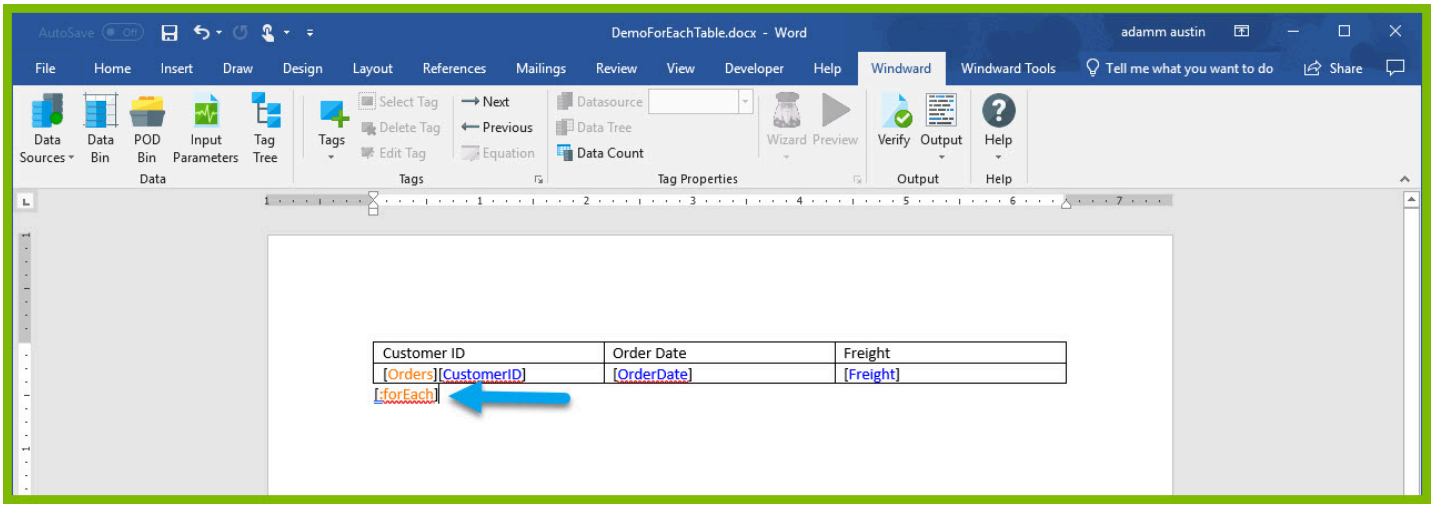
12. In the Tag Tree, expand the <wr:forEach> -< varName1 and double-click the **“CustomerID”** node. This will automatically write a select for CustomerID currently captured by the ForEach variable.



13. Save the tag and repeat the previous two steps to select the “OrderDate” node for the “Order Date” column and the “Freight” node for the “Freight” column.

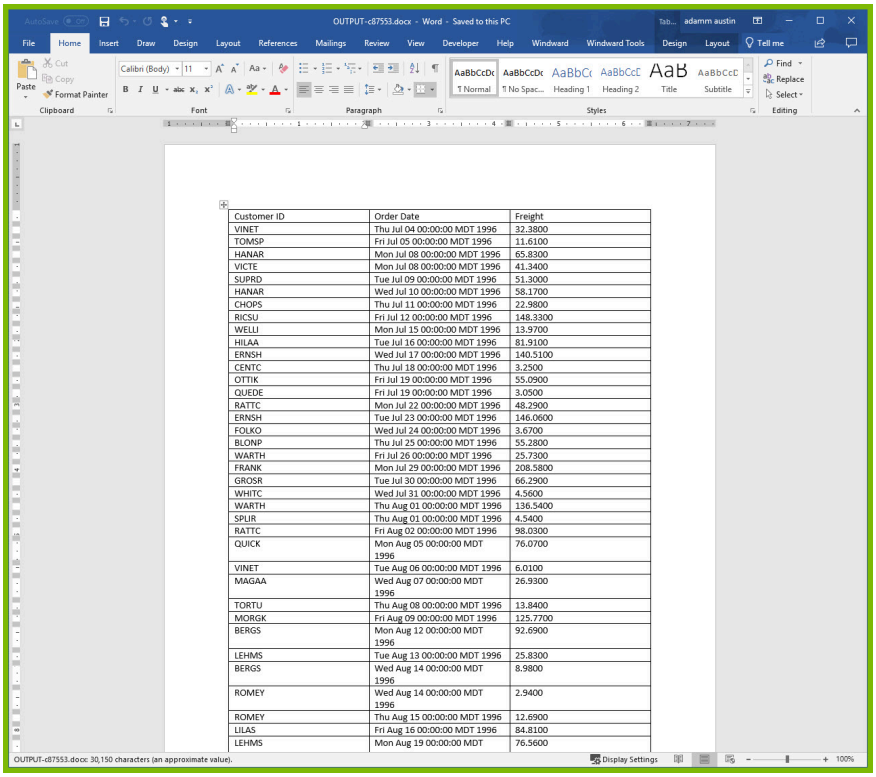


14. On the line after your table, place an EndForEach tag



Since the ForEach loop will re-produce the tag output and content captured between the ForEach and the EndForEach tags, one row of the table will be produced for every record returned by the ForEach tags select.

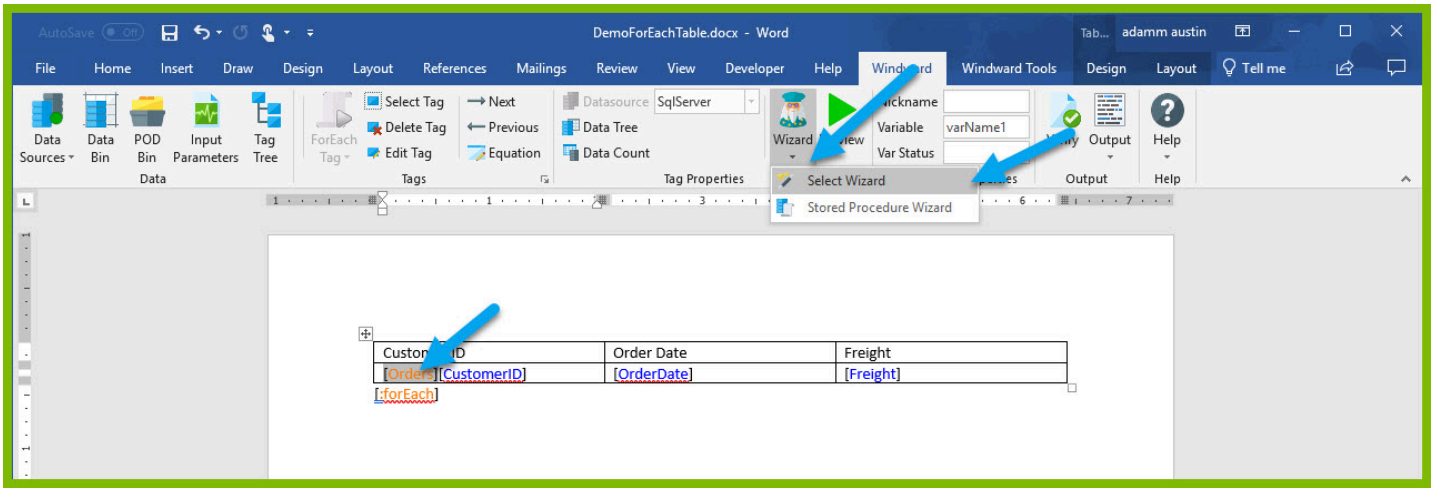
15. Save and output the template to DOCX output and see your results:

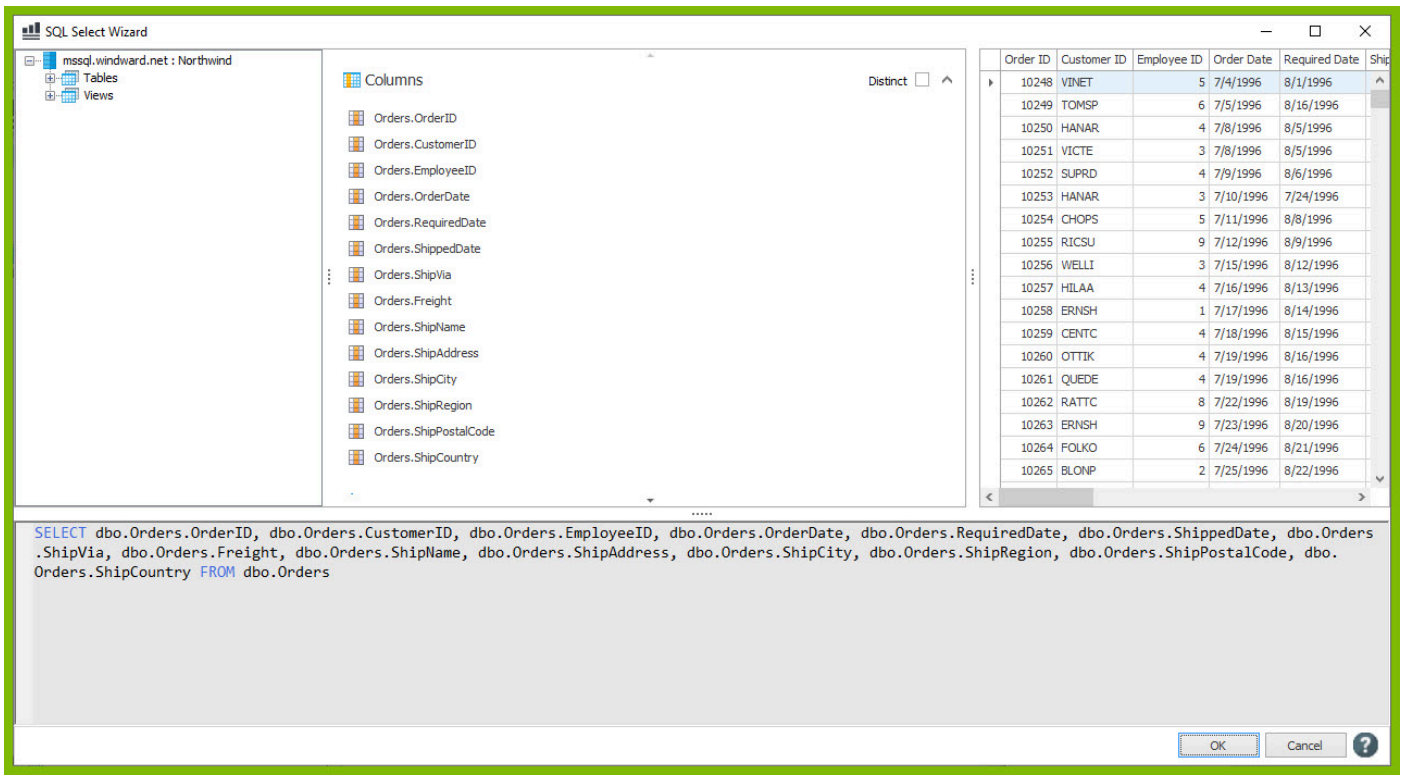


Customer ID	Order Date	Freight
VINET	Thu Jul 04 00:00:00 MDT 1996	32.3800
TOMSP	Fri Jul 05 00:00:00 MDT 1996	11.6100
HANAR	Mon Jul 08 00:00:00 MDT 1996	65.8300
VICTE	Mon Jul 08 00:00:00 MDT 1996	41.3400
SUPRD	Tue Jul 09 00:00:00 MDT 1996	51.3000
HANAR	Wed Jul 10 00:00:00 MDT 1996	58.1700
CHOPS	Thu Jul 11 00:00:00 MDT 1996	22.9800
RICSU	Fri Jul 12 00:00:00 MDT 1996	148.3300
WELLI	Mon Jul 15 00:00:00 MDT 1996	13.9700
HILAA	Tue Jul 16 00:00:00 MDT 1996	81.9100
ERNSH	Wed Jul 17 00:00:00 MDT 1996	140.5100
CENTC	Thu Jul 18 00:00:00 MDT 1996	3.2500
OTTIK	Fri Jul 19 00:00:00 MDT 1996	55.0900
QUEDE	Fri Jul 19 00:00:00 MDT 1996	3.0500
RATTC	Mon Jul 22 00:00:00 MDT 1996	48.2900
ERNSH	Tue Jul 23 00:00:00 MDT 1996	146.0600
FOLKO	Wed Jul 24 00:00:00 MDT 1996	3.6700
BLONP	Thu Jul 25 00:00:00 MDT 1996	55.2800
WARTH	Fri Jul 26 00:00:00 MDT 1996	25.7300
FRANK	Mon Jul 29 00:00:00 MDT 1996	208.5800
GROSR	Tue Jul 30 00:00:00 MDT 1996	66.2900
WHITC	Wed Jul 31 00:00:00 MDT 1996	4.5600
WARTH	Thu Aug 01 00:00:00 MDT 1996	136.5400
SPLIR	Thu Aug 01 00:00:00 MDT 1996	4.5400
RATTC	Fri Aug 02 00:00:00 MDT 1996	98.0300
QUICK	Mon Aug 05 00:00:00 MDT 1996	76.0700
VINET	Tue Aug 06 00:00:00 MDT 1996	6.0100
MAGAA	Wed Aug 07 00:00:00 MDT 1996	26.9300
TORTU	Thu Aug 08 00:00:00 MDT 1996	13.8400
MORGK	Fri Aug 09 00:00:00 MDT 1996	125.7700
BERGS	Mon Aug 12 00:00:00 MDT 1996	92.6900
LEHMS	Tue Aug 13 00:00:00 MDT 1996	25.8300
BERGS	Wed Aug 14 00:00:00 MDT 1996	8.9800
ROMEY	Wed Aug 14 00:00:00 MDT 1996	2.9400
ROMEY	Thu Aug 15 00:00:00 MDT 1996	12.6900
LILAS	Fri Aug 16 00:00:00 MDT 1996	84.8100
LEHMS	Mon Aug 19 00:00:00 MDT	76.5600

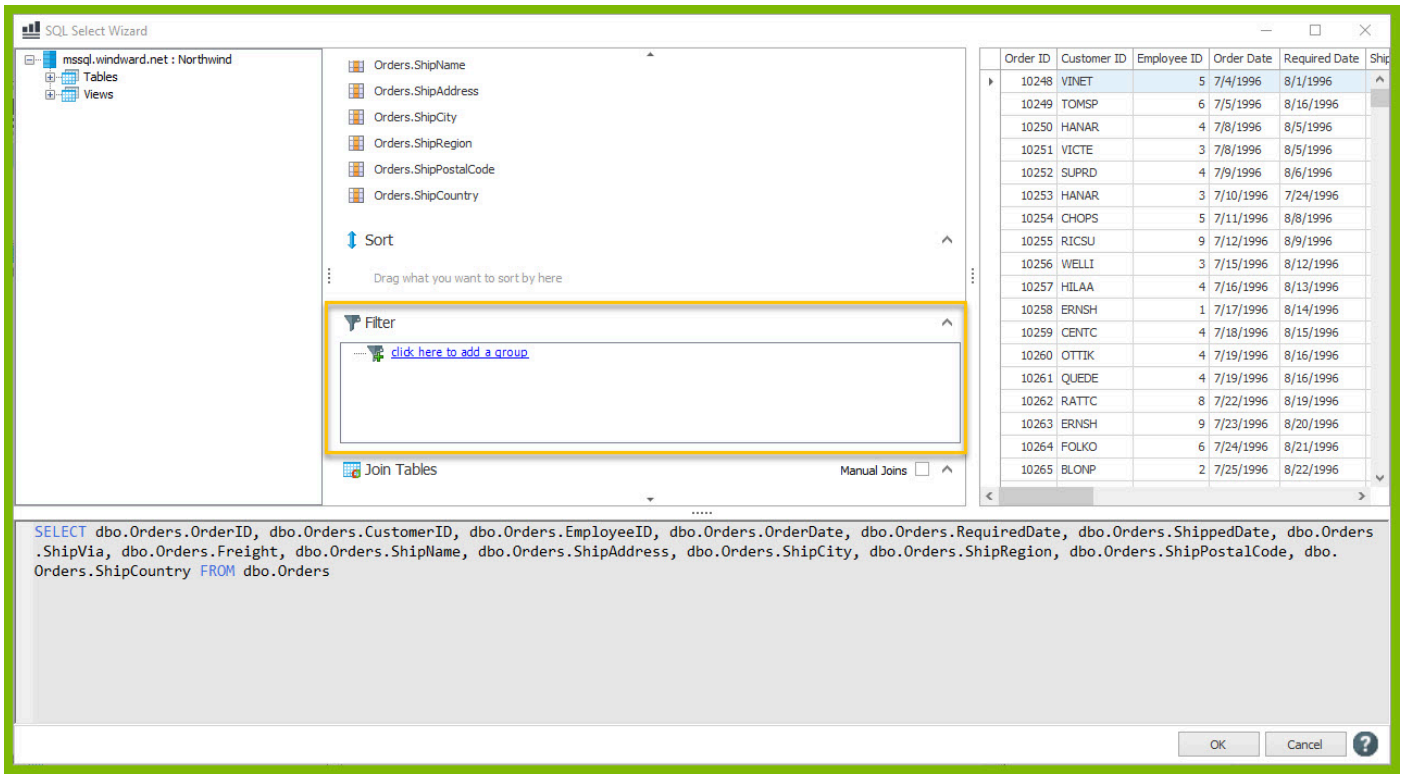
We are receiving the output we expected, but it is not very useful. To reduce the number of records in our output table, we need to reduce the number of records in our select.

1. Close your output and go back to your template. Place your cursor on the ForEach tag and click the bottom of the "**Wizard**" button to open the drop-down. In the drop-down click "**Select Wizard**." The Select Wizard will allow us to make our tag select more specific data from the Database.

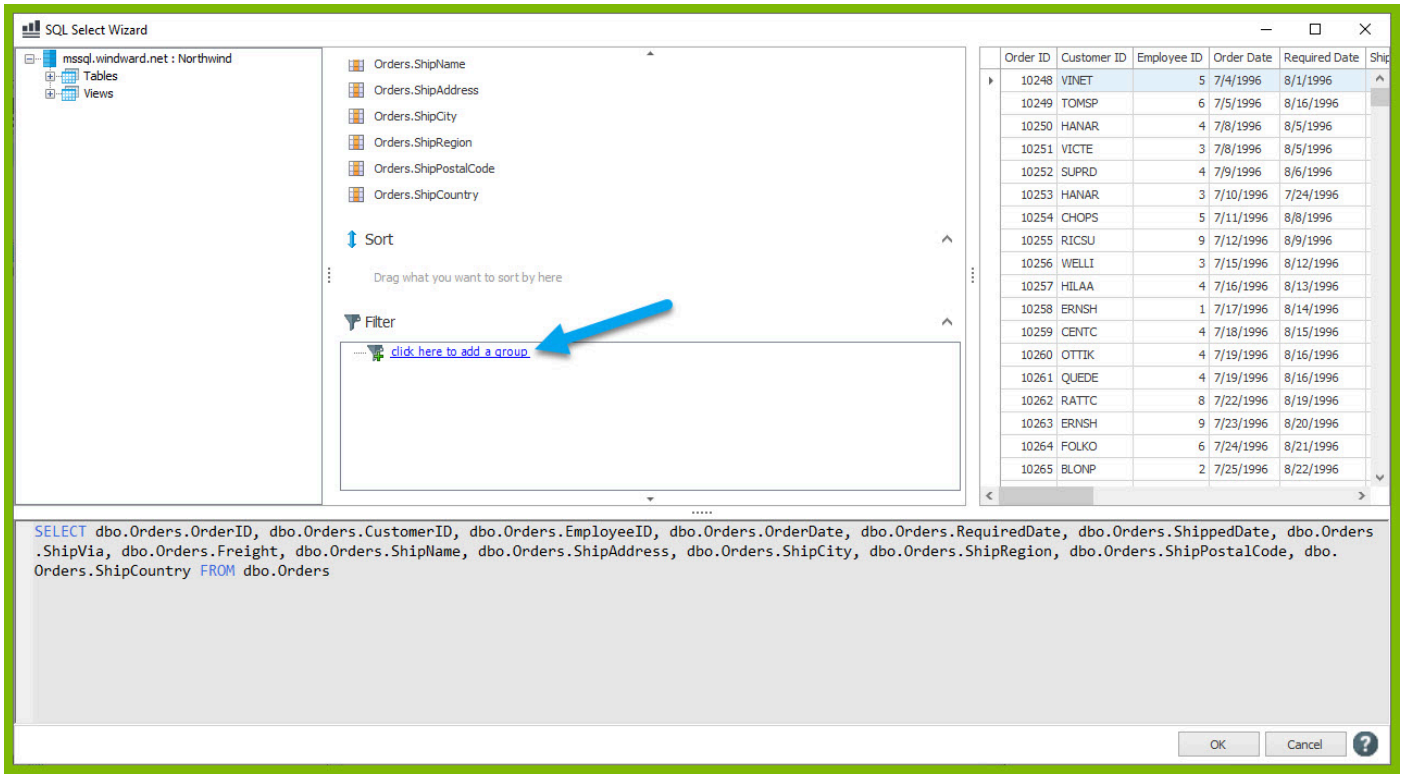


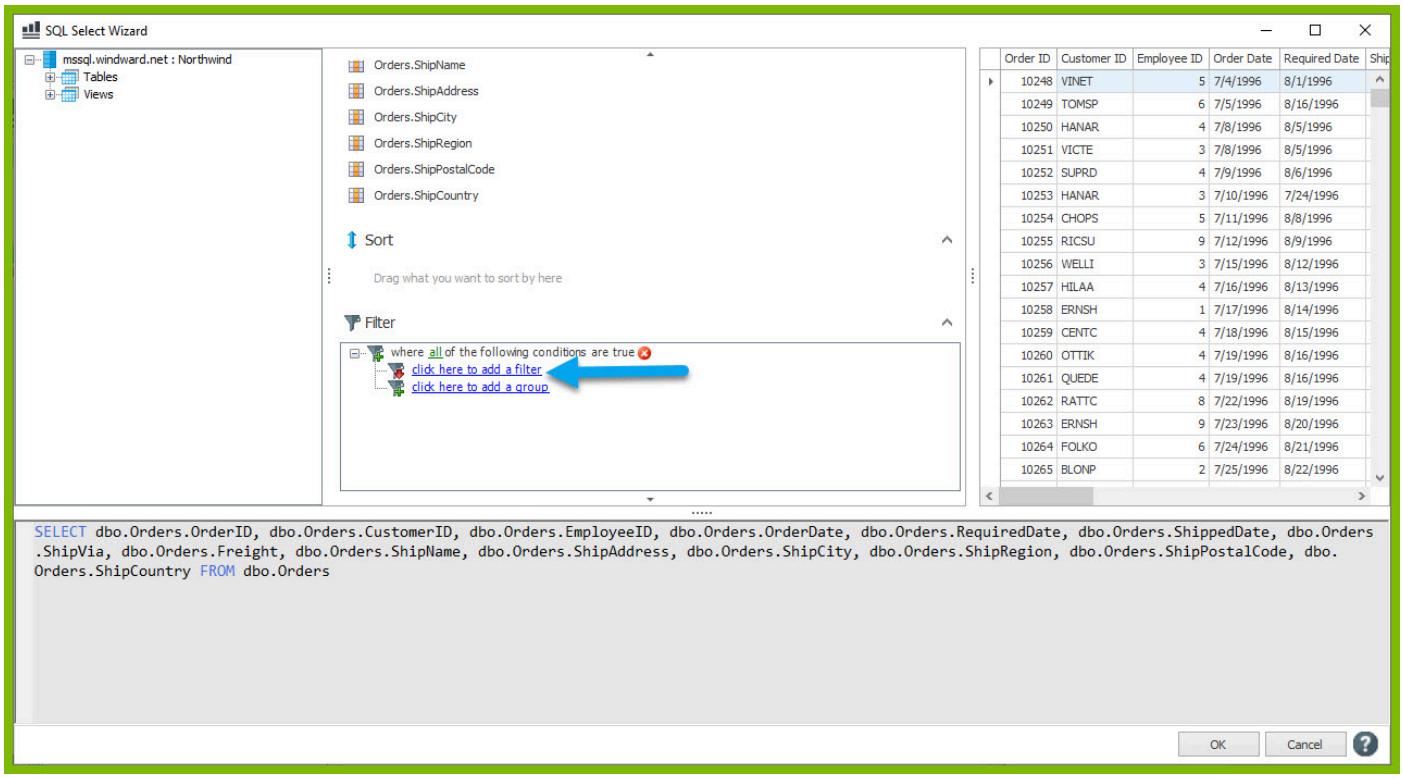


2. In the SQL Wizard, locate the “Filter” section. Adding a filter to our query will allow us to narrow down our select to fewer records of data. In this example, we will filter our select to only look at orders for the customer with CustomerID = “VICTE.”

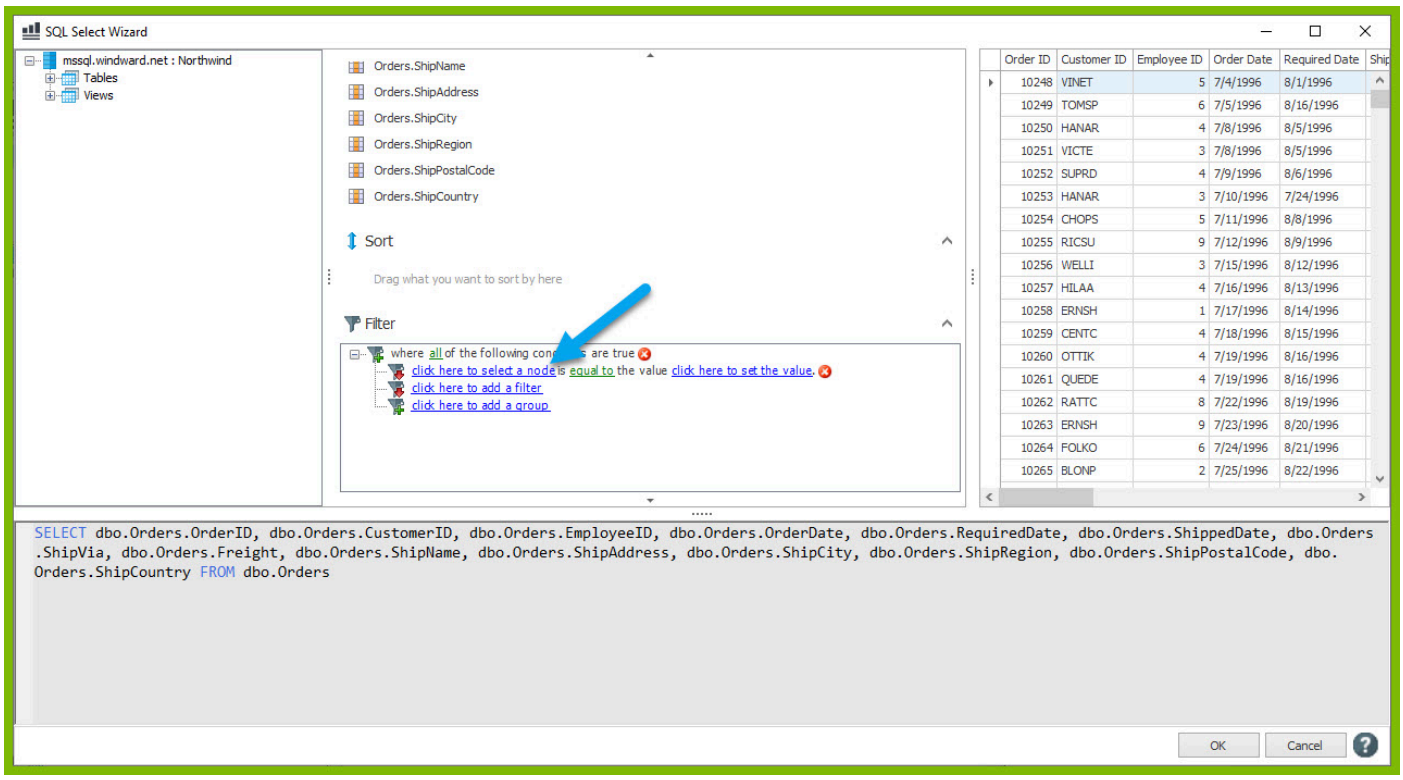


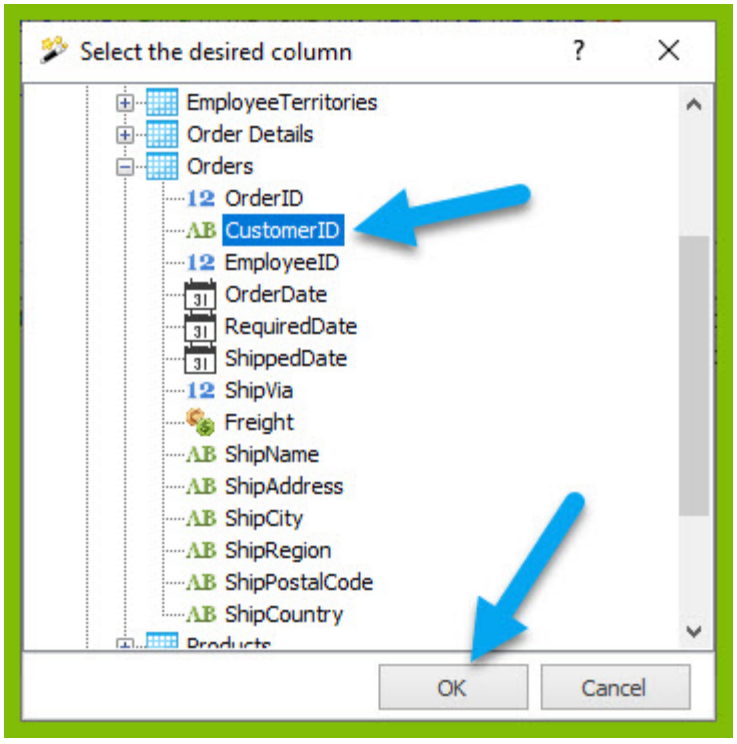
3. Click "**click here to add a group**" followed by "**click here to add a filter.**"



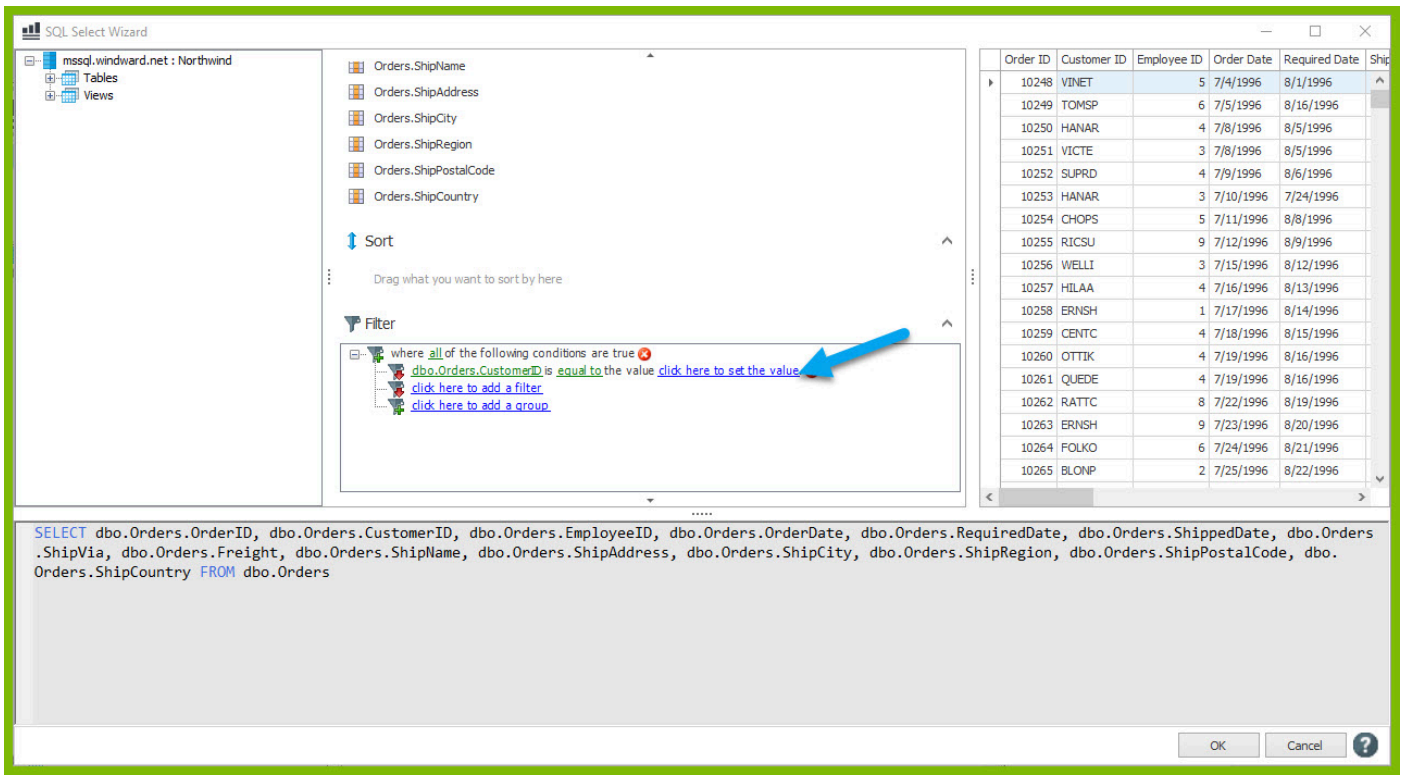


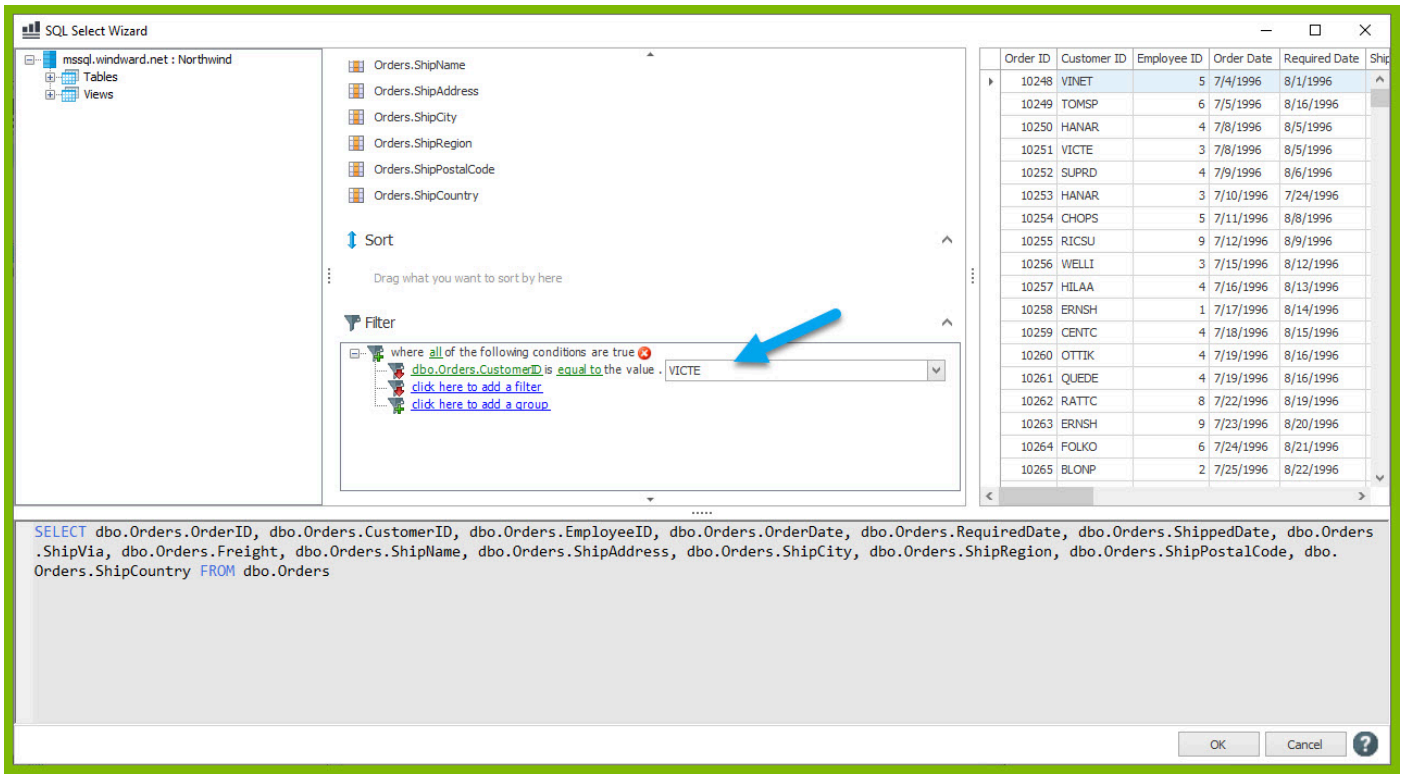
4. Click on "**click here to select a node**" and from the "Select the desired column" dialog, select the **mssql.windward.net : Northwind** → **Tables** → **Orders** → **CustomerID** node.

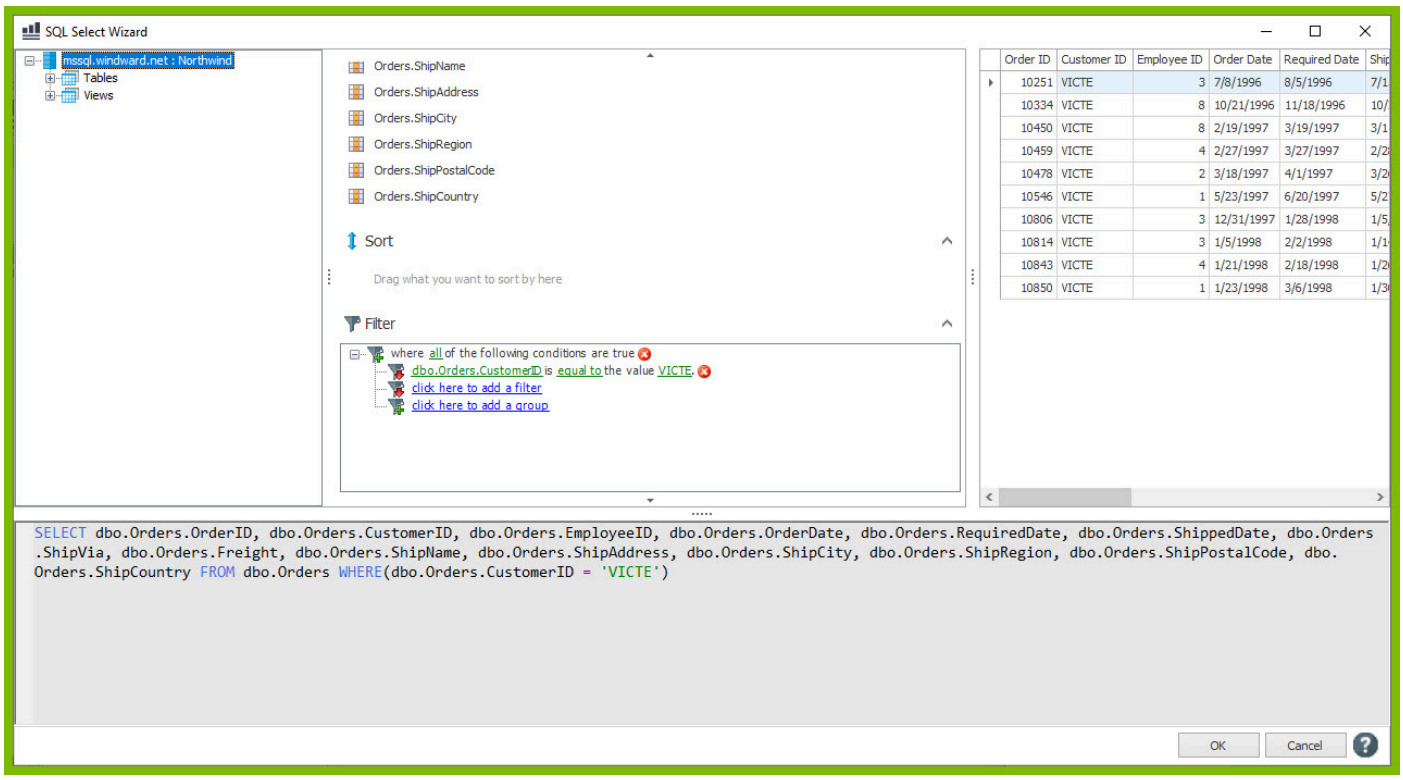




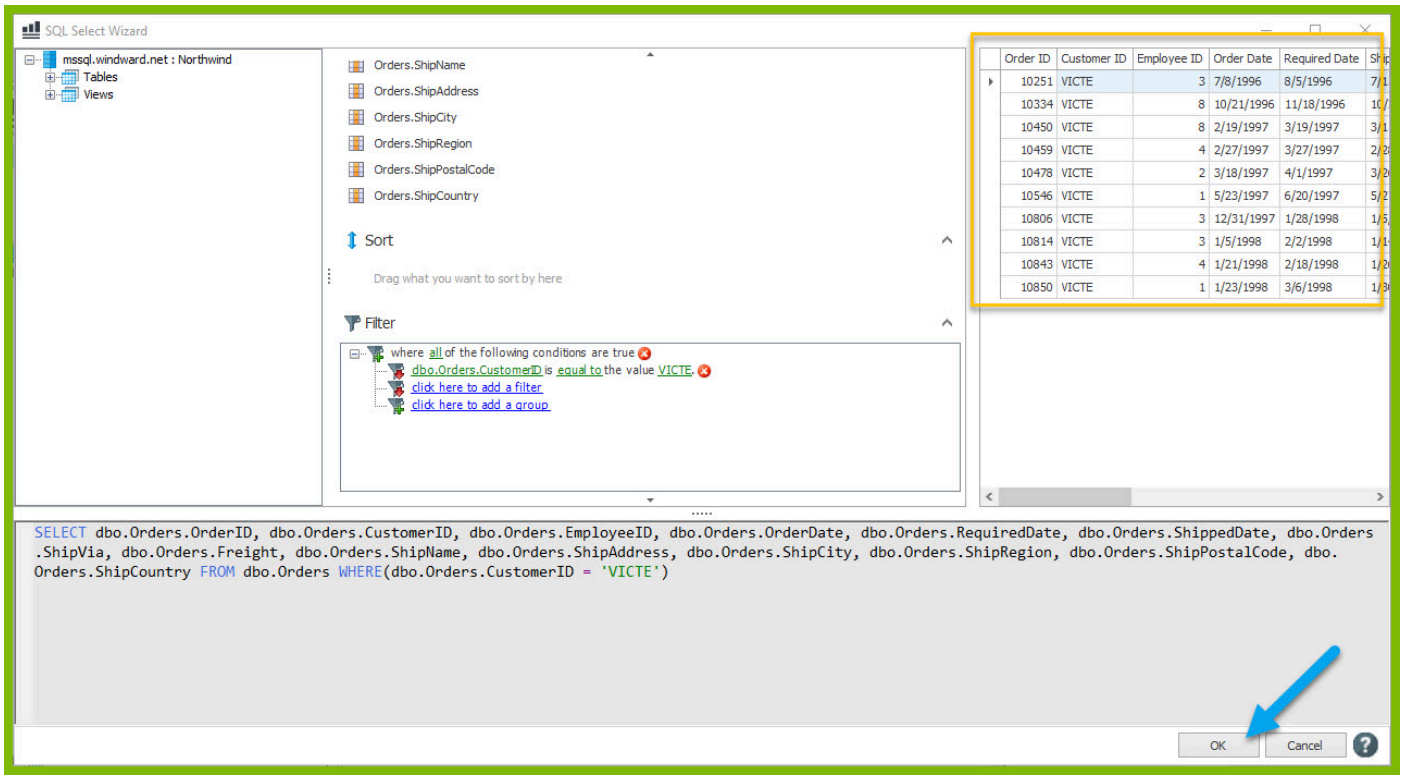
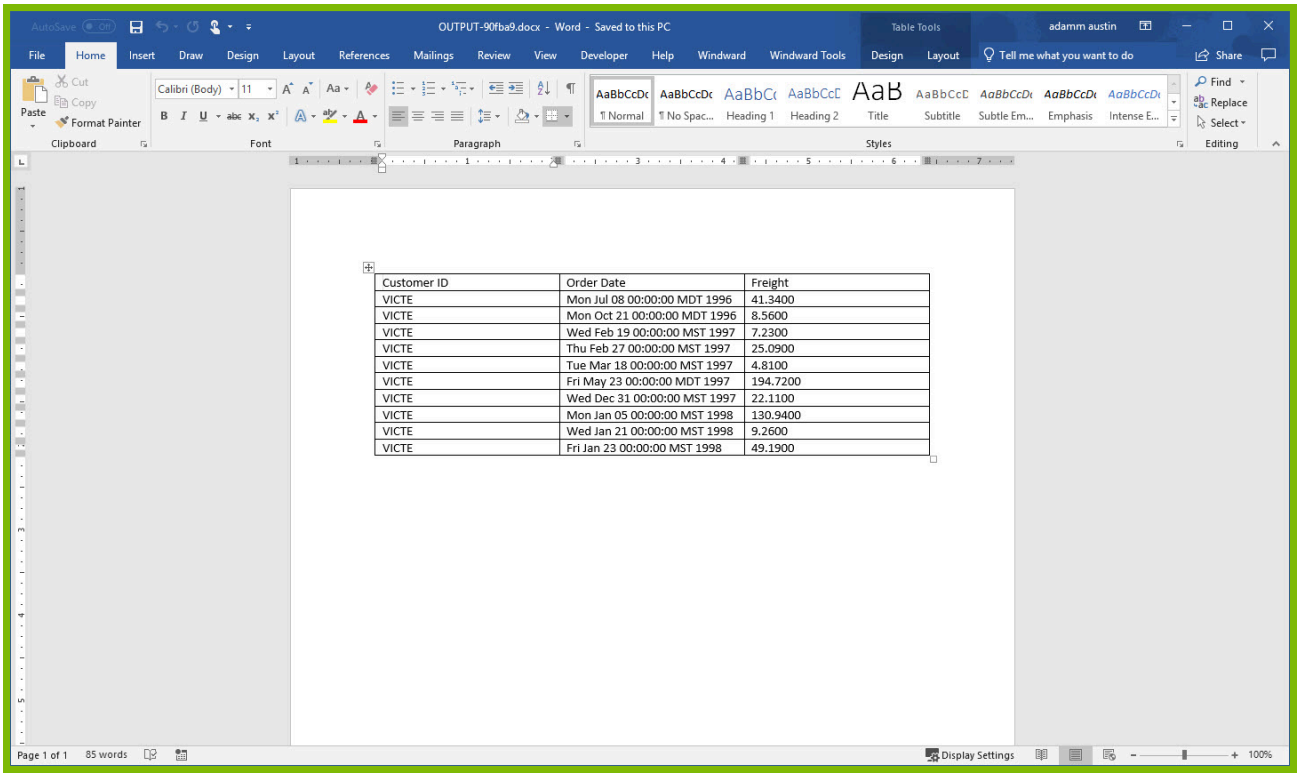
5. To compare the CustomerID column to the value "VICTE," click "**click here to set the value**," and in the text box that appears enter the text "**VICTE**". Click enter to save the value.


SQL Select Wizard
mssql.windward.net : Northwind
Tables
Views
Orders.ShipName
Orders.ShipAddress
Orders.ShipCity
Orders.ShipRegion
Orders.ShipPostalCode
Orders.ShipCountry
Sort
Drag what you want to sort by here
Filter
where all of the following conditions are true
dbo.Orders.CustomerID is equal to the value click here to set the value
click here to add a filter
click here to add a group
Order ID | Customer ID | Employee ID | Order Date | Required Date
10248 VINET 5 7/4/1996 8/1/1996
10249 TOMSP 6 7/5/1996 8/16/1996
10250 HANAR 4 7/8/1996 8/5/1996
10251 VICTE 3 7/8/1996 8/5/1996
10252 SUPRD 4 7/9/1996 8/6/1996
10253 HANAR 3 7/10/1996 7/24/1996
10254 CHOPS 5 7/11/1996 8/8/1996
10255 RICSU 9 7/12/1996 8/9/1996
10256 WELLI 3 7/15/1996 8/12/1996
10257 HILAA 4 7/16/1996 8/13/1996
10258 ERNSH 1 7/17/1996 8/14/1996
10259 CENTC 4 7/18/1996 8/15/1996
10260 OTTIK 4 7/19/1996 8/16/1996
10261 QUEDE 4 7/19/1996 8/16/1996
10262 RATTC 8 7/22/1996 8/19/1996
10263 ERNSH 9 7/23/1996 8/20/1996
10264 FOLKO 6 7/24/1996 8/21/1996
10265 BLONP 2 7/25/1996 8/22/1996
SELECT dbo.Orders.OrderID, dbo.Orders.CustomerID, dbo.Orders.EmployeeID, dbo.Orders.OrderDate, dbo.Orders.RequiredDate, dbo.Orders.ShippedDate, dbo.Orders.ShipVia, dbo.Orders.Freight, dbo.Orders.ShipName, dbo.Orders.ShipAddress, dbo.Orders.ShipCity, dbo.Orders.ShipRegion, dbo.Orders.ShipPostalCode, dbo.Orders.ShipCountry FROM dbo.Orders
OK
Cancel


SQL Select Wizard
mssql.windward.net : Northwind
Tables
Views
Orders.ShipName
Orders.ShipAddress
Orders.ShipCity
Orders.ShipRegion
Orders.ShipPostalCode
Orders.ShipCountry
Sort
Drag what you want to sort by here
Filter
where all of the following conditions are true
dbo.Orders.CustomerID is equal to the value . VICTE
click here to add a filter
click here to add a group
Order ID | Customer ID | Employee ID | Order Date | Required Date
10248 VINET 5 7/4/1996 8/1/1996
10249 TOMSP 6 7/5/1996 8/16/1996
10250 HANAR 4 7/8/1996 8/5/1996
10251 VICTE 3 7/8/1996 8/5/1996
10252 SUPRD 4 7/9/1996 8/6/1996
10253 HANAR 3 7/10/1996 7/24/1996
10254 CHOPS 5 7/11/1996 8/8/1996
10255 RICSU 9 7/12/1996 8/9/1996
10256 WELLI 3 7/15/1996 8/12/1996
10257 HILAA 4 7/16/1996 8/13/1996
10258 ERNSH 1 7/17/1996 8/14/1996
10259 CENTC 4 7/18/1996 8/15/1996
10260 OTTIK 4 7/19/1996 8/16/1996
10261 QUEDE 4 7/19/1996 8/16/1996
10262 RATTC 8 7/22/1996 8/19/1996
10263 ERNSH 9 7/23/1996 8/20/1996
10264 FOLKO 6 7/24/1996 8/21/1996
10265 BLONP 2 7/25/1996 8/22/1996
SELECT dbo.Orders.OrderID, dbo.Orders.CustomerID, dbo.Orders.EmployeeID, dbo.Orders.OrderDate, dbo.Orders.RequiredDate, dbo.Orders.ShippedDate, dbo.Orders.ShipVia, dbo.Orders.Freight, dbo.Orders.ShipName, dbo.Orders.ShipAddress, dbo.Orders.ShipCity, dbo.Orders.ShipRegion, dbo.Orders.ShipPostalCode, dbo.Orders.ShipCountry FROM dbo.Orders
OK
Cancel



6. You will notice in the preview pane of the Tag Editor only records with CustomerID = VICTE are shown. Click "**OK**" to save your select with the new filter.



7. Re-save your template and output to DOCX. Now your output document has much fewer rows, only displaying rows for the customer with Customer ID = VICTE.