Mark Friedman
University of Miami

Appending Streams of Data Using Power BI

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Using Power BI

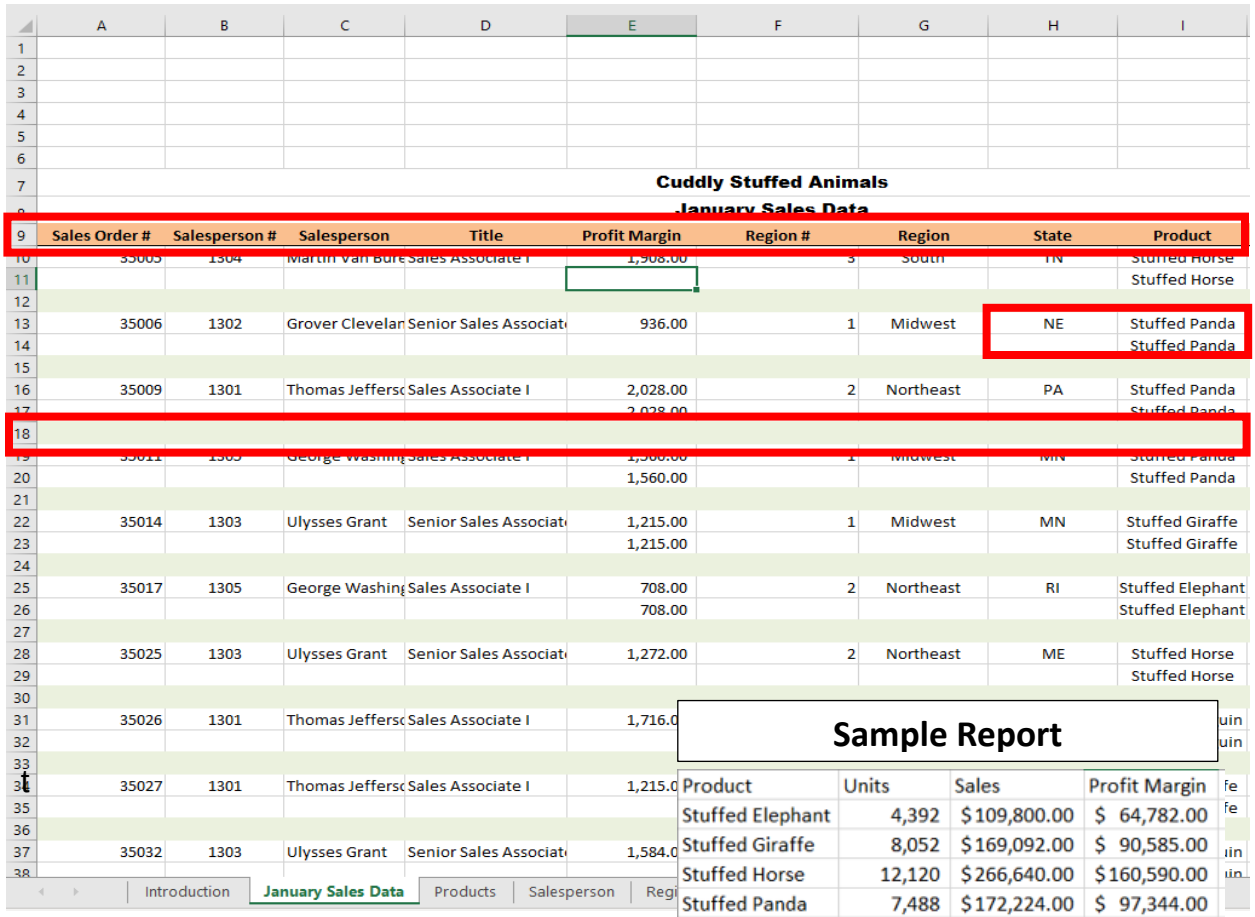
ETL software is used to automate the redundant manipulation of data. In this exercise you will use Power BI to:

Extract the Data file(s) from Excel

Transform the data

Load the transformed data into Excel

The sales data for *Cuddly Stuffed Animals* are stored in an Excel sheet titled January Sales Data. The column headings are in the ninth row, some rows have partial duplicate data and some rows are blank.



Cuddly Stuffed Animals

January Sales Data

Sales Order #	Salesperson #	Salesperson	Title	Profit Margin	Region #	Region	State	Product
								Stuffed Horse
35006	1302	Grover Clevelan	Senior Sales Associat	936.00	1	Midwest	NE	Stuffed Panda
								Stuffed Panda
35009	1301	Thomas Jefferso	Sales Associate I	2,028.00	2	Northeast	PA	Stuffed Panda
				1,560.00				Stuffed Panda
35014	1303	Ulysses Grant	Senior Sales Associat	1,215.00	1	Midwest	MN	Stuffed Giraffe
				1,215.00				Stuffed Giraffe
35017	1305	George Washing	Sales Associate I	708.00	2	Northeast	RI	Stuffed Elephant
				708.00				Stuffed Elephant
35025	1303	Ulysses Grant	Senior Sales Associat	1,272.00	2	Northeast	ME	Stuffed Horse
								Stuffed Horse
35026	1301	Thomas Jefferso	Sales Associate I	1,716.0				
35027	1301	Thomas Jefferso	Sales Associate I	1,215.0				
35032	1303	Ulysses Grant	Senior Sales Associat	1,584.0				

Introduction | January Sales Data | Products | Salesperson | Regi

Sample Report

Product	Units	Sales	Profit Margin
Stuffed Elephant	4,392	$109,800.00	$ 64,782.00
Stuffed Giraffe	8,052	$169,092.00	$ 90,585.00
Stuffed Horse	12,120	$266,640.00	$160,590.00
Stuffed Panda	7,488	$172,224.00	$ 97,344.00
Stuffed Penguin	5,016	$100,320.00	$ 55,176.00
Stuffed Unicorn	3,060	$ 73,440.00	$ 40,545.00
Total	40,128	$891,516.00	$509,022.00

Note: You cannot extract data from an open Excel file so make sure that the Excel file is closed before starting to input the data.

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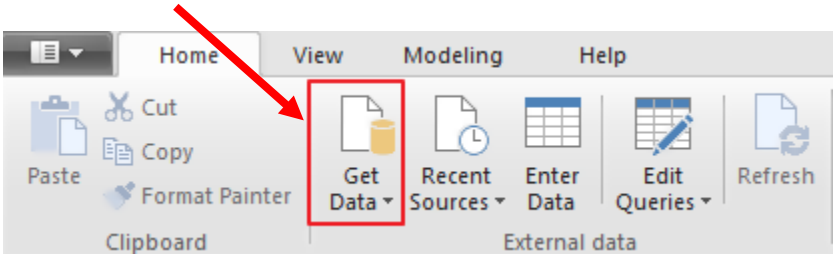
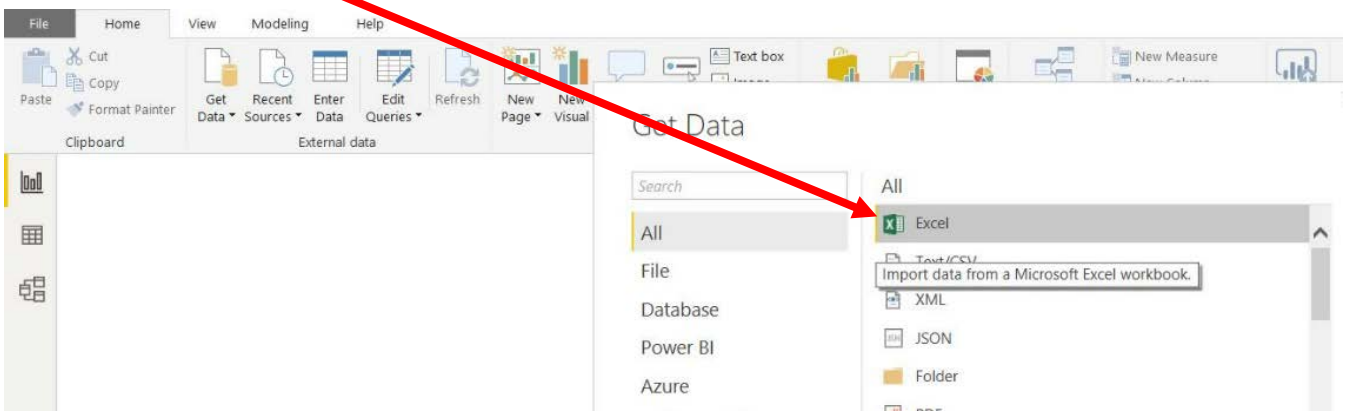
Start Power BI Desktop

Operation 1: Get Data – Input Excel file

Select "Get Data" from the "External data" group under the "Home" tab.

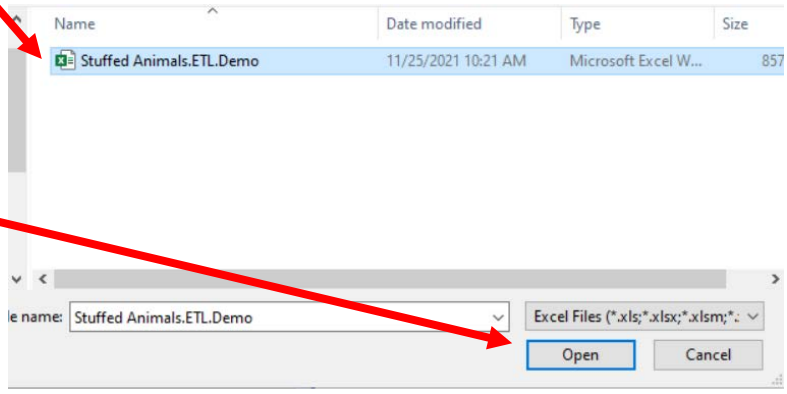


Select "Excel".

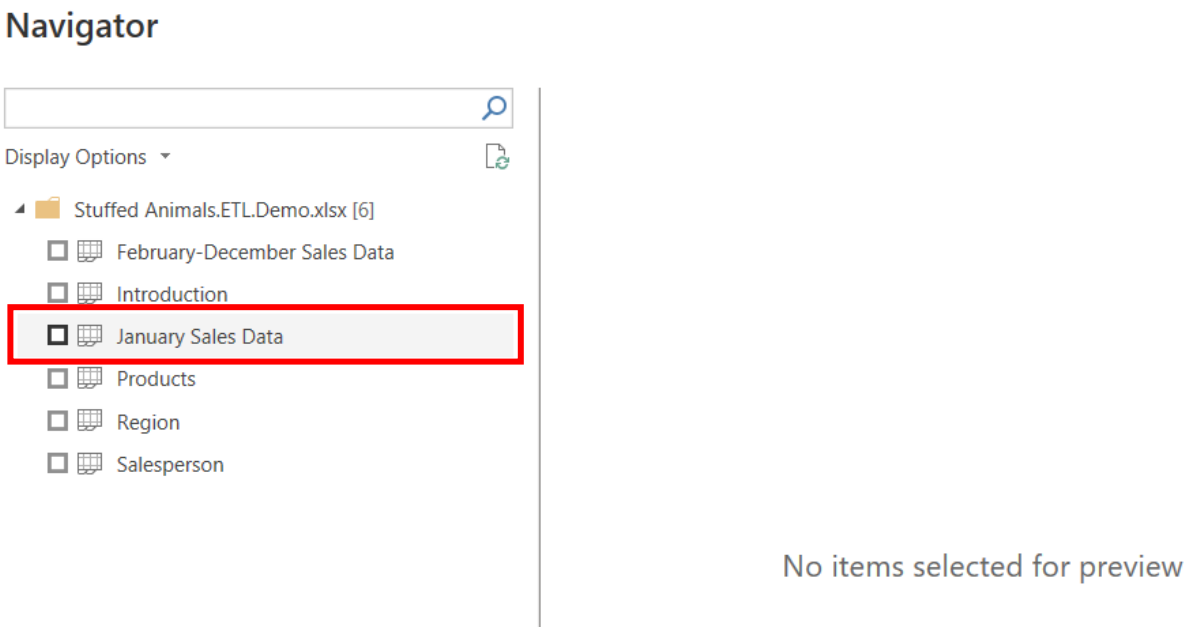


Select the file.

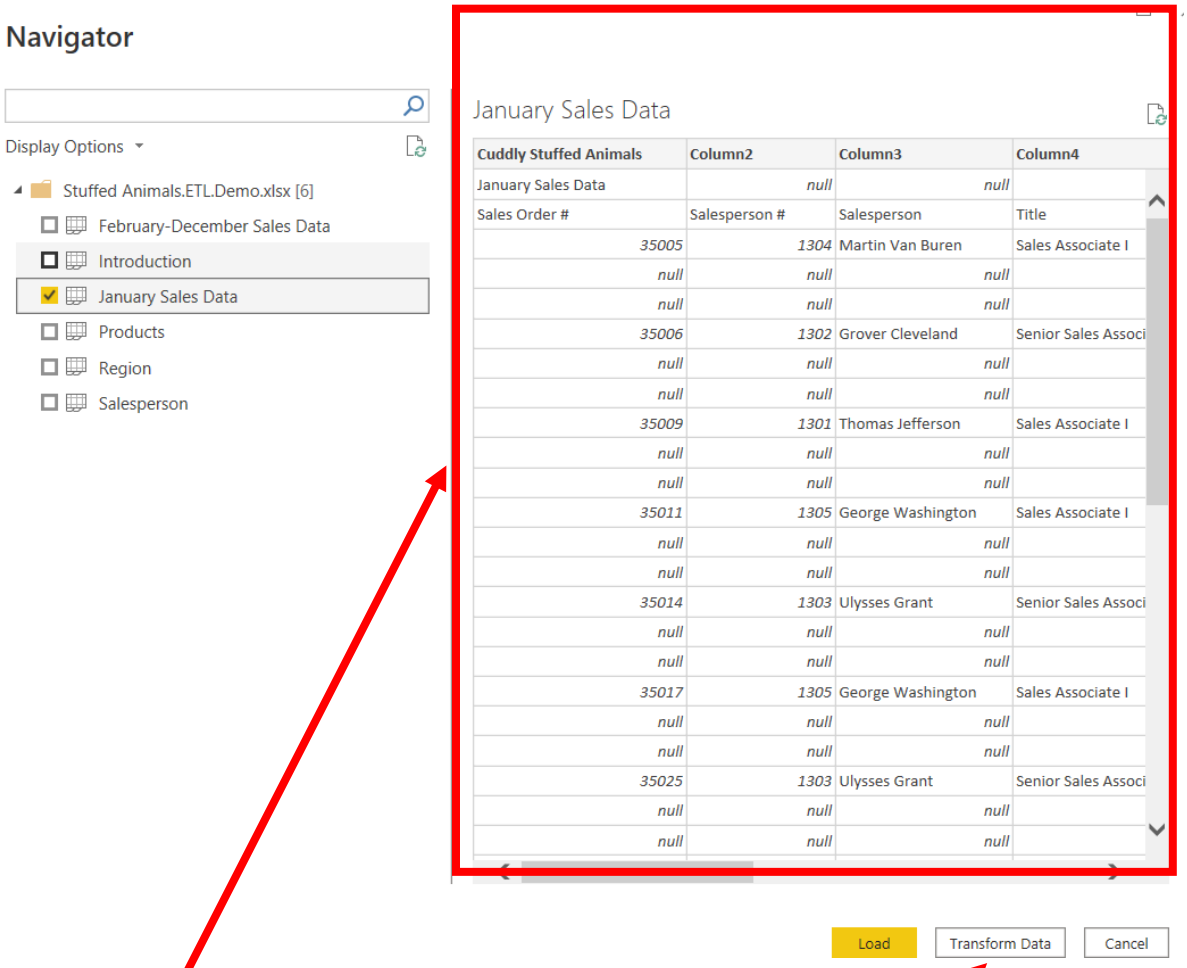
Select “Open”.



Highlighting the desired sheet does **not** activate the Load and Edit buttons.



Double click on “January Sales Data” or you can select the check box on the left of “January Sales Data”.

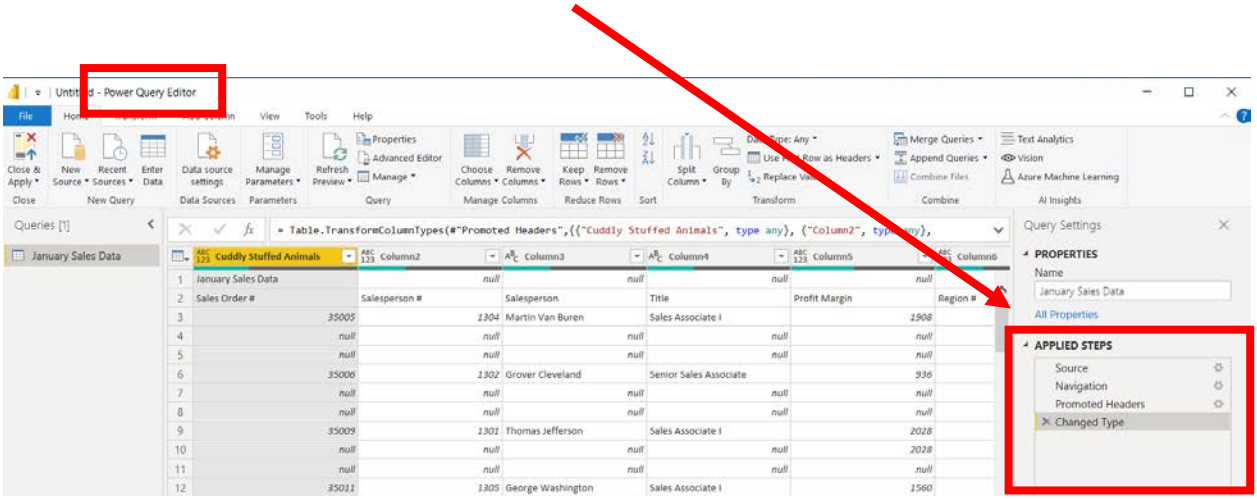


Cuddly Stuffed Animals	Column2	Column3	Column4
January Sales Data	null	null	
Sales Order #	Salesperson #	Salesperson	Title
35005	1304	Martin Van Buren	Sales Associate I
null	null	null	
null	null	null	
35006	1302	Grover Cleveland	Senior Sales Associ
null	null	null	
null	null	null	
35009	1301	Thomas Jefferson	Sales Associate I
null	null	null	
null	null	null	
35011	1305	George Washington	Sales Associate I
null	null	null	
null	null	null	
35014	1303	Ulysses Grant	Senior Sales Associ
null	null	null	
null	null	null	
35017	1305	George Washington	Sales Associate I
null	null	null	
null	null	null	
35025	1303	Ulysses Grant	Senior Sales Associ
null	null	null	
null	null	null	

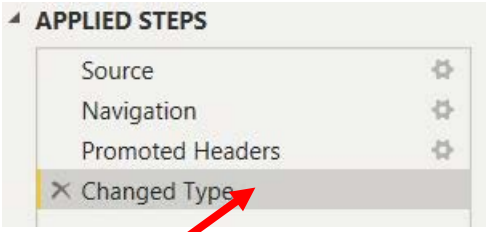
The data preview will be displayed.

Select “Transform Data” or “Edit” and a new window called Power Query Editor opens.

In the Power Query window, Power BI Desktop records each data modifications in the “Applied Steps” section.

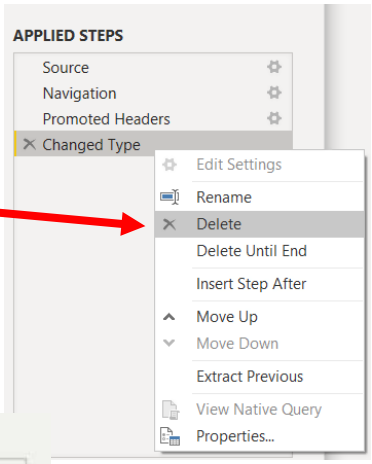


The program added the steps that it performed as Power BI inputted the data. Note that it did not correctly find the row that contains the "Headers". Therefore, some steps must be deleted.



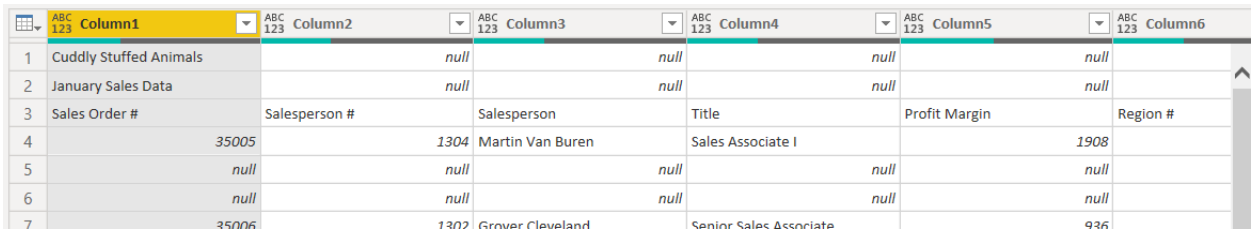
Select the step, "Changed Type".

Right click and select "Delete".

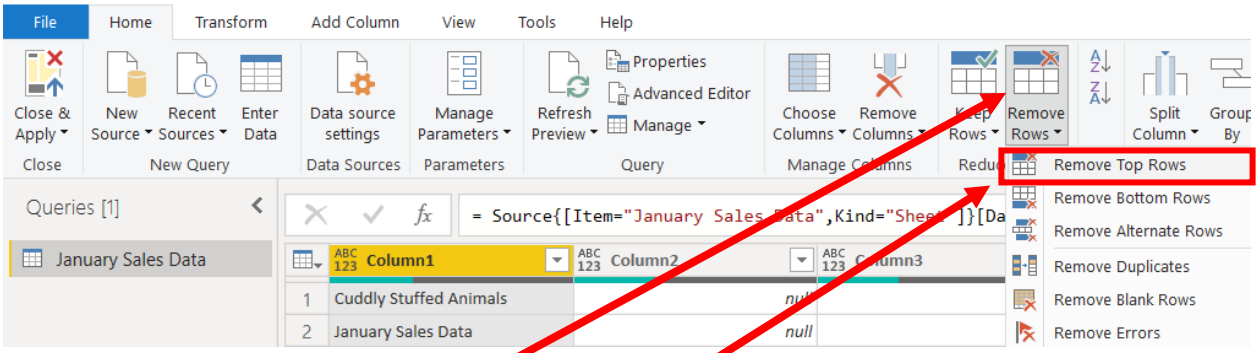


Delete the step "Promoted Headers", leaving us with two steps.

Operation 2: Fix the Headers – The field headers are in the third row of the source document. Remove the top two rows to move the headers to the first row and then promote them to the Query Editors' headers.



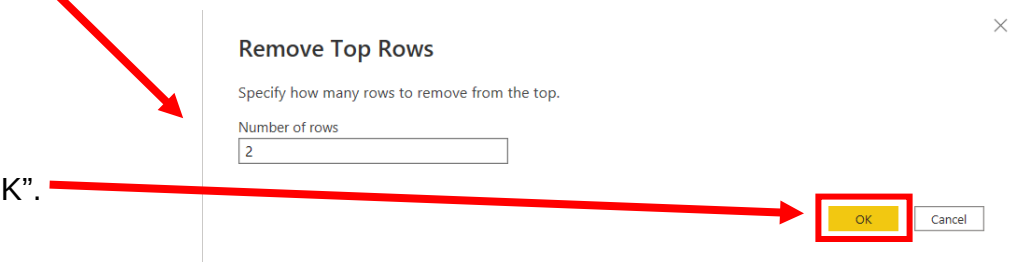
	Column1	Column2	Column3	Column4	Column5	Column6
1	Cuddly Stuffed Animals	null	null	null	null	
2	January Sales Data	null	null	null	null	
3	Sales Order #	Salesperson #	Salesperson	Title	Profit Margin	Region #
4	35005	1304	Martin Van Buren	Sales Associate I	1908	
5	null	null	null	null	null	
6	null	null	null	null	null	
7	35006	1302	Grover Cleveland	Senior Sales Associate	936	



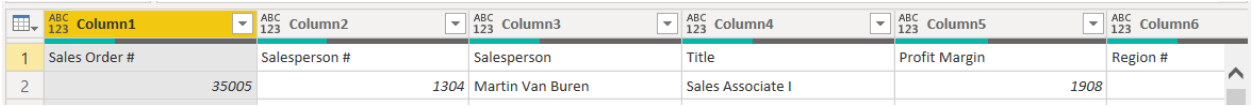
Select "Remove Rows".

Select "Remove Top Rows".

Enter a "2" to remove top three rows.

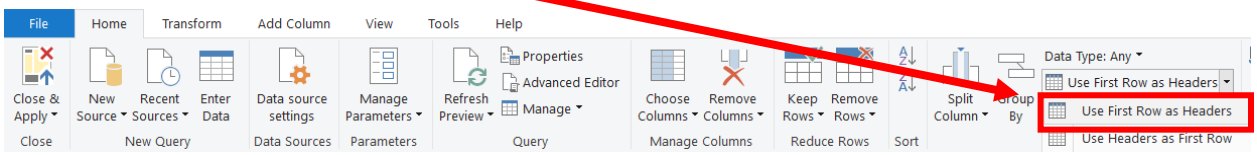


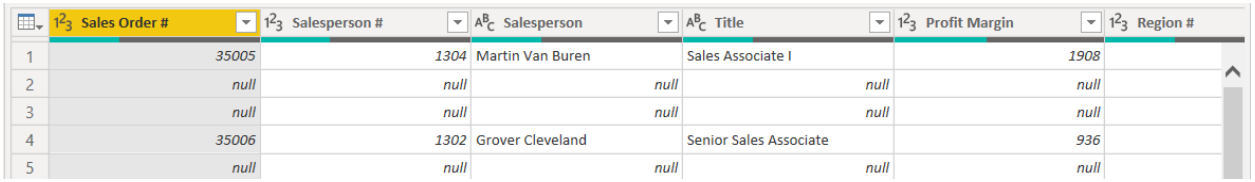
Then click "OK".



	Column1	Column2	Column3	Column4	Column5	Column6
1	Sales Order #	Salesperson #	Salesperson	Title	Profit Margin	Region #
2	35005	1304	Martin Van Buren	Sales Associate I	1908	

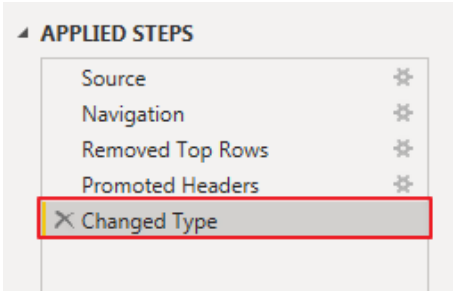
To promote the first row in the current data to Query Editors' headers, select "Use First Row as Headers".





	Sales Order #	Salesperson #	Salesperson	Title	Profit Margin	Region #
1	35005	1304	Martin Van Buren	Sales Associate I	1908	
2	null	null	null	null	null	
3	null	null	null	null	null	
4	35006	1302	Grover Cleveland	Senior Sales Associate	936	
5	null	null	null	null	null	

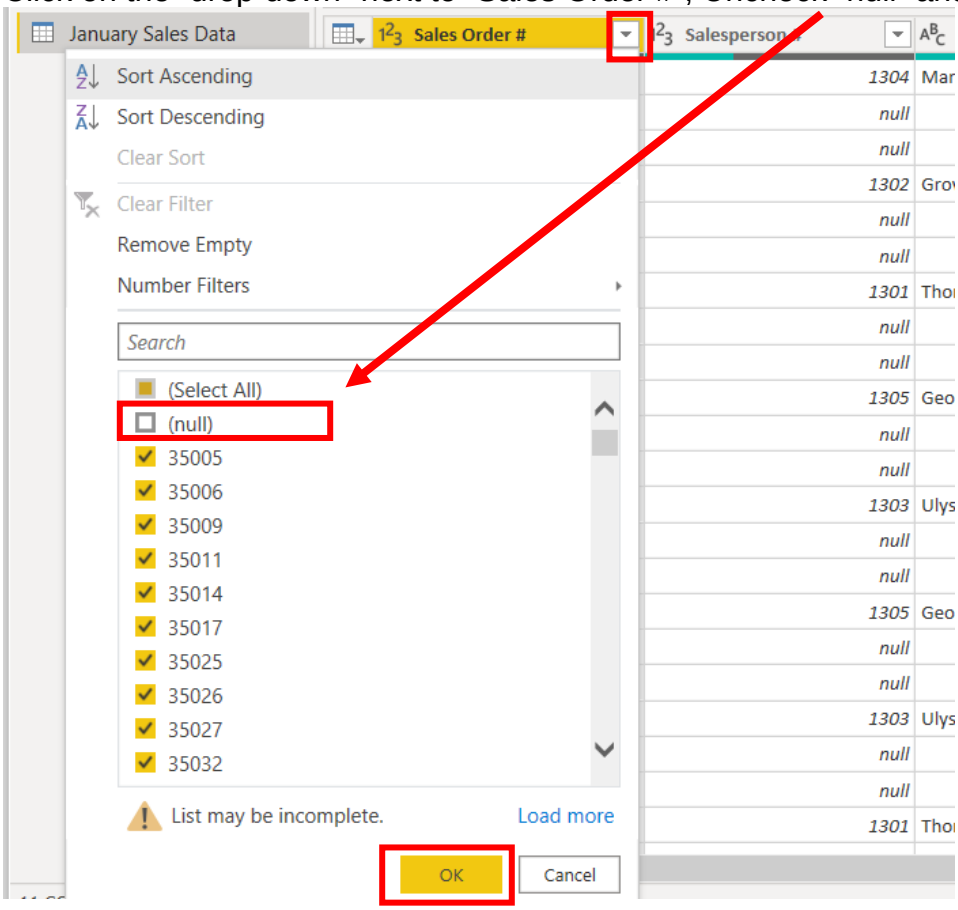
Note: After you perform a transformation, the changes are recoded in the "Applied Steps" section. If you incorrectly did a step, you can easily delete the step and do it again.



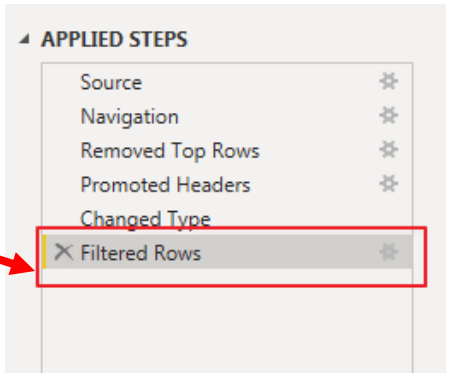
Operation 3: Filter Rows – Exclude rows that do not contain Sales Order Number

You can observe that there are several rows that do not contain a sales order number. We can add a filter step which will remove such rows. Note that we are not deleting anything from the source data file. This will just filter such data out and exclude these records from the final table.

Click on the “drop-down” next to “Sales Order #”, Uncheck “null” and Click “OK”.



Notice that “Filtered Rows” step is automatically added on the right side in the “Applied Steps” section.



The Data in the Fields Must Conform to Predefined Rules.

In the original Excel file, The Cuddly Stuffed Animals company provided the only acceptable values for “Product”, “Salesperson” and “Region”. Sometime data is entered incorrectly into the data.

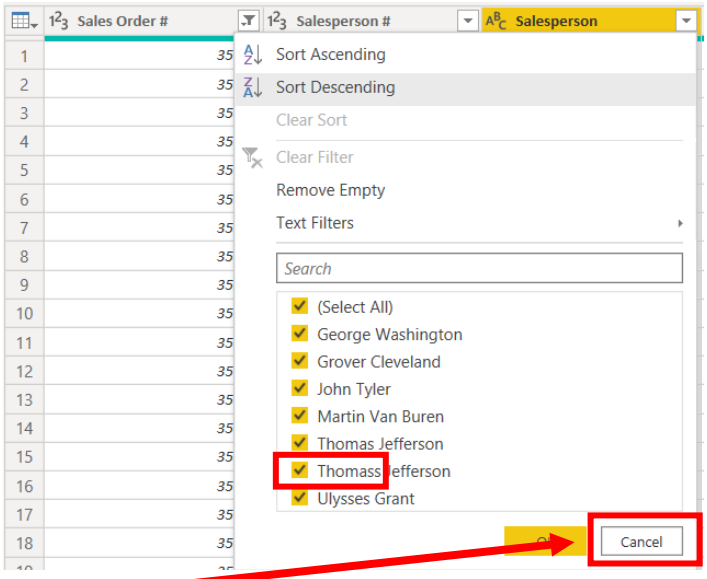
Code	Salesperson
1301	Thomas Jefferson
1302	Grover Cleveland
1303	Ulysses Grant
1304	Martin Van Buren
1305	George Washington
1306	John Tyler

Operation 4 :– Verify that the Salesperson field is correct

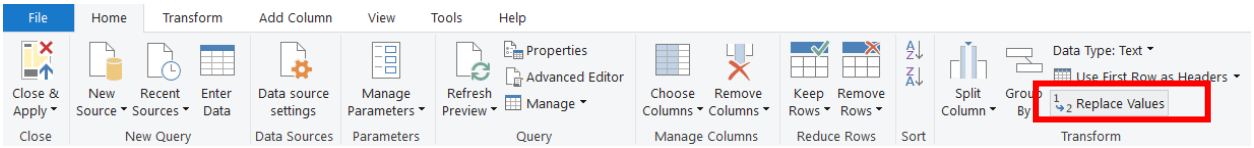
Click on the “drop-down” next to “Salesperson”.

The “Salesperson” field can only contain one of the six salespersons. Browse the data in the “Salesperson” field to verify that all the data is correct. Make any changes that are required.

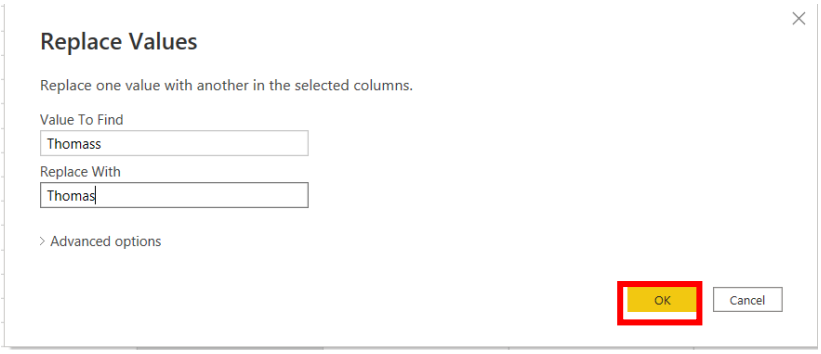
“Thomass” must be replaced with “Thomas”.



Select Cancel.



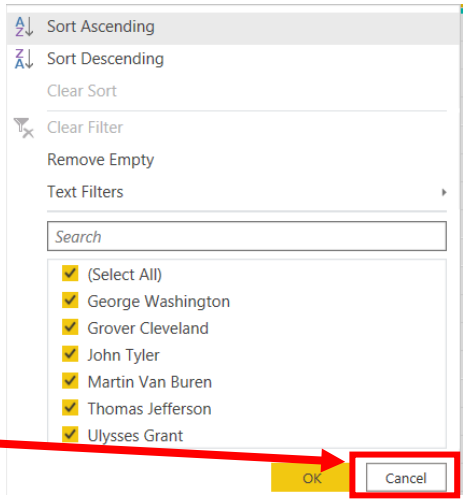
Select Replace Values



Value to find “Thomass”
Replace with “Thomas”

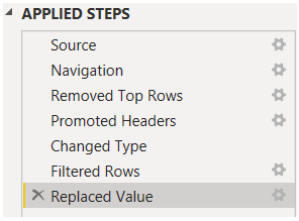
Select OK.

Click on the “drop-down” next to “Salesperson”.



Select Cancel.

A step has been added to the Applied Steps.

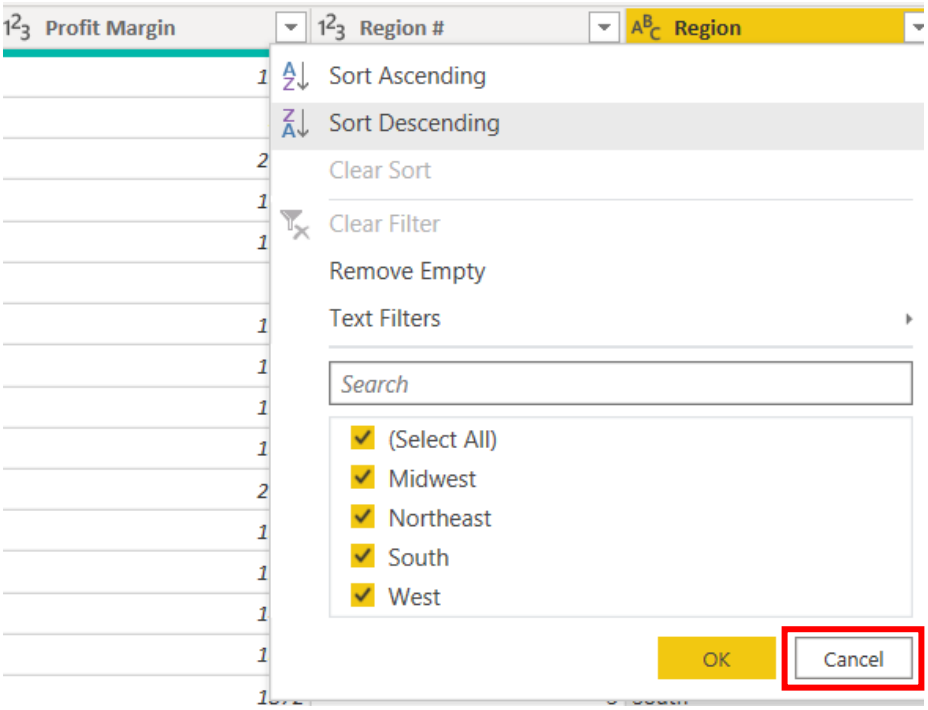


Operation 5 :– Verify that the Product field is correct

Click on the “drop-down” next to “Region”.

Code	Region
1	Midwest
2	Northeast
3	South
4	West

The “Region” field can only contain one of the six products. Browse the data in the “Region” field to verify that all the data is correct. Make any changes that are required.



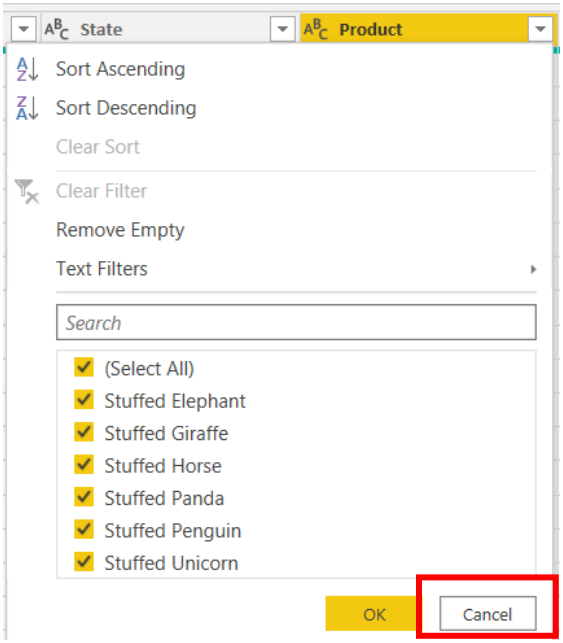
No changes must be made, select Cancel.

Operation 6 :– Verify that the Product field is correct

Product ID	Product
101	Stuffed Penguin
102	Stuffed Horse
103	Stuffed Unicorn
104	Stuffed Giraffe
105	Stuffed Panda
106	Stuffed Elephant

Click on the “drop-down” next to “Product”.

The “Product” field can only contain one of the six products. Browse the data in the “Product” field to verify that all the data is correct. Make any changes that are required.



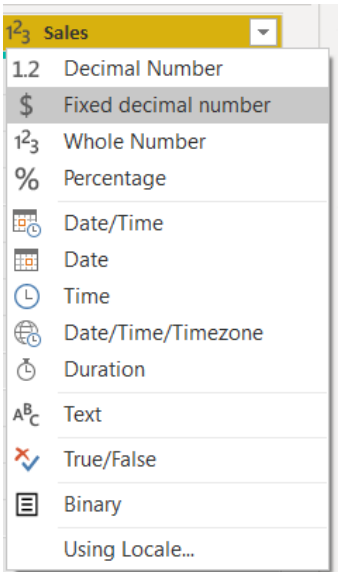
No changes must be made, select Cancel.

Operation 7: Change the data type. Change the type of all numeric fields that will be used in calculations to “Fixed Decimal”. The “# of units should have zero decimal places and dollar values should have two decimal places.

Click on the 123 in the left-hand corner of the field “Sales”.

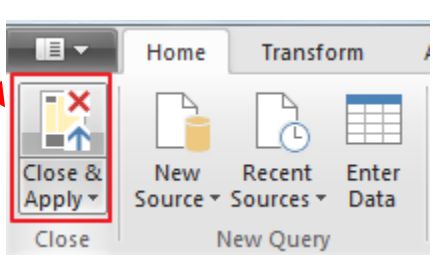
Select “$ Fixed decimal number”.

Do the same to the “Profit Margin” Field.

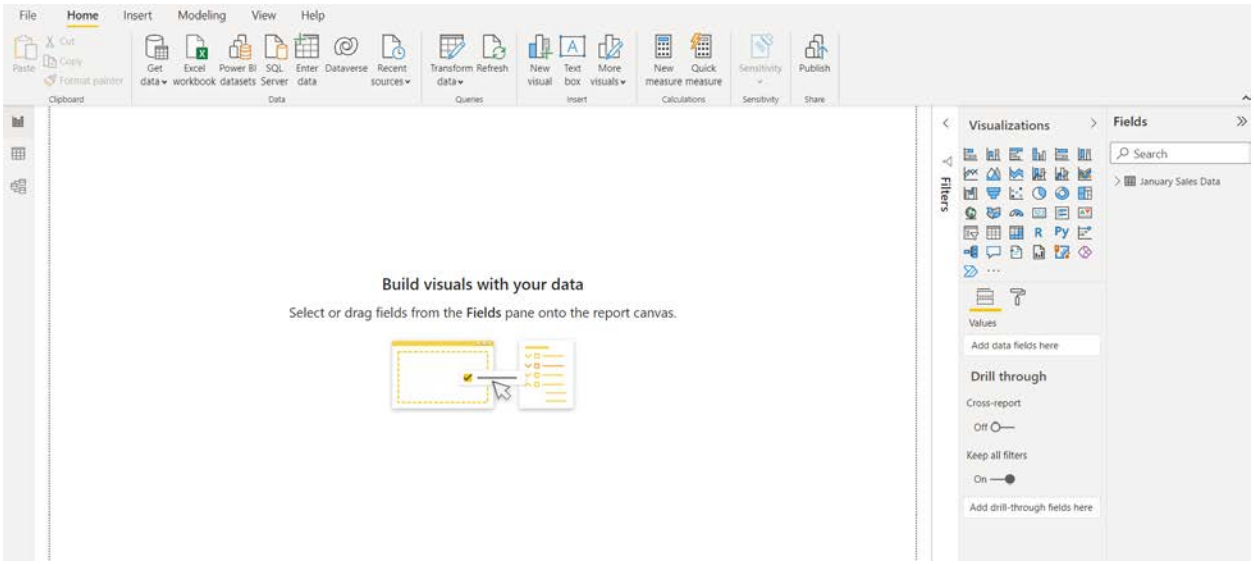


Operation 8: Load data. Click on "Close and Apply"

This loads the data onto Power BI from Power Query Editor.

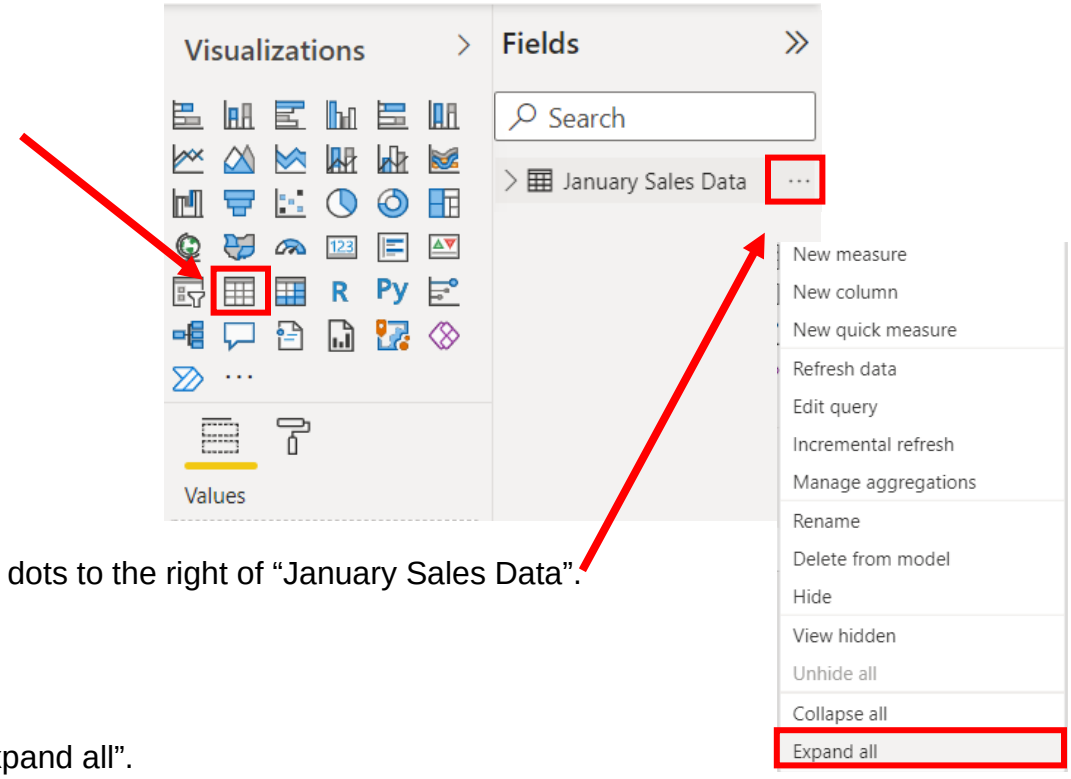


Now you'll be back to the main window of Power BI.



Operation 9: Create a "Table".

Click on the Table icon under the Visualization section to add a table.

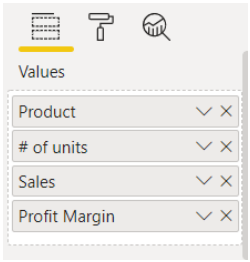


Select the dots to the right of "January Sales Data".

Select "Expand all".

The order that you select the fields is used to determine the order in which the fields are displayed in the table. Click on the box next to each field in the order that you want the fields to be displayed.

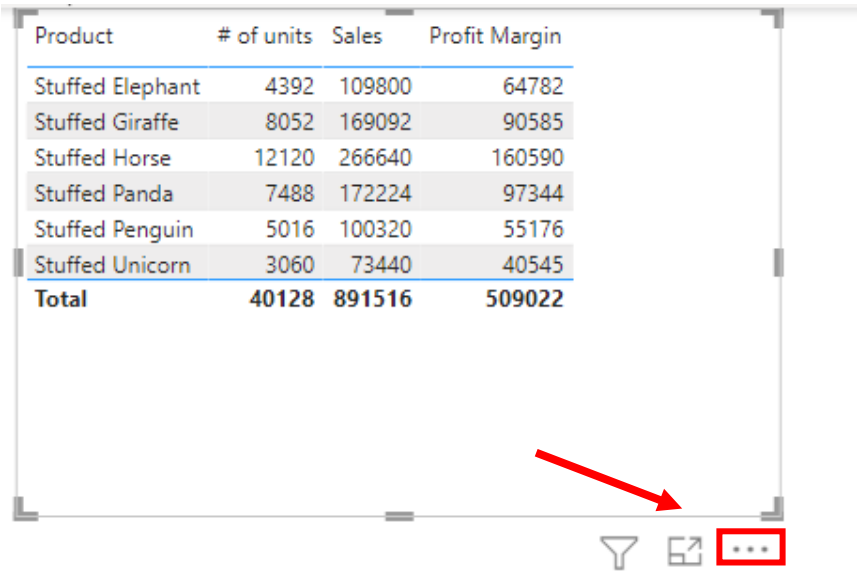
1. Product
2. # of units
3. Sales
4. Profit Margin



Product	# of units	Sales	Profit Margin
Stuffed Elephant	4392	109800	64782
Stuffed Giraffe	8052	169092	90585
Stuffed Horse	12120	266640	160590
Stuffed Panda	7488	172224	97344
Stuffed Penguin	5016	100320	55176
Stuffed Unicorn	3060	73440	40545
Total	**40128**	**891516**	**509022**

Operation 10: Exporting data to Excel

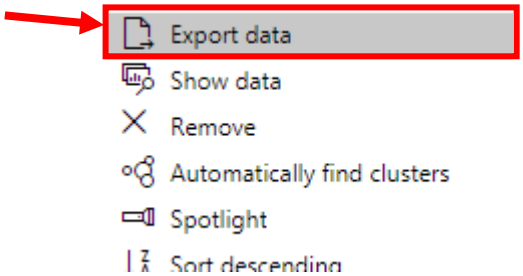
Select the table and notice that you get More Options indicated by 3 dots (…) on the top or bottom right of the table.



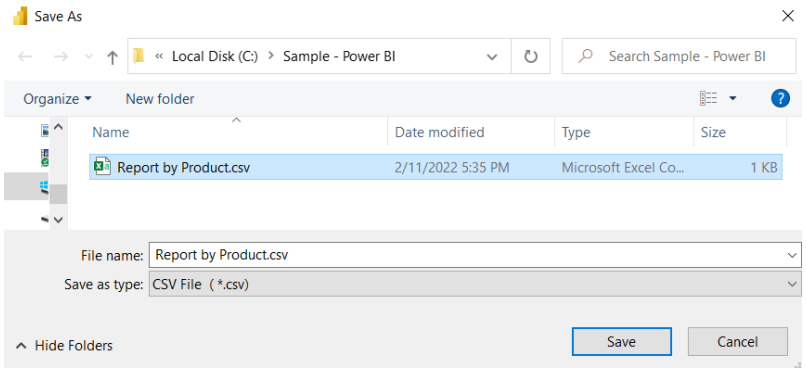
Product	# of units	Sales	Profit Margin
Stuffed Elephant	4392	109800	64782
Stuffed Giraffe	8052	169092	90585
Stuffed Horse	12120	266640	160590
Stuffed Panda	7488	172224	97344
Stuffed Penguin	5016	100320	55176
Stuffed Unicorn	3060	73440	40545
Total	**40128**	**891516**	**509022**

Click on the More Options

Select “Export Data”.



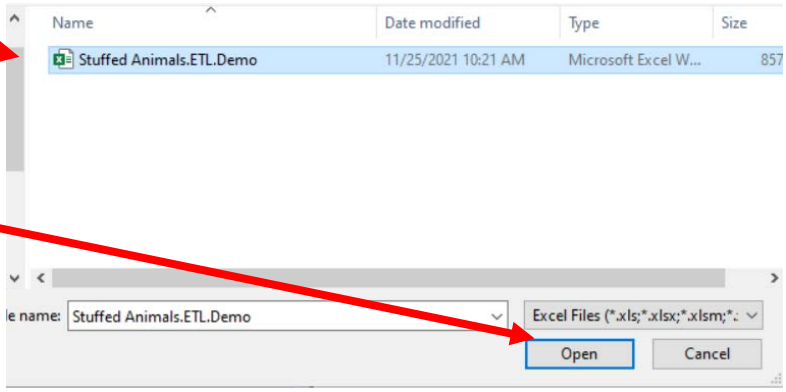
Type the name of the file “Report by Product.csv”.



Select Save.

Open the original excel file

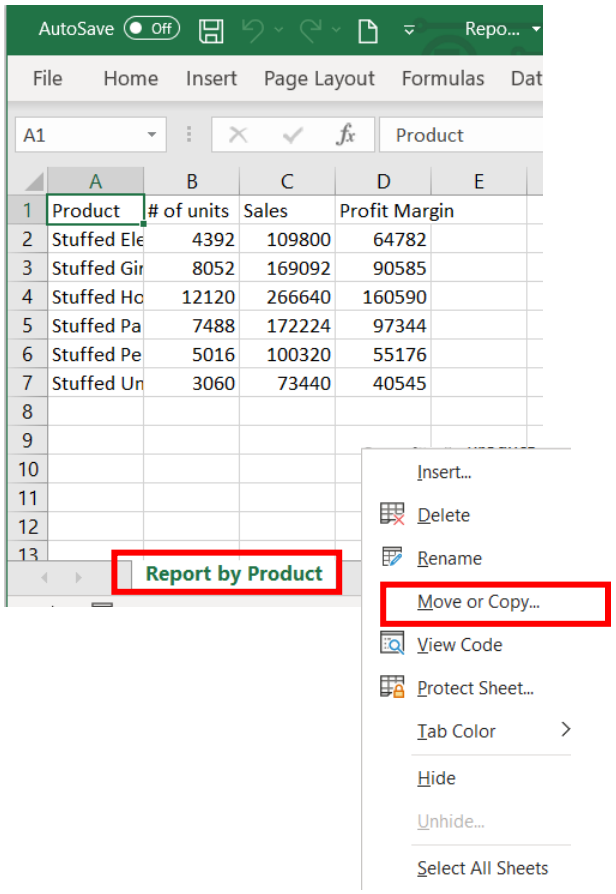
Select the file.



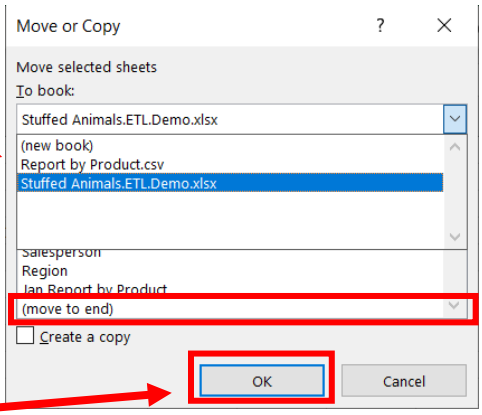
Select “Open”.

To open the new report, navigate in file manager and double click on the “Report by Product.csv” file.

Copy this tab to the original Excel by right clicking on the tab Report by Product and selecting “Move or Copy”.



Select the name of the original file.

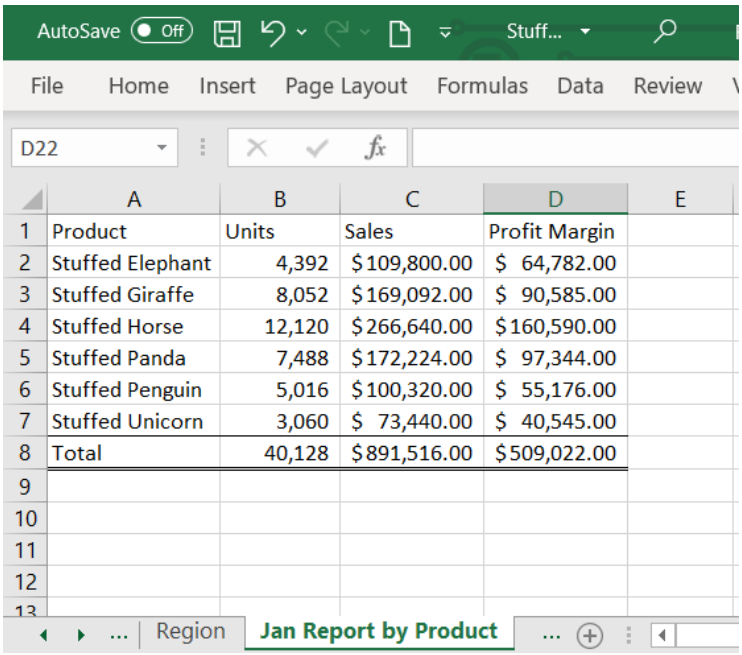


Then click “OK”.

Scroll till the end and click on “(move to end)”.

Then click “OK”.

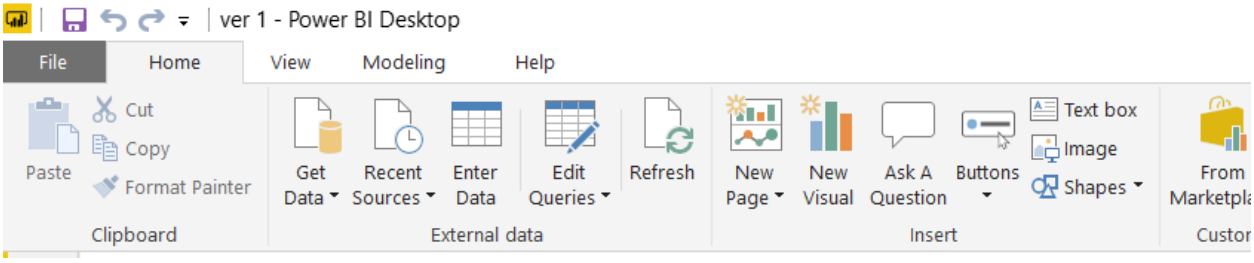
Rename the tab as “January Report by Product”. Add totals, format the sheet, save and close the Excel file.



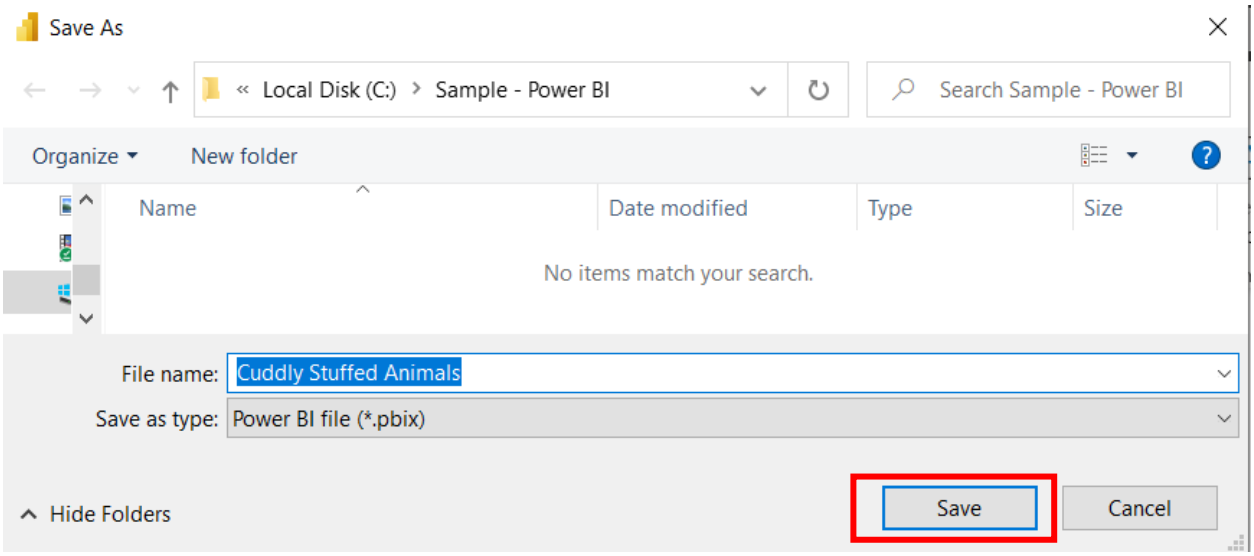
	A	B	C	D	E
1	Product	Units	Sales	Profit Margin	
2	Stuffed Elephant	4,392	$109,800.00	$ 64,782.00	
3	Stuffed Giraffe	8,052	$169,092.00	$ 90,585.00	
4	Stuffed Horse	12,120	$266,640.00	$160,590.00	
5	Stuffed Panda	7,488	$172,224.00	$ 97,344.00	
6	Stuffed Penguin	5,016	$100,320.00	$ 55,176.00	
7	Stuffed Unicorn	3,060	$ 73,440.00	$ 40,545.00	
8	Total	40,128	$891,516.00	$509,022.00	
9					
10					
11					
12					
13					

Operation 11: Save the "Flow and Data"

Select "File" > "Save as".



Type the name of the file.

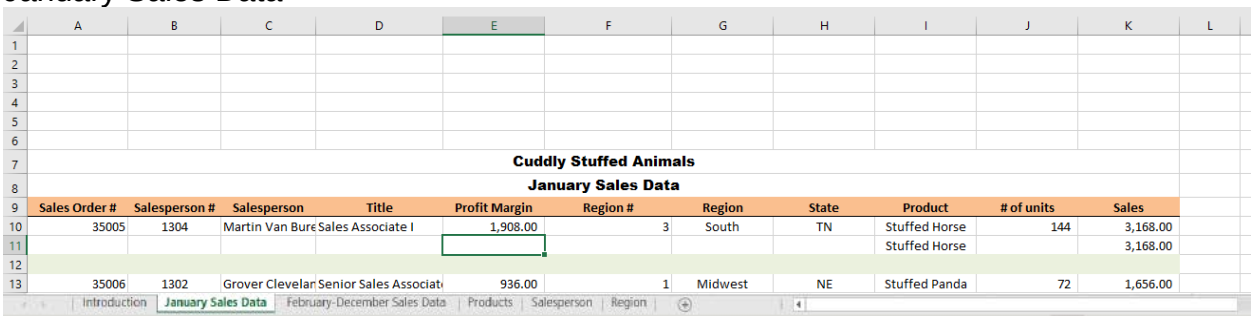


Select Save.

Part 2

The “February-December Sales Data” tab contains data that was created in a different system than the “January Sales Data”. You cannot append two data sets unless the field names and field types are identical. The fields, however, may be ordered differently.

January Sales Data



Cuddly Stuffed Animals
January Sales Data

Sales Order #	Salesperson #	Salesperson	Title	Profit Margin	Region #	Region	State	Product	# of units	Sales
35005	1304	Martin Van Bure	Sales Associate I	1,908.00	3	South	TN	Stuffed Horse	144	3,168.00
								Stuffed Horse		3,168.00
35006	1302	Grover Clevelan	Senior Sales Associat	936.00	1	Midwest	NE	Stuffed Panda	72	1,656.00

Introduction | January Sales Data | February-December Sales Data | Products | Salesperson | Region

February-December Sales Data

Cuddly Stuffed Animals
February-December Sales

Order #	SalesPerson	Title	Region Name	Region Code	*State*	Article	# of pieces sold	Selling Price Per Unit	Profit Margin
37060	1303 : Ulysses Grant	Senior Sales Associate	South	3	TX	Stuffed Horse	120	22.00	1,590.00
						Stuffed Horse			1,590.00
37064	1301 : Thomas Jefferson	Sales Associate I	Northeast	2	CT	Stuffed Horse	144	22.00	1,908.00
						Stuffed Horse			

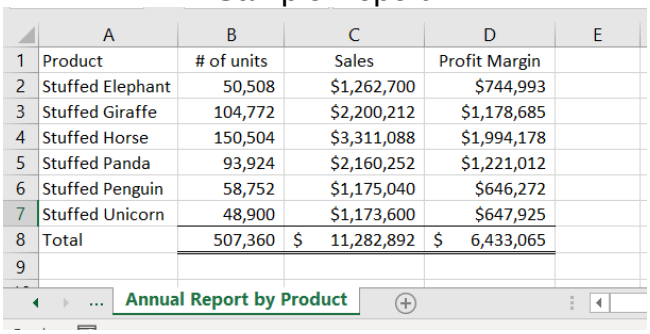
Introduction | January Sales Data | February-December Sales Data | Products | Salesperson | Region

Ready

As you review the new sheet note the differences:

0. The column headings are in row 4.
1. The column headings are different.
2. The columns are in a different order.
3. Column B contains both the Salesperson’s number and name.
4. Selling Price Per Units has replaced Sales.

Sample Report

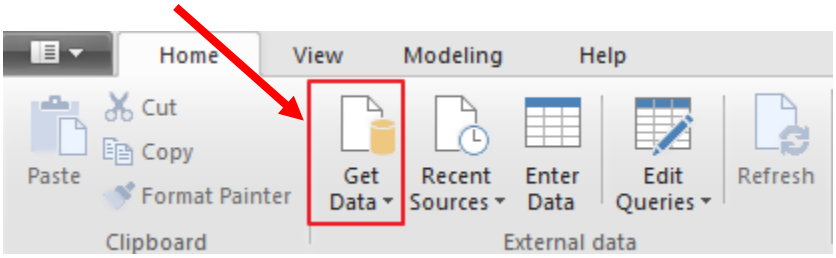


Product	# of units	Sales	Profit Margin
Stuffed Elephant	50,508	$1,262,700	$744,993
Stuffed Giraffe	104,772	$2,200,212	$1,178,685
Stuffed Horse	150,504	$3,311,088	$1,994,178
Stuffed Panda	93,924	$2,160,252	$1,221,012
Stuffed Penguin	58,752	$1,175,040	$646,272
Stuffed Unicorn	48,900	$1,173,600	$647,925
Total	507,360	$ 11,282,892	$ 6,433,065

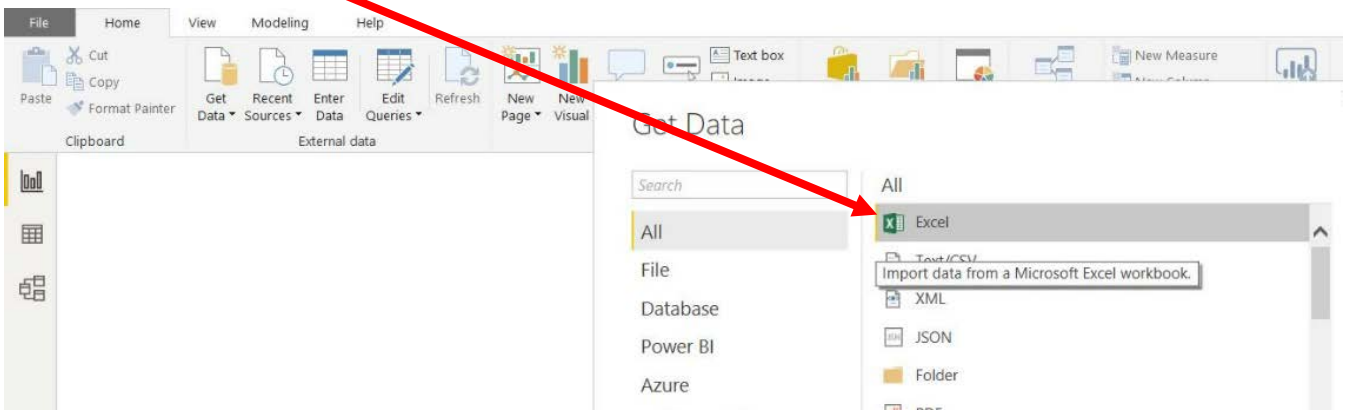
Annual Report by Product

Operation 12: Get Data – Input Second Data Set From

Select "Get Data" from the External Data Group Under Home tab.

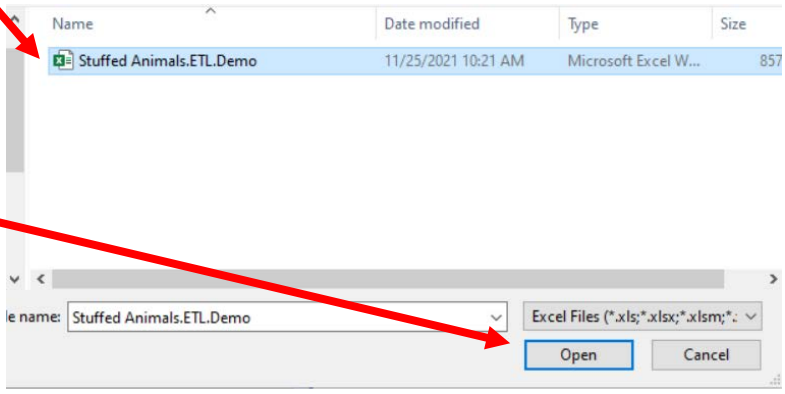


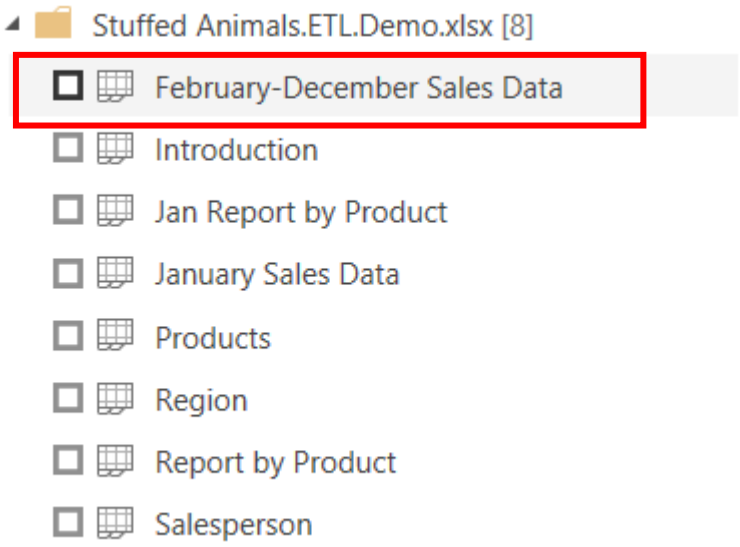
Select "Excel".



Select the file.

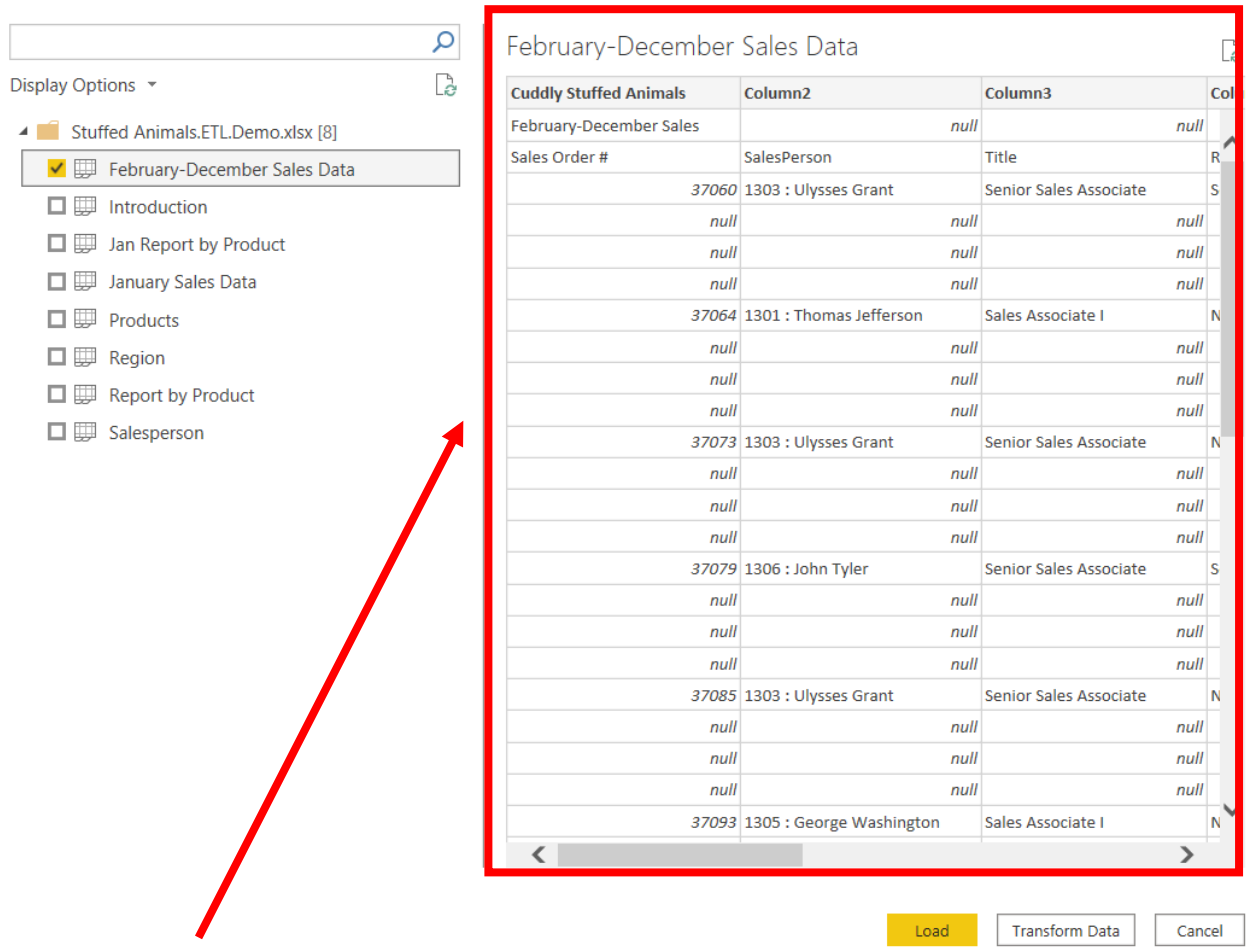
Select “Open”.





Highlighting the desired sheet does **not** activate the Load and Edit buttons.

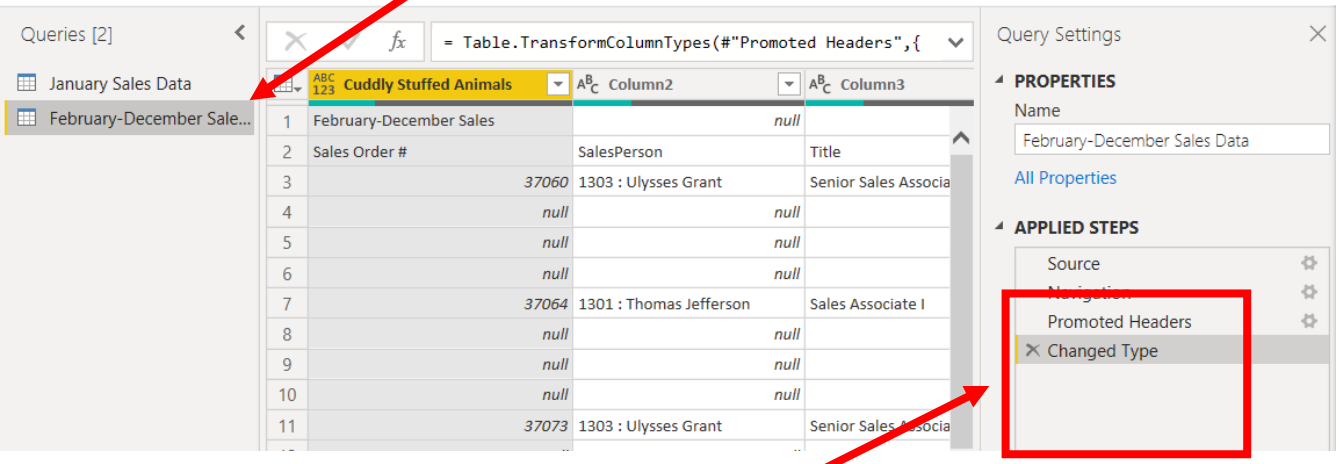
Double click on “February-December Sales Data” or you can select the check box on the left of “February-December Sales Data”.



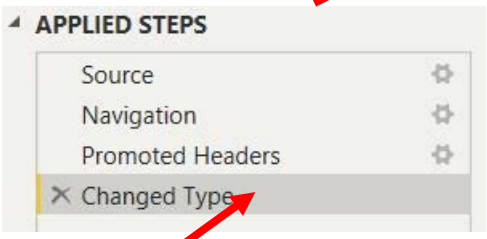
The data preview will be displayed.

Select “Transform Data” or “Edit” and a new window called Power Query Editor opens.

Now there are two queries.

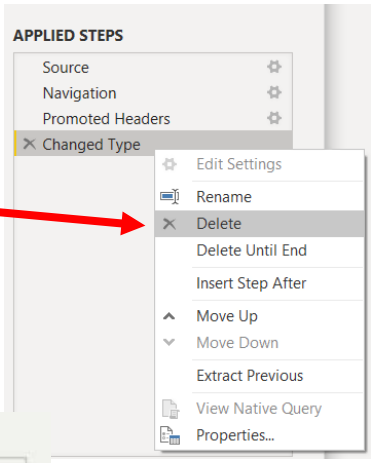


The program added the steps that it performed as Power BI inputted the data. Note that it did not correctly find the row that contains the "Headers". Therefore, some steps must be deleted.



Select the step, "Changed Type".

Right click and select "Delete".

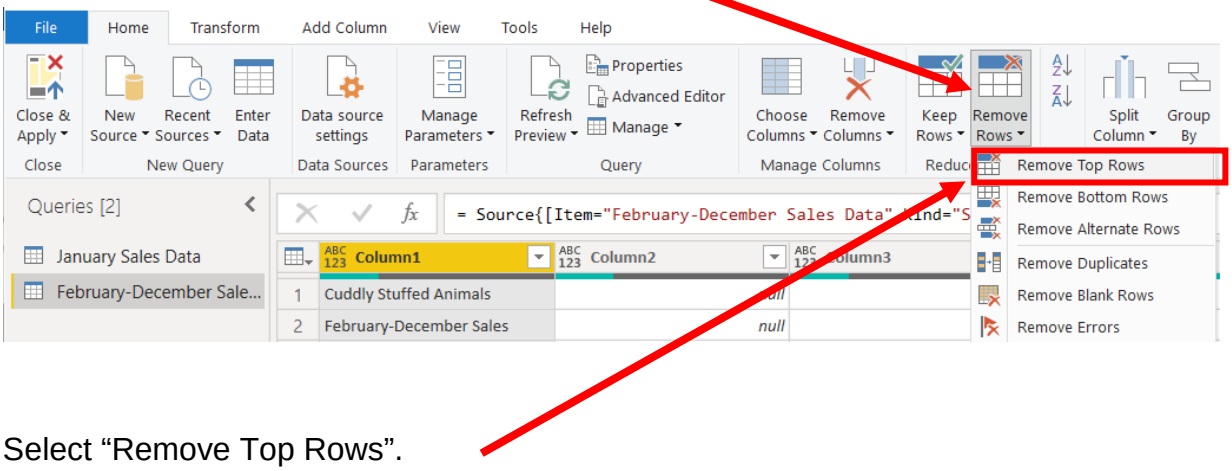


Delete the step "Promoted Headers", leaving us with two steps.

Operation 13: Fix the Headers – The field headers are in the third row of the source document. Remove the top two rows to move the headers to the first row and then promote them to the Query Editors' headers.

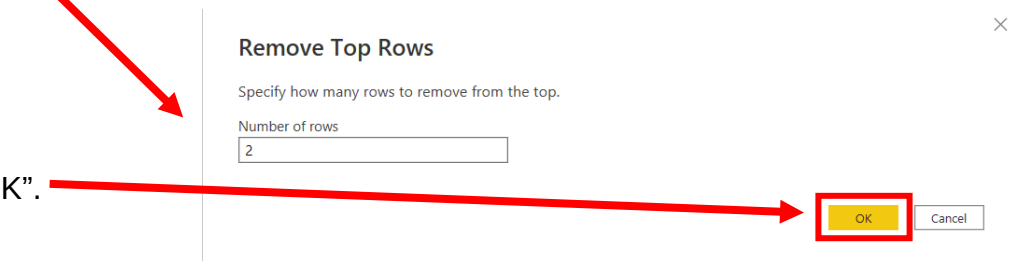
	Column1	Column2	Column3	Column4	Column5
1	Cuddly Stuffed Animals	null	null	null	
2	February-December Sales	null	null	null	
3	Sales Order #	SalesPerson	Title	Region	Region #
4	37060	1303 : Ulysses Grant	Senior Sales Associate	South	

Select "Remove Rows".



Select "Remove Top Rows".

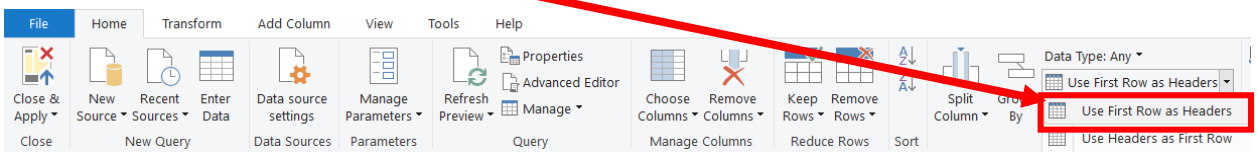
Enter a "2" to remove top three rows.



Then click "OK".

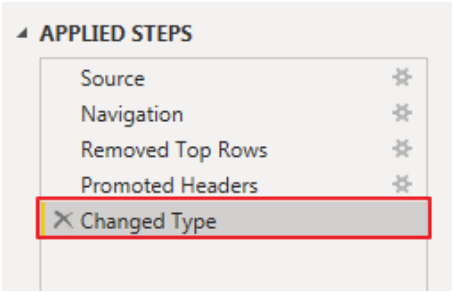
	Column1	Column2	Column3	Column4	Column5	Column6
1	Sales Order #	SalesPerson	Title	Region	Region #	State
2	37060	1303 : Ulysses Grant	Senior Sales Associate	South	3	TX

To promote the first row in the current data to Query Editors' headers, select "Use First Row as Headers".



	Sales Order #	SalesPerson	Title	Region	Region #	State
1	37060	1303 : Ulysses Grant	Senior Sales Associate	South	3	TX
2	null	null	null		null	
3	null	null	null		null	

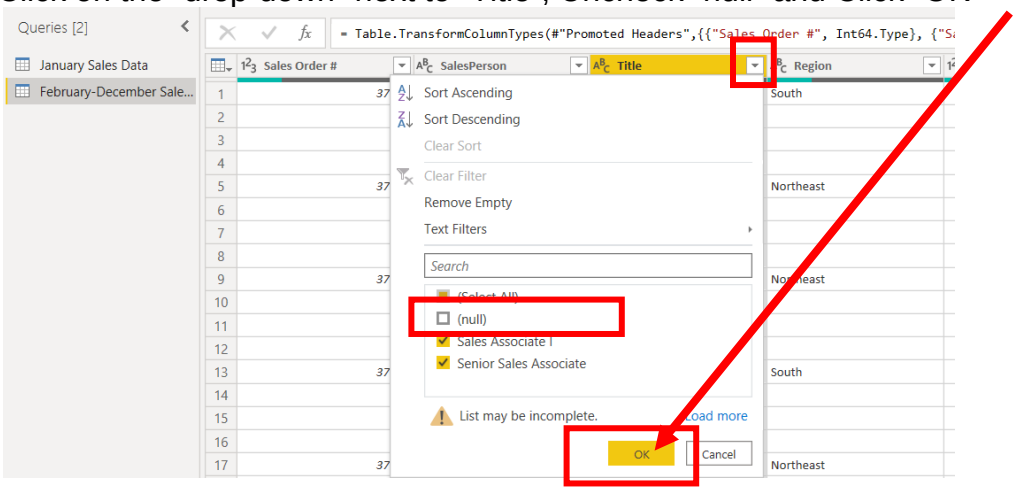
Note: After you perform a transformation, the changes are recoded in the "Applied Steps" section. If you incorrectly did a step, you could easily delete the step and do it again.



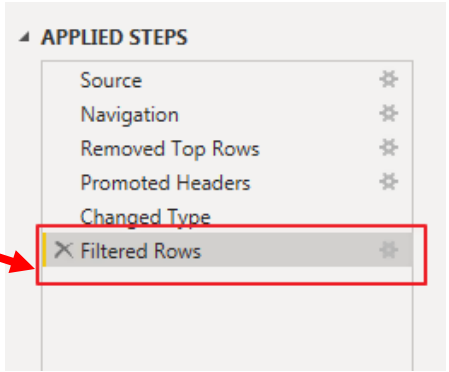
Operation 14: Filter Rows – Exclude rows that do not contain Sales Order Number

You can observe that there are several rows that do not contain a "Title". Add a filter step which will remove such rows. Note that we are not deleting anything from the source data file. This will just filter such data out and exclude these records from the final table.

Click on the "drop-down" next to "Title", Uncheck "null" and Click "OK"



Notice that "Filtered Rows" step is automatically added on the right side in the "Applied Steps" section.



Before we append the “February-December Sales Data” set to the “January Sales Data” set the “Field Names” and “Types” must be identical.

There are ten fields in the “February-December Sales Data” stream, and we will review them one by one making all necessary changes.

January Query

	Sales Order #	Salesperson #	Salesperson	Title	Profit Margin	Region #
1	35005	1304	Martin Van Buren	Sales Associate I	1,908.00	3
2	35006	1302	Grover Cleveland	Senior Sales Associate	936.00	1

Region	State	Product	# of units	Sales
South	TN	Stuffed Horse	144	3,168.00
Midwest	NE	Stuffed Panda	72	1,656.00

February-December Query

	1	2	3	4	5	6
	Sales Order #	SalesPerson	Title	Region	Region #	State
1	37060	1303 : Ulysses Grant	Senior Sales Associate	South	3	TX
2	37064	1301 : Thomas Jefferson	Sales Associate I	Northeast	2	CT

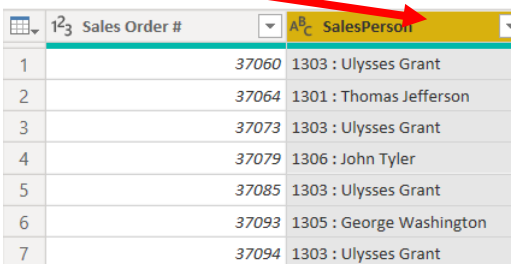
7	8	9	10
Article	# of units	Selling Price Per Unit	Profit Margin
Stuffed Horse	120	22	1590
Stuffed Horse	144	22	1908

1) The field “**Sales Order #”** has no changes.
2) The field “Salesperson” is a merged field of the “Salesperson #” field and the “Salesperson” field. They are separated by a colon. The colon is referred to as a delimiter. Common delimiters are colons, commas, dashes, and semicolons.

SalesPerson
1303 : Ulysses Grant
1301 : Thomas Jefferson
1303 : Ulysses Grant
1306 : John Tyler
1303 : Ulysses Grant
1305 : George Washington
1303 : Ulysses Grant
1301 : Thomas Jefferson
1306 : John Tyler
1301 : Thomas Jefferson
1306 : John Tyler

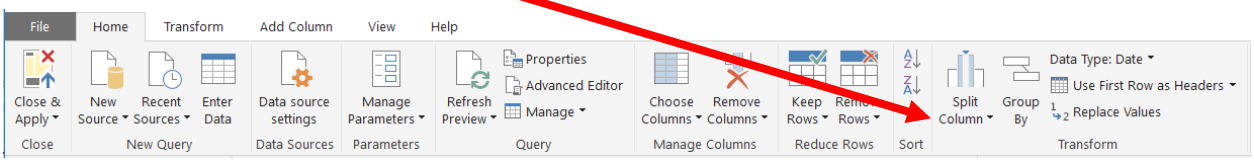
Operation 15: Split Column – Separate One Column into Many Columns

Select the column “Salesperson”.

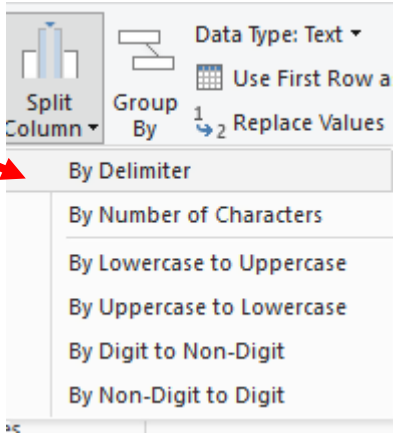


	Sales Order #	SalesPerson
1	37060	1303 : Ulysses Grant
2	37064	1301 : Thomas Jefferson
3	37073	1303 : Ulysses Grant
4	37079	1306 : John Tyler
5	37085	1303 : Ulysses Grant
6	37093	1305 : George Washington
7	37094	1303 : Ulysses Grant

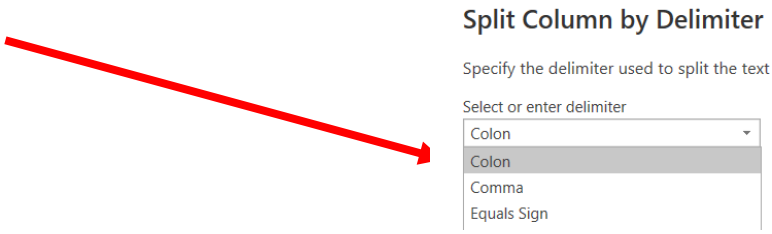
Select “Split Column”.



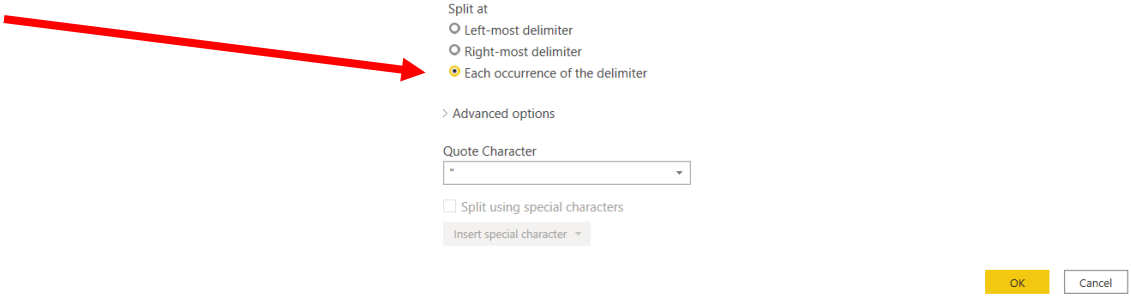
Select “By Delimiter”.



Select “Colon”.



Verify that “Each occurrence of the Delimiter” is selected.



Click “OK”.

Two new fields are created from parsing the “Salesperson” field.

Operation 16: Rename Columns

To rename the column heading double click on “SalesPerson.1”.

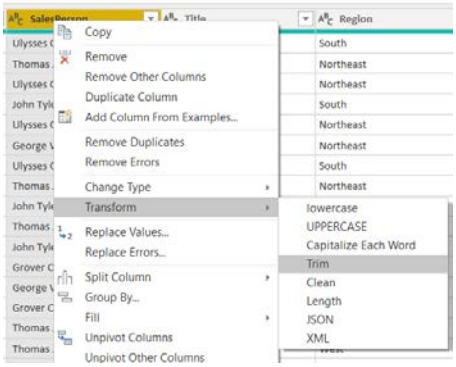
Type “Salesperson #” and press enter.

In the same way rename “SalesPerson.2” to “Salesperson”.

After the split the field “SalesPerson” may have extra spaces. To trim the field and remove extra spaces from the beginning and ending of a string right click on “SalesPerson”.

Select “Transform”.

Select “Trim”.

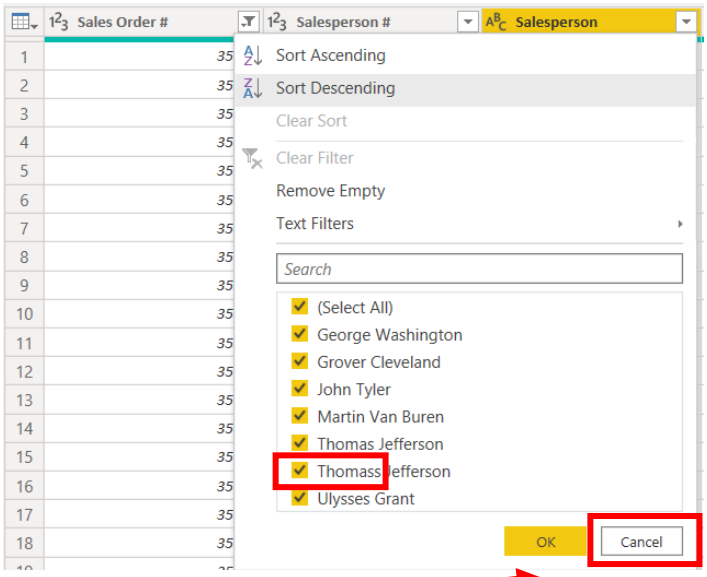


Click on the “drop-down” next to “Salesperson”.

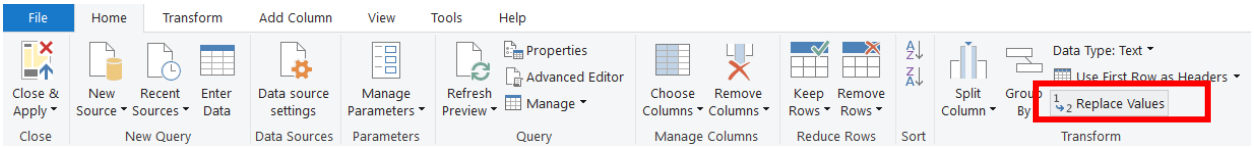
Code	Salesperson
1301	Thomas Jefferson
1302	Grover Cleveland
1303	Ulysses Grant
1304	Martin Van Buren
1305	George Washington
1306	John Tyler

The “Salesperson” field can only contain one of the six salespersons. Browse the data in the “Salesperson” field to verify that all the data is correct. Make any changes that are required.

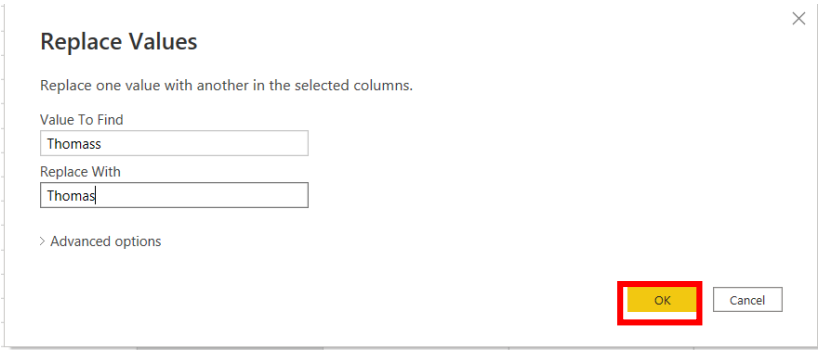
“Thomass” must be replaced with “Thomas”.



Select Cancel.



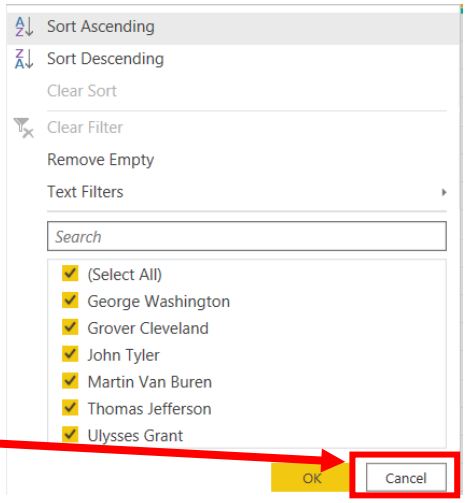
Select Replace Values



Value to find “Thomass”
Replace with “Thomas”

Select OK.

Click on the “drop-down” next to “Salesperson”.



Select Cancel.

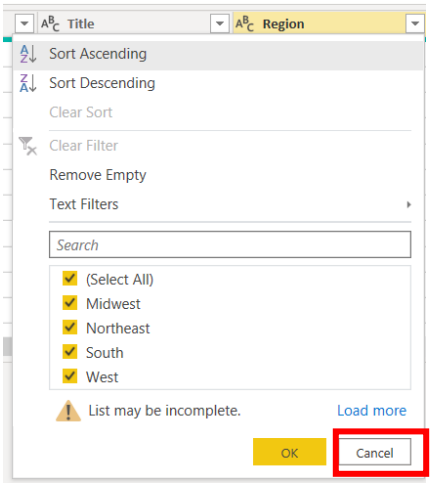
3) The field “**Title**” has no changes.

4) The field "**Region**" has no changes, we must verify that all the names have been entered correctly.

Code	Region
1	Midwest
2	Northeast
3	South
4	West

The "Region" field can only contain one of the four regions. Browse the data in the "Region" field to verify that all the data is correct. Make any changes that are required.

Click on the "drop-down" next to "Region".



No changes must be made, select Cancel.

5) The field "**Region #**" has no changes.

6) The field "**State**" has no changes.

7) The field "**Article**" has to be renamed "**Product"** and we must verify that all the names have been entered correctly.

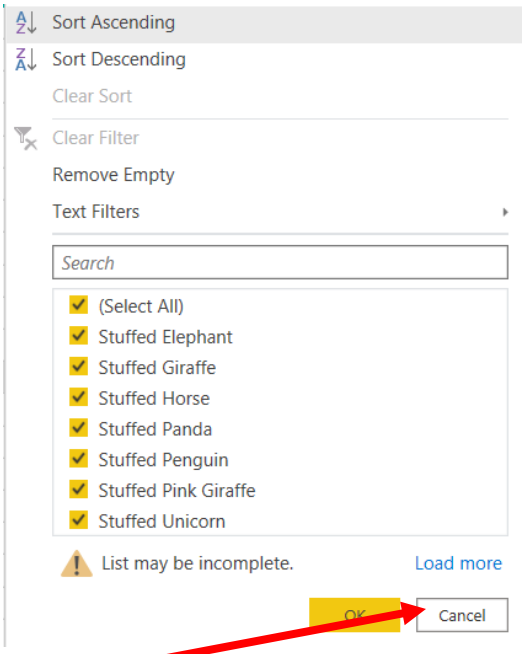
Double click on “Article”, type “Product” and press the enter key.
In the original Excel file, The Cuddly Stuffed Animals company provided the only acceptable values for “Product”.

Product ID	Product
101	Stuffed Penguin
102	Stuffed Horse
103	Stuffed Unicorn
104	Stuffed Giraffe
105	Stuffed Panda
106	Stuffed Elephant

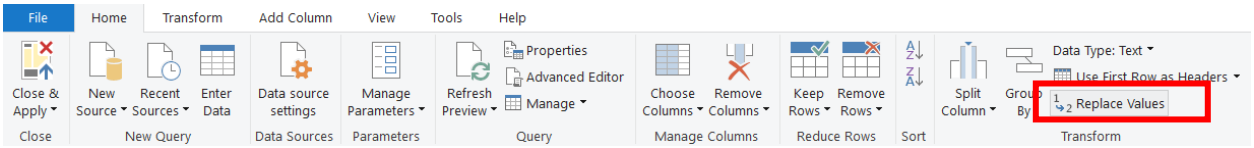
Click on the “drop-down” next to “Product”.

The “Product” field can only contain one of the six products. Browse the data in the “Product” field to verify that all the data is correct. Make any changes that are required.

“Pink Giraffe” must be replaced with “Giraffe”.

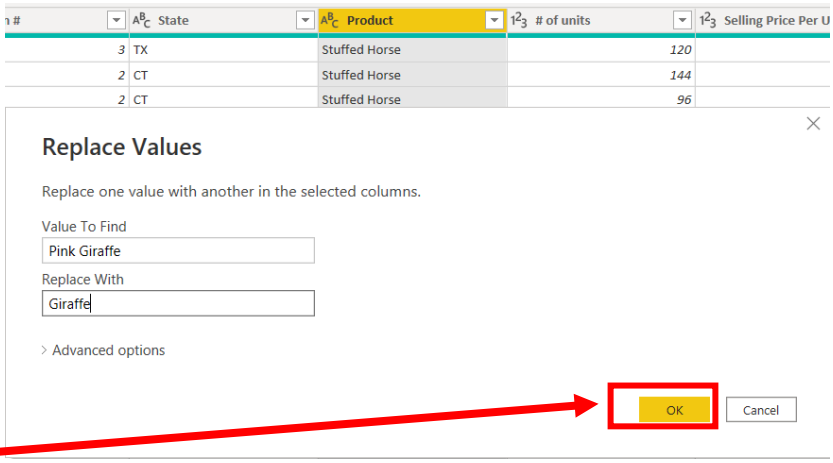


Select Cancel.



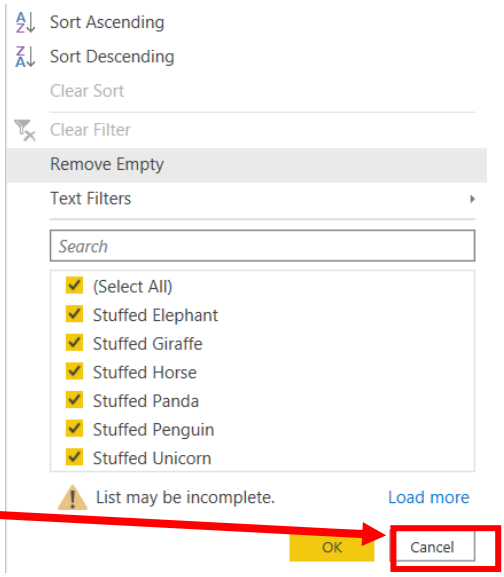
With the field "Product" highlighted, select "Replace Values".

Value to find "Pink Giraffe".
Replace with "Giraffe".



Select OK.

To confirm, click on the "drop-down" next to "Product".



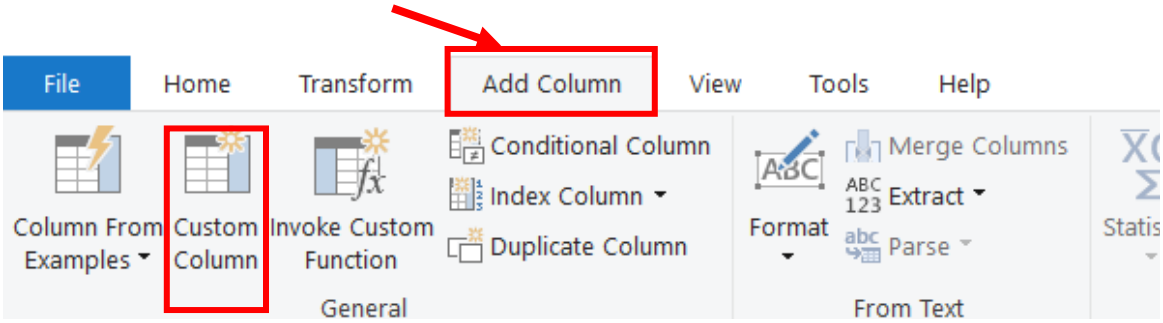
Select Cancel.

8) The field "**# of units**" has no changes.

9) The field "**Selling Price Per Unit**" does not exist in the "January Sales Data" stream of data. Instead, there is a field "Sales", the product of the "# of units" and the "Selling Price Per Unit".

Operation 17: Create Calculated Field

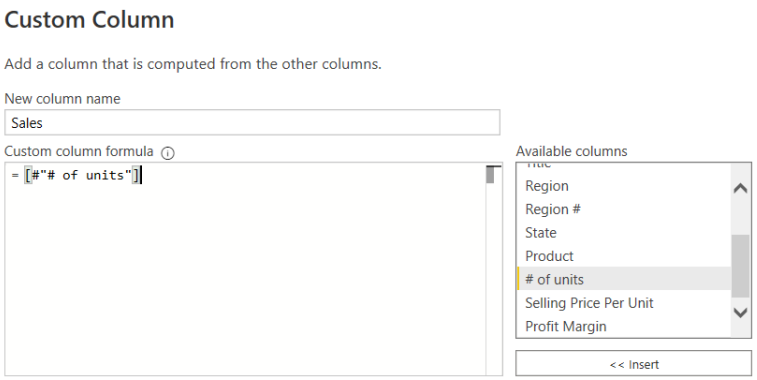
Select “Custom Column” from the “General” data group under the “Add Column” tab.

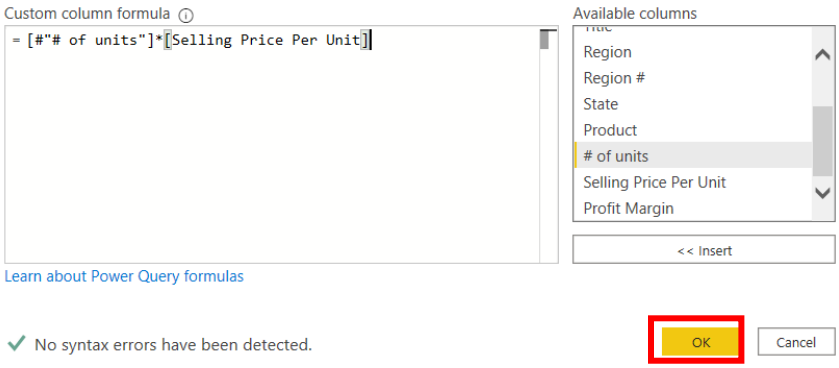


New column name, “Sales”.

Select “# of units” from the available list, double click or hit insert.

Type, “*” select “Selling Price Per Unit” from the available list double click or hit insert.





Select OK.

The type of field must be changed to a decimal. Click on the 123 in the left-hand corner of the field “Sales”.

Select “$ Fixed decimal number”.

$ Sales
2,640.00
3,168.00
2,112.00
1,320.00
2,760.00
1,056.00
1,260.00
2,268.00
3,120.00
3,696.00

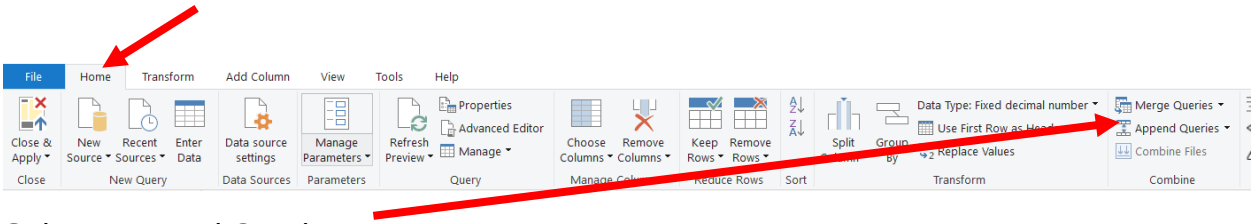
ABC 123 Sales
2640
3168
2112
1320
2760
1056
1260
2268

10) The field "**Profit Margin**" must be changed to a decimal
Click on the 123 in the left-hand corner of the field "Profit Margin".

Select "$ Fixed decimal number".

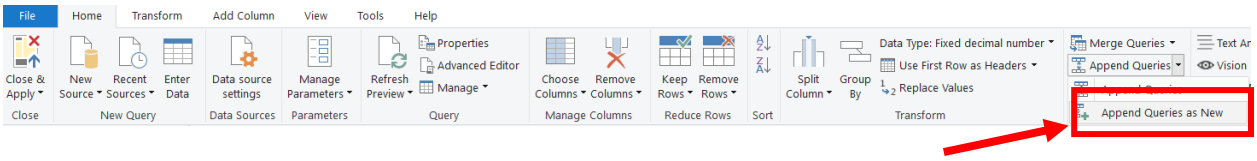
Operation 18: Append the Two Streams

Select “Append Queries” from the “Combine” group under the “Home” tab.



Select “Append Queries”.

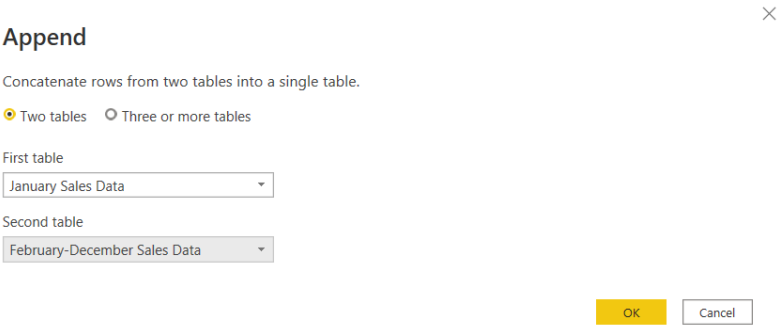
Select “Append Queries as New”.



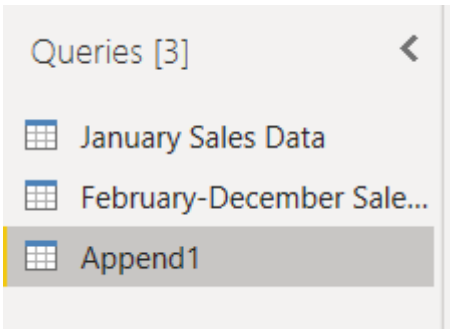
In the pop-up select “January Sales Data” as the “First table”.

Select “February-December Sales data” as the “Second table”.

Click “OK”.



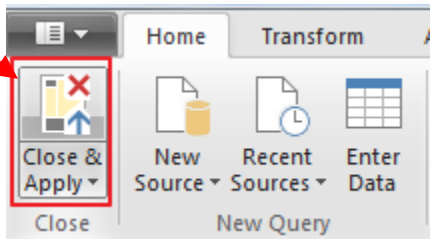
This results in a new query named “Append1”.



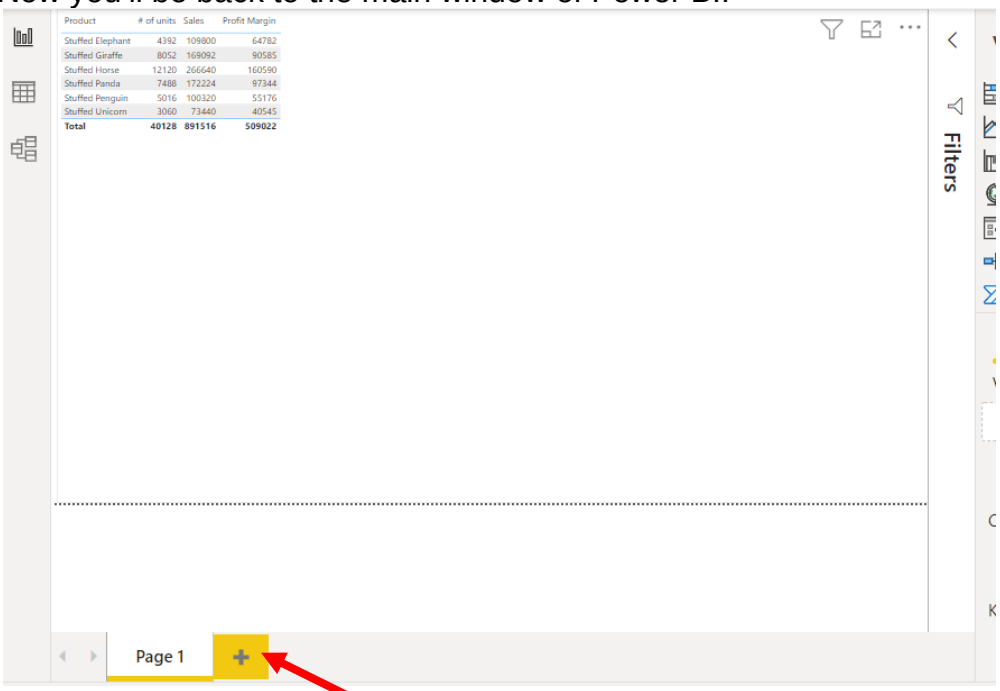
Operation 19: Load Data.

Click on “Close and Apply”

This loads the data onto Power BI from Power Query Editor.



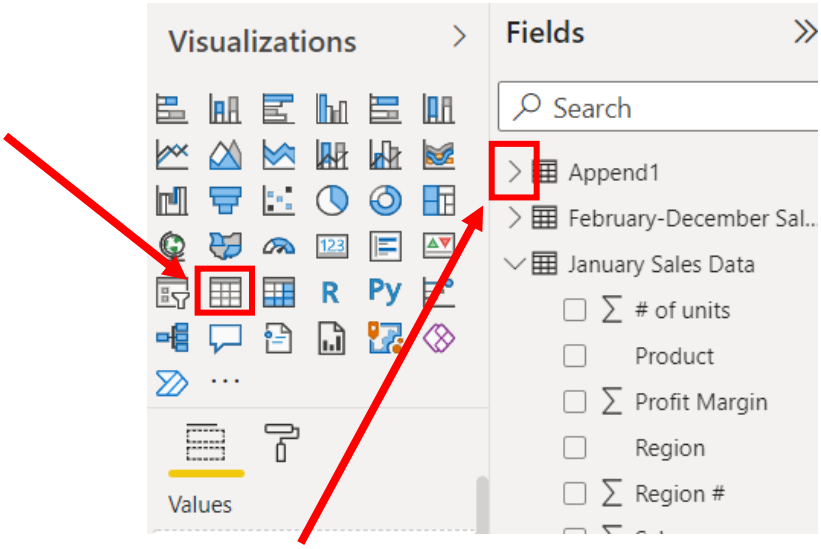
Now you’ll be back to the main window of Power BI.



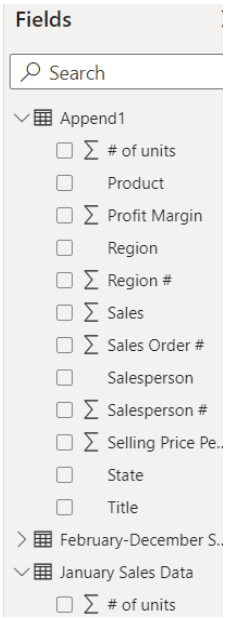
Make sure you add a new page.

Operation 19: Create a "Table".

Click on the Table icon under the Visualization section to add a table.



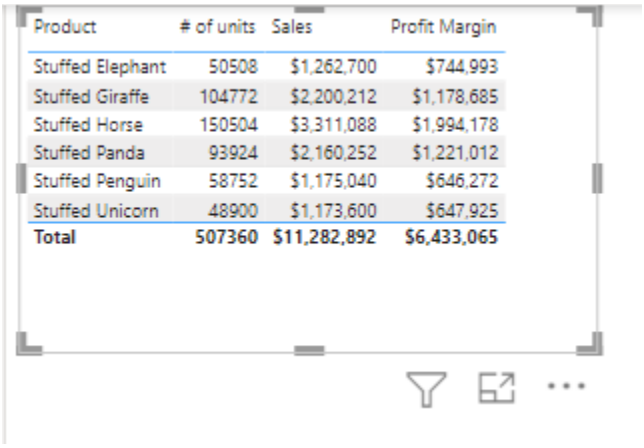
Click on the > to the left of Append 1 to expand the fields.



The order that you select the fields is used to determine the order in which the fields are displayed in the table. Click on the box next to each field in the order that you want the fields to be displayed.

1. Product
2. # of units
3. Sales
4. Profit Margin

Size the table



Product	# of units	Sales	Profit Margin
Stuffed Elephant	50508	$1,262,700	$744,993
Stuffed Giraffe	104772	$2,200,212	$1,178,685
Stuffed Horse	150504	$3,311,088	$1,994,178
Stuffed Panda	93924	$2,160,252	$1,221,012
Stuffed Penguin	58752	$1,175,040	$646,272
Stuffed Unicorn	48900	$1,173,600	$647,925
Total	**507360**	**$11,282,892**	**$6,433,065**

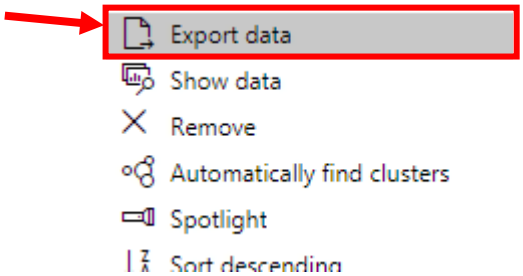
Operation 20: Exporting data to Excel

Select the table you want to export and notice that you get More Options indicated by 3 dots (…) on the top or bottom right of the table.

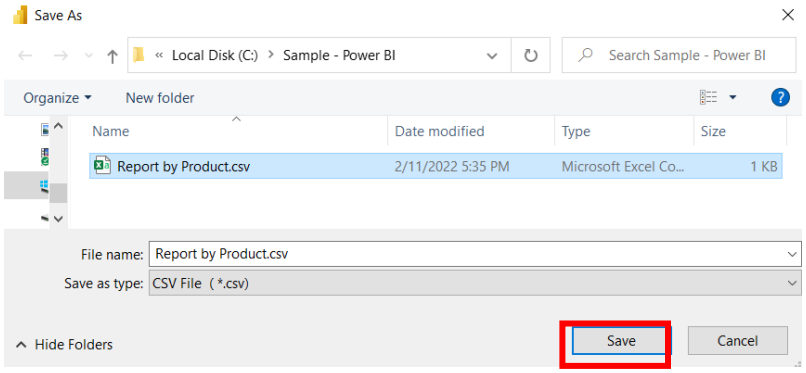
Product	# of units	Sales	Profit Margin
Stuffed Elephant	50508	$1,262,700	$744,993
Stuffed Giraffe	104772	$2,200,212	$1,178,685
Stuffed Horse	150504	$3,311,088	$1,994,178
Stuffed Panda	93924	$2,160,252	$1,221,012
Stuffed Penguin	58752	$1,175,040	$646,272
Stuffed Unicorn	48900	$1,173,600	$647,925
Total	**507360**	**$11,282,892**	**$6,433,065**

Click on the More Options.

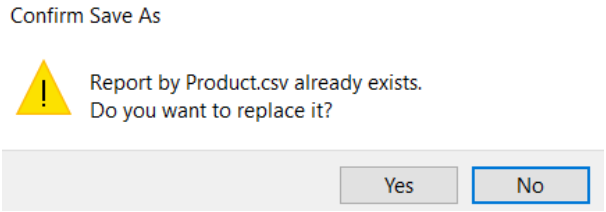
Select “Export Data”.



Select the name of the file “Report by Product.csv”.



Select Save

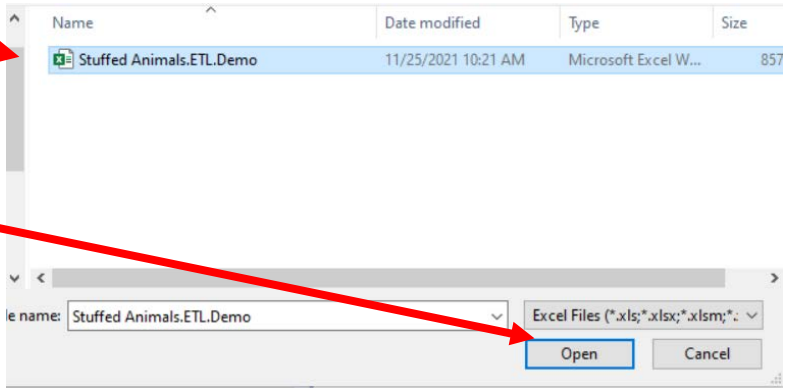


Confirm the save.

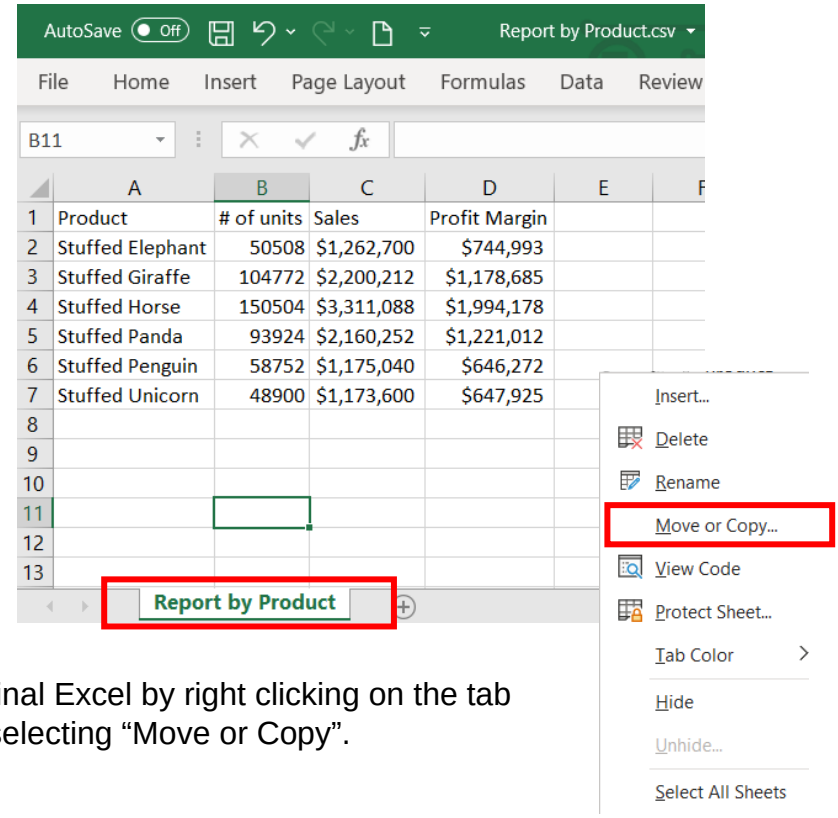
Open the original excel file

Select the file.

Select “Open”.

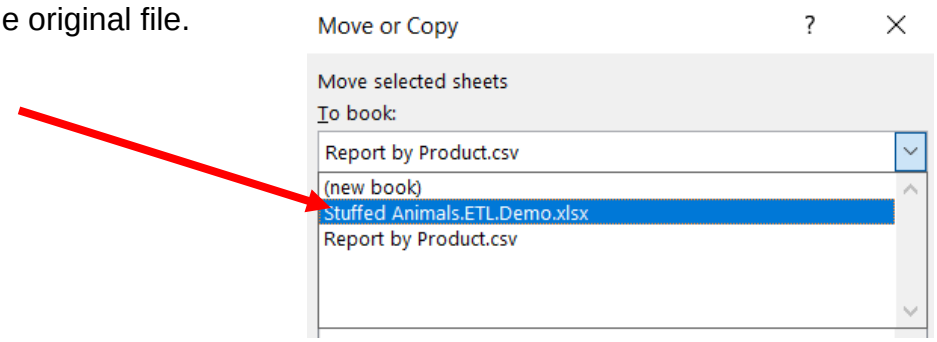


Navigate in file manager and double click on the “Report by Product.csv” file.



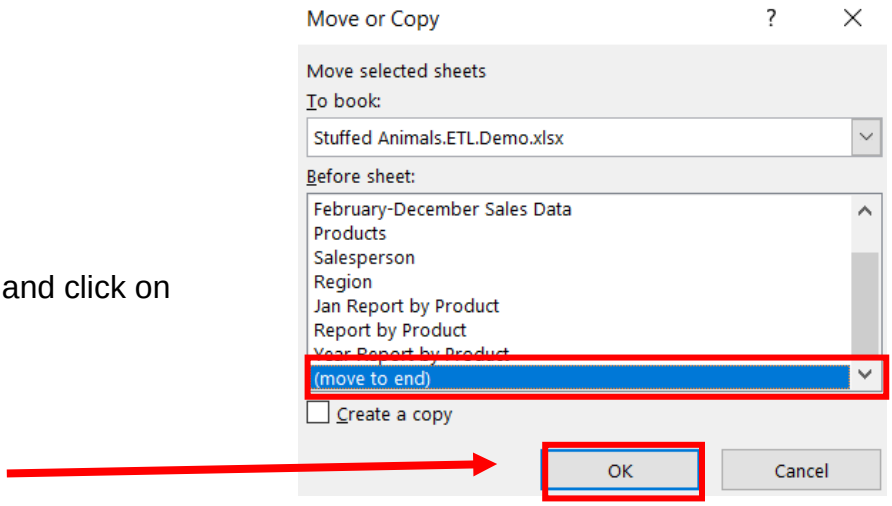
Copy this tab to the original Excel by right clicking on the tab Report by Product and selecting “Move or Copy”.

Select the name of the original file.



Scroll till the end and click on "(move to end)".

Then click "OK".



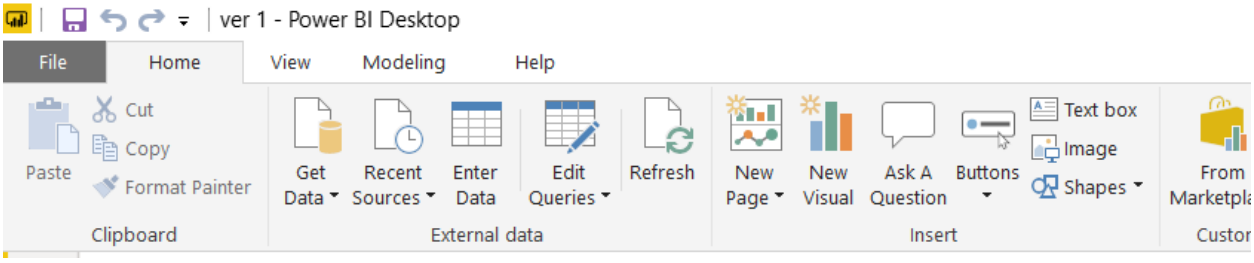
Rename the tab as "Annual Report by Product", format the sheet, save, and close the Excel file.

	A	B	C	D	E
1	Product	# of units	Sales	Profit Margin	
2	Stuffed Elephant	50,508	$1,262,700	$744,993	
3	Stuffed Giraffe	104,772	$2,200,212	$1,178,685	
4	Stuffed Horse	150,504	$3,311,088	$1,994,178	
5	Stuffed Panda	93,924	$2,160,252	$1,221,012	
6	Stuffed Penguin	58,752	$1,175,040	$646,272	
7	Stuffed Unicorn	48,900	$1,173,600	$647,925	
8	Total	507,360	$ 11,282,892	$ 6,433,065	
9					

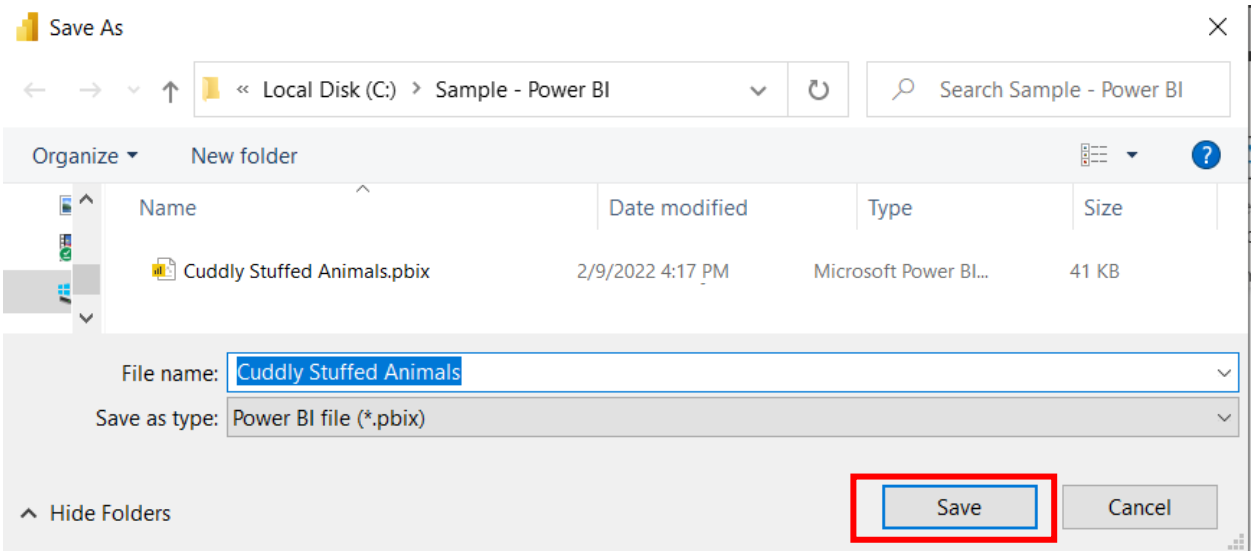
Annual Report by Product

Operation 21: Save the "Flow and Data"

Select "File".



Select the name of the file.



Select Save.

Close Power BI.