

Connect to my data

Excel file

### Get Data

Search

All

File

Database

Microsoft Fabric

Power Platform

Azure

All

Excel Workbook

Text/CSV

XML

JSON

Folder

PDF

Preview Sales Rep data in the Navigator

Notice the data has null values and no headers

### Navigator

Display Options		Sales Reps			
		Report generated in January 2024.			
		Column2	Column3	Column4	
MyFootprintSports.xlsx [3]		null	null	null	
	Date	null	null	null	
	Orders				
	Sales Reps	1/31/2023	2/28/2023	3/31/2023	
WUS-Timothy Adams		215	240	255	
EUS-Larry Barnes		321	342	321	
EUS-Sharon Richards		222	245	254	
SUS-Tina Peterson		313	331	291	
CUS-Randy Wilson		326	303	342	
WUS-Jean Thomas		377	289	321	

Check box next to Sales Rep and click Transform Data to open **Power Query Editor**

Now I am in position to clean and transform this data before bringing it into Power BI. My data is ready to be edited

Notice the first 2 rows have Null values. I will first remove the first 2 rows with null values

Queries [6]

Date  
Customers  
Products  
Sales Orders  
Sales Orders2019-2020  
**Sales Reps**

**= Table.TransformColumnTypes(#"Promoted Headers",{{"Report generated in January", type nullable}})**

ABC	Report generated in January 2024.	ABC	Column2	ABC	Column3	ABC	Column4
1	Number of sales per month per sales rep.		null		null		null
2			null		null		null
3	Sales Rep			1/31/2023		2/28/2023	
4	WUS-Timothy Adams				215		240
5	EUS-Larry Barnes				321		342
6	EUS-Sharon Richards				222		245
7	SUS-Tina Peterson				313		331
8	CUS-Randy Wilson				326		303
9	WUS-Jean Thomas				377		289

Query Settings

**PROPERTIES**  
Name: Sales Reps  
All Properties

**APPLIED STEPS**  
Source, Navigation, Promoted Headers, **Changed Type**, Removed Top Rows

## Cleaning my data

### 1. Remove Null Values

Select <b>Home</b> → <b>Reduce Rows</b> → <b>Remove Rows</b> → <b>Remove Top Rows</b> .  Enter 2 in the dialogue box	
Notice my change is listed in Applied steps	

--	--

= Table.TransformColumnTypes(#"Promoted Headers",{{"Report generated in January 2024.", type text}, {"Column2", type number}, {"Column3", type number}})

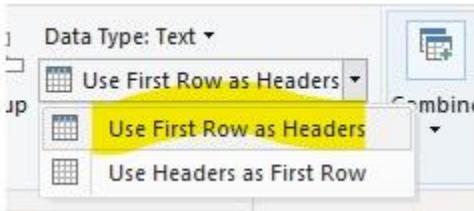
A	B	C	D
1	Report generated in January 2024.	ABC 123	Column2
2			null
3			null
4	Sales Rep		
5	WUS-Timothy Adams		
6	EUS-Larry Barnes		
7	EUS-Sharon Richards		
8	SUS-Tina Peterson		
9	CUS-Randy Wilson		
10	WUS-Jean Thomas		

**Remove Top Rows**

Specify how many rows to remove from the top.

Number of rows

## 2. Add Headers

<p>Select <b>Home</b>→<b>Use First Row as Headers</b>.</p>	
--	--

Results after selecting use the first row as headers. Notice the null values are gone and the columns now have headers.

A	B	C	D	E
1	Sales Rep	1/31/2023	2/28/2023	3/31/2023
2	WUS-Timothy Adams	215	240	253
3	EUS-Larry Barnes	321	342	321
4	EUS-Sharon Richards	222	245	252
5	SUS-Tina Peterson	313	331	291
6	CUS-Randy Wilson	326	303	342
7	WUS-Jean Thomas	377	289	329

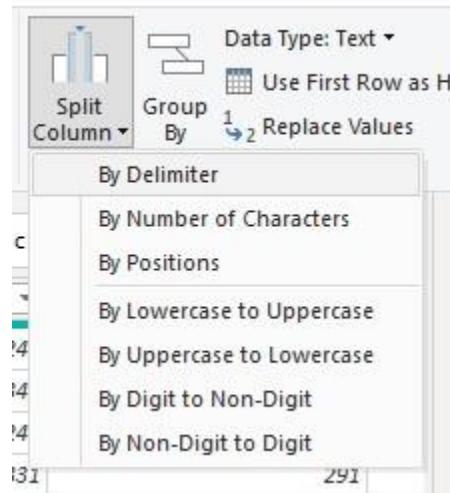
Notice Sales Rep has a Dash between the region and the name.

Lets split that out using the dash as the delimiter value

A	B	C	Sales Rep	D	E
			WUS-Timothy Adams		
			EUS-Larry Barnes		
			EUS-Sharon Richards		
			SUS-Tina Peterson		
			CUS-Randy Wilson		
			WUS-Jean Thomas		

### 3. Split the Rep name out using the delimiter

1. Select the Sales Rep Column
2. Select **Home→Split Column→By Delimiter.**



In the **Split Column by Delimiter** dialog box, in the **Select or enter delimiter** list box, verify that Power BI automatically entered **--Custom--** and the dash.

Click ok

## Split Column by Delimiter

Specify the delimiter used to split the text column.

Select or enter delimiter

--Custom--

-

Split at

- Left-most delimiter
- Right-most delimiter
- Each occurrence of the delimiter

► Advanced options

Quote Character

"

Split using special characters

Insert special character ▾

Rows after split completed

= Table.TransformColumnTypes(#"Split Column by Delimiter",{{"Sales Rep.1", type					
	A <sup>B</sup> <sub>C</sub> Sales Rep.1	A <sup>B</sup> <sub>C</sub> Sales Rep.2	ABC 123 1/31/2023	ABC 123 2/28/2023	ABC 123 3
1	WUS	Timothy Adams		215	240
2	EUS	Larry Barnes		321	342
3	EUS	Sharon Richards		222	245
4	SUS	Tina Peterson		313	331
5	CUS	Randy Wilson		326	303
6	WUS	Jean Thomas		377	289

## 4. Rename Columns

### Review Applied Steps

In the **Sales Rep.1** column, right-click **Sales Rep.1** and then

select **Rename**. Add Region

In the **Sales Rep.2** column,  
right-click **Sales Rep.1** and then  
select **Rename**. Add Sale Rep  
Name

#### APPLIED STEPS

- Source
- Navigation
- Promoted Headers
- Changed Type
- Removed Top Rows
- Promoted Headers1
- Split Column by Delimiter
- Renamed Columns**

Data After columns are renamed.

	Region	Sales Rep Name	1/31/2023	2/28/2023
1	WUS	Timothy Adams	215	240
2	EUS	Larry Barnes	321	342
3	EUS	Sharon Richards	222	245
4	SUS	Tina Peterson	313	331
5	CUS	Randy Wilson	326	303
6	WUS	Jean Thomas	377	289

## 5. Unpivot date columns to have a column for dates and a column for sales

Notice the number of sales is under the date column. I want to transform the data to have a column for the dates and a column for the number of sales. I can do that using the unpivot feature.

Unpivot the date columns.

- a. In the grid, select the **1/31/2023** date column.
- b. Scroll to the right until the last date column is displayed.
- c. While pressing **Shift**, select the **12/31/2023** date

- column.
- d. Right-click the **12/31/2023** column, and select **Unpivot Columns**.

The screenshot shows the Power BI Data Editor interface. A table with three columns is displayed: 'ABC 123 10/31/2023', 'ABC 123 11/30/2023', and 'ABC 123 12/31/2023'. The '12/31/2023' column is selected. A context menu is open on this column, listing various data transformation options. The 'Unpivot Columns' option is highlighted with a yellow box.

ABC 123 10/31/2023	ABC 123 11/30/2023	ABC 123 12/31/2023
222	241	219
343	367	333
230	278	260
189	377	381
348	364	378
355	376	384

Query Settings

PROPERTIES

- Copy
- Remove Columns
- Remove Other Columns
- Add Column From Examples...
- Remove Duplicates
- Remove Errors
- Replace Values...
- Fill
- Change Type
- Transform
- Merge Columns
- Sum
- Product
- Group By...
- Unpivot Columns**
- Unpivot Other Columns
- Unpivot Only Selected Columns
- Move

## Results of unpivot and applied steps

### APPLIED STEPS

Source	#
Navigation	#
Promoted Headers	#
Changed Type	#
Removed Top Rows	#
Promoted Headers1	#
Split Column by Delimiter	#
Renamed Columns	#
<b>Unpivoted Columns</b>	

A <sup>B</sup> C	Region	A <sup>B</sup> C	Sales Rep Name	A <sup>B</sup> C	Attribute	A <sup>B</sup> C 123	Value
4	WUS		Timothy Adams		4/30/2023		301
5	WUS		Timothy Adams		5/31/2023		224
6	WUS		Timothy Adams		6/30/2023		274
7	WUS		Timothy Adams		7/31/2023		239
8	WUS		Timothy Adams		8/31/2023		189
9	WUS		Timothy Adams		9/30/2023		222
10	WUS		Timothy Adams		10/31/2023		241
11	WUS		Timothy Adams		11/30/2023		219
12	WUS		Timothy Adams		12/31/2023		287
13	EUS		Larry Barnes		1/31/2023		321
14	EUS		Larry Barnes		2/28/2023		342
15	EUS		Larry Barnes		3/31/2023		321
16	EUS		Larry Barnes		4/30/2023		312
17	EUS		Larry Barnes		5/31/2023		321

## 6. Format my unpivoted columns: Date and Number of Sales

- Select the **Attribute** column, and verify it is the only column selected.
- Right click the columns. Select Rename the **Attribute** column as **Date**
- Right click the columns Rename the **Value** column as **Number of Sales**
- select the **Number of Sales** column.

Before **Number of Sales** Data Type Change

is",{{"Attribute", "Date"},	
A <sup>B</sup> C	Number of Sales
	215
	240
	253
	301
	224
	274
	239
	189

After **Number of Sales** Data Type Change

A <sup>B</sup> <sub>C</sub> Number of Sales
215
240
253
301
224
274
239
189
222
241

## 7. Reorder and Reformate Date Column:

drag the **Date** column to the left so that it is the first column in the table.

Select **Home→Data Type: Text→Date**

A <sup>B</sup> <sub>C</sub> Date	A <sup>B</sup> <sub>C</sub> Region	A <sup>B</sup> <sub>C</sub> Sales Rep Name	A <sup>B</sup> <sub>C</sub> Number of Sales
1/31/2023	WUS	Timothy Adams	215
2/28/2023	WUS	Timothy Adams	240
3/31/2023	WUS	Timothy Adams	253
4/30/2023	WUS	Timothy Adams	301
5/31/2023	WUS	Timothy Adams	224
6/30/2023	WUS	Timothy Adams	274
7/31/2023	WUS	Timothy Adams	239
8/31/2023	WUS	Timothy Adams	189

## 8. Review Transformation Steps

Confirm All Change Type steps did not make unwanted changes

Deleted changeType steps that  
change my Number of sales to  
Text

Before Correction

The screenshot shows the Power Query Editor interface. On the left, there is a preview pane displaying a list of numbers from 215 to 375 under the column header "ABC 123 Number of Sales". On the right, the "Query Settings" pane is open, showing the "PROPERTIES" section with the name "Sales Reps" and the "APPLIED STEPS" section. The "APPLIED STEPS" list includes several steps: Source, Navigation, Promoted Headers, Removed Top Rows, Promoted Headers1, Split Column by Delimiter, Renamed Columns, Unpivoted Columns, and Renamed Columns1. The step "Renamed Columns1" is highlighted with a green selection bar.

After Correction

	Date	A <sup>B</sup> C Region	A <sup>B</sup> C Sales Rep Name	1 <sup>2</sup> 3 Number of Sales
1	1/31/2023	WUS	Timothy Adams	215
2	2/28/2023	WUS	Timothy Adams	240
3	3/31/2023	WUS	Timothy Adams	253
4	4/30/2023	WUS	Timothy Adams	301
5	5/31/2023	WUS	Timothy Adams	224
6	6/30/2023	WUS	Timothy Adams	274
7	7/31/2023	WUS	Timothy Adams	239
8	8/31/2023	WUS	Timothy Adams	189
9	9/30/2023	WUS	Timothy Adams	222
10	10/31/2023	WUS	Timothy Adams	241
11	11/30/2023	WUS	Timothy Adams	219
12	12/31/2023	WUS	Timothy Adams	287
13	1/31/2023	EUS	Larry Barnes	321
14	2/28/2023	EUS	Larry Barnes	342
15	3/31/2023	EUS	Larry Barnes	321
16	4/30/2023	EUS	Larry Barnes	312
17	5/31/2023	EUS		224

9. Apply changes and save the report.

Now I have finished cleaning shaping, and transforming my data using Query Editor. Now I will save the change to my semantic model with the changes I have applied.

- a. Select **Home**→**Close & Apply**→**Close & Apply**.

The screenshot shows the Power BI desktop ribbon with the 'File' tab selected. The 'Close & Apply' button in the ribbon is highlighted with a yellow box. A separate 'Loading changes' dialog box is open, showing a 'Load' section with 'Sales Reps' and 'Loading data...'. Below the dialog is a note about saving changes.

Note: I was careful NOT to use File -> Save before Close & Apply because that would not apply my changes or transform my data

b. Once the changes have been applied, select **File→Save**.

Now I will save my file as a .pbix file

I can tell how the data is justified and the presentation of the data that my changes were applied

Saved as MyTransformedSportsdata.pbix

Table View

Clicked Sales Rep on the Data Pane

Date	Region	Sales Rep Name	Number of Sales
Tuesday, January 31, 2023	WUS	Timothy Adams	215
Tuesday, February 28, 2023	WUS	Timothy Adams	240
Friday, March 31, 2023	WUS	Timothy Adams	253
Sunday, April 30, 2023	WUS	Timothy Adams	301
Wednesday, May 31, 2023	WUS	Timothy Adams	224
Friday, June 30, 2023	WUS	Timothy Adams	274
Monday, July 31, 2023	WUS	Timothy Adams	239
Thursday, August 31, 2023	WUS	Timothy Adams	189
Saturday, September 30, 2023	WUS	Timothy Adams	222
Tuesday, October 31, 2023	WUS	Timothy Adams	241

Search

- >  Customers
- >  Date
- >  Products
- >  Sales Orders
- >  Sales Orders2019-2020
- >  Sales Reps