



BATCH :

B150

LESSON :

POWER BI

DATE :

23.05.2023

SUBJECT :

Power Query

ZOOM GİRİŞLERİNİZİ LÜTFEN **LMS** SİSTEMİ ÜZERİNDEN YAPINIZ



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Power BI



POWER BI – Power Query

Data Science Program

Session -2



Session - 2 Content



**Bugün ne
öğreneceğiz?**

Power BI

- ⦿ Power Query (Sorgu Düzenleyici)
- ⦿ ETL Process (Extract-Transform-Load)
- ⦿ Run Python Script
- ⦿ Data Model (Relationship)



Recap – Previous Lesson



Benefits of BI Tools

Intuitive Dashboards

Data-driven business

Governed data



Faster Analysis



Increased Competitive Advantage



Improved Customer Experience



Organizational efficiency

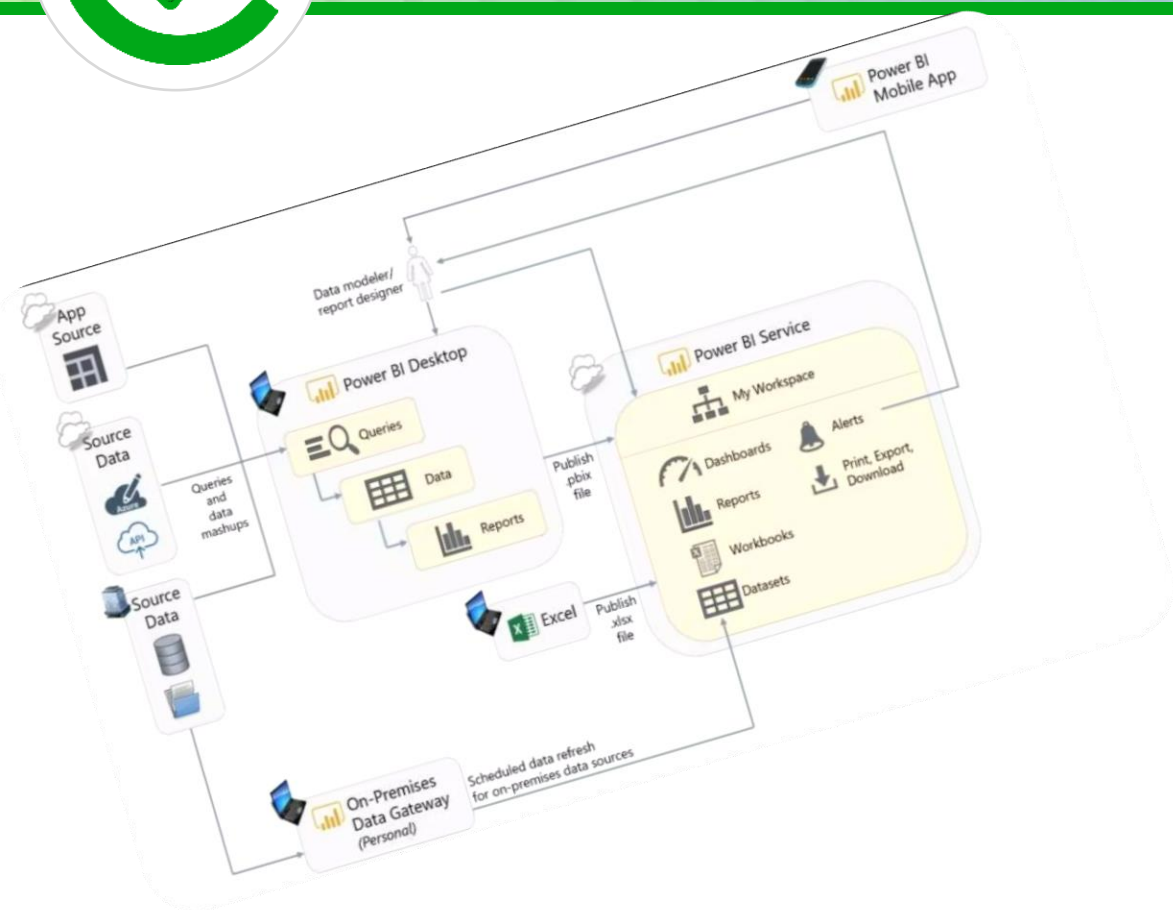


Features of Power BI





Recap – Previous Lesson





**Sizi bugünkü derse
hazırlayacak **pre-class**
materyalleri ile
antrenman yaptınız
mı?**

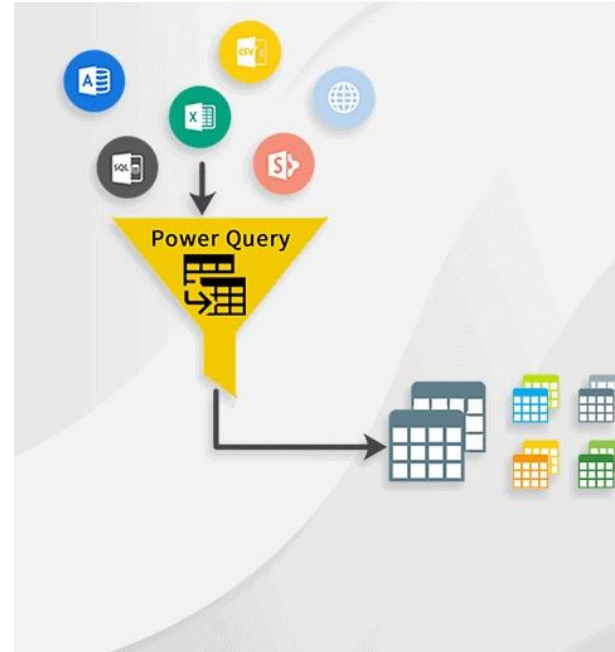


Power Query



- **Power Query;** bir veri dönüştürme ve veri hazırlama altyapısıdır.
- Birçok farklı kaynaktan veri alıp bu veriler üzerinde düzenleme işlemi gerçekleştirmenizi sağlayan BI aracıdır.
- Power Query kullanarak;
 1. Extract
 2. Transform
 3. Loadişlemlerini gerçekleştirebilirsiniz.

(ETL)



Power BI
**Clean, Transform
and Load Data**





Power Query M Formula Language



- M dili, Power Query veri dönüştürme formül dili.
- Power Query M, veri kaynaklarından veri alma, veri temizleme, dönüştürme ve birleştirme gibi işlemleri gerçekleştirmek için kullanılır.
- Power Query, Microsoft Power BI, Excel ve diğer veri analizi araçlarında bulunan bir bileşendir.



Power Query M Formula Language



Power Query Editor interface showing the Advanced Editor window.

Queries [4]

- Categories2
- Orders1
- Products4
- Customers3

Advanced Editor

Customers3

```
let
    Source = Excel.Workbook(File.Contents("C:\Users\Mustafa\Desktop\TechPro\Power BI\106 Power BI\Data and Dashboard\Superstore_Basic.xlsx"),
    Customers_Table = Source[Item="Customers", Kind="Table"][Data],
    #"Changed Type" = Table.TransformColumnTypes(Customers_Table, {"Customer ID", type text}, {"Customer Name", type text}, {"Segment", type text}, {"#"Split Column by Delimiter" = Table.SplitColumn(#"Changed Type", "Customer Name", Splitter.SplitTextByDelimiter(" ", QuoteStyle.Csv), {"#"Changed Type1" = Table.TransformColumnTypes(#"Split Column by Delimiter", {"Customer Name.1", type text}, {"Customer Name.2", type text})}
in
    #"Changed Type1"
```

✓ No syntax errors have been detected.

Query Settings

PROPERTIES

Name: Customers3

APPLIED STEPS

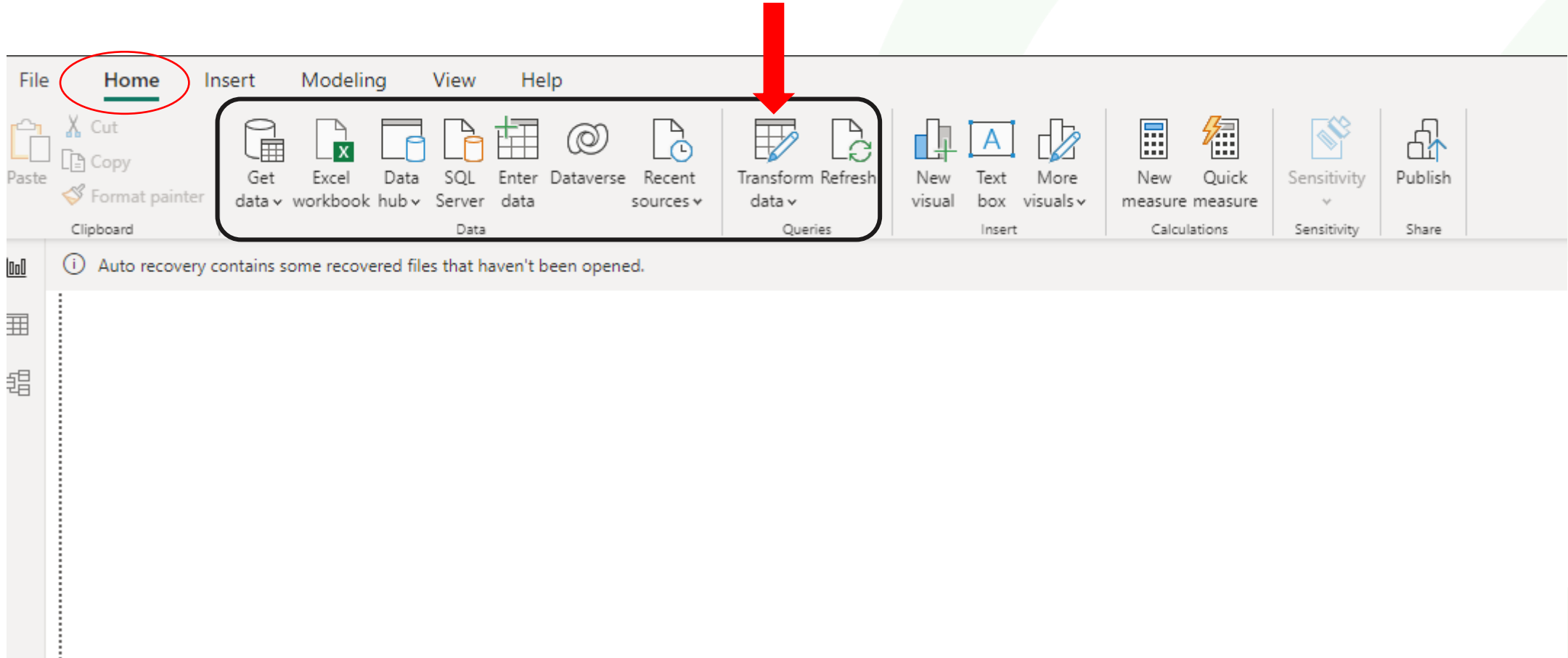
- Source
- Navigation
- Changed Type
- Split Column by Delimiter
- Changed Type1

4 COLUMNS, 161 ROWS Column profiling based on top 1000 rows

PREVIEW DOWNLOADED ON 30 NISAN 2023 PAZAR



Power Query (Power BI to Power Query)



Untitled - Power BI Desktop

File **Home** Insert Modeling View Help

Paste Cut Copy Format painter Clipboard

Get data Excel Power BI datasets SQL Server Enter data Dataverse Recent sources

Transform data Refresh Queries

New visual Text box More visuals Insert

New measure Quick measure Calculations

Sensitivity (preview) Sensitivity

Publish Share

Common data sources

- Excel
- Power BI datasets
- Power BI dataflows
- Dataverse
- SQL Server
- Analysis Services
- Text/CSV
- Web
- OData feed
- Blank query
- Power BI Template Apps
- More...

Add data to your report

Once loaded, your data will appear in the **Fields** pane.

data from Excel Import data from SQL Server Paste data into a blank table Try a sample dataset

[Get data from another source →](#)

Navigator

dean_Territory234

Display Options

- Data Sheet.xlsx [4]
 - 123Employee
 - date-23
 - date-sheet-213
 - dean_Territory234
- Suggested Tables [1]
 - date-23 (2)

Territroy ID	Region Name	Country	Group
1	North	United States	North America
2	NorthEast	United States	North America
3	Northwest	United States	North America
4	Southeast	United States	North America
5	Central	United States	North America
6	Australia	Australia	Pacific
7	Canada	Canada	North America
8	Italy	Italy	Eurpoe
9	Germany	Germany	Europe
10	France	France	Europe

Load Transform Data Cancel

FileHomeTransformAdd ColumnViewToolsHelp

Close & Apply

New Source

Recent Sources

Enter Data

Data source settings

Manage Parameters

Refresh Preview

Properties

Advanced Editor

Manage

Choose Columns

Remove Columns

Keep Rows

Remove Rows

Sort

Split Column

Group By

Use First Row as Headers

Replace Values

Merge Queries

Append Queries

Combine Files

Combine

Text Analytics

Vision

Azure Machine Learning

AI Insights

Ribbon-Şerit

Queries [6]

City1

Add_Orders

Category_Target

Customers

Orders

Products

Query list- Sorgular bölümü

Table.TransformColumnTypes(Products_Sheet,{{"Column1", type text}, {"Column2", type text}, {"Column3", type text}, {"Column4", type text}})

Formula bar

	Column1	Column2	Column3	Column4
1	Product ID	Category	Sub-Category	Product Name
2	FUR-CH-10000513	Furniture	Chairs	High-Back Leather Manager's Chair
3	FUR-FU-10003708	Furniture	Furnishings	Tenex Traditional Chairmats for Medium Pile Carpet, Standard Lip, 36"...
4	OFF-ST-10003442	Office Supplies	Storage	Eldon Portable Mobile Manager
5	TEC-AC-10001767	Technology	Accessories	SanDisk Ultra 64 GB MicroSDHC Class 10 Memory Card
6	OFF-BI-10002609	Office Supplies	Binders	Avery Hidden Tab Dividers for Binding Systems
7	TEC-AC-10000290	Technology	Accessories	Sabrent 4-Port USB 2.0 Hub
8	OFF-ST-10002790	Office Supplies	Storage	Safco Industrial Shelving
9	OFF-BI-10003460	Office Supplies	Binders	Acco 3-Hole Punch
10	OFF-AP-10002203	Office Supplies	Appliances	Eureka Disposable Bags for Sanitaire Vibra Groomer I Upright Vac
11	OFF-BI-10001922	Office Supplies	Binders	Storex Dura Pro Binders
12	OFF-PA-10003724	Office Supplies	Paper	Wirebound Message Book, 4 per Page
13	TEC-AC-10000303	Technology	Accessories	Logitech M510 Wireless Mouse
14	OFF-BI-10001670	Office Supplies	Binders	Vinyl Sectional Post Binders
15	FUR-CH-10003379	Furniture	Chairs	Global Commerce Series High-Back Swivel/Tilt Chairs
16	TEC-PH-10002262	Technology	Phones	LG Electronics Tone+ HBS-730 Bluetooth Headset
17	TEC-PH-10002597	Technology	Phones	Xblue XB-1670-86 X16 Small Office Telephone - Titanium
18	FUR-FU-10003039	Furniture	Furnishings	Howard Miller 11-1/2" Diameter Grantwood Wall Clock
19	OFF-LA-10001297	Office Supplies	Labels	Avery 473
20	TEC-PH-10000347	Technology	Phones	Cush Cases Heavy Duty Rugged Cover Case for Samsung Galaxy S5 - Pu...
21	OFF-ST-10000025	Office Supplies	Storage	Fellowes Stor/Drawer Steel Plus Storage Drawers
22	FUR-FU-10003878	Furniture	Furnishings	Linden 10" Round Wall Clock, Black
23	OFF-AP-10004487	Office Supplies	Appliances	Kensington 4 Outlet MasterPiece Compact Power Control Center
24	OFF-EN-10001335	Office Supplies	Envelopes	White Business Envelopes with Contemporary Seam, Recycled White B...
25	OFF-LA-10001569	Office Supplies	Labels	Avery 499
26	FUR-FU-10000293	Furniture	Furnishings	Eldon Antistatic Chair Mats for Low to Medium Pile Carpets
27	OFF-PA-10004735	Office Supplies	Paper	Xerox 1905
28	OFF-AR-10004817	Office Supplies	Art	Colorific Watercolor Pencils
29	FUR-CH-10002961	Furniture	Chairs	Leather Task Chair, Black
30	FUR-TA-10002958	Furniture	Tables	Bevis Oval Conference Table, Walnut
31	OFF-PA-10001994	Office Supplies	Paper	Ink Jet Note and Greeting Cards, 8-1/2" x 5-1/2" Card Size
32	FUR-FU-10001037	Furniture	Furnishings	DAX Charcoal/Nickel-Tone Document Frame, 5 x 7
33	OFF-FA-10002975	Office Supplies	Fasteners	Staples

Data preview- Geçerli görünüm

Query settings Sorgu ayarları

Query Settings

PROPERTIES

Name

Products

All Properties

APPLIED STEPS

Source

Navigation

Changed Type

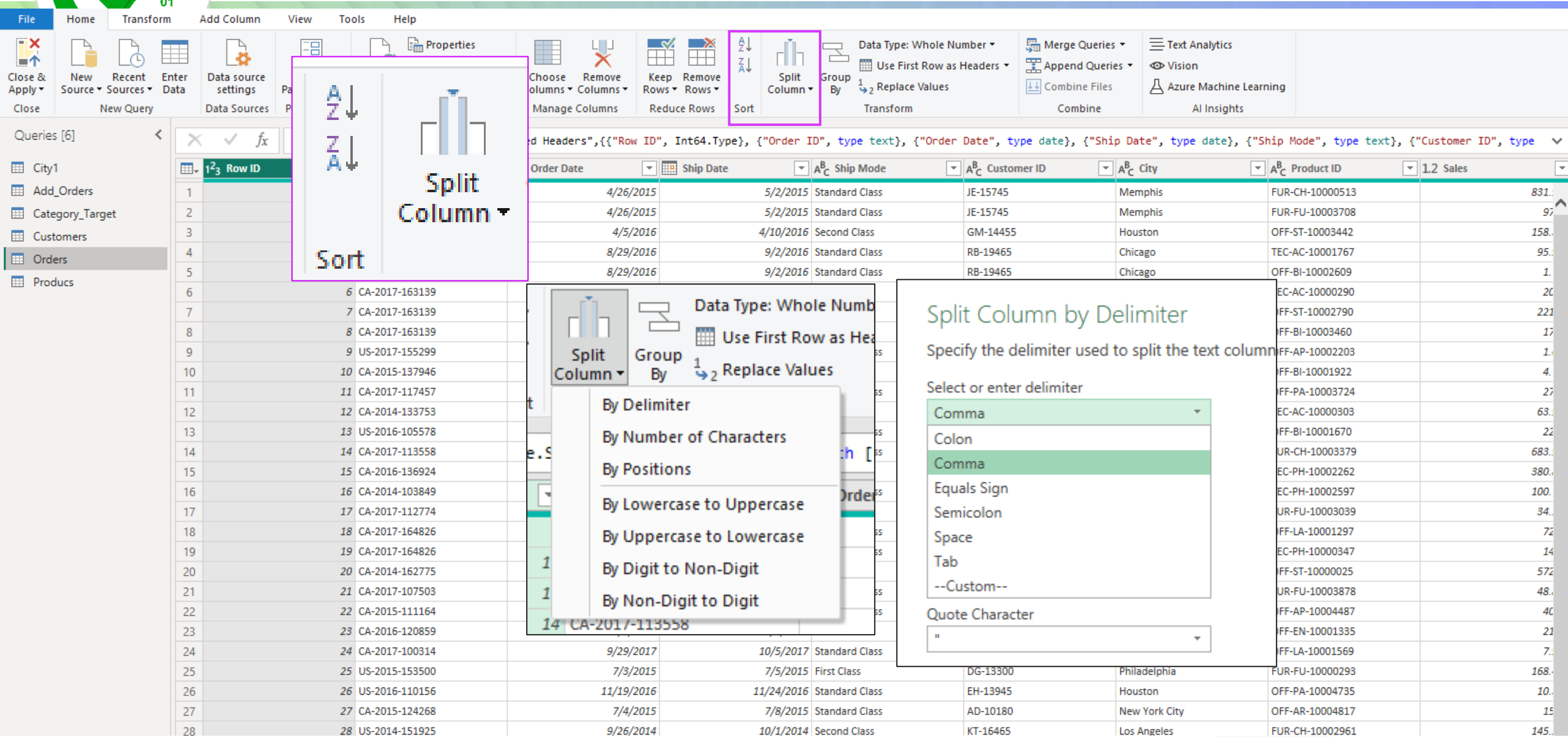
4 COLUMNS, 189 ROWS

Column profiling based on top 1000 rows

Durum cubuğu

PREVIEW DOWNLOADED AT 11:45 AM

Power Query (Split Column)



The image shows the Power Query interface with the 'Transform' tab selected. The 'Split Column' button is highlighted in the ribbon. A callout box shows the 'Split Column' menu options: 'By Delimiter', 'By Number of Characters', 'By Positions', 'By Lowercase to Uppercase', 'By Uppercase to Lowercase', 'By Digit to Non-Digit', and 'By Non-Digit to Digit'. Another callout box shows the 'Split Column by Delimiter' dialog with 'Comma' selected as the delimiter and 'Quote Character' set to double quotes. The background shows a data table with columns: Order Date, Ship Date, Ship Mode, Customer ID, City, Product ID, and Sales.

Order Date	Ship Date	Ship Mode	Customer ID	City	Product ID	Sales
4/26/2015	5/2/2015	Standard Class	JE-15745	Memphis	FUR-CH-10000513	831.0
4/26/2015	5/2/2015	Standard Class	JE-15745	Memphis	FUR-FU-10003708	97.0
4/5/2016	4/10/2016	Second Class	GM-14455	Houston	OFF-ST-10003442	158.0
8/29/2016	9/2/2016	Standard Class	RB-19465	Chicago	TEC-AC-10001767	95.0
8/29/2016	9/2/2016	Standard Class	RB-19465	Chicago	OFF-BI-10002609	1.0
					EC-AC-10000290	20.0
					FF-ST-10002790	221.0
					FF-BI-10003460	17.0
					FF-AP-10002203	1.0
					FF-BI-10001922	4.0
					FF-PA-10003724	27.0
					EC-AC-10000303	63.0
					FF-BI-10001670	22.0
					UR-CH-10003379	683.0
					EC-PH-10002262	380.0
					EC-PH-10002597	100.0
					UR-FU-10003039	34.0
					FF-LA-10001297	72.0
					EC-PH-10000347	14.0
					FF-ST-10000025	572.0
					UR-FU-10003878	48.0
					FF-AP-10004487	40.0
					FF-EN-10001335	21.0
					FF-LA-10001569	7.0
					FUR-FU-10000293	168.0
					OFF-PA-10004735	10.0
					OFF-AR-10004817	15.0
					FUR-CH-10002961	145.0



Power Query (Change table Name)



Untitled - Power Query Editor

File Home Transform Add Column View Tools Help

Close & Apply New Source Recent Sources Enter Data Data source settings Manage Parameters Refresh Preview Properties Advanced Editor Manage Choose Columns Remove Columns Keep Rows Remove Rows Sort Split Column Group By Data Type: Text Use First Row as Headers Replace Values Merge Queries Append Queries Combine Files Text Analytics Vision Azure Machine Learning

Close New Query Data Sources Parameters Query Manage Columns Reduce Rows Sort Transform Combine AI Insights

Queries [4] 1

	123Employee	date-23	date-sheet-213	dean_Territory234
1				
2	Rachel			
3	Chandler			
4	Monica			
5	Pheobe			
6	Joey			
7				
8	Ross			
9	Ben			
10	Janice			
11	Mike			
12	Gunther			
13				
14	Rose			
15	Alice			
16	Beneet			
17	Luna			

Query Settings

PROPERTIES 2

Name

123Employee

[All Properties](#)

APPLIED STEPS

- Source
- Navigation
- Promoted Headers

Changed Type



Power Query (Delete-Keep)



Power Query interface showing the Transform tab and a data table.

Transform Tab Options:

- Close & Apply
- New Source
- Recent Sources
- Enter Data
- Data source settings
- Manage Parameters
- Refresh Preview
- Properties
- Advanced Editor
- Manage
- Query
- Choose Columns
- Remove Columns
- Manage Columns
- Keep Rows
- Remove Rows
- Reduce Rows
- Sort
- Split Column
- Group By
- Data Type: Whole Number
- Use First Row as Headers
- Replace Values
- Transform
- Merge Queries
- Append Queries
- Combine Files
- Combine
- Text Analytics
- Vision
- Azure Machine Learning
- AI Insights

Queries [6]:

- City1
- Add_Orders
- Category_Target
- Customers
- Orders
- Products

Data Table:

Row ID	Product ID	1.2 Sales
1	FUR-CH-10000513	831.0
2	FUR-FU-10003708	97.0
3	OFF-ST-10003442	158.0
4	TEC-AC-10001767	95.0
5	OFF-BI-10002609	1.0
6	TEC-AC-10000290	20.0
7	OFF-ST-10002790	221.0
8	OFF-BI-10003460	17.0
9	OFF-AP-10002203	1.0
10	OFF-BI-10001922	4.0
11	OFF-PA-10003724	27.0
12	TEC-AC-10000303	63.0
13	OFF-BI-10001670	22.0
14	FUR-CH-10003379	683.0
15	TEC-PH-10002262	380.0
16	TEC-PH-10002597	100.0
17	FUR-FU-10003039	34.0
18	OFF-LA-10001297	72.0
19	TEC-PH-10000347	14.0
20	OFF-ST-10000025	572.0
21	FUR-FU-10003878	48.0
22	OFF-AP-10004487	40.0
23	OFF-EN-10001335	21.0
24	OFF-LA-10001569	7.0
25	FUR-FU-10000293	168.0
26	OFF-PA-10004735	10.0
27	OFF-AR-10004817	15.0
28	FUR-CH-10002961	145.0

Power Query (Transform / Unpivot Column)

Power Query (Transform / Unpivot Column) interface showing the Transform tab and the Unpivot Columns button highlighted.

The interface includes the following components:

- File**, **Home**, **Transform**, **Add Column**, **View**, **Tools**, **Help**
- Group By**, **Use First Row as Headers**, **Count Rows**
- Table**
- Data Type: Whole Number**, **Replace Values**, **Unpivot Columns**, **Fill**, **Move**, **Pivot Column**, **Convert to List**, **Any Column**
- Split Column**, **Format**, **Merge Columns**, **Extract**, **Parse**, **Text Column**
- Statistics**, **Standard**, **Scientific**, **Trigonometry**, **Rounding**, **Information**, **Number Column**
- Date**, **Time**, **Duration**, **Date & Time Column**
- R**, **Py**, **Run R script**, **Run Python script**, **Scripts**

The **Queries [6]** list on the left includes:

- City1
- Add_Orders
- Category_Target
- Customers
- Orders**
- Products

The **Formula Bar** shows the following M code:

```
= Table.TransformColumnTypes(#"Promoted Headers".{{"Row ID", Int64.Type}, {"Order ID", type text}, {"Order Date", type date}, {"Ship Date", type date}, {"Ship Mode", type text}, {"Customer ID", type text}}, {"Ship Mode", type text}, {"Customer ID", type text}, {"City", type text}, {"Product ID", type text}, {"Sales", type number})
```

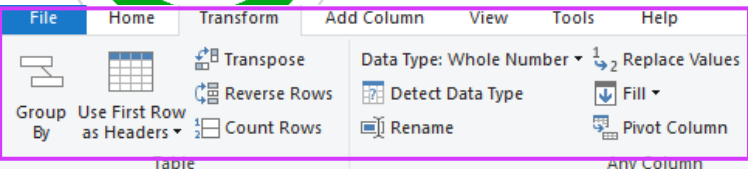
The **Unpivot Columns** button is highlighted in red. The **Unpivot Columns** dialog box is open, showing the **Unpivot Columns** button and the **Convert to List** button.

The **Table** view displays the following data:

Row ID	Order ID	Order Date	Ship Date	Ship Mode	Customer ID	City	Product ID	Sales
13	US-2016-105578	5/30/2016	6/4/2016	Standard Class	MY-17380	Parker	OFF-BI-10001670	22
14	CA-2017-113558	10/21/2017	10/26/2017	Standard Class	PH-18790	Lakeland	FUR-CH-10003379	683
15	CA-2016-136924	7/14/2016	7/17/2016	First Class	ES-14080	Tucson	TEC-PH-10002262	380
16	CA-2014-103849	5/11/2014	5/16/2014	Standard Class	PG-18895	Fort Worth	TEC-PH-10002597	100
17	CA-2017-112774	9/11/2017	9/12/2017	First Class	RC-19960	Jacksonville	FUR-FU-10003039	34
18	CA-2017-164826	12/28/2017	1/4/2018	Standard Class	JF-15415	New York City	OFF-LA-10001297	72
19	CA-2017-164826	12/28/2017	1/4/2018	Standard Class	JF-15415	New York City	TEC-PH-10000347	14
20	CA-2014-162775	1/13/2014	1/15/2014	Second Class	CS-12250	Bossier City	OFF-ST-10000025	572
21	CA-2017-107503	1/1/2017	1/6/2017	Standard Class	GA-14725	Lorain	FUR-FU-10003878	48
22	CA-2015-111164	4/11/2015	4/15/2015	Standard Class	SE-20110	New York City	OFF-AP-10004487	40
23	CA-2016-120859	9/1/2016	9/4/2016	First Class	CV-12805	San Francisco	OFF-EN-10001335	21
24	CA-2017-100314	9/29/2017	10/5/2017	Standard Class	AS-10630	Pasadena	OFF-LA-10001569	7
25	US-2015-153500	7/3/2015	7/5/2015	First Class	DG-13300	Philadelphia	FUR-FU-10000293	168
26	US-2016-110156	11/19/2016	11/24/2016	Standard Class	EH-13945	Houston	OFF-PA-10004735	10
27	CA-2015-124268	7/4/2015	7/8/2015	Standard Class	AD-10180	New York City	OFF-AR-10004817	15



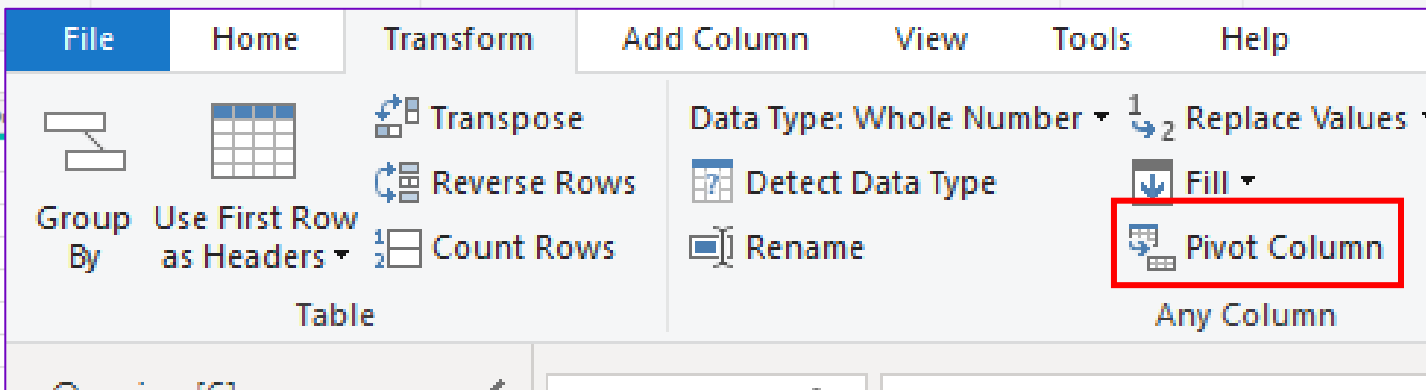
Power Query (Transform / Pivot Column)



Queries [6]

- City1
- Add_Orders
- Category_Target
- Customers
- Orders
- Products

Row ID	Order ID	Order Date	Product Name	Customer ID	City
1	US-2015-134026	6/8/2017	Standard Class	DI-13600	Pasadena
2	US-2015-134026	6/12/2017	Standard Class	DI-13600	Pasadena
3	CA-2016-159695	6/8/2017	Standard Class	DI-13600	Pasadena
4	CA-2016-158568	6/12/2017	Standard Class	DI-13600	Pasadena
5	CA-2016-158568	6/8/2017	Standard Class	DI-13600	Pasadena
6	CA-2017-163139	6/12/2017	Standard Class	DI-13600	Pasadena
7	CA-2017-163139	6/8/2017	Standard Class	DI-13600	Pasadena
8	CA-2017-163139	6/12/2017	Standard Class	DI-13600	Pasadena
9	US-2017-155299	6/8/2017	Standard Class	DI-13600	Pasadena
10	CA-2015-137946	6/12/2017	Standard Class	DI-13600	Pasadena
11	CA-2017-117457	6/8/2017	Standard Class	DI-13600	Pasadena
12	CA-2014-133753	6/12/2017	Standard Class	DI-13600	Pasadena
13	US-2016-105578	6/8/2017	Standard Class	DI-13600	Pasadena
14	CA-2017-113558	6/12/2017	Standard Class	DI-13600	Pasadena
15	CA-2016-136924	6/8/2017	Standard Class	DI-13600	Pasadena
16	CA-2014-103849	6/12/2017	Standard Class	DI-13600	Pasadena
17	CA-2017-112774	6/8/2017	Standard Class	DI-13600	Pasadena
18	CA-2017-164826	6/12/2017	Standard Class	DI-13600	Pasadena
19	CA-2017-164826	6/8/2017	Standard Class	DI-13600	Pasadena
20	CA-2014-162775	6/12/2017	Standard Class	DI-13600	Pasadena
21	CA-2017-107503	6/8/2017	Standard Class	DI-13600	Pasadena
22	CA-2015-111164	6/12/2017	Standard Class	DI-13600	Pasadena
23	CA-2016-120859	6/8/2017	Standard Class	DI-13600	Pasadena
24	CA-2017-100314	6/12/2017	Standard Class	DI-13600	Pasadena
25	US-2015-153500	6/8/2017	Standard Class	DI-13600	Pasadena
26	US-2016-110156	6/12/2017	Standard Class	DI-13600	Pasadena
27	CA-2015-124268	6/8/2017	Standard Class	DI-13600	Pasadena



Pivot Column

Use the names in column "Tarih" to create new columns.

Values Column ⓘ

Yakit

Advanced options

[Learn more about Pivot Column](#)

OK Cancel



Power Query (Transform / Format)

Power Query ribbon: File, Home, Transform, Add Column, View, Tools, Help

Transform ribbon options:

- Transpose, Reverse Rows, Count Rows
- Data Type: Whole Number, Replace Values, Detect Data Type, Rename
- Unpivot Columns, Move, Convert to List
- Split Column, Format
- Merge Columns, Extract, Parse
- Statistics, Standard, Scientific, Trigonometry, Rounding, Information
- Date, Time, Duration
- Run R script, Run Python script

Queries [6]: City1, Add_Orders, Category_Target, Customers, Orders, Products

Table: Table.TransformColumnTypes("#Promo", {"Promo", type text})

Row ID	Order ID	City	Product ID	Sales	
1	US-2015-134026	Memphis	FUR-CH-10000513	831.1	
2	US-2015-134026	Memphis	FUR-FU-10003708	97.1	
3	CA-2016-159695	Houston	OFF-ST-10003442	158.1	
4	CA-2016-158568	Chicago	TEC-AC-10001767	95.1	
5	CA-2016-158568	Chicago	OFF-BI-10002609	1.1	
6	CA-2017-163139	New York City	TEC-AC-10000290	20.1	
7	CA-2017-163139			221.1	
8	CA-2017-163139			17.1	
9	US-2015-155299			1.1	
10	CA-2015-137946			4.1	
11	CA-2017-117457			27.1	
12	CA-2014-133753	6/9/2014	6/13/2014	Second Class	CW-11905
13	US-2016-105578	5/30/2016	6/4/2016	Standard Class	MY-17380
14	CA-2017-113558	10/21/2017	10/26/2017	Standard Class	PH-18790
15	CA-2016-136924	7/14/2016	7/17/2016	First Class	ES-14080
16	CA-2014-103849	5/11/2014	5/16/2014	Standard Class	PG-18895
17	CA-2017-112774	9/11/2017	9/12/2017	First Class	RC-19960
18	CA-2017-164826	12/28/2017	1/4/2018	Standard Class	JF-15415
19	CA-2017-164826	12/28/2017	1/4/2018	Standard Class	JF-15415
20	CA-2014-162775	1/13/2014	1/15/2014	Second Class	CS-12250
21	CA-2017-107503	1/1/2017	1/6/2017	Standard Class	GA-14725
22	CA-2015-111164	4/11/2015	4/15/2015	Standard Class	SE-20110
23	CA-2016-120859	9/1/2016	9/4/2016	First Class	CV-12805
24	CA-2017-100314	9/29/2017	10/5/2017	Standard Class	AS-10630
25	US-2015-153500	7/3/2015	7/5/2015	First Class	DG-13300
26	US-2016-110156	11/19/2016	11/24/2016	Standard Class	EH-13945
27	CA-2015-124268	7/4/2015	7/8/2015	Standard Class	AD-10180

Format dropdown menu options:

- lowercase
- UPPERCASE
- Capitalize Each Word
- Trim
- Clean
- Add Prefix
- Add Suffix
- United States
- United States
- United States



Power Query (Transform / Extract)



Power Query (Transform / Extract) interface showing the Transform tab and a data table.

Transform Tab Options:

- Group By
- Use First Row as Headers
- Count Rows
- Table
- Transpose
- Reverse Rows
- Unpivot Columns
- Move
- Convert to List
- Split Column
- Format
- Merge Columns
- ABC 123 Extract
- abc Parse
- Statistics
- Standard
- Scientific
- Trigonometry
- Rounding
- Information
- Date
- Time
- Duration
- Run R script
- Run Python script

Queries [6]:

- City1
- Add_Orders
- Category_Target
- Customers
- Orders
- Products

Data Table:

Row ID	Order ID	Ship Mode	Customer ID	City	Product ID	Sales
1	US-2015-134026	Standard Class	AD-10180	New York City	OFF-AR-10004817	158.0
2	US-2015-134026	Standard Class	AD-10180	New York City	OFF-AR-10004817	158.0
3	CA-2016-159695	Standard Class	AD-10180	New York City	OFF-AR-10004817	158.0
4	CA-2016-158568	Standard Class	AD-10180	New York City	OFF-AR-10004817	158.0
5	CA-2016-158568	Standard Class	AD-10180	New York City	OFF-AR-10004817	158.0
6	CA-2017-163139	Standard Class	AD-10180	New York City	OFF-AR-10004817	158.0
7	CA-2017-163139	Standard Class	AD-10180	New York City	OFF-AR-10004817	158.0
8	CA-2017-163139	Standard Class	AD-10180	New York City	OFF-AR-10004817	158.0
9	US-2017-155299	Standard Class	AD-10180	New York City	OFF-AR-10004817	158.0
10	CA-2015-137946	Standard Class	AD-10180	New York City	OFF-AR-10004817	158.0
11	CA-2017-117457	Standard Class	AD-10180	New York City	OFF-AR-10004817	158.0
12	CA-2014-133753	Standard Class	AD-10180	New York City	OFF-AR-10004817	158.0
13	US-2016-105578	Standard Class	AD-10180	New York City	OFF-AR-10004817	158.0
14	CA-2017-113558	Standard Class	AD-10180	New York City	OFF-AR-10004817	158.0
15	CA-2016-136924	Standard Class	AD-10180	New York City	OFF-AR-10004817	158.0
16	CA-2014-103849	Standard Class	AD-10180	New York City	OFF-AR-10004817	158.0
17	CA-2017-112774	Standard Class	AD-10180	New York City	OFF-AR-10004817	158.0
18	CA-2017-164826	Standard Class	AD-10180	New York City	OFF-AR-10004817	158.0
19	CA-2017-164826	Standard Class	AD-10180	New York City	OFF-AR-10004817	158.0
20	CA-2014-162775	Standard Class	AD-10180	New York City	OFF-AR-10004817	158.0
21	CA-2017-107503	Standard Class	AD-10180	New York City	OFF-AR-10004817	158.0
22	CA-2015-111164	Standard Class	AD-10180	New York City	OFF-AR-10004817	158.0
23	CA-2016-120859	Standard Class	AD-10180	New York City	OFF-AR-10004817	158.0
24	CA-2017-100314	Standard Class	AD-10180	New York City	OFF-AR-10004817	158.0
25	US-2015-153500	Standard Class	AD-10180	New York City	OFF-AR-10004817	158.0
26	US-2016-110156	Standard Class	AD-10180	New York City	OFF-AR-10004817	158.0
27	CA-2015-124268	Standard Class	AD-10180	New York City	OFF-AR-10004817	158.0

Transformations:

- Merge Columns
- ABC 123 Extract
- abc Parse
- Length
- First Characters
- Last Characters
- Range
- Text Before Delimiter
- Text After Delimiter
- Text Between Delimiters

Power Query (Transform / Statistics-Standard Calculated)

Power Query interface showing the Transform tab and the Statistics Standard Calculated menu.

The interface includes the following components:

- File** | **Home** | **Transform** | **Add Column** | **View** | **Tools** | **Help**
- Queries [6]**: City1, Add_Orders, Category_Target, Customers, **Orders**, Products
- Transform Tab**:
 - Data Type**: Whole Number, Replace Values, Unpivot Columns, Split Column, Format
 - Reverse Rows**: Reverse Rows, Count Rows, Pivot Column, Move, Convert to List
 - Statistics**: Sum, Minimum, Maximum, Median, Average, Standard Deviation, Count Values, Count Distinct Values
 - Standard**: Add, Multiply, Subtract, Divide, Integer-Divide, Modulo, Percentage, Percent Of
 - Scientific**: Standard Scientific, Scientific
 - Information**: Information
 - Date & Time**: Date, Time, Duration
 - Scripts**: Run R script, Run Python script
- Table**:

Customer ID	City	Product	Standard Class
CC-12670	New York City	TEC-AC-10000290	20
CC-12670	New York City	OFF-ST-10002790	221
CC-12670	New York City	OFF-BI-10003460	17
DI-13600	Pasadena	OFF-AP-10002203	1
DB-13615	Los Angeles	OFF-BI-10001922	4
KH-16510	San Francisco	OFF-PA-10003724	27
CW-11905	Huntsville	TEC-AC-10000303	63
MY-17380	Parker	OFF-BI-10001670	22
PH-18790	Lakeland	FUR-CH-10003379	683
ES-14080	Tucson	TEC-PH-10002262	380
PG-18895	Fort Worth	TEC-PH-10002597	100
RC-19960	Jacksonville	FUR-FU-10003039	34
JF-15415	New York City	OFF-LA-10001297	72
JF-15415	New York City	TEC-PH-10000347	14
CS-12250	Bossier City	OFF-ST-10000025	572
GA-14725	Lorain	FUR-FU-10003878	48
SE-20110	New York City	OFF-AP-10004487	40
CV-12805	San Francisco	OFF-EN-10001335	21
AS-10630	Pasadena	OFF-LA-10001569	7
DG-13300	Philadelphia	FUR-FU-10000293	168
EH-13945	Houston	OFF-PA-10004735	10
AD-10180	New York City	OFF-AR-10004817	15



Power Query (DATE)



Mini Dashboard - Power Query Editor

Dosya Home Transform Add Column View Tools Help

Column From Examples Custom Column Invoke Custom Function Conditional Column Index Column Duplicate Column Merge Columns Extract Parse Format From Text Statistics Standard Scientific Trigonometry Rounding Information Date Time Duration Text Analytics Vision Azure Machine Learning AI Insights

Queries [1] × ✓ fx = Table.ReorderColumns(#"Changed Type",{ "TARİH", ... })

	TARİH	ÜRÜN ADI		
1	23.05.2020	CD-ROM		
2	24.09.2020	CD-ROM		
3	19.05.2020	CD-ROM	STAR	
4	23.06.2020	CD-ROM	CREATIVE	
5	24.05.2020	CD-ROM	STAR	
6	14.06.2020	CD-ROM	CREATIVE	
7	11.07.2020	CD-ROM	STAR	
8	20.08.2020	CD-ROM	CREATIVE	
9	22.08.2020	CD-ROM	CREATIVE	
10	4.09.2020	CD-ROM	STAR	ANTALYA
11	14.09.2020	CD-ROM	CREATIVE	ANTALYA
12	21.10.2020	CD-ROM	STAR	ANTALYA
13	1.07.2020	CD-ROM	STAR	ESKİŞEHİR
14	7.07.2020	CD-ROM	CREATIVE	ESKİŞEHİR
15	7.06.2020	CD-ROM	CREATIVE	SAMSUN
16	12.06.2020	CD-ROM	STAR	SAMSUN
17	14.06.2020	CD-ROM	STAR	SAMSUN
18	19.05.2020	CD-ROM	STAR	SAMSUN
19	22.05.2020	CD-ROM	STAR	SAMSUN
20	23.05.2020	CD-ROM	CREATIVE	SAMSUN
21	18.06.2020	CD-ROM	STAR	SAMSUN
22	20.06.2020	CD-ROM	CREATIVE	SAMSUN
23	4.07.2020	CD-ROM	STAR	SAMSUN
24	12.07.2020	CD-ROM	CREATIVE	SAMSUN
25	19.06.2020	CD-ROM	CREATIVE	SAMSUN
26	7.07.2020	CD-ROM	CREATIVE	SAMSUN

Year
Start of Year
End of Year
Year
Month
Quarter
Week
Day
Subtract Days
Combine Date and Time
Earliest
Latest



File

Home

Transform

Add Column

View

Tools

Help

Close & Apply

New Source

Recent Sources

Enter Data

Data source settings

Manage Parameters

Refresh Preview

Advanced Editor

Manage

Choose Columns

Remove Columns

Keep Rows

Remove Rows

Sort

Split Column

Group By

Replace Values

Data Type: Whole Number

Use First Row as Headers

Merge Queries

Append Queries

Combine Files

Text Analytics

Vision

Azure Machine Learning

Queries [6]

City1

Add_Orders

Category_Target

Customers

Orders

Products

Table.TransformColumns

Row ID

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

Merge

Select a table and matching columns to create a merged table.

Orders

Row ID

Order ID

Order Date

Ship Date

Ship Mode

Customer ID

City

Product ID

Refresh

No preview is available

Join Kind

Left Outer (all from first, matching from second)

Use fuzzy matching to perform the merge

Fuzzy matching options

Left outer

Right outer

Full outer

Inner

Left anti

Right anti

1.2 Sales

831.0

97.0

158.0

95.0

1.0

20.0

221.0

17.0

1.0

4.0

27.0

63.0

22.0

683.0

380.0

100.0

34.0

72.0

14.0

572.0

48.0

40.0

21.0

7.0

168.0

10.0

15.0

145.0




File

Home

Transform

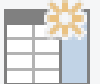
Add




Column From Examples

From All Columns


From Selection




Custom Column



Invoke Custom Function



General



Order Date

ABC 123

Ship Date

ABC 123

Ship Mode

ABC 123

Customer ID

ABC 123

City

ABC 123

Product ID

ABC 123

Sales

ABC 123

	4/26/2015	5/2/2015	Standard Class	JE-15745	Memphis	FUR-CH-10000513	831.0
	4/26/2015	5/2/2015	Standard Class	JE-15745	Memphis	FUR-FU-10003708	97.0
	4/5/2016	4/10/2016	Second Class	GM-14455	Houston	OFF-ST-10003442	158.0
	8/29/2016	9/2/2016	Standard Class	RB-19465	Chicago	TEC-AC-10001767	95.0
	8/29/2016	9/2/2016	Standard Class	RB-19465	Chicago	OFF-BI-10002609	1.0
	12/1/2017	12/3/2017	Second Class	CC-12670	New York City	TEC-AC-10000290	20.0
	12/1/2017	12/3/2017	Second Class	CC-12670	New York City	OFF-ST-10002790	221.0
	12/1/2017	12/3/2017	Second Class	CC-12670	New York City	OFF-BI-10003460	17.0
	6/8/2017	6/12/2017	Standard Class	DI-13600	Pasadena	OFF-AP-10002203	1.0
	9/1/2015	9/4/2015	Second Class	DB-13615	Los Angeles	OFF-BI-10001922	4.0
	12/8/2017	12/12/2017	Standard Class	KH-16510	San Francisco	OFF-PA-10003724	27.0
	6/9/2014	6/13/2014	Second Class	CW-11905	Huntsville	TEC-AC-10000303	63.0
	5/30/2016	6/4/2016	Standard Class	MY-17380	Parker	OFF-BI-10001670	22.0
	10/21/2017	10/26/2017	Standard Class	PH-18790	Lakeland	FUR-CH-10003379	683.0
	7/14/2016	7/17/2016	First Class	ES-14080	Tucson	TEC-PH-10002262	380.0
	5/11/2014	5/16/2014	Standard Class	PG-18895	Fort Worth	TEC-PH-10002597	100.0
	9/11/2017	9/12/2017	First Class	RC-19960	Jacksonville	FUR-FU-10003039	34.0
	12/28/2017	1/4/2018	Standard Class	JF-15415	New York City	OFF-LA-10001297	72.0
	12/28/2017	1/4/2018	Standard Class	JF-15415	New York City	TEC-PH-10000347	14.0
	1/13/2014	1/15/2014	Second Class	CS-12250	Bossier City	OFF-ST-10000025	572.0
	1/1/2017	1/6/2017	Standard Class	GA-14725	Lorain	FUR-FU-10003878	48.0
	4/11/2015	4/15/2015	Standard Class	SE-20110	New York City	OFF-AP-10004487	40.0
	9/1/2016	9/4/2016	First Class	CV-12805	San Francisco	OFF-EN-10001335	21.0
	9/29/2017	10/5/2017	Standard Class	AS-10630	Pasadena	OFF-LA-10001569	7.0
	7/3/2015	7/5/2015	First Class	DG-13300	Philadelphia	FUR-FU-10000293	168.0
	11/19/2016	11/24/2016	Standard Class	EH-13945	Houston	OFF-PA-10004735	10.0
	7/4/2015	7/8/2015	Standard Class	AD-10180	New York City	OFF-AR-10004817	19.0
	9/26/2014	10/1/2014	Second Class	KT-16465	Los Angeles	FUR-CH-10002961	145.0
	10/9/2017	10/14/2017	Standard Class	CK-12760	Aurora	FUR-TA-10002958	652.0
	8/8/2016	8/10/2016	Second Class	IF-15565	Dallas	OFF-PA-10001994	53.0



Power Query (View)



FileHomeTransformAdd ColumnViewToolsHelp

Query Settings

Layout

☒ Formula Bar

☐ Monospaced

☐ Show whitespace

☐ Column quality

☐ Column distribution

☐ Column profile

Go to Column

Columns

Always allow

Parameters

Advanced Editor

Advanced

Query Dependencies

Dependencies

Data Preview

Columns

Parameters

Advanced

Dependencies

Queries [6]

City1

Category_Target

Customers

Products

Orders

Orders_Append

✕

✓

fx

= Table.ReorderColumns("#Added Index",{ "Row ID", "Index", "Order ID", "Order Date", "Ship Date", "Ship Mode", "Customer ID", "City", "Product ID", "Sales", "Quantity", "Discount", "Profit", "Total_Sales ", "Profit or loss"})

Row ID	Index	Order ID	Order Date	Ship Date	Ship Mode	Customer ID	City	Product ID
16	16	CA-2014-103849	5/11/2014	5/16/2014	Standard Class	PG-18895	Fort Worth	TEC-PH-10002597
17	17	CA-2017-112774	9/11/2017	9/12/2017	First Class	RC-19960	Jacksonville	FUR-FU-10003039
18	18	CA-2017-164826	12/28/2017	1/4/2018	Standard Class	JF-15415	New York City	OFF-LA-10001297
19	19	CA-2017-164826	12/28/2017	1/4/2018	Standard Class	JF-15415	New York City	TEC-PH-10000347
20	20	CA-2014-162775	1/13/2014	1/15/2014	Second Class	CS-12250	Bossier City	OFF-ST-10000025
21	21	CA-2017-107503	1/1/2017	1/6/2017	Standard Class	GA-14725	Lorain	FUR-FU-10003878
22	22	CA-2015-111164	4/11/2015	4/15/2015	Standard Class	SE-20110	New York City	OFF-AP-10004487
23	23	CA-2016-120859	9/1/2016	9/4/2016	First Class	CV-12805	San Francisco	OFF-EN-10001335
24	24	CA-2017-100314	9/29/2017	10/5/2017	Standard Class	AS-10630	Pasadena	OFF-LA-10001569
25	25	US-2015-153500	7/3/2015	7/5/2015	First Class	DG-13300	Philadelphia	FUR-FU-10000293
26	26	US-2016-110156	11/19/2016	11/24/2016	Standard Class	EH-13945	Houston	OFF-PA-10004735
27	27	CA-2015-124268	7/4/2015	7/8/2015	Standard Class	AD-10180	New York City	OFF-AR-10004817
28	28	US-2014-151925	9/26/2014	10/1/2014	Second Class	KT-16465	Los Angeles	FUR-CH-10002961
29	29	US-2017-117247	10/9/2017	10/14/2017	Standard Class	CK-12760	Aurora	FUR-TA-10002958
30	30	CA-2016-121034	8/8/2016	8/10/2016	Second Class	JF-15565	Dallas	OFF-PA-10001994
31	31	CA-2017-105886	12/18/2017	12/23/2017	Standard Class	DB-13660	Oceanside	FUR-FU-10001037
32	32	CA-2017-124597	4/30/2017	5/5/2017	Standard Class	AS-10630	Boynton Beach	OFF-LA-10001569
33	33	CA-2014-106439	10/31/2014	11/4/2014	Standard Class	GG-14650	Los Angeles	OFF-FA-10002975
34	34	CA-2016-140501	6/23/2016	6/28/2016	Standard Class	IM-15070	New York City	OFF-PA-10003129
35	35	US-2014-140116	3/10/2014	3/17/2014	Standard Class	KT-16480	Denver	OFF-AR-10001044
36	36	CA-2015-122210	11/30/2015	12/4/2015	Standard Class	WB-21850	Philadelphia	OFF-BI-10003656
37	37	US-2016-152051	6/25/2016	6/29/2016	Standard Class	TS-21160	York	OFF-ST-10001713



Transforming data using Python



Power Query (Transforming data using Python)



pip install pandas

pip install matplotlib



Power Query (Transforming data using Python)



New

Open report

Save

Save as

Get data

Import

Export

Publish

Options and settings

Get started

Options and settings



Options



Data source settings

Options

GLOBAL

Data Load

Power Query Editor

DirectQuery

R scripting

Python scripting

Security

Privacy

Regional Settings

Updates

Usage Data

Diagnostics

Preview features

Auto recovery

Report settings

CURRENT FILE

Data Load

Regional Settings

Privacy

Auto recovery

Published dataset settings

Query reduction

Report settings

Python script options

To choose a home directory for Python, select a detected Python installation from the drop-down list, or select Other and browse to the location you want.

Detected Python home directories:

C:\Users\Mustafa\AppData\Local\Programs\Python\P... ▾

[How to install Python](#)

To choose which Python integrated development environment (IDE) you want Power BI Desktop to launch, select a detected IDE from the drop-down list, or select Other to browse to another IDE on your machine.

Detected Python IDEs:

Default OS program for .PY files ▾

[Learn more about Python IDEs](#)

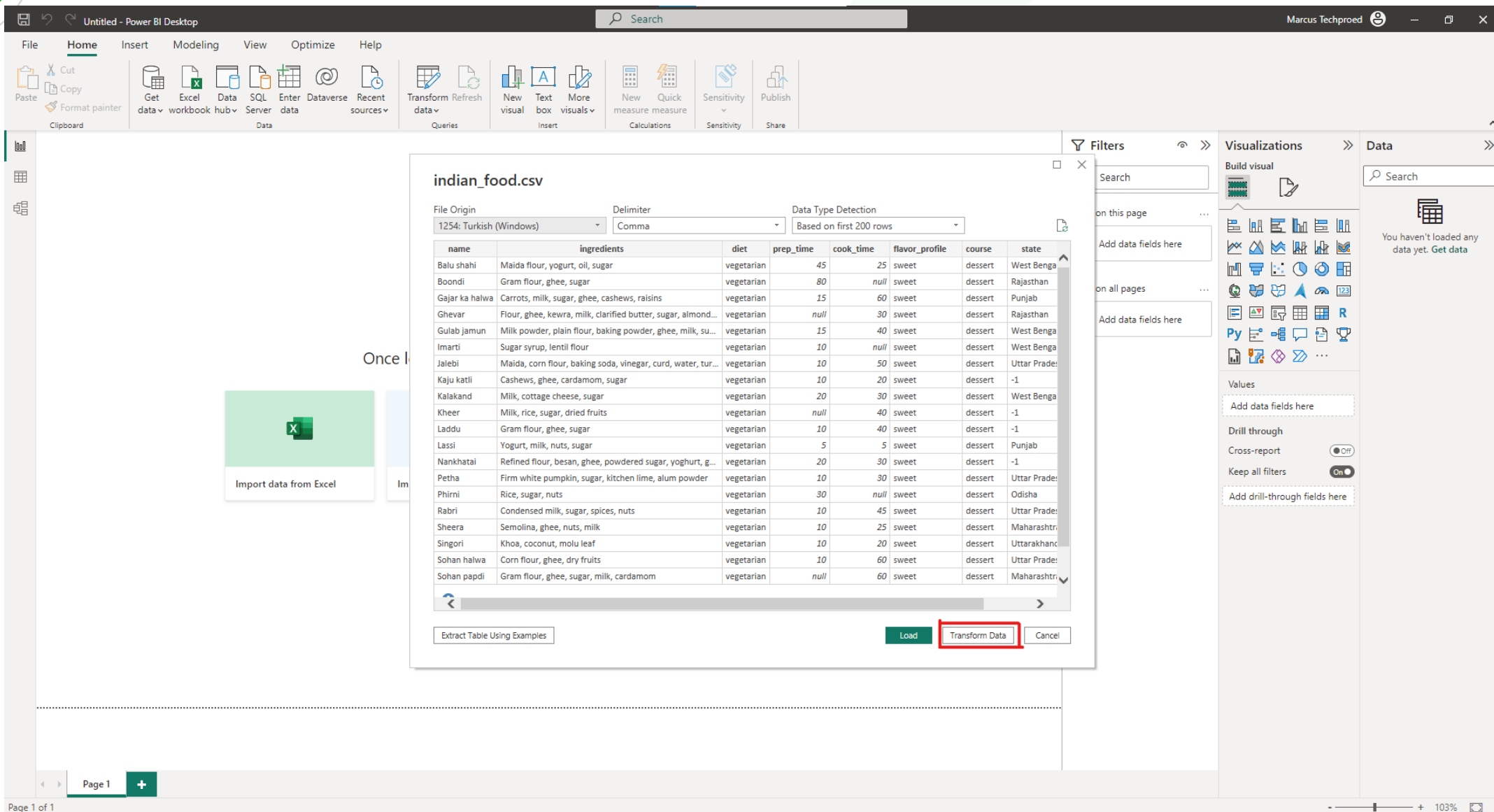
[Change temporary storage location](#)

Note: Sometimes, Python custom visuals automatically install additional packages. For those to work, the temporary storage folder name must be written in Latin characters (letters in the English alphabet).

OK

Cancel

Power Query (Transforming data using Python)



Power BI Desktop interface showing the Power Query Editor window for 'indian_food.csv'. The window displays a table of food items with columns: name, ingredients, diet, prep_time, cook_time, flavor_profile, course, and state. The 'Transform Data' button is highlighted with a red box.

name	ingredients	diet	prep_time	cook_time	flavor_profile	course	state
Balu shahi	Maida flour, yogurt, oil, sugar	vegetarian	45	25	sweet	dessert	West Benge
Boondi	Gram flour, ghee, sugar	vegetarian	80	null	sweet	dessert	Rajasthan
Gajar ka halwa	Carrots, milk, sugar, ghee, cashews, raisins	vegetarian	15	60	sweet	dessert	Punjab
Ghevar	Flour, ghee, kewra, milk, clarified butter, sugar, almond...	vegetarian	null	30	sweet	dessert	Rajasthan
Gulab jamun	Milk powder, plain flour, baking powder, ghee, milk, su...	vegetarian	15	40	sweet	dessert	West Benge
Imarti	Sugar syrup, lentil flour	vegetarian	10	null	sweet	dessert	West Benge
Jalebi	Maida, corn flour, baking soda, vinegar, curd, water, tur...	vegetarian	10	50	sweet	dessert	Uttar Prade
Kaju katli	Cashews, ghee, cardamom, sugar	vegetarian	10	20	sweet	dessert	-1
Kalakand	Milk, cottage cheese, sugar	vegetarian	20	30	sweet	dessert	West Benge
Kheer	Milk, rice, sugar, dried fruits	vegetarian	null	40	sweet	dessert	-1
Laddu	Gram flour, ghee, sugar	vegetarian	10	40	sweet	dessert	-1
Lassi	Yogurt, milk, nuts, sugar	vegetarian	5	5	sweet	dessert	Punjab
Nankhatai	Refined flour, besan, ghee, powdered sugar, yoghurt, g...	vegetarian	20	30	sweet	dessert	-1
Petha	Firm white pumpkin, sugar, kitchen lime, alum powder	vegetarian	10	30	sweet	dessert	Uttar Prade
Phirni	Rice, sugar, nuts	vegetarian	30	null	sweet	dessert	Odisha
Rabri	Condensed milk, sugar, spices, nuts	vegetarian	10	45	sweet	dessert	Uttar Prade
Sheera	Semolina, ghee, nuts, milk	vegetarian	10	25	sweet	dessert	Maharashtr
Singori	Khoa, coconut, molu leaf	vegetarian	10	20	sweet	dessert	Uttarakhan
Sohan halwa	Corn flour, ghee, dry fruits	vegetarian	10	60	sweet	dessert	Uttar Prade
Sohan papdi	Gram flour, ghee, sugar, milk, cardamom	vegetarian	null	60	sweet	dessert	Maharashtr

Power Query (Transforming data using Python)

python script - Power Query Editor

File Home Transform Add Column View Tools Help

Group By Use First Row as Headers Reverse Rows Count Rows Table

Data Type: Text Replace Values Unpivot Columns Split Column Format Merge Columns Statistics Standard Scientific Trigonometry Rounding Date Time Duration Run R script Run Python script

Queries [1]

indian_food

Table.TransformColumnTypes(#"Promoted Headers",{{"name", type text}, {"ingredients", type text}, {"diet", type text}, {"prep_time", Int64.Type}, {"cook_time", Int64.Type}, {"flavor_profile", type text}}

	A name	A ingredients	A diet	1 prep_time	1 cook_time	A flavor_profile	A course	A state
1	Balu shahi	Maida flour, yogurt, oil, sugar	vegetarian		45	25 sweet	dessert	West Bengal
2	Boondi	Gram flour, ghee, sugar	vegetarian		80	null sweet	dessert	Rajasthan
3	Gajar ka halwa	Carrots, milk, sugar, ghee, cashews, raisins	vegetarian		15	60 sweet	dessert	Punjab
4	Ghevar	Flour, ghee, kewra, milk, clarified butter, sugar, almonds, pistachio, saf...	vegetarian		null	30 sweet	dessert	Rajasthan
5	Gulab jamun	Milk powder, plain flour, baking powder, ghee,					dessert	West Bengal
6	Imarti	Sugar syrup, lentil flour					dessert	West Bengal
7	Jalebi	Maida, corn flour, baking soda, vinegar, curd, w					dessert	Uttar Pradesh
8	Kaju katli	Cashews, ghee, cardamom, sugar					dessert	-1
9	Kalakand	Milk, cottage cheese, sugar					dessert	West Bengal
10	Kheer	Milk, rice, sugar, dried fruits					dessert	-1
11	Laddu	Gram flour, ghee, sugar					dessert	-1
12	Lassi	Yogurt, milk, nuts, sugar					dessert	Punjab
13	Nankhatai	Refined flour, besan, ghee, powdered sugar, yo					dessert	-1
14	Petha	Firm white pumpkin, sugar, kitchen lime, alum p					dessert	Uttar Pradesh
15	Phirni	Rice, sugar, nuts					dessert	Odisha
16	Rabri	Condensed milk, sugar, spices, nuts					dessert	Uttar Pradesh
17	Sheera	Semolina, ghee, nuts, milk					dessert	Maharashtra
18	Singori	Khoa, coconut, molu leaf					dessert	Uttarakhand
19	Sohan halwa	Corn flour, ghee, dry fruits					dessert	Uttar Pradesh
20	Sohan papdi	Gram flour, ghee, sugar, milk, cardamom					dessert	Maharashtra
21	Chhena jalebi	Chhena, sugar, ghee					dessert	Odisha
22	Chhena kheeri	Chhena, sugar, milk					dessert	Odisha
23	Chhena poda	Sugar, chhena cheese					dessert	Odisha
24	Cham cham	Flour, cream, sugar, saffron, lemon juice, cocon					dessert	West Bengal
25	Kheer sagar	Chhena, condensed milk, sugar, saffron, cardam					dessert	Odisha
26	Ledikeni	Chhena, sugar, ghee					dessert	West Bengal
27	Lyangcha	Flour, fried milk power, sugar syrup	vegetarian		20	30 sweet	dessert	Assam
28	Malapua	Yoghurt, refined flour, ghee, fennel seeds	vegetarian		10	120 sweet	dessert	Bihar
29	Mihidana	Besan flour, sugar, ghee	vegetarian		15	30 sweet	dessert	West Bengal
30	Misti doi	Milk, jaggery	vegetarian		480	30 sweet	dessert	West Bengal
31	Pantua	Chhena, sugar, ghee, flour	vegetarian		45	45 sweet	dessert	West Bengal
32	Pithe	Rice flour, wheat flour	vegetarian		15	35 sweet	dessert	Assam
33	Rasabali	Chhena, sweetened milk	vegetarian		15	30 sweet	dessert	Odisha
34	Ras malai	Chhena, reduced milk, pistachio	vegetarian		180	60 sweet	dessert	West Bengal
35	Rasgulla	Chhena, sugar, cardamom	vegetarian		10	90 sweet	dessert	West Bengal
36	Sandesh	Milk, sugar, saffron, cardamom	vegetarian		30	20 sweet	dessert	West Bengal
37	Adhirasam	Rice flour, jaggery, ghee, vegetable oil, elachi	vegetarian		10	50 sweet	dessert	West Bengal
38	Ariselu	Rice flour, jaggery, ghee	vegetarian		15	75 sweet	dessert	Andhra Pradesh

9 COLUMNS, 255 ROWS Column profiling based on top 1000 rows

Query Settings

PROPERTIES

Name indian_food

APPLIED STEPS

Source Promoted Headers Changed Type

Run Python script

Enter Python scripts into the editor to transform and shape your data.

Script

```
# 'dataset' holds the input data for this script
```

The script will run with the following Python installation
C:\USERS\MUSTAFA\APPDATA\LOCAL\PROGRAMS\PYTHON\PYTHON310.
To configure your settings and change which Python installation you want to run, go to Options and settings.

OK Cancel

PREVIEW DOWNLOADED AT 03:21

Power Query (Transforming data using Python)

Untitled - Power Query Editor

Home Transform Add Column View Tools Help

Group By Use First Row as Headers Count Rows Table

Reverse Rows Detect Data Type Rename Pivot Column Convert to List

Split Column Format Text Column

Merge Columns Extract Parse

Statistics Standard Scientific Information

Trigonometry Rounding

Date Time Duration Date & Time Column

Run R script Run Python script Scripts

Queries [1]

indian_food

Python.Execute("# 'dataset' holds the input data for this script\nimport pandas as pd\ndata = pd.DataFrame(dataset.loc[:, \"prep_time\"])\nfinal = data.fillna(80.0)\n")

Name	Value
data	Table
dataset	Table
final	Table

Query Settings

PROPERTIES

Name
indian_food

All Properties

APPLIED STEPS

Source
Promoted Headers
Changed Type
Run Python script

2 COLUMNS, 3 ROWS Column profiling based on top 1000 rows

PREVIEW DOWNLOADED ON PAZAR



Power Query (Creating visualizations using Python)



Untitled - Power BI Desktop

Search

Marcus Techproed

File Home Insert Modeling View Optimize Help Format Data / Drill

Paste Cut Copy Format painter Clipboard

Get data Excel workbook Data SQL Server Enter Dataaverse Recent sources

Transform Refresh data Queries

New visual Text box More visuals Insert

New Quick measure measure Calculations

Sensitivity Sensitivity

Publish Share

Select or drag fields to populate this visual

Python script editor

Enable script visuals

You need to enable script visuals to begin creating Python script. Script visuals can execute script code that may contain security or privacy risks.

Enable Cancel

Filters

Search

Filters on this visual

Add data fields here

Filters on this page

Add data fields here

Filters on all pages

Add data fields here

Visualizations

Build visual

Values

Add data fields here

Drill through

Cross-report

Keep all filters

Add drill-through fields here

Data

Search

indian_food

- ☐ cook_time
- ☐ course
- ☐ diet
- ☐ flavor_profile
- ☐ ingredients
- ☐ name
- ☐ prep_time
- ☐ region
- ☐ state

Page 1

Page 1 of 1

56%

Drag fields into the Values area in the Visualization pane to start scripting.



Power Query (Creating visualizations using Python)



Untitled - Power BI Desktop

Search

Marcus Techproed

File Home Insert Modeling View Optimize Help Format Data / Drill

Clipboard: Paste, Cut, Copy, Format painter

Data: Get data, Excel workbook, Data hub, SQL Server, Enter data, Dataverse, Recent sources

Queries: Transform data, Refresh data

Visuals: New visual, Text box, More visuals

Calculations: New measure, Quick measure

Sensitivity: Sensitivity

Share: Publish

Visuals: Sum of cook_time, Sum of prep_time and course

Filters

Search

Filters on this visual

- course is (All)
- Sum of cook_time is (All)
- Sum of prep_time is (All)

Add data fields here

Filters on this page

Add data fields here

Visualizations

Build visual

Values

- Sum of cook_time
- Sum of prep_time
- course

Drill through

Cross-report

Keep all filters

Add drill-through fields here

Data

Search

indian_food

- ☒ cook_time
- ☒ course
- ☐ diet
- ☐ flavor_profile
- ☐ ingredients
- ☐ name
- ☒ prep_time
- ☐ region
- ☐ state

Python script editor

△ Duplicate rows will be removed from the data.

```
1 # The following code to create a dataframe and remove duplicated rows is always executed and acts as a preamble for your script:
2
3 # dataset = pandas.DataFrame(cook_time, prep_time, course)
4 # dataset = dataset.drop_duplicates()
5
6 # Paste or type your script code here:
7
```

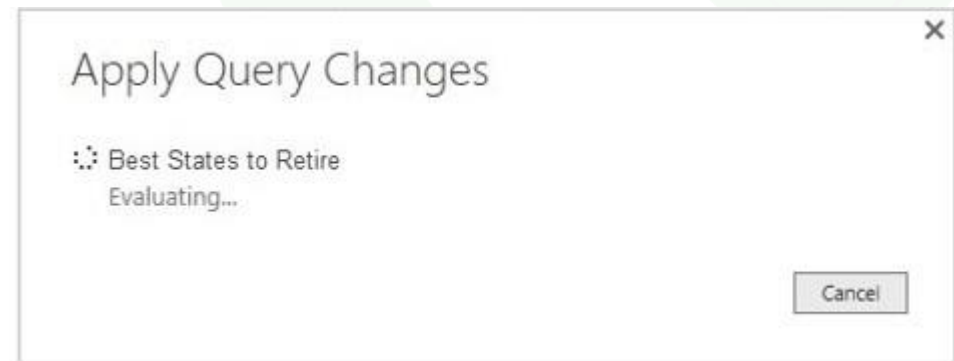
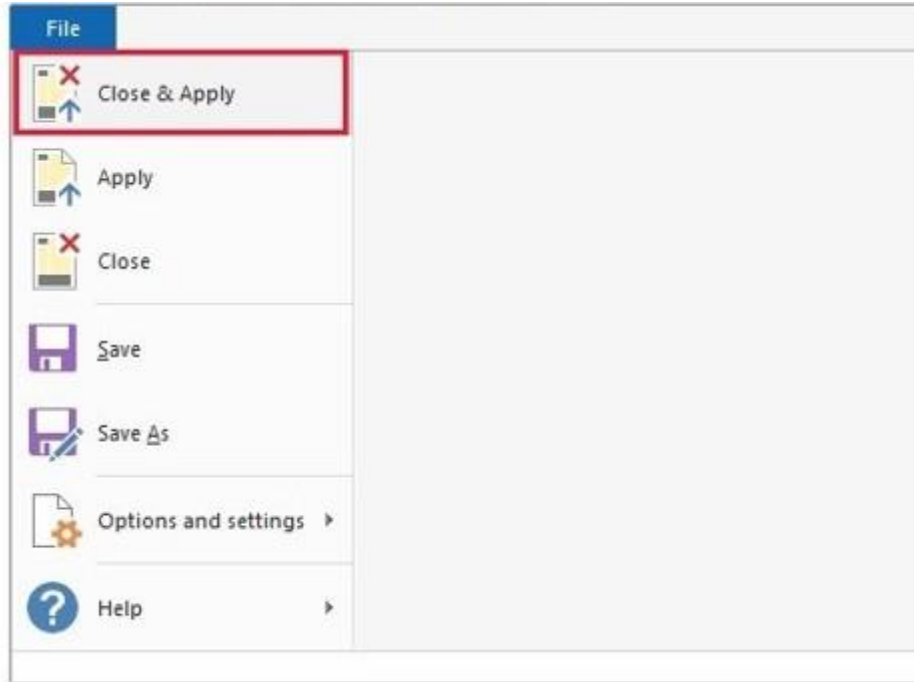
Page 1

Page 1 of 1

56%



Power Query (Close & Apply)





Power Query (Save)

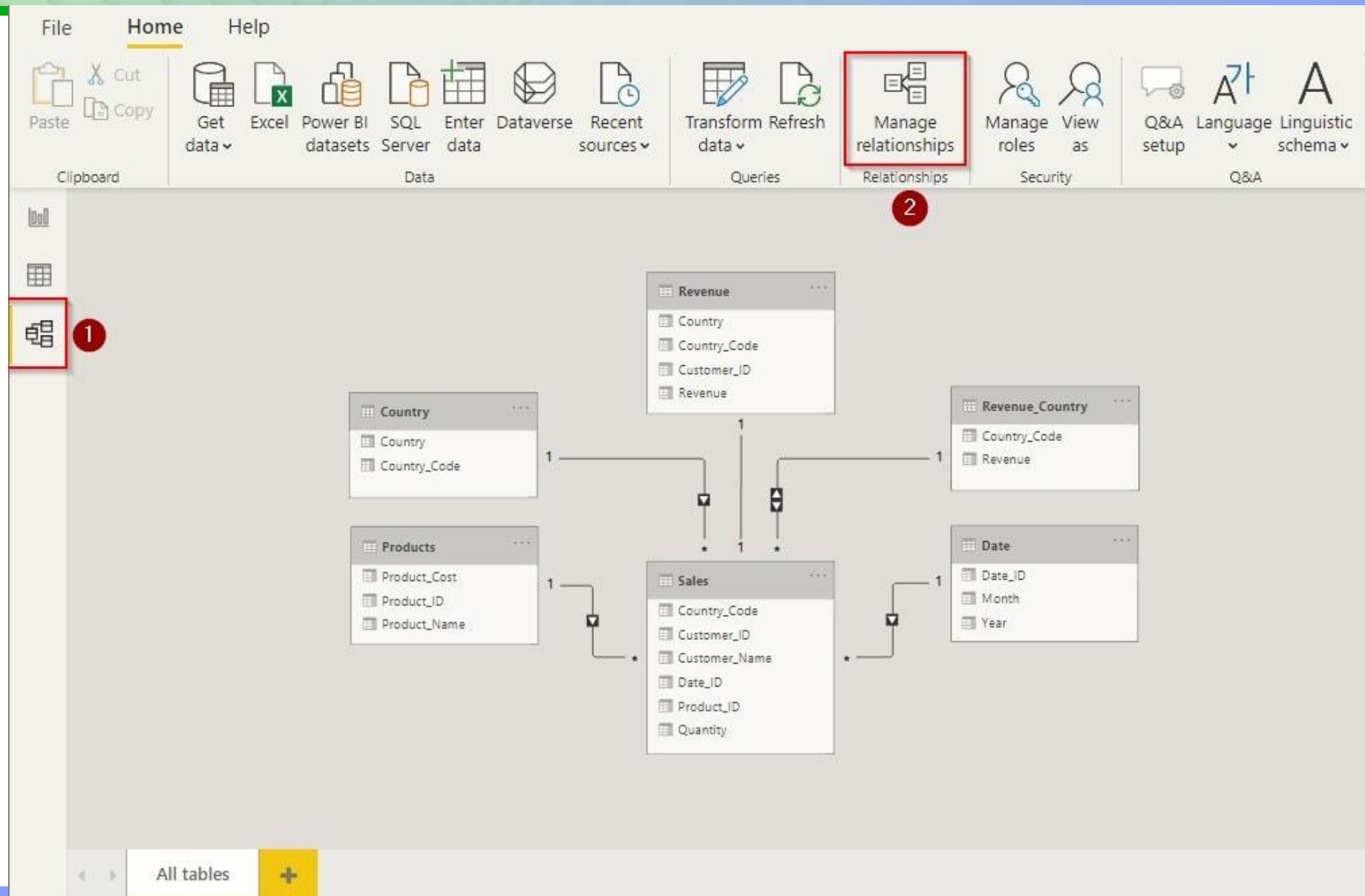




DATA MODEL

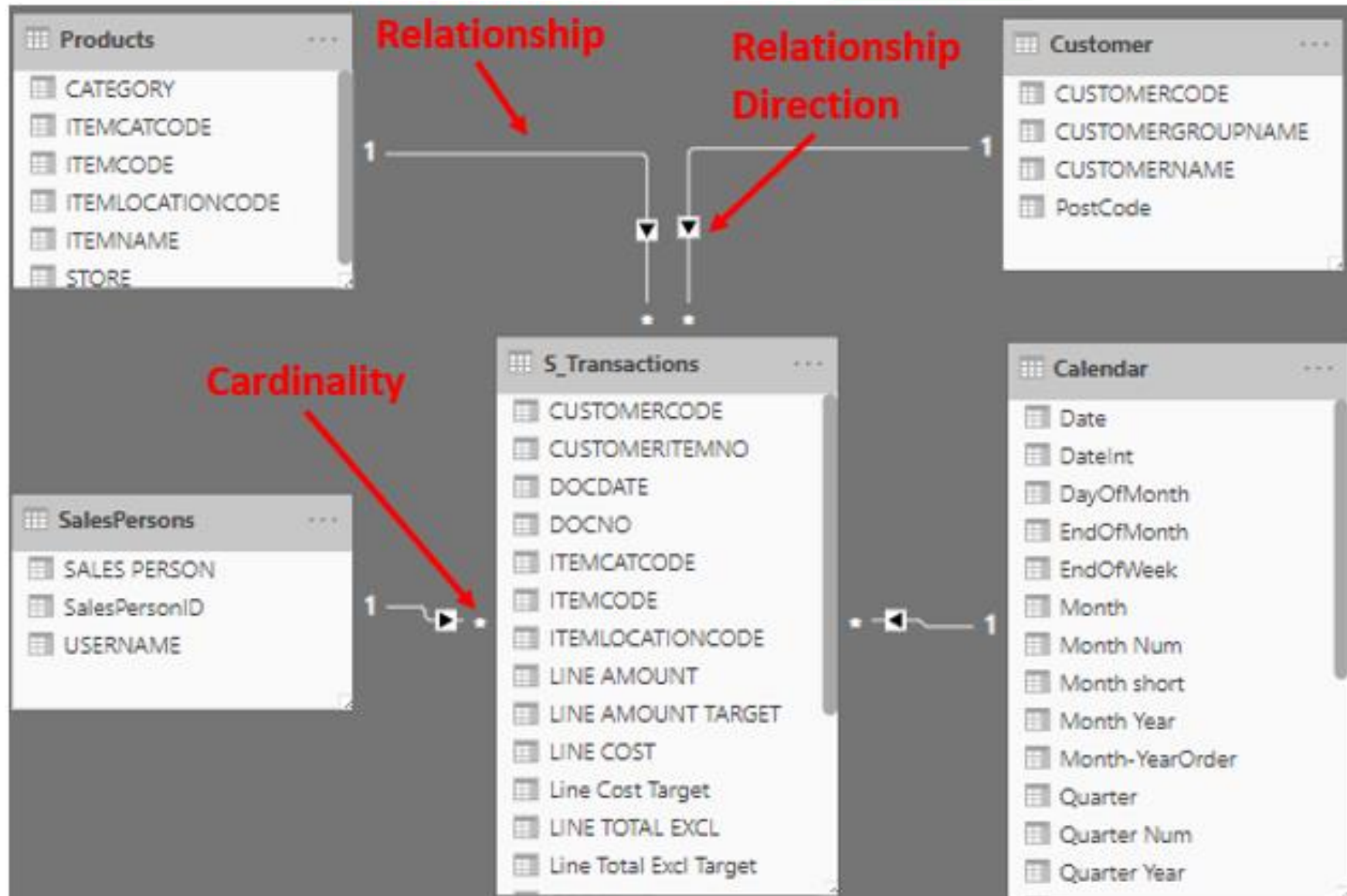


Data Model





Data Model





Data Model



Category	
Cat-A	Jenny Jones
Cat-B	John Smith

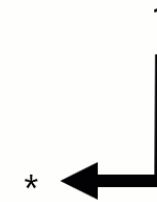


Product			
1	Prod-A	Cat-A	Red
2	Prod-B	Cat-B	Yellow
3	Prod-C	Cat-A	Blue



Sales		
2	CY2017	10
1	CY2017	3
2	CY2018	5
2	CY2018	2
3	CY2018	11

Year
CY2017
CY2018
CY2019
CY2020





Sorunuz var mı ?



Next Session



**Sonraki derste ne
öğreneceğiz?**

Visualization Types

- Bar Chart
- Line Chart
- Area Chart
- Pie-Donut Chart
- Gauge Charts
- Combo Charts
- Waterfall Charts
- Cards
- Maps
- Table-Matrix
- Slicer
- Custom visual

Tea break...

10:00



mins: secs: type: