BATCH : B150

LESSON : POWER BI

DATE : 23.05.2023

SUBJECT : Power Query

ZOOM GİRİŞLERİNİZİ LÜTFEN **LMS** SİSTEMİ ÜZERİNDEN YAPINIZ

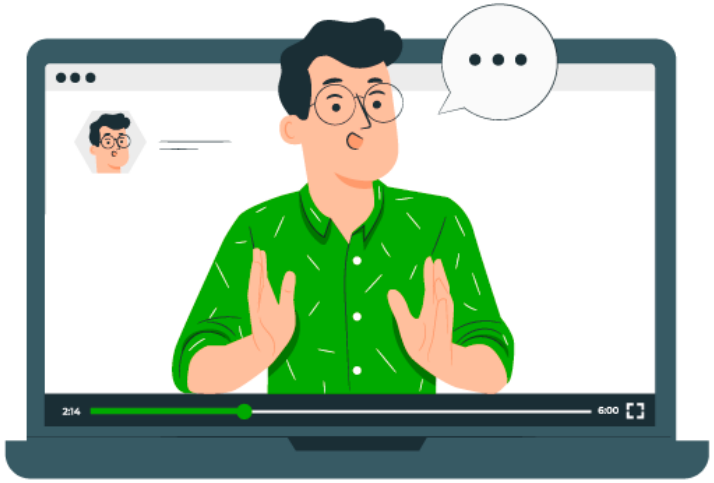
Power BI

POWER BI – Power Query

Data Science Program

Session -2

Session - 2 Content



Bugün ne öğreneceğiz?

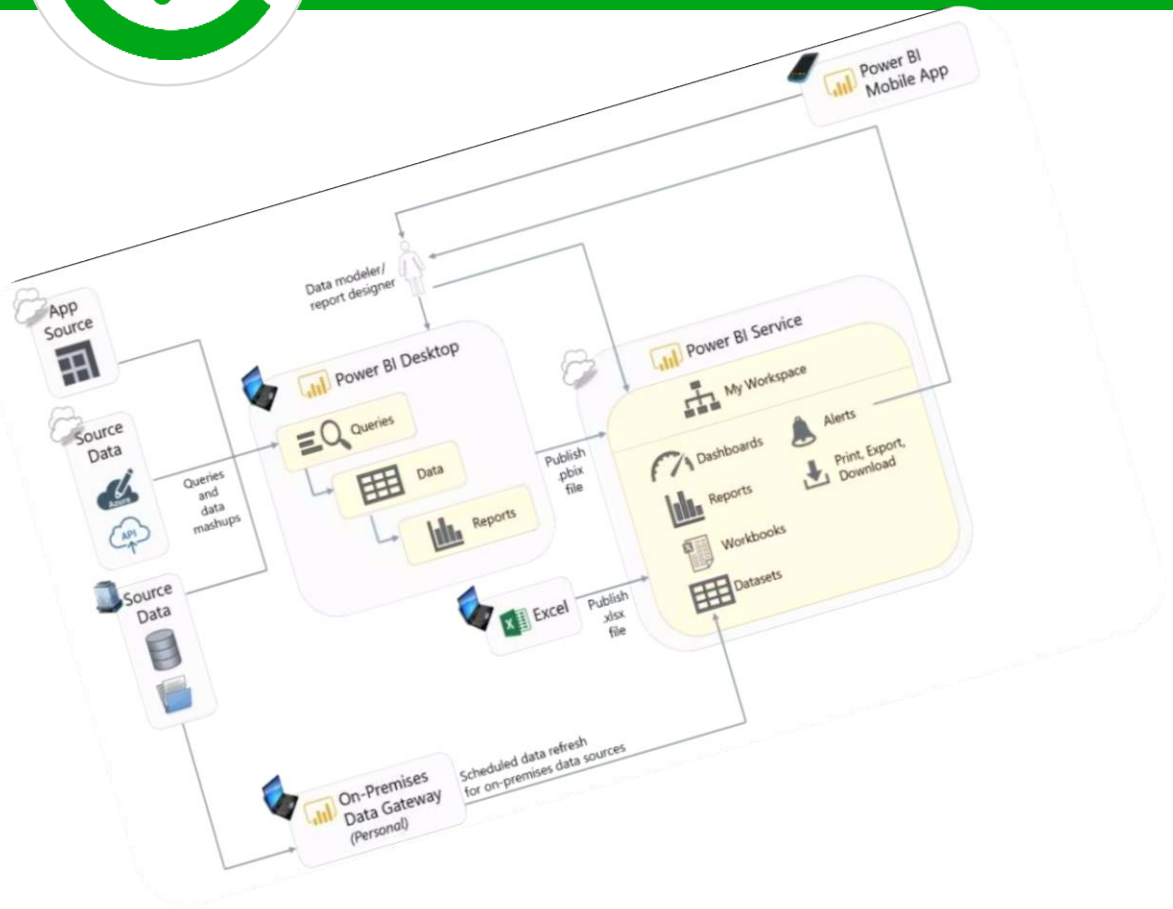
Power BI

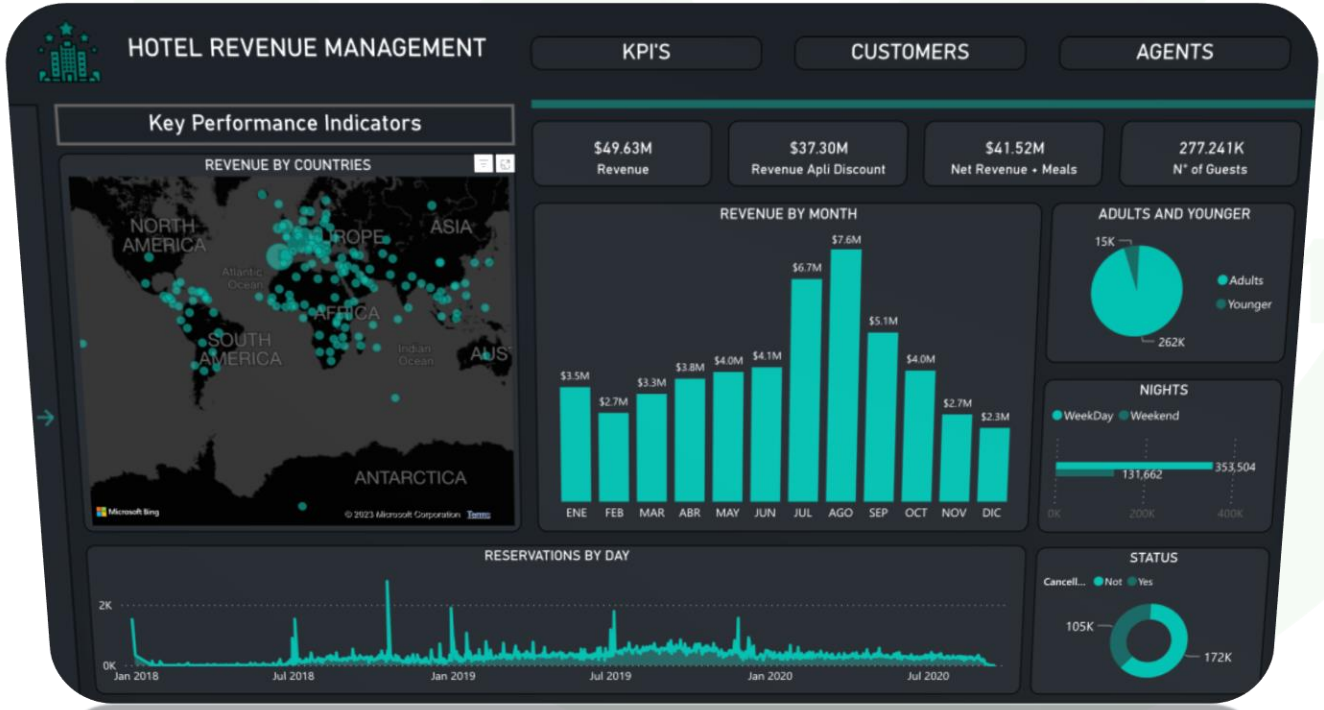
- Power Query (Sorgu Düzenleyici)
- ETL Process (Extract-Transform-Load)
- Run Python Script
- Data Model (Relationship)

Recap – Previous Lesson

Features of Power BI

Recap – Previous Lesson





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

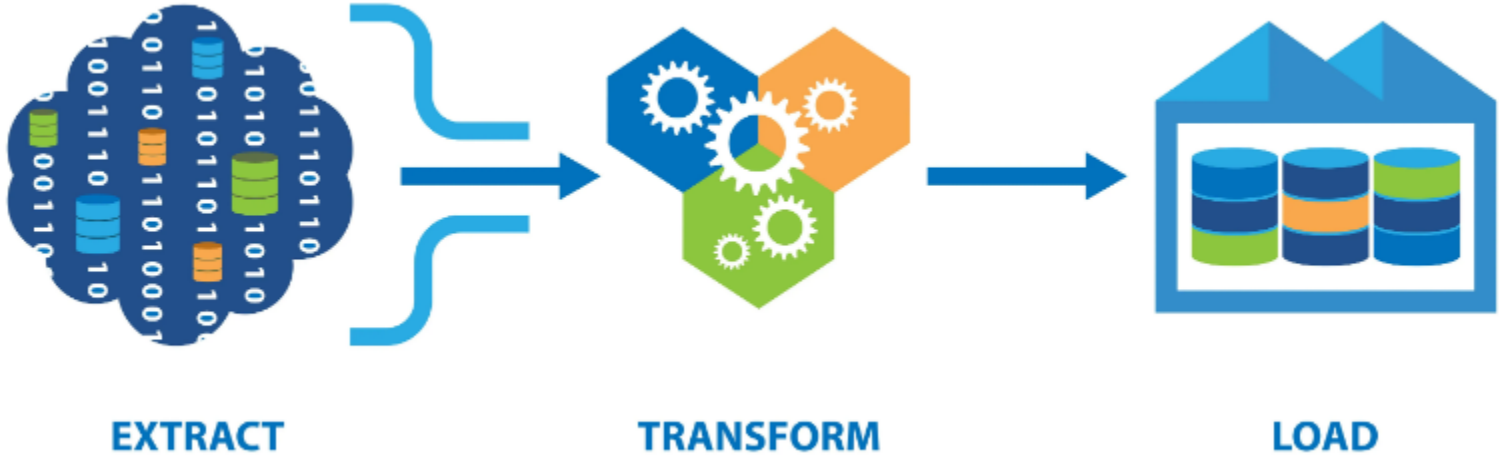
Power Query

- **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. Load

işlemlerini gerçekleştirebilirsiniz.

(ETL)


EXTRACT
TRANSFORM
LOAD

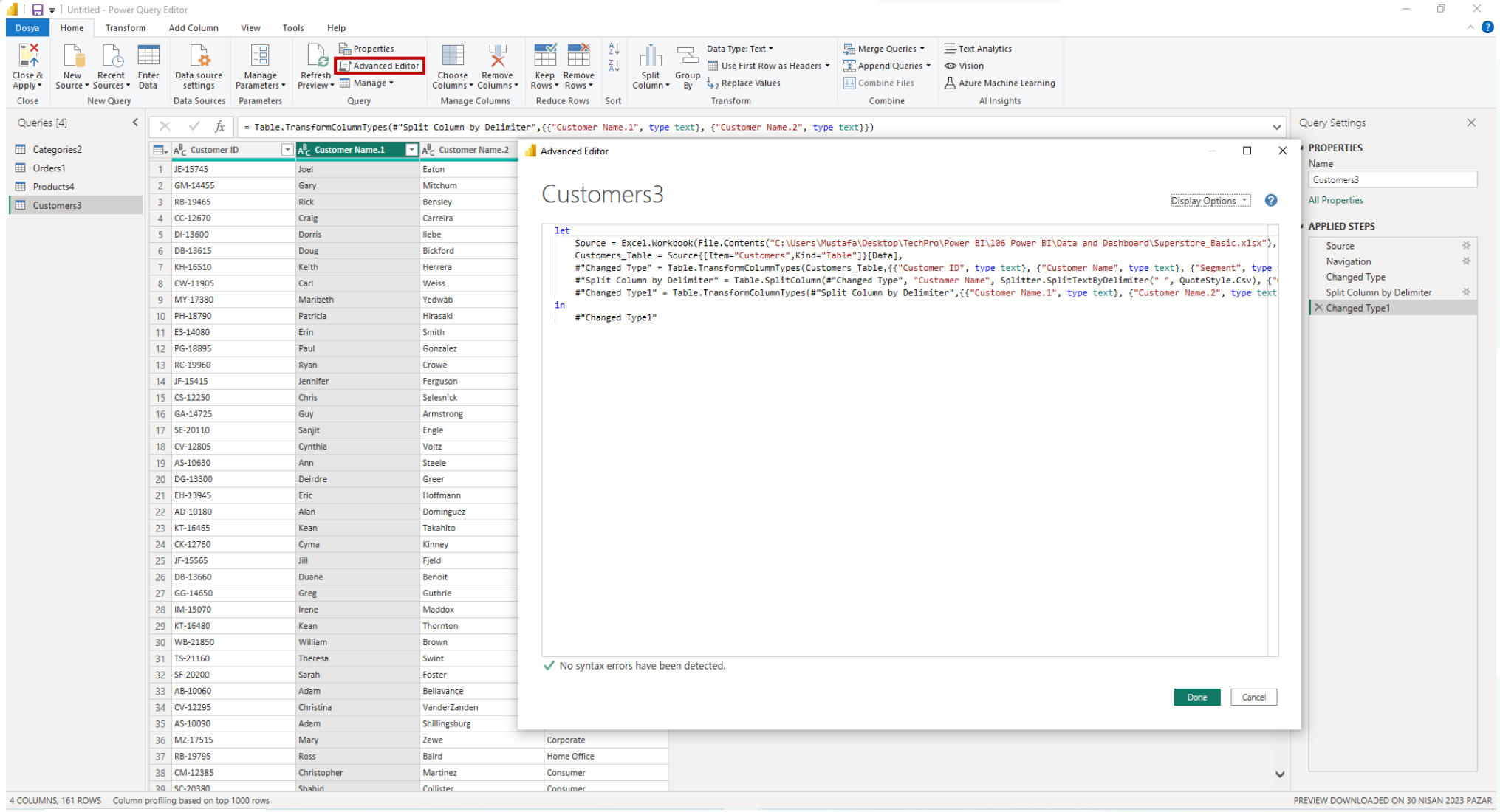
Power Query M Formula Language

- M dili, Power Query veri dönüştürme formül dili.

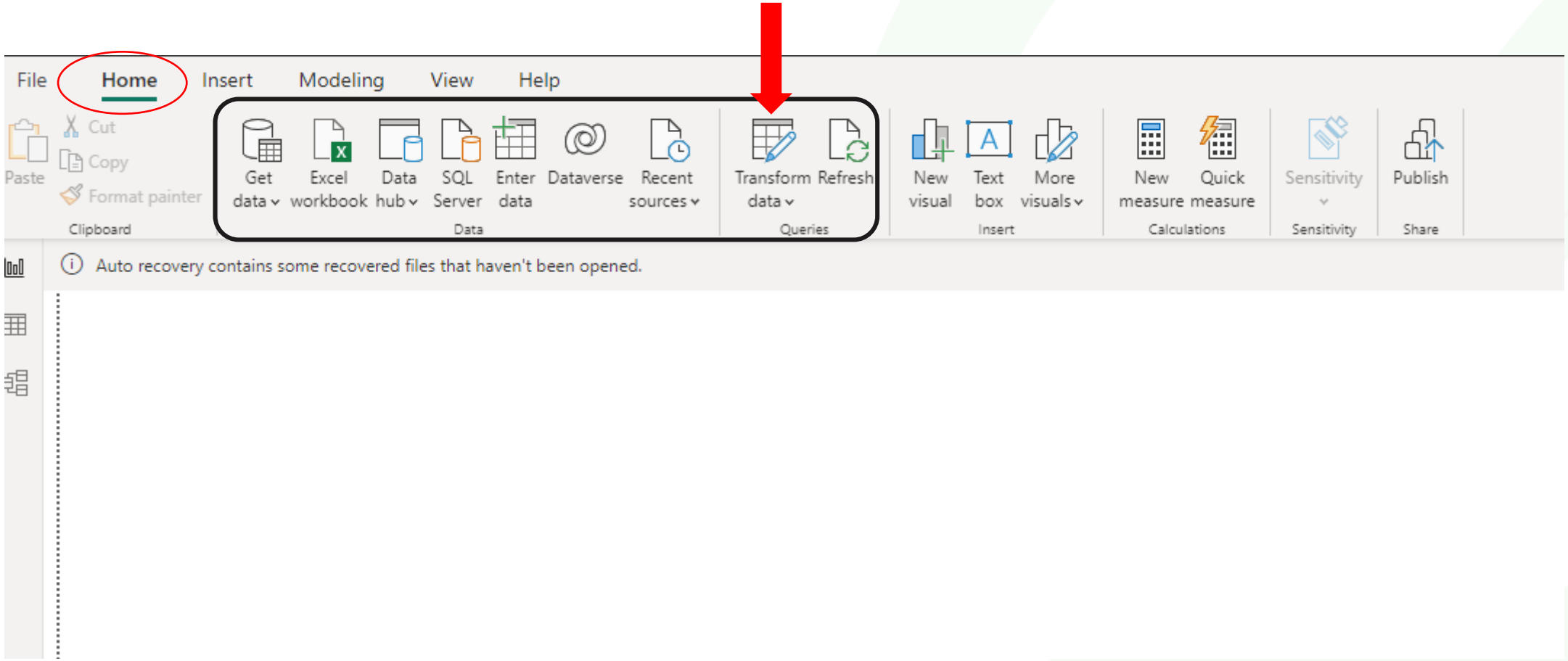
- Power Query M, veri kaynaklarından veri alma, veri temizleme, dönüştürme ve birleştirme gibi işlemleri gerçekleştirmek için kullanılır.

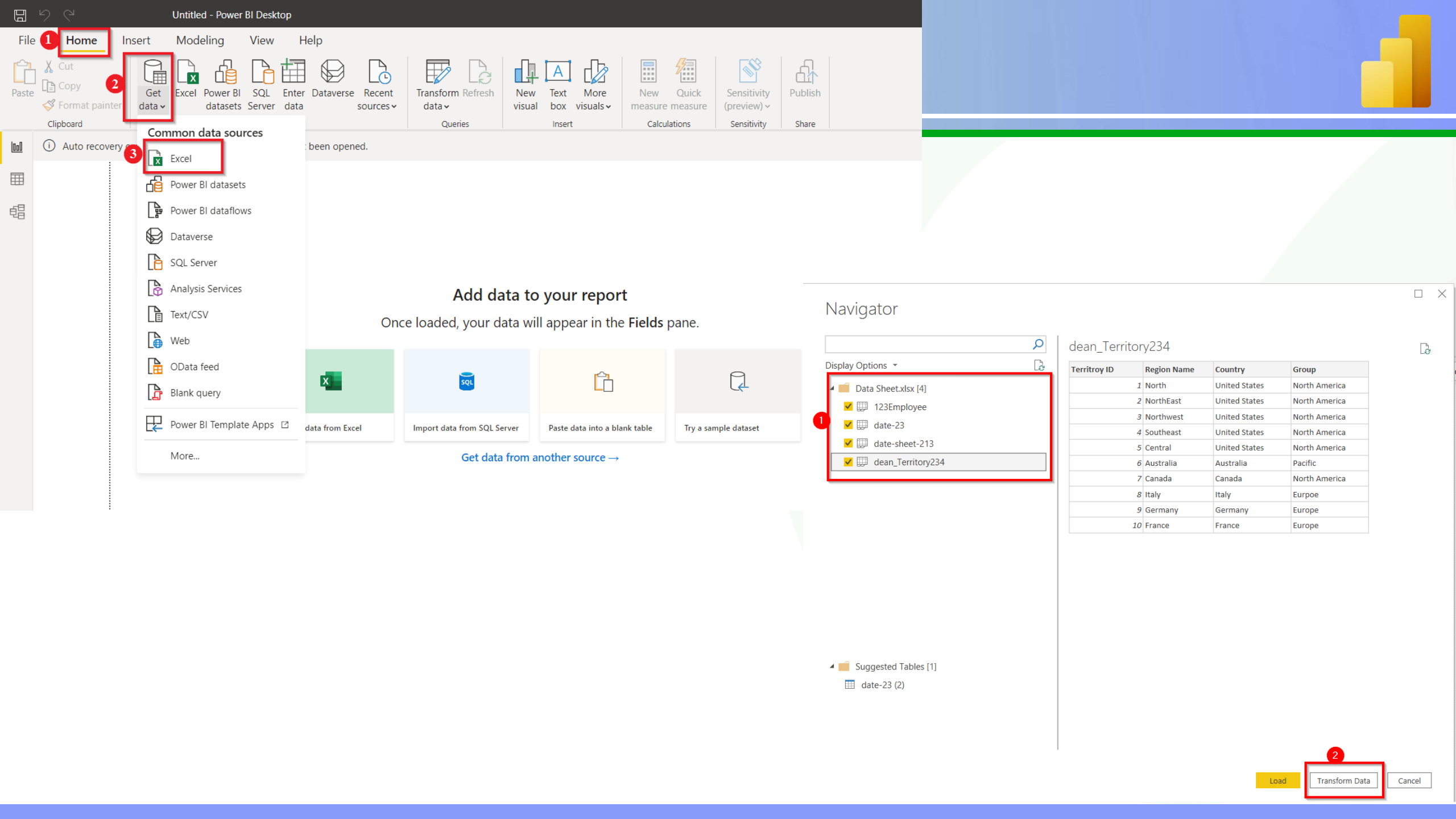
- Power Query, Microsoft Power BI, Excel ve diğer veri analizi araçlarında bulunan bir bileşendir.

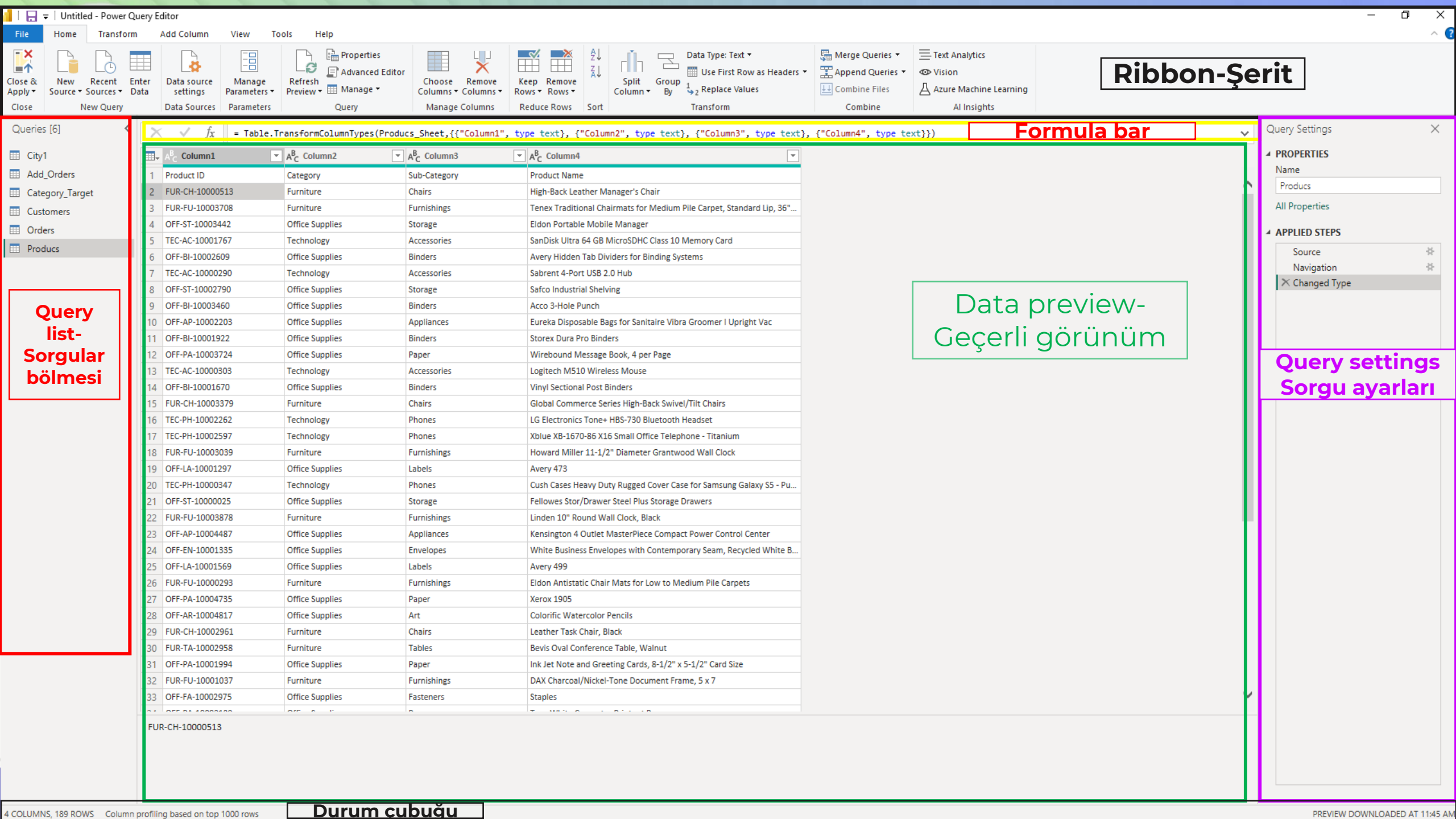
Power Query M Formula Language



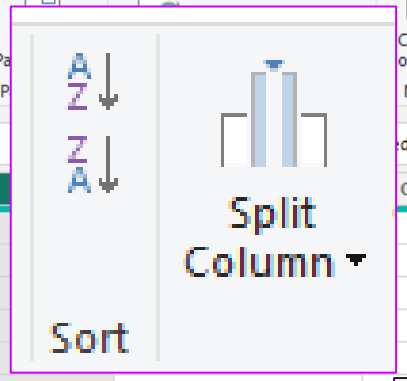
Power Query (Power BI to Power Query)

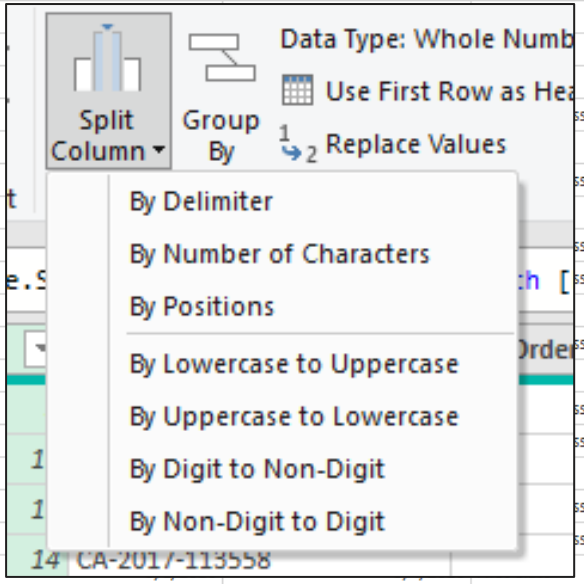


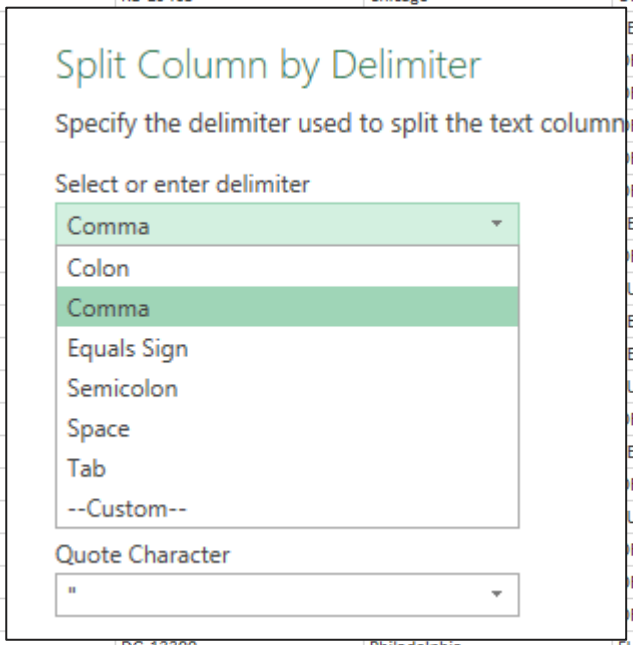

Untitled - Power BI Desktop
File
1
Home
Insert
Modeling
View
Help
Paste
Cut
Copy
Format painter
Clipboard
2
Get data
Excel
Power BI datasets
SQL Server
Enter data
Dataverse
Recent sources
Transform data
Refresh
Queries
New visual
Text box
More visuals
Insert
New measure
Quick measure
Calculations
Sensitivity (preview)
Sensitivity
Publish
Share
Auto recovery
been opened.
Common data sources
3
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
Display Options
Data Sheet.xlsx [4]
123Employee
date-23
date-sheet-213
dean_Territory234
1
Suggested Tables [1]
date-23 (2)
dean_Territory234
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
2
Load
Transform Data
Cancel


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
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
Ribbon-Şerit
Queries [6]
City1
Add_Orders
Category_Target
Customers
Orders
Producs
Query list- Sorgular bölmesi
= Table.TransformColumnTypes(Producs_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
FUR-CH-10000513
Data preview- Geçerli görünüm
Query Settings
PROPERTIES
Name
Producs
All Properties
APPLIED STEPS
Source
Navigation
Changed Type
Query settings Sorgu ayarları
4 COLUMNS, 189 ROWS
Column profiling based on top 1000 rows
Durum çubuğu
PREVIEW DOWNLOADED AT 11:45 AM

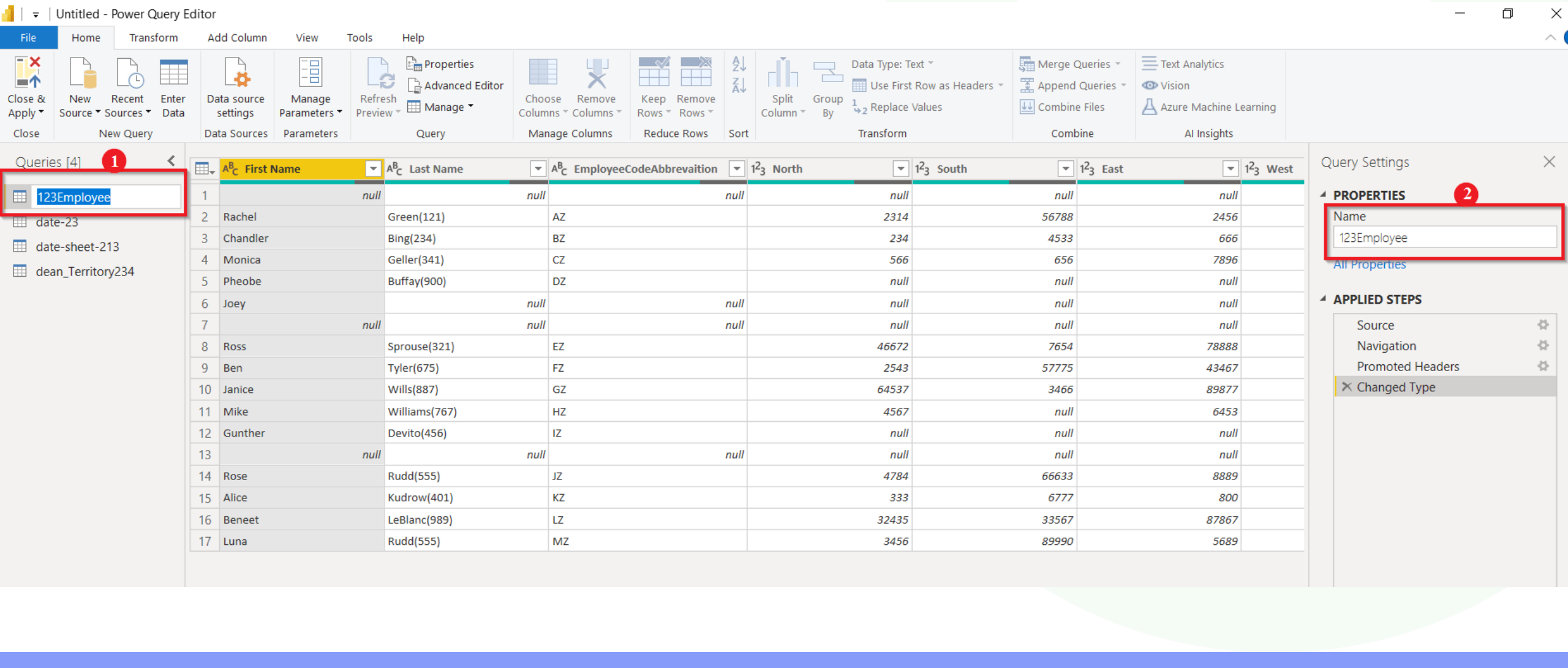
Power Query (Split Column)



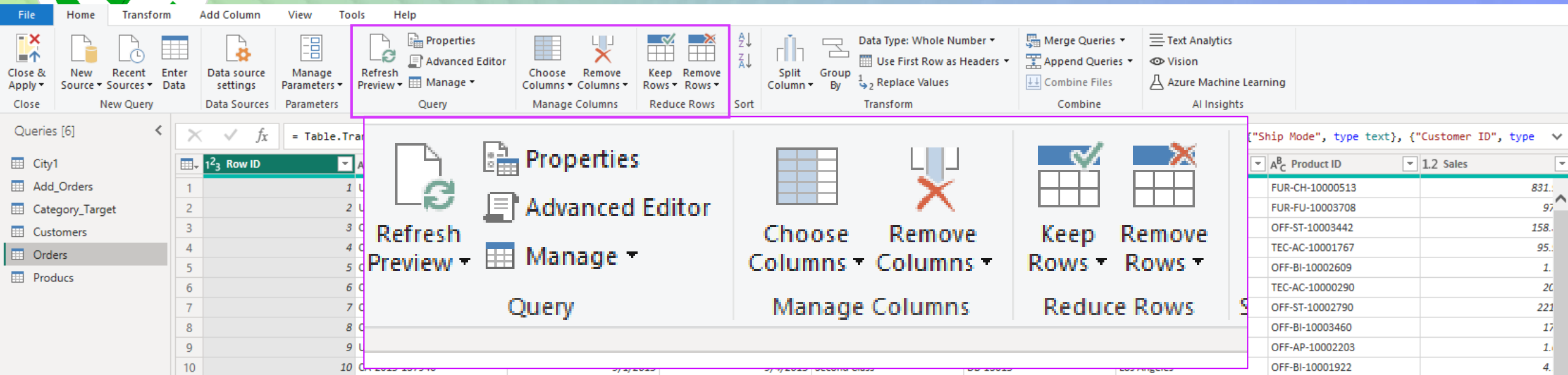




Power Query (Change table Name)



Power Query (Delete-Keep)

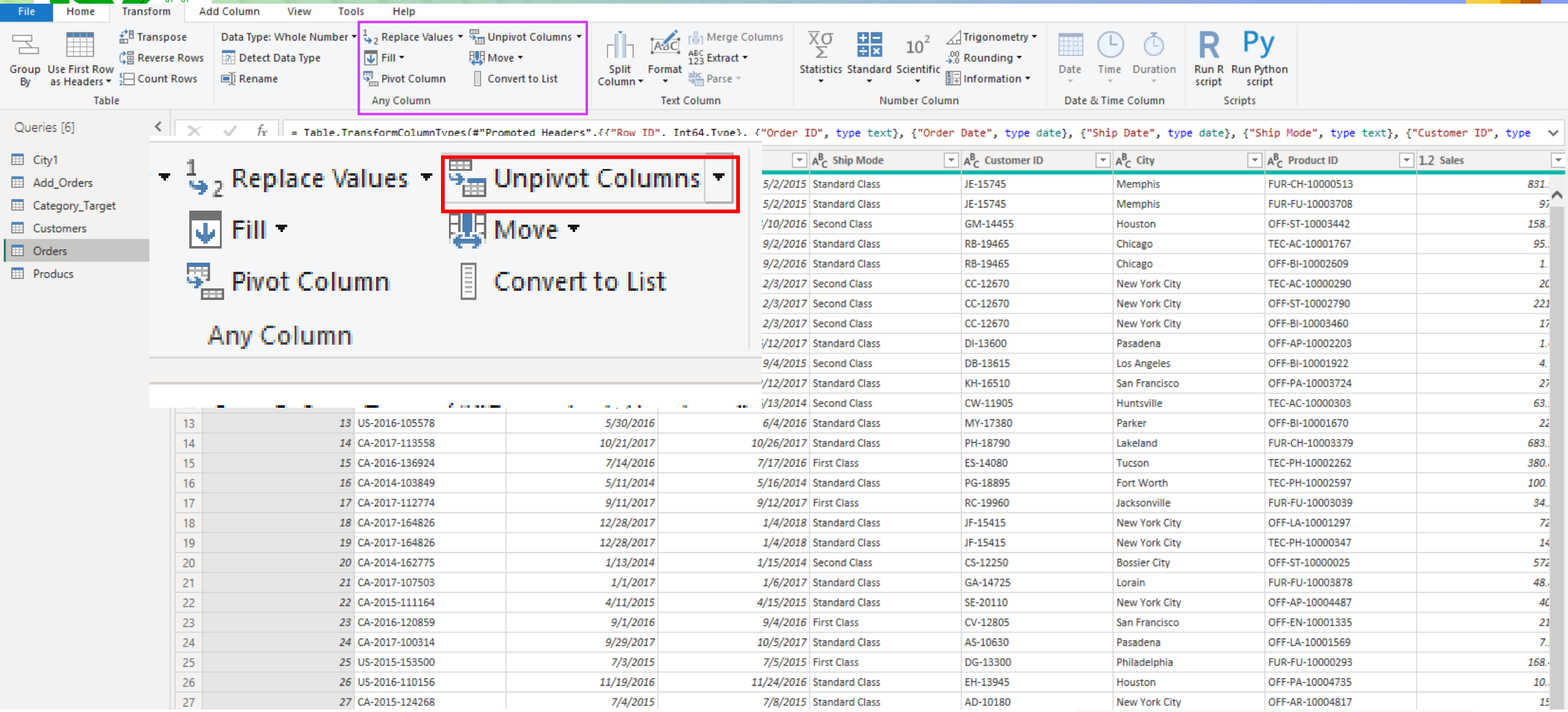


Queries [6]

- City1
- Add_Orders
- Category_Target
- Customers
- Orders
- Producs

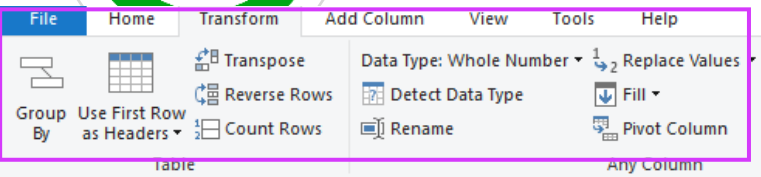
	Row ID	Order ID	Order Date	Ship Date	Ship Mode	Customer ID	City	Product ID	Sales
1	1	U						FUR-CH-10000513	831.
2	2	U						FUR-FU-10003708	97
3	3	C						OFF-ST-10003442	158.
4	4	C						TEC-AC-10001767	95.
5	5	C						OFF-BI-10002609	1.
6	6	C						TEC-AC-10000290	20
7	7	C						OFF-ST-10002790	221
8	8	C						OFF-BI-10003460	17
9	9	U						OFF-AP-10002203	1.
10	10	C						OFF-BI-10001922	4.
11	11	CA-2017-117457	12/8/2017	12/12/2017	Standard Class	KH-16510	San Francisco	OFF-PA-10003724	27
12	12	CA-2014-133753	6/9/2014	6/13/2014	Second Class	CW-11905	Huntsville	TEC-AC-10000303	63.
13	13	US-2016-105578	5/30/2016	6/4/2016	Standard Class	MY-17380	Parker	OFF-BI-10001670	22
14	14	CA-2017-113558	10/21/2017	10/26/2017	Standard Class	PH-18790	Lakeland	FUR-CH-10003379	683.
15	15	CA-2016-136924	7/14/2016	7/17/2016	First Class	ES-14080	Tucson	TEC-PH-10002262	380.
16	16	CA-2014-103849	5/11/2014	5/16/2014	Standard Class	PG-18895	Fort Worth	TEC-PH-10002597	100.
17	17	CA-2017-112774	9/11/2017	9/12/2017	First Class	RC-19960	Jacksonville	FUR-FU-10003039	34.
18	18	CA-2017-164826	12/28/2017	1/4/2018	Standard Class	JF-15415	New York City	OFF-LA-10001297	72
19	19	CA-2017-164826	12/28/2017	1/4/2018	Standard Class	JF-15415	New York City	TEC-PH-10000347	14
20	20	CA-2014-162775	1/13/2014	1/15/2014	Second Class	CS-12250	Bossier City	OFF-ST-10000025	572
21	21	CA-2017-107503	1/1/2017	1/6/2017	Standard Class	GA-14725	Lorain	FUR-FU-10003878	48.
22	22	CA-2015-111164	4/11/2015	4/15/2015	Standard Class	SE-20110	New York City	OFF-AP-10004487	40
23	23	CA-2016-120859	9/1/2016	9/4/2016	First Class	CV-12805	San Francisco	OFF-EN-10001335	21
24	24	CA-2017-100314	9/29/2017	10/5/2017	Standard Class	AS-10630	Pasadena	OFF-LA-10001569	7.
25	25	US-2015-153500	7/3/2015	7/5/2015	First Class	DG-13300	Philadelphia	FUR-FU-10000293	168.
26	26	US-2016-110156	11/19/2016	11/24/2016	Standard Class	EH-13945	Houston	OFF-PA-10004735	10.
27	27	CA-2015-124268	7/4/2015	7/8/2015	Standard Class	AD-10180	New York City	OFF-AR-10004817	15
28	28	US-2014-151925	9/26/2014	10/1/2014	Second Class	KT-16465	Los Angeles	FUR-CH-10002961	145.

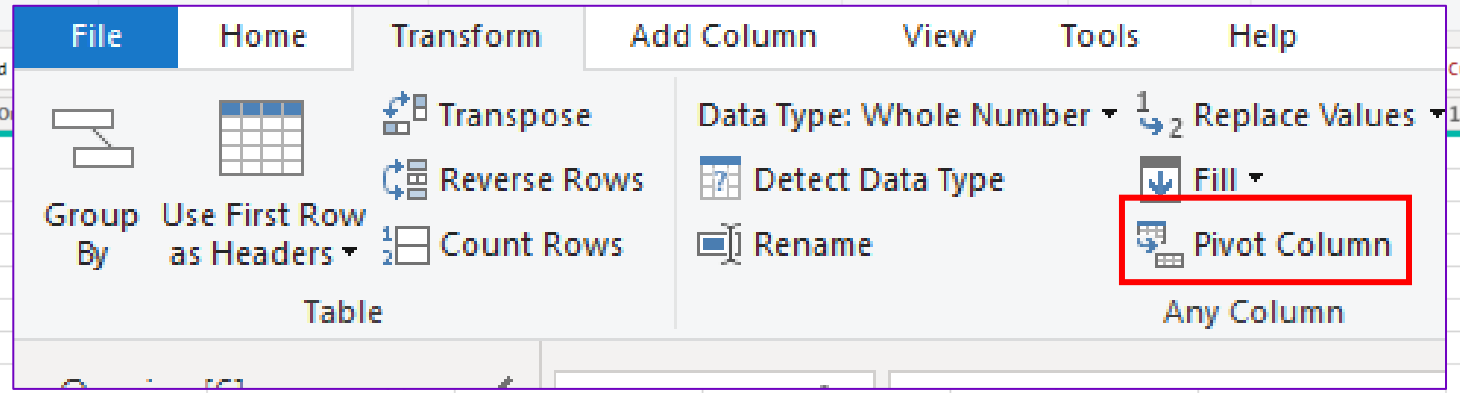
Power Query (Transform / Unpivot Column)



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





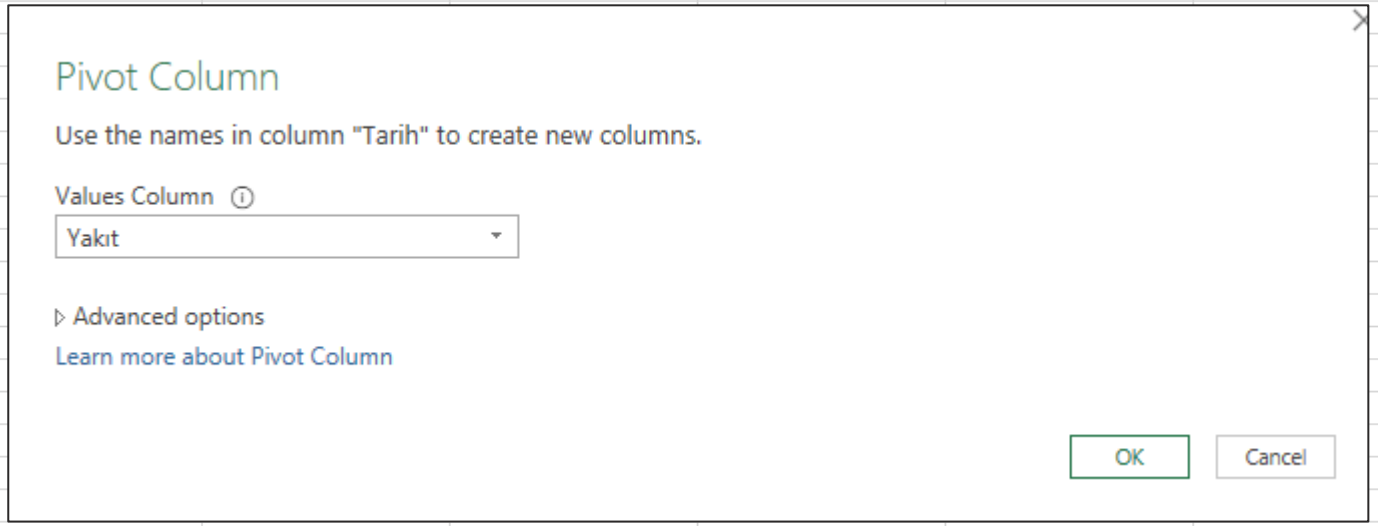
Queries [6]

- City1
- Add_Orders
- Category_Target
- Customers
- Orders
- Producs

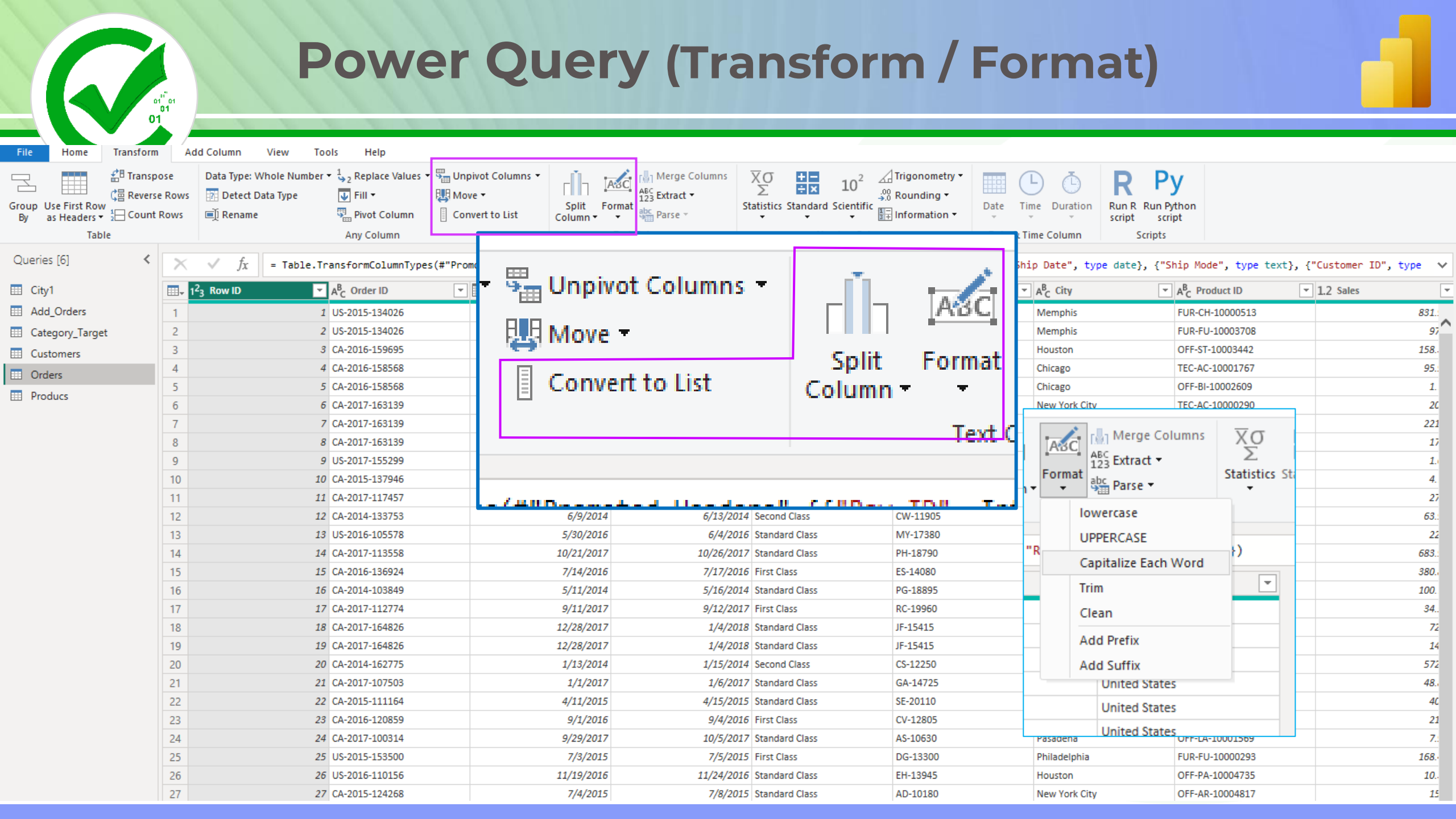
= Table.TransformColumnTypes(#"Promoted

Customer ID", type

	Row ID	Order ID							Sales
1	1	US-2015-134026							831..
2	2	US-2015-134026							97
3	3	CA-2016-159695							158..
4	4	CA-2016-158568							95..
5	5	CA-2016-158568							1.
6	6	CA-2017-163139							20
7	7	CA-2017-163139							221
8	8	CA-2017-163139							17
9	9	US-2017-155299	6/8/2017	6/12/2017	Standard Class	DI-13600	Pasadena	OFF-AP-10002203	1.
10	10	CA-2015-137946							4.
11	11	CA-2017-117457							27
12	12	CA-2014-133753							63..
13	13	US-2016-105578							22
14	14	CA-2017-113558							683..
15	15	CA-2016-136924							380..
16	16	CA-2014-103849							100.
17	17	CA-2017-112774							34..
18	18	CA-2017-164826							72
19	19	CA-2017-164826							14
20	20	CA-2014-162775							572
21	21	CA-2017-107503							48..
22	22	CA-2015-111164							40
23	23	CA-2016-120859							21
24	24	CA-2017-100314							7..
25	25	US-2015-153500							168..
26	26	US-2016-110156	11/19/2016	11/24/2016	Standard Class	EH-13945	Houston	OFF-PA-10004735	10..
27	27	CA-2015-124268	7/4/2015	7/8/2015	Standard Class	AD-10180	New York City	OFF-AR-10004817	15

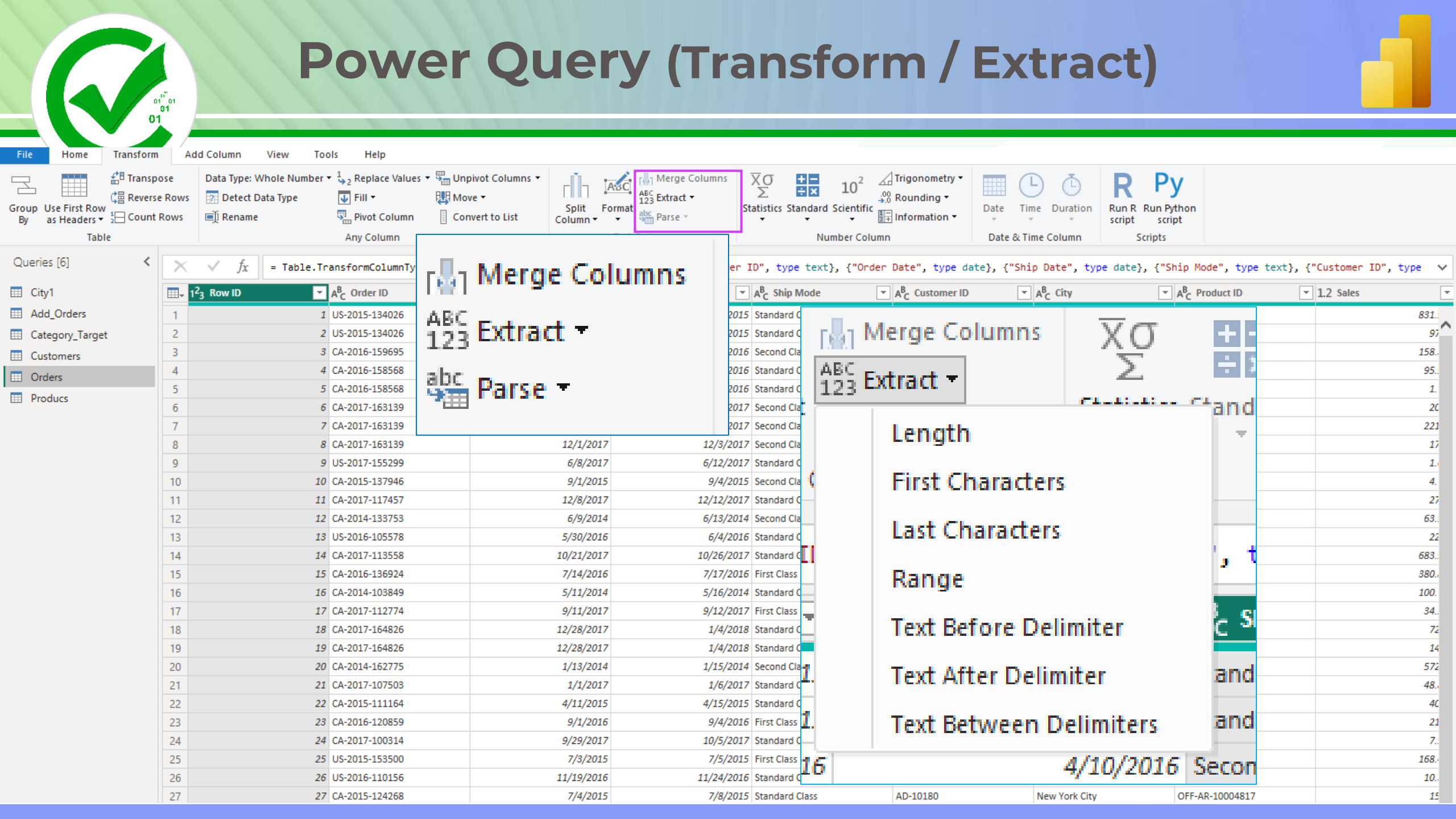


Power Query (Transform / Format)

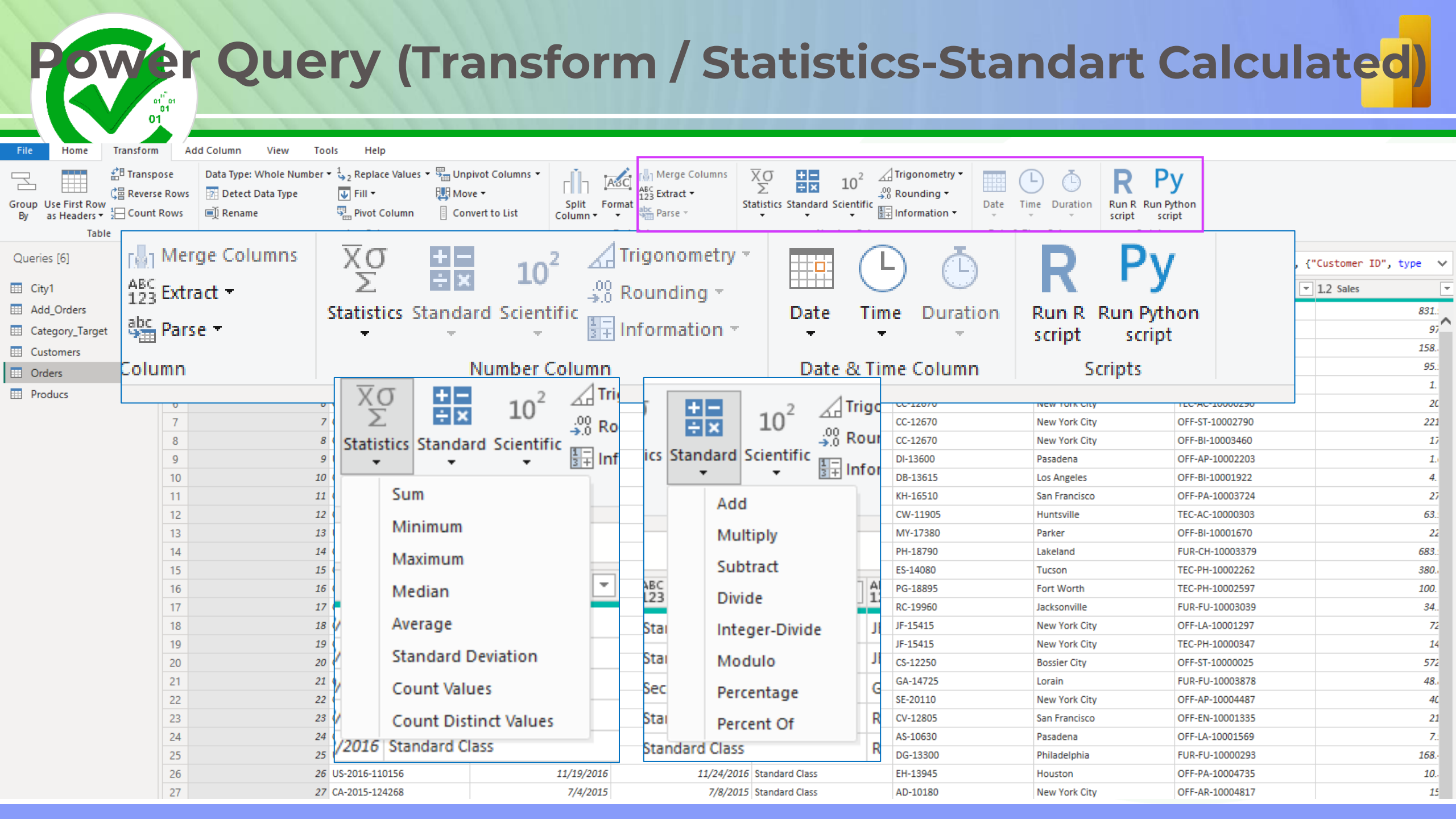


	Row ID	Order ID					City	Product ID	Sales
1	1	US-2015-134026					Memphis	FUR-CH-10000513	831..
2	2	US-2015-134026					Memphis	FUR-FU-10003708	97
3	3	CA-2016-159695					Houston	OFF-ST-10003442	158..
4	4	CA-2016-158568					Chicago	TEC-AC-10001767	95..
5	5	CA-2016-158568					Chicago	OFF-BI-10002609	1.
6	6	CA-2017-163139					New York City	TEC-AC-10000290	20
7	7	CA-2017-163139							221
8	8	CA-2017-163139							17
9	9	US-2017-155299							1.
10	10	CA-2015-137946							4.
11	11	CA-2017-117457							27
12	12	CA-2014-133753	6/9/2014	6/13/2014	Second Class	CW-11905			63..
13	13	US-2016-105578	5/30/2016	6/4/2016	Standard Class	MY-17380			22
14	14	CA-2017-113558	10/21/2017	10/26/2017	Standard Class	PH-18790			683..
15	15	CA-2016-136924	7/14/2016	7/17/2016	First Class	ES-14080			380..
16	16	CA-2014-103849	5/11/2014	5/16/2014	Standard Class	PG-18895			100.
17	17	CA-2017-112774	9/11/2017	9/12/2017	First Class	RC-19960			34..
18	18	CA-2017-164826	12/28/2017	1/4/2018	Standard Class	JF-15415			72
19	19	CA-2017-164826	12/28/2017	1/4/2018	Standard Class	JF-15415			14
20	20	CA-2014-162775	1/13/2014	1/15/2014	Second Class	CS-12250			572
21	21	CA-2017-107503	1/1/2017	1/6/2017	Standard Class	GA-14725			48..
22	22	CA-2015-111164	4/11/2015	4/15/2015	Standard Class	SE-20110			40
23	23	CA-2016-120859	9/1/2016	9/4/2016	First Class	CV-12805			21
24	24	CA-2017-100314	9/29/2017	10/5/2017	Standard Class	AS-10630			7..
25	25	US-2015-153500	7/3/2015	7/5/2015	First Class	DG-13300	Philadelphia	FUR-FU-10000293	168..
26	26	US-2016-110156	11/19/2016	11/24/2016	Standard Class	EH-13945	Houston	OFF-PA-10004735	10..
27	27	CA-2015-124268	7/4/2015	7/8/2015	Standard Class	AD-10180	New York City	OFF-AR-10004817	15

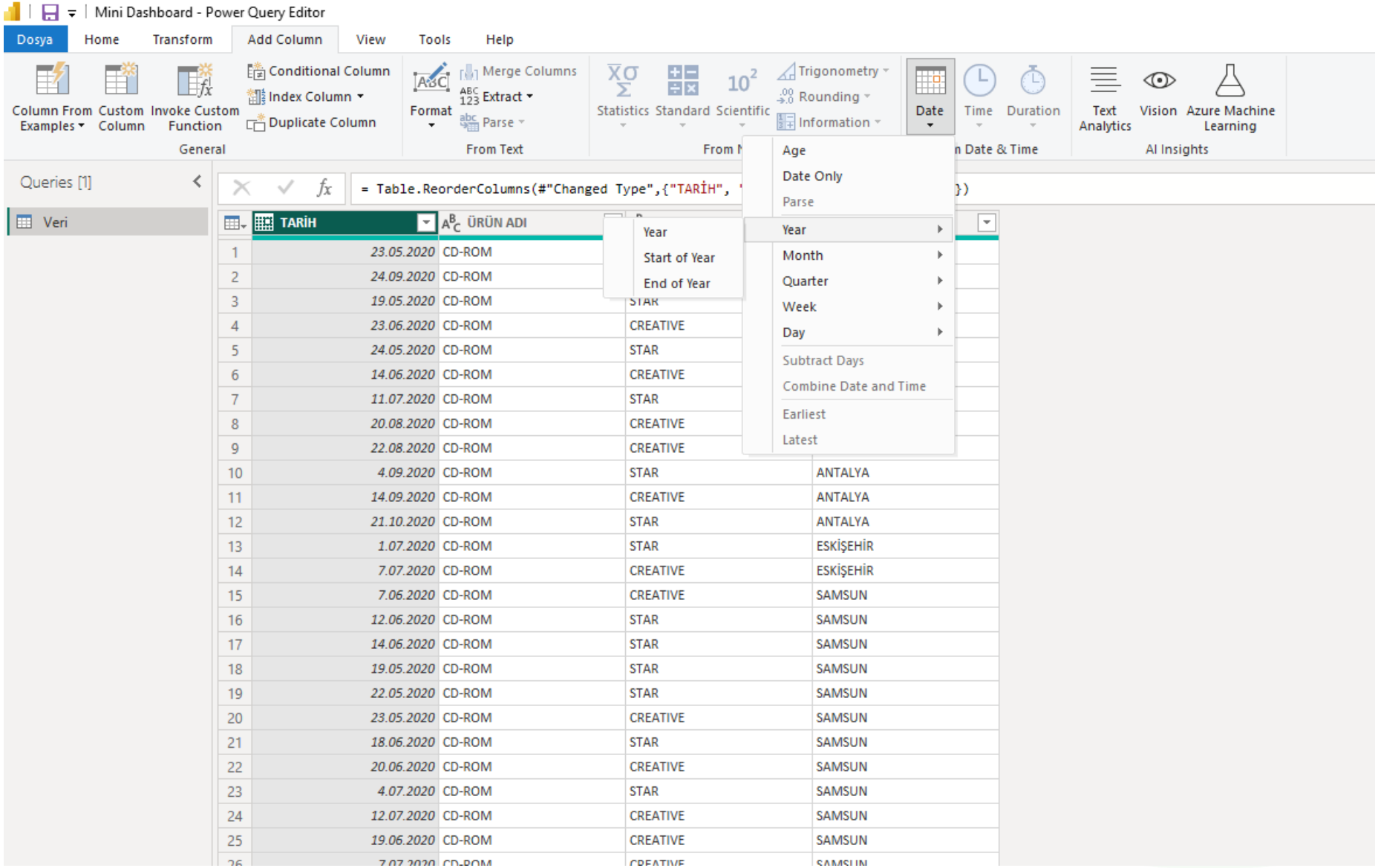
Power Query (Transform / Extract)



Power Query (Transform / Statistics-Standart Calculated)

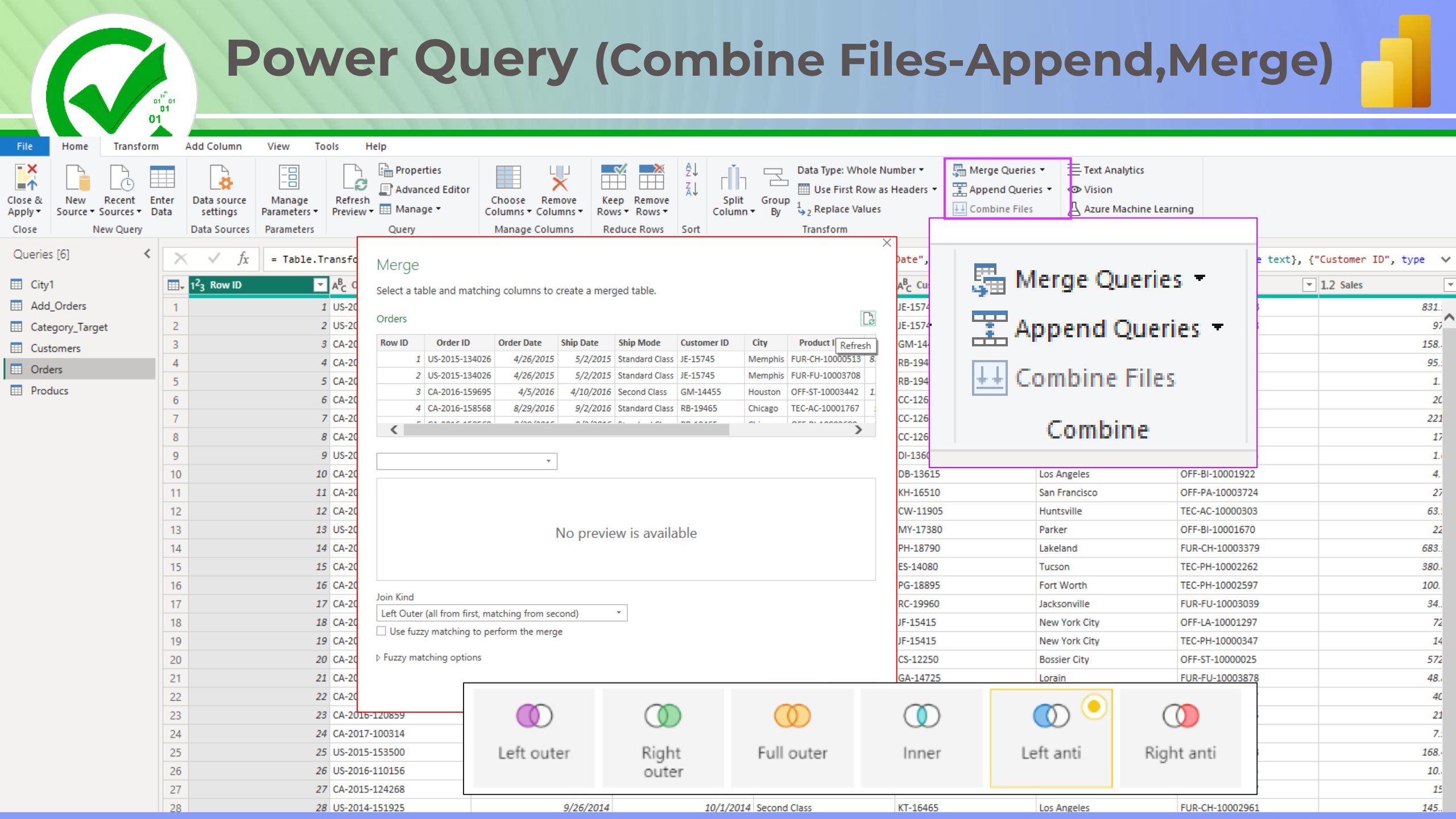


Power Query (DATE)

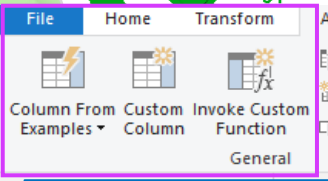


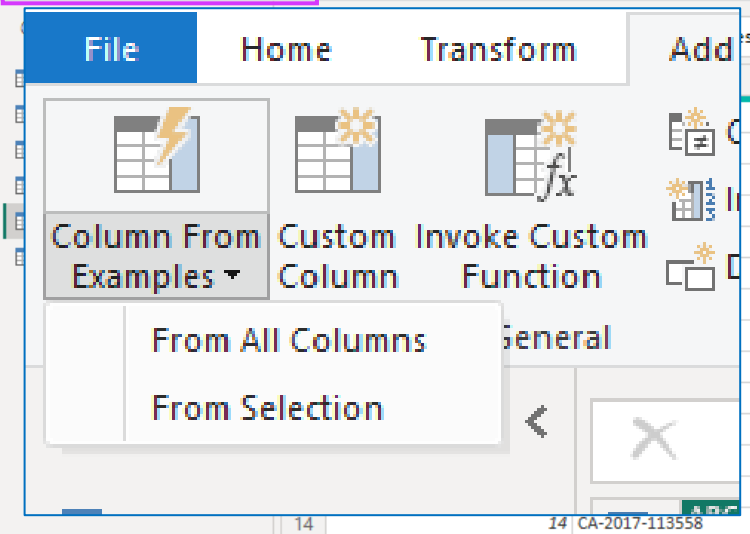
	TARİH	ÜRÜN ADI		
1	23.05.2020	CD-ROM		
2	24.09.2020	CD-ROM		
3	19.05.2020	CD-ROM	STAR	
4	23.06.2020	CD-ROM	CREATIVE	
5	24.05.2020	CD-ROM	STAR	
6	14.06.2020	CD-ROM	CREATIVE	
7	11.07.2020	CD-ROM	STAR	
8	20.08.2020	CD-ROM	CREATIVE	
9	22.08.2020	CD-ROM	CREATIVE	
10	4.09.2020	CD-ROM	STAR	ANTALYA
11	14.09.2020	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

Power Query (Combine Files-Append,Merge)



Power Query (Add Column)






```
=Table.TransformColumnTypes(#"Promoted Headers",{{"Order Date", type date}})
```

	Row ID	Order ID	Order Date	Ship Date	Ship Mode	Customer ID	City	Product ID	Sales
14	14	CA-2017-113558	10/21/2017	10/26/2017	Standard Class	PH-18790	Lakeland	FUR-CH-10003379	683.
15	15	CA-2016-136924	7/14/2016	7/17/2016	First Class	ES-14080	Tucson	TEC-PH-10002262	380.
16	16	CA-2014-103849	5/11/2014	5/16/2014	Standard Class	PG-18895	Fort Worth	TEC-PH-10002597	100.
17	17	CA-2017-112774	9/11/2017	9/12/2017	First Class	RC-19960	Jacksonville	FUR-FU-10003039	34.
18	18	CA-2017-164826	12/28/2017	1/4/2018	Standard Class	JF-15415	New York City	OFF-LA-10001297	72
19	19	CA-2017-164826	12/28/2017	1/4/2018	Standard Class	JF-15415	New York City	TEC-PH-10000347	14
20	20	CA-2014-162775	1/13/2014	1/15/2014	Second Class	CS-12250	Bossier City	OFF-ST-10000025	572
21	21	CA-2017-107503	1/1/2017	1/6/2017	Standard Class	GA-14725	Lorain	FUR-FU-10003878	48.
22	22	CA-2015-111164	4/11/2015	4/15/2015	Standard Class	SE-20110	New York City	OFF-AP-10004487	40
23	23	CA-2016-120859	9/1/2016	9/4/2016	First Class	CV-12805	San Francisco	OFF-EN-10001335	21
24	24	CA-2017-100314	9/29/2017	10/5/2017	Standard Class	AS-10630	Pasadena	OFF-LA-10001569	7.
25	25	US-2015-153500	7/3/2015	7/5/2015	First Class	DG-13300	Philadelphia	FUR-FU-10000293	168.
26	26	US-2016-110156	11/19/2016	11/24/2016	Standard Class	EH-13945	Houston	OFF-PA-10004735	10.
27	27	CA-2015-124268	7/4/2015	7/8/2015	Standard Class	AD-10180	New York City	OFF-AR-10004817	15
28	28	US-2014-151925	9/26/2014	10/1/2014	Second Class	KT-16465	Los Angeles	FUR-CH-10002961	145.
29	29	US-2017-117247	10/9/2017	10/14/2017	Standard Class	CK-12760	Aurora	FUR-TA-10002958	652
30	30	CA-2016-121034	8/8/2016	8/10/2016	Second Class	JE-15565	Dallas	OFF-PA-10001994	53

Power Query (View)

File | Home | Transform | Add Column | View | Tools | Help

Layout: Query Settings; Formula Bar
Data Preview: Monospaced; Column distribution; Show whitespace; Column profile; Column quality
Columns: Go to Column
Parameters: Always allow
Advanced: Advanced Editor
Dependencies: Query Dependencies

Queries [6]

- City1
- Category_Target
- Customers
- Producs
- Orders
- Orders_Append

```
= 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"})
```

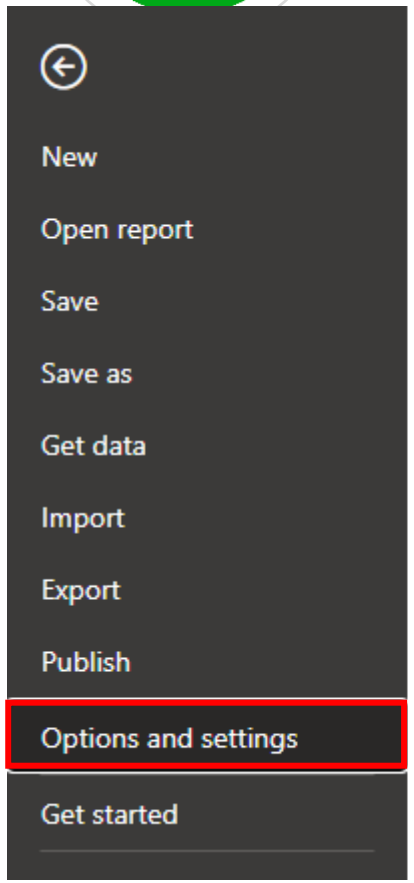
	Row ID	Index	Order ID	Order Date	Ship Date	Ship Mode	Customer ID	City	Product ID
16	16	16	CA-2014-103849	5/11/2014	5/16/2014	Standard Class	PG-18895	Fort Worth	TEC-PH-10002597
17	17	17	CA-2017-112774	9/11/2017	9/12/2017	First Class	RC-19960	Jacksonville	FUR-FU-10003039
18	18	18	CA-2017-164826	12/28/2017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

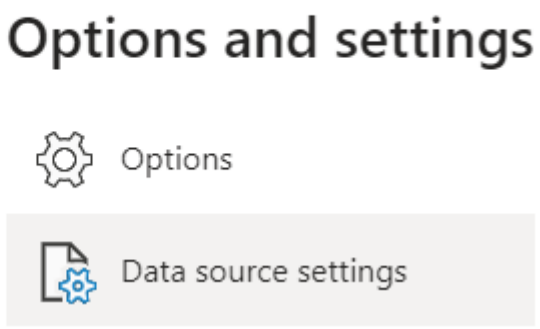
Transforming data using Python

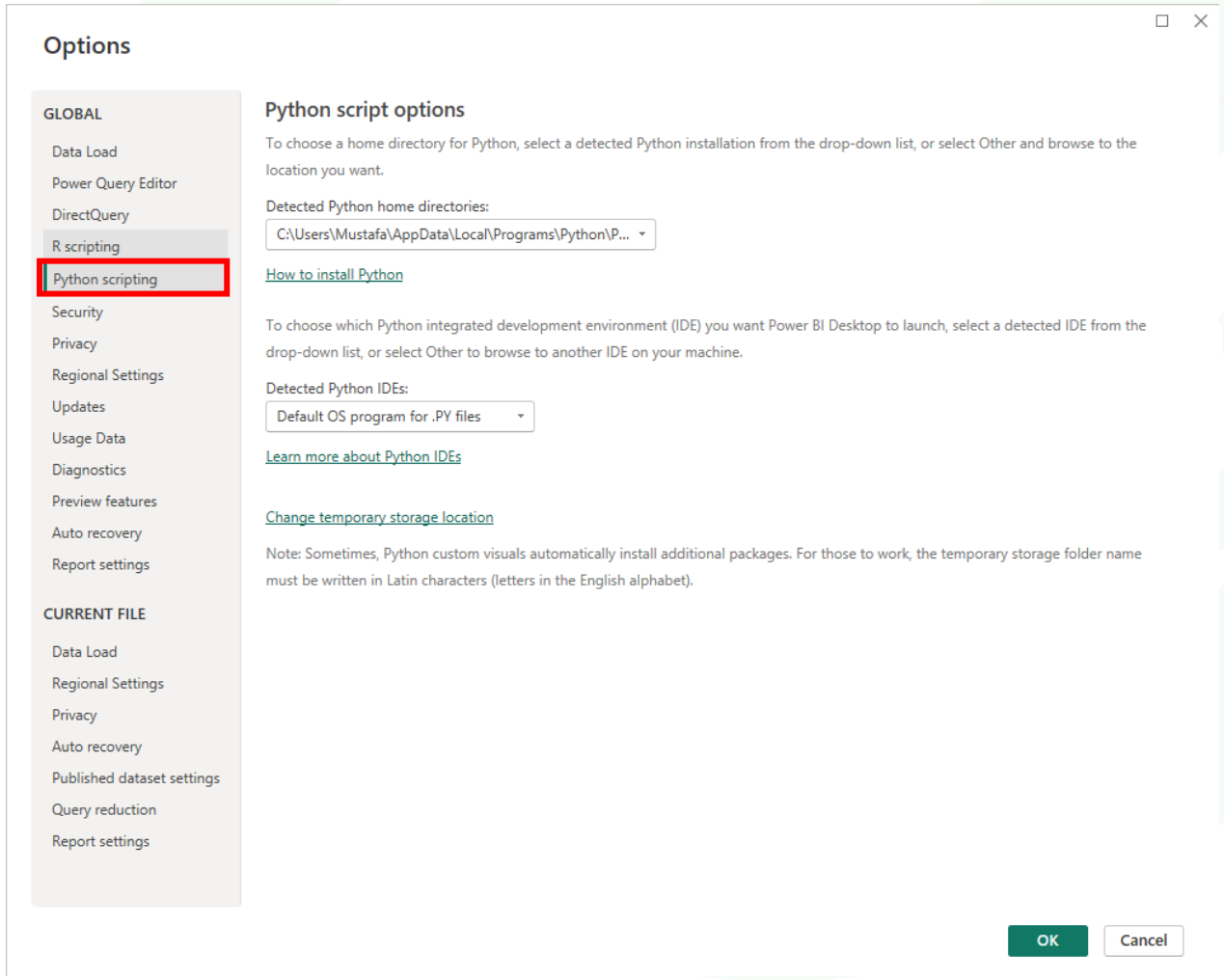
pip install pandas

pip install matplotlib

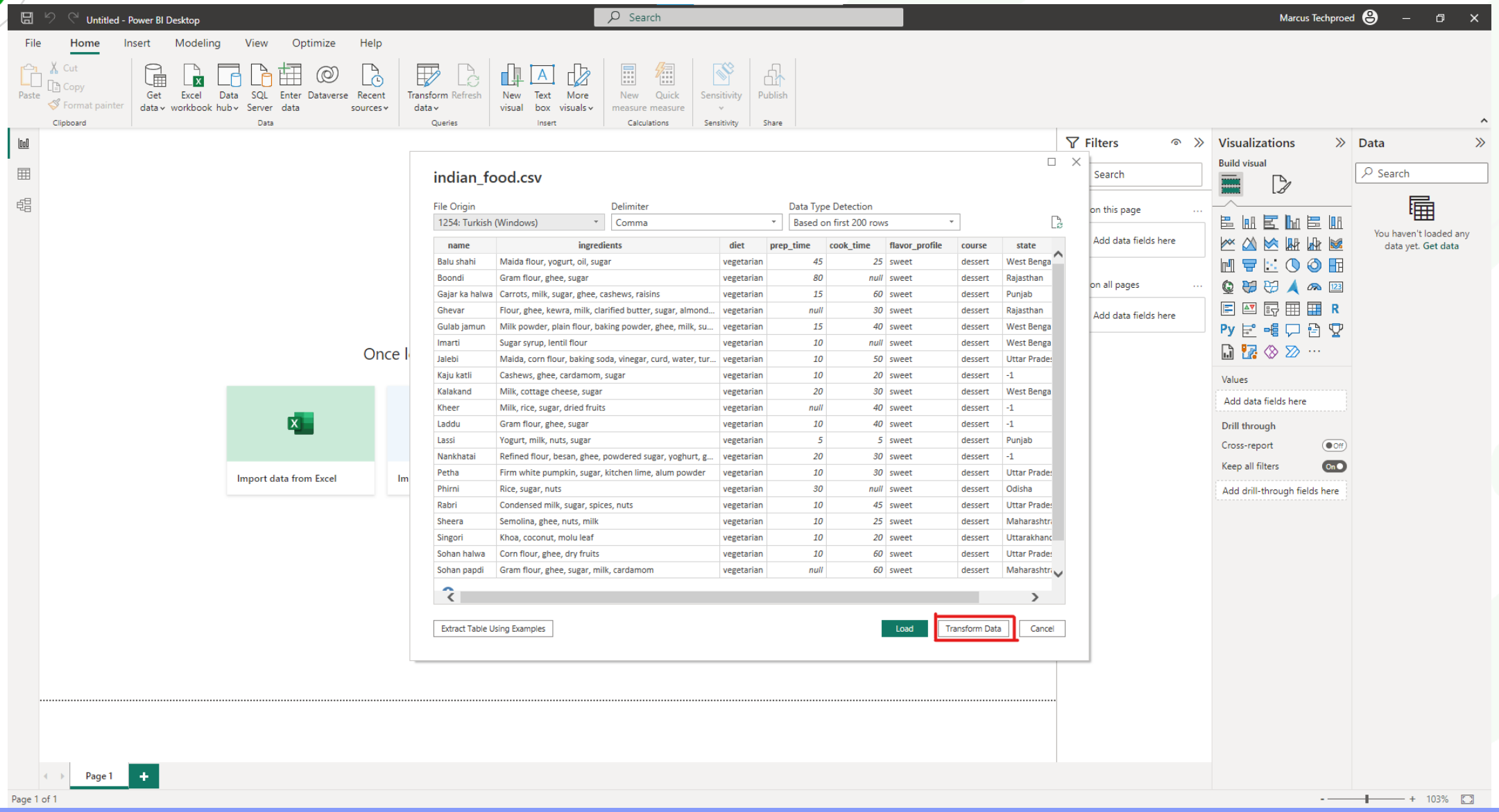
Power Query (Transforming data using Python)







Power Query (Transforming data using Python)



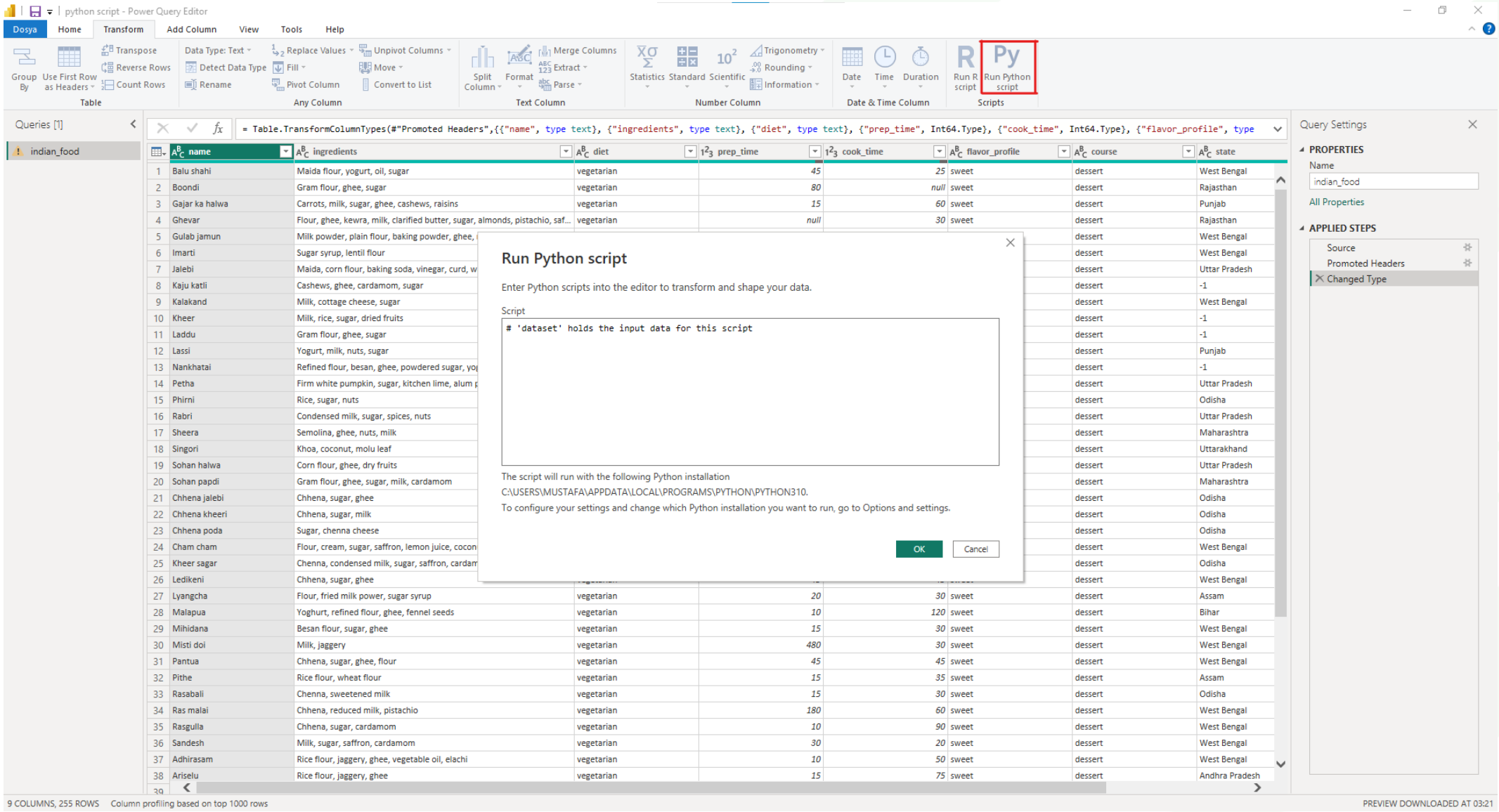
indian_food.csv

File Origin: 1254: Turkish (Windows) | Delimiter: Comma | Data Type Detection: Based on first 200 rows

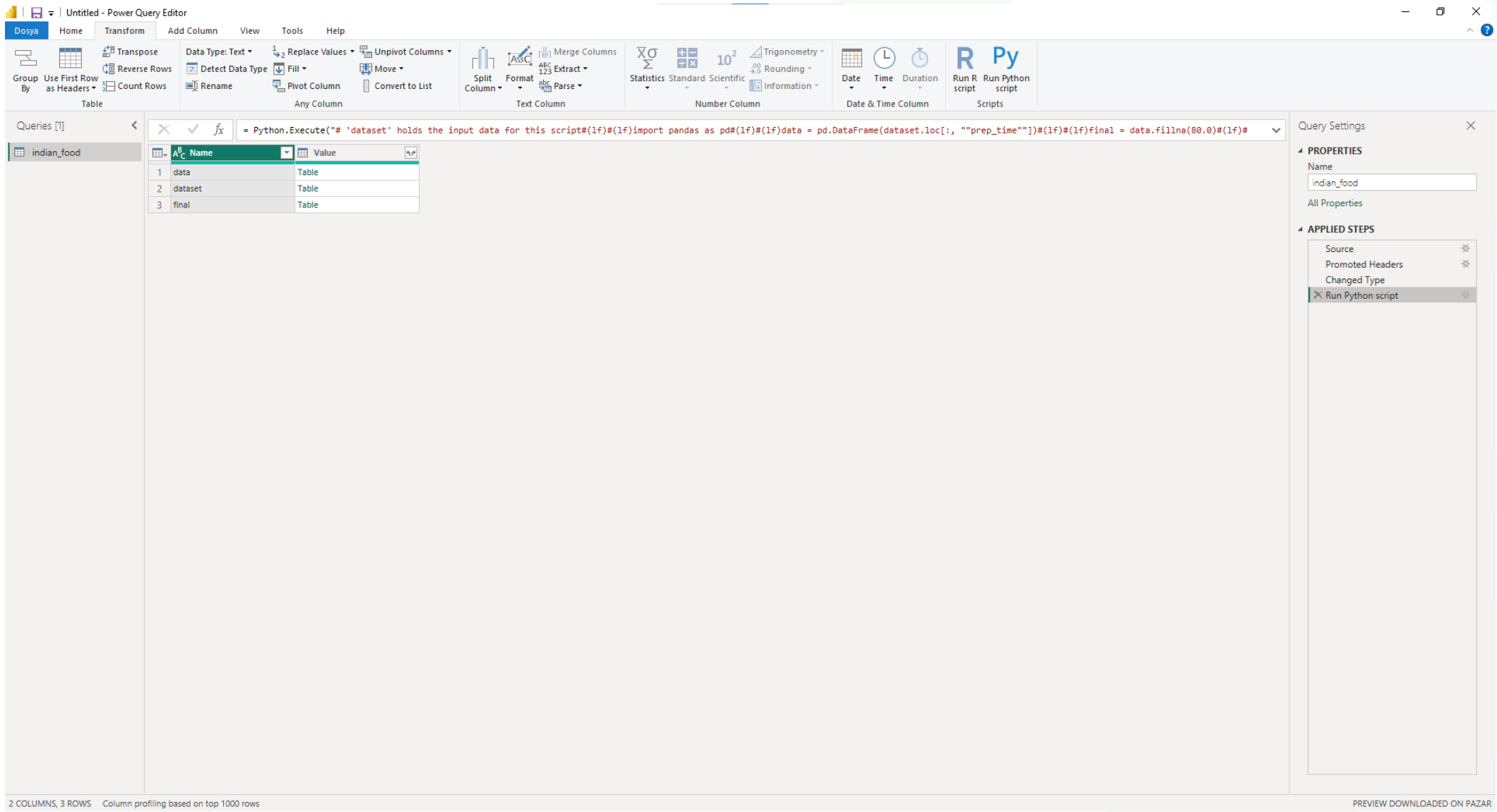
name	ingredients	diet	prep_time	cook_time	flavor_profile	course	state
Balu shahi	Maida flour, yogurt, oil, sugar	vegetarian	45	25	sweet	dessert	West Benga
Boondi	Gram flour, ghee, sugar	vegetarian	80	null	sweet	dessert	Rajasthan
Gajar ka halwa	Carrots, milk, sugar, ghee, cashews, raisins	vegetarian	15	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 Benga
Imarti	Sugar syrup, lentil flour	vegetarian	10	null	sweet	dessert	West Benga
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 Benga
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	Uttarakhanc
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

Extract Table Using Examples | Load | Transform Data | Cancel

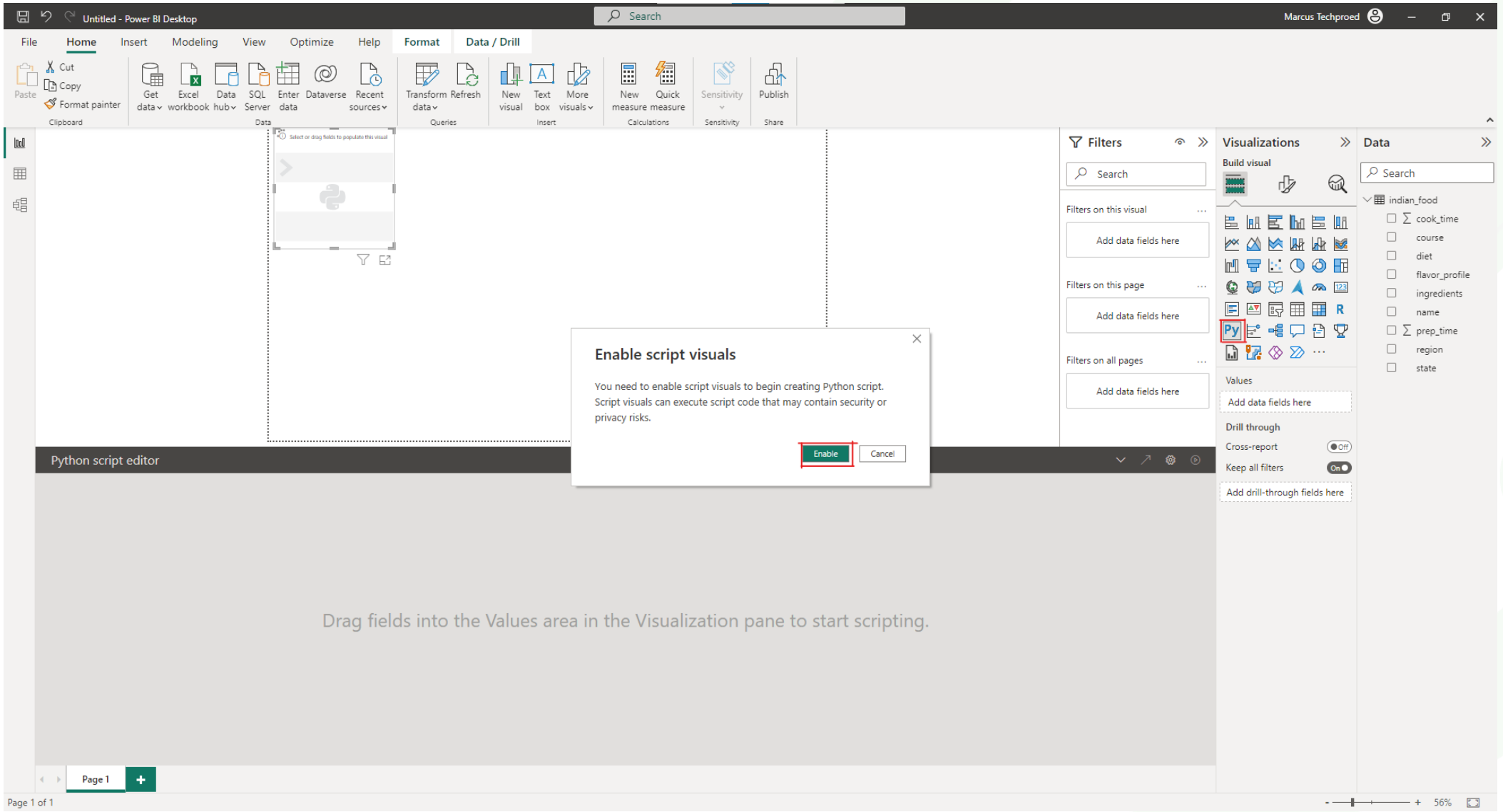
Power Query (Transforming data using Python)



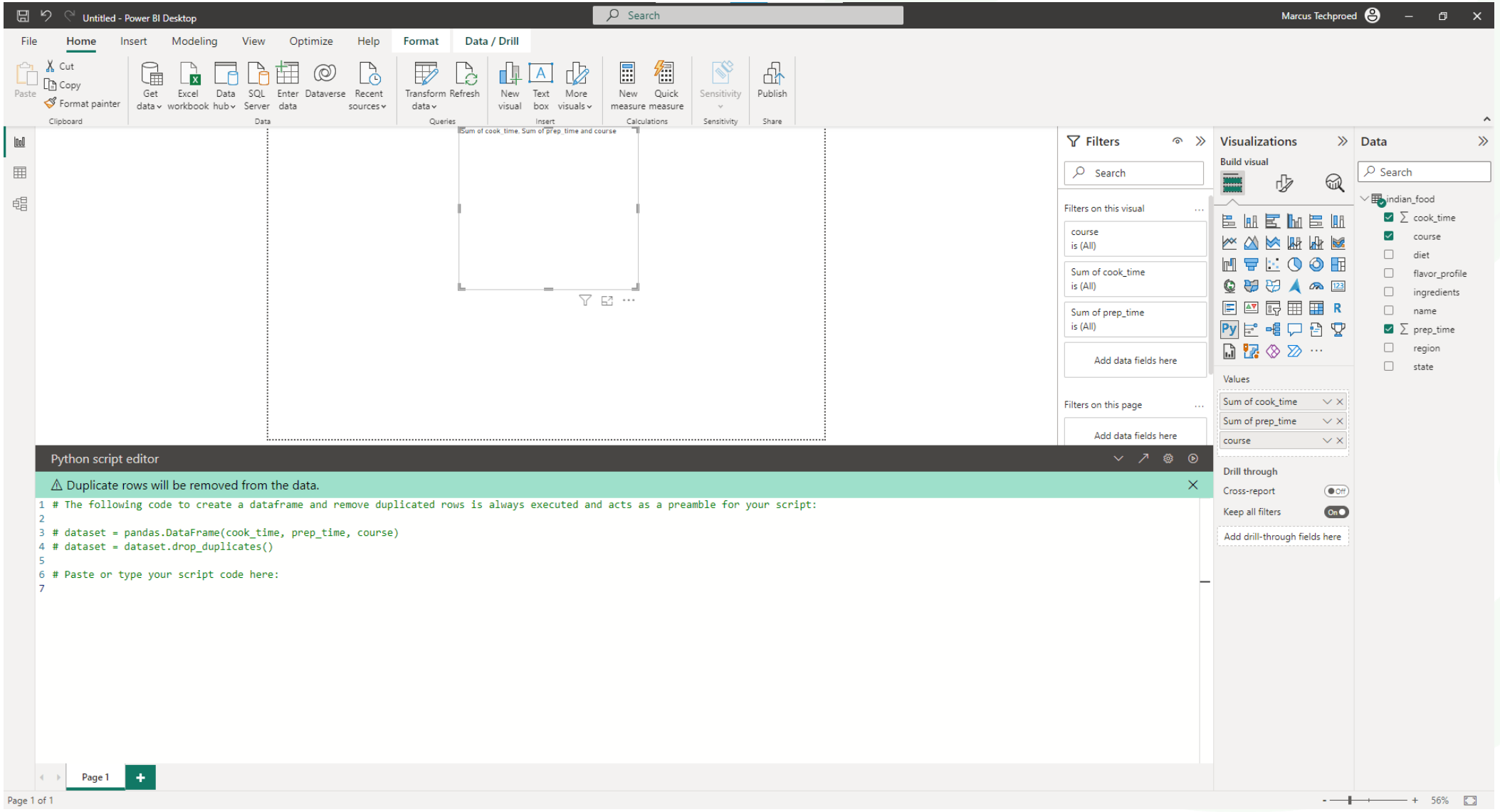
Power Query (Transforming data using Python)



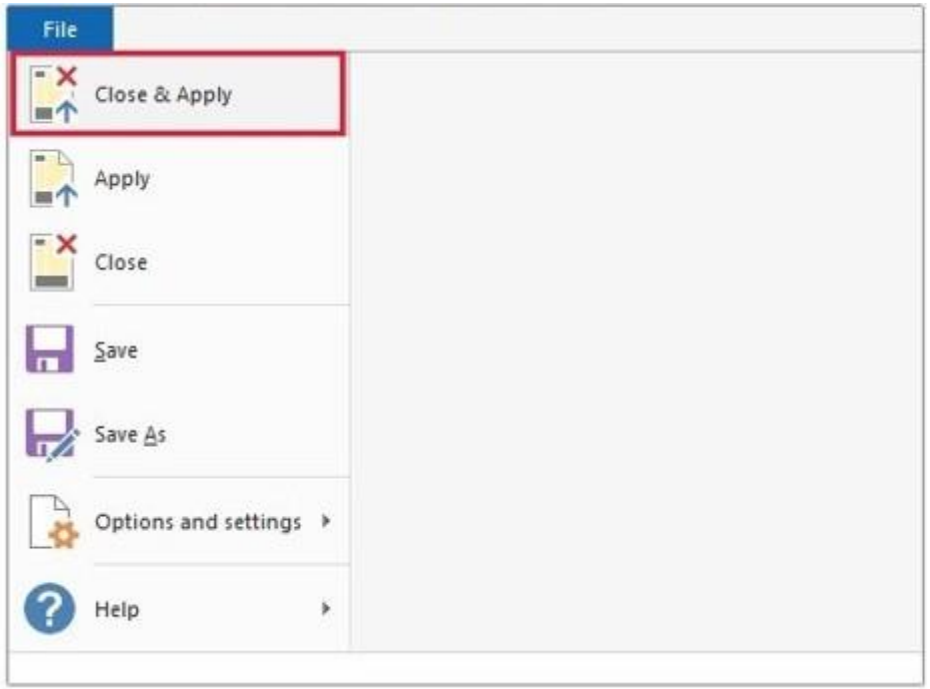
Power Query (Creating visualizations using Python)

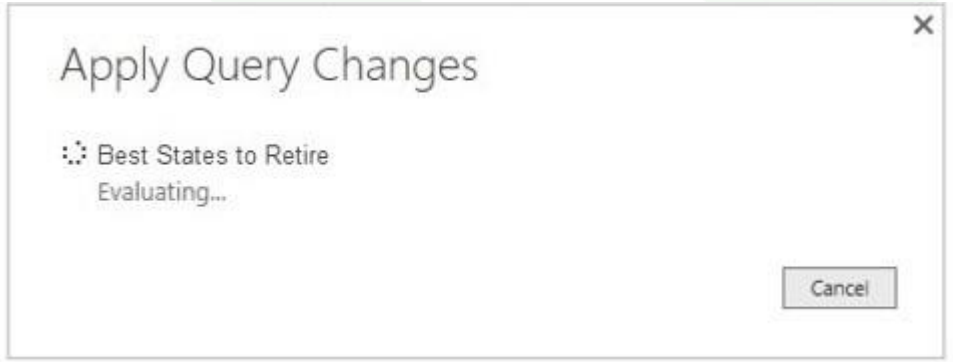


Power Query (Creating visualizations using Python)

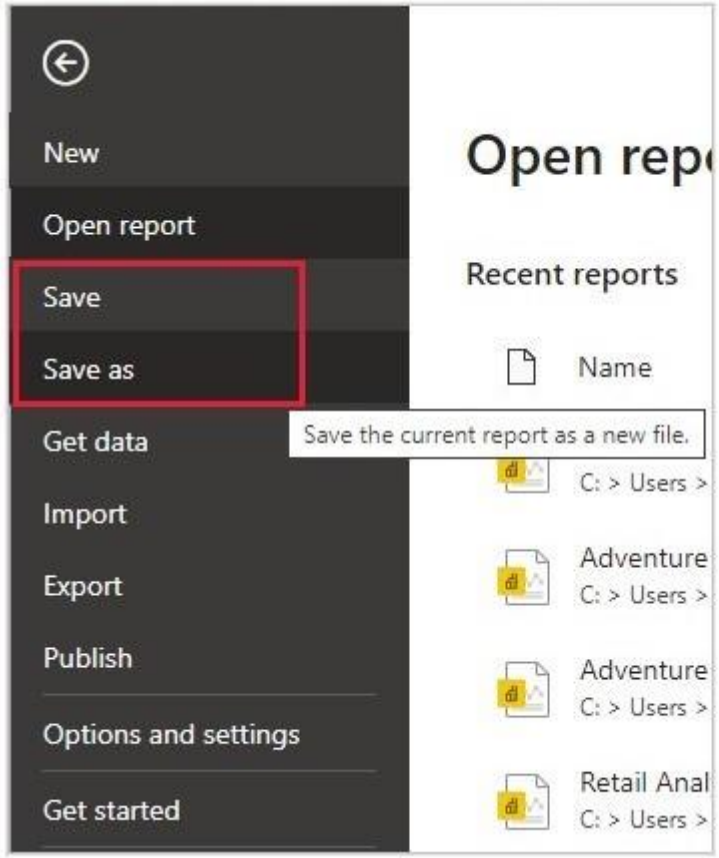


Power Query (Close & Apply)



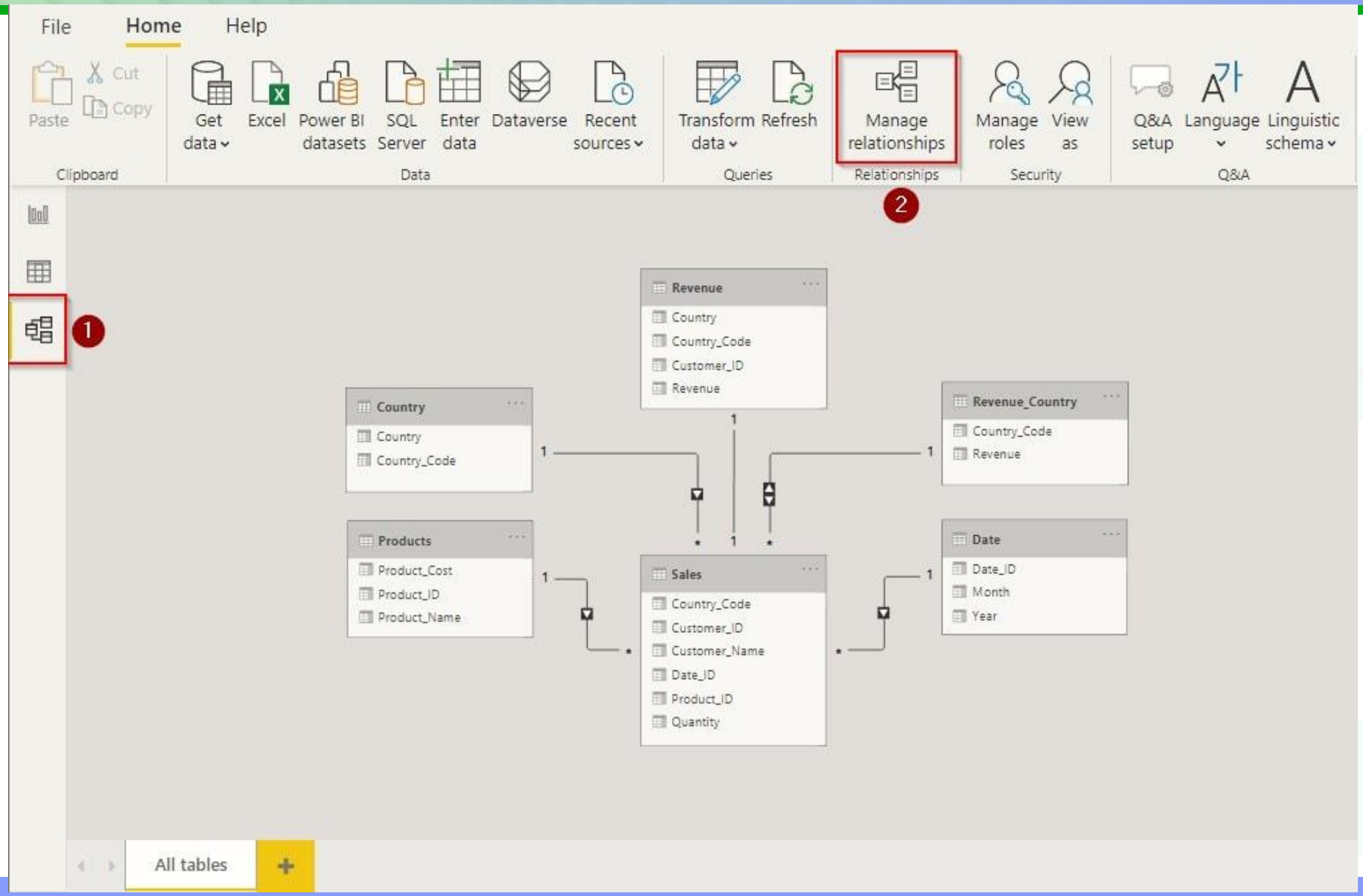


Power Query (Save)

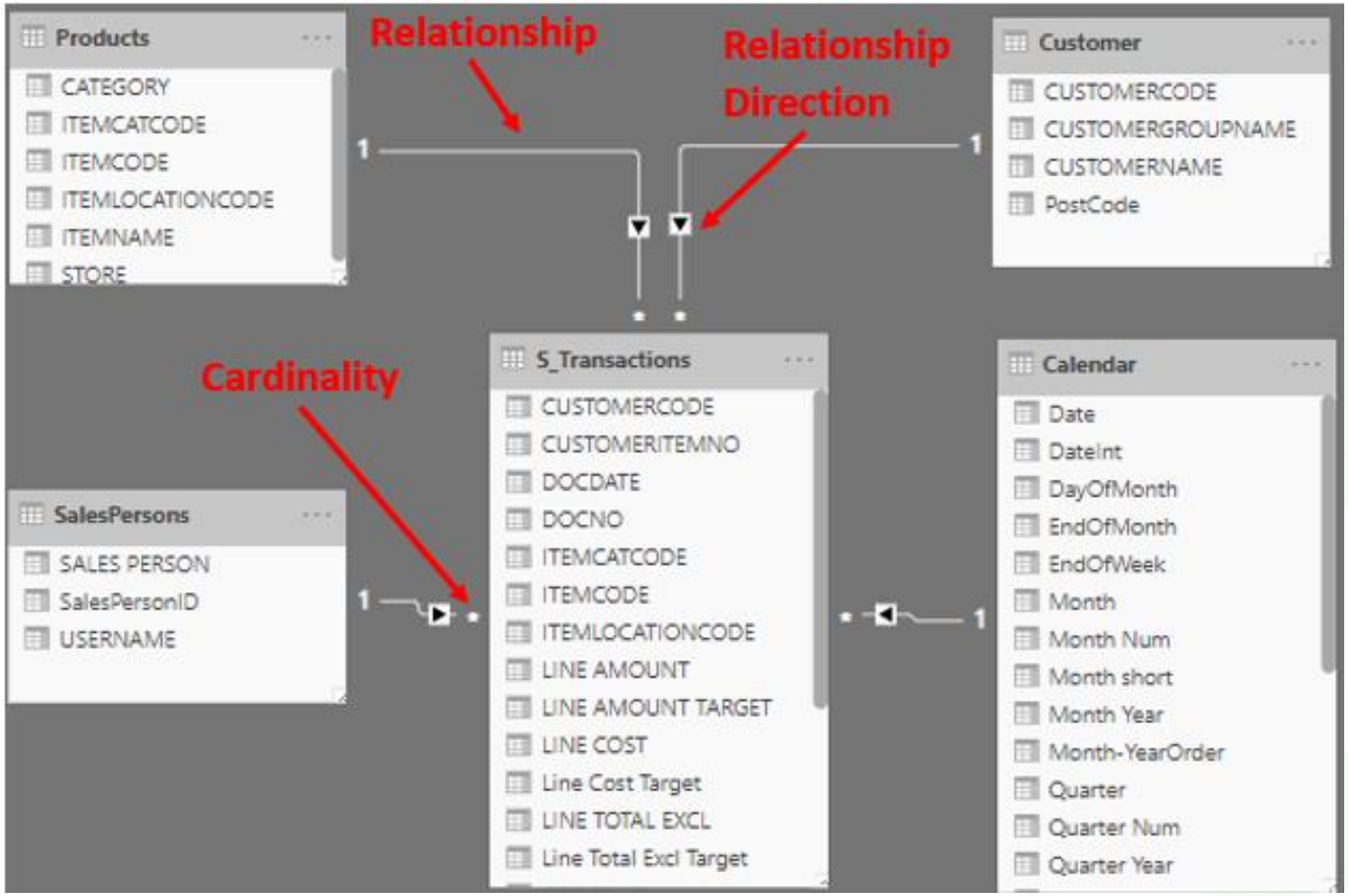


DATA MODEL

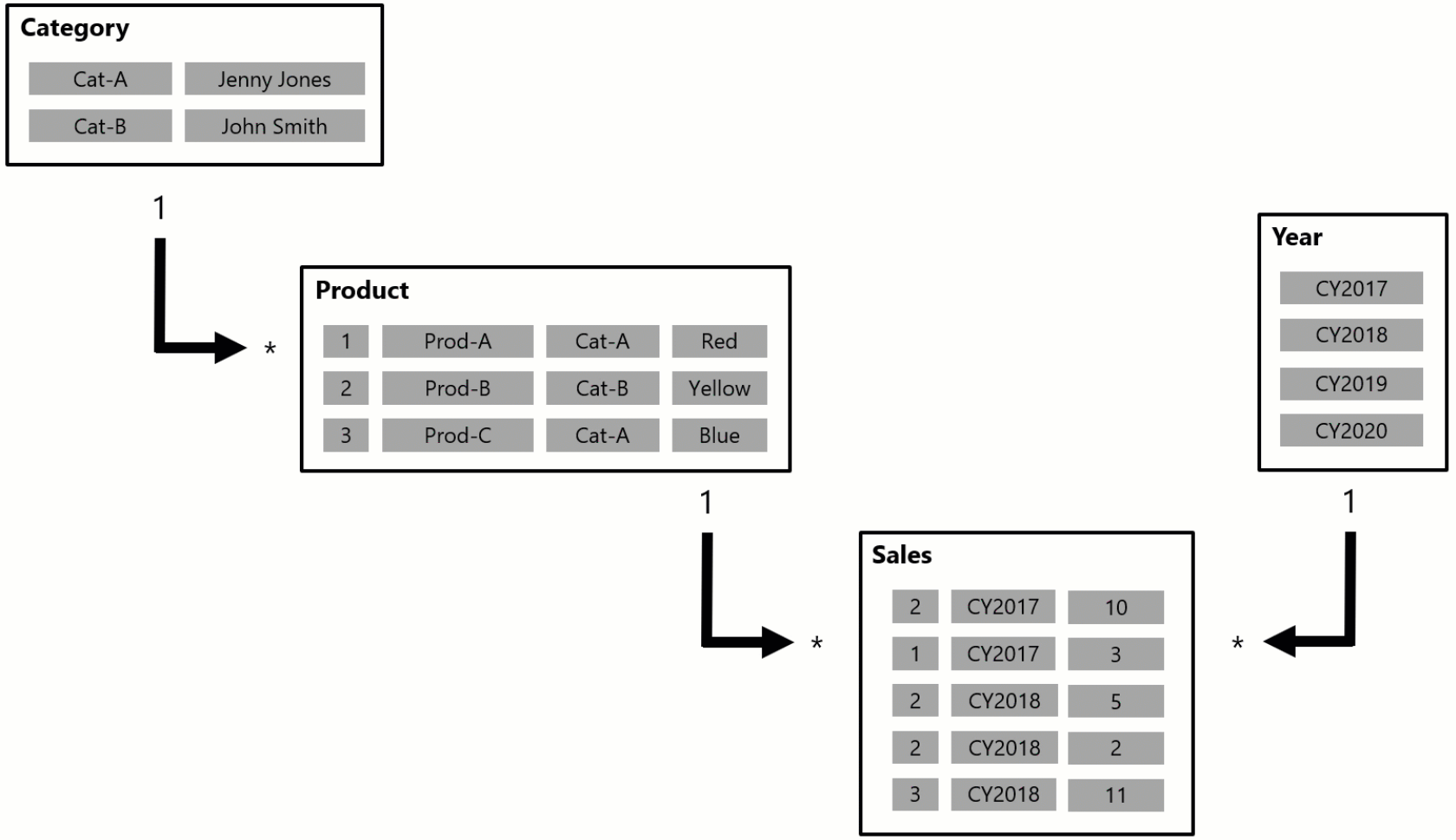
Data Model


File
Home
Help
Paste
Cut
Copy
Clipboard
Get data
Excel
Power BI datasets
SQL Server
Enter data
Dataverse
Recent sources
Data
Transform data
Refresh
Queries
Manage relationships
Relationships
Manage roles
View as
Security
Q&A setup
Language
Linguistic schema
Q&A
1
2
Revenue
Country
Country_Code
Customer_ID
Revenue
Country
Country
Country_Code
Revenue_Country
Country_Code
Revenue
Products
Product_Cost
Product_ID
Product_Name
Sales
Country_Code
Customer_ID
Customer_Name
Date_ID
Product_ID
Quantity
Date
Date_ID
Month
Year
1
*
All tables

Data Model

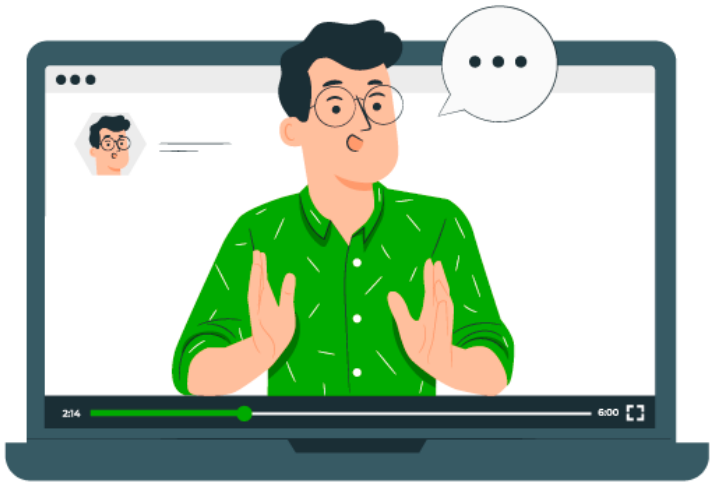

Products
CATEGORY
ITEMCATCODE
ITEMCODE
ITEMLOCATIONCODE
ITEMNAME
STORE
Relationship
Relationship Direction
Customer
CUSTOMERCODE
CUSTOMERGROUPNAME
CUSTOMERNAME
PostCode
Cardinality
S_Transactions
CUSTOMERCODE
CUSTOMERITEMNO
DOCDATE
DOCNO
ITEMCATCODE
ITEMCODE
ITEMLOCATIONCODE
LINE AMOUNT
LINE AMOUNT TARGET
LINE COST
Line Cost Target
LINE TOTAL EXCL
Line Total Excl Target
SalesPersons
SALES PERSON
SalesPersonID
USERNAME
Calendar
Date
DateInt
DayOfMonth
EndOfMonth
EndOfWeek
Month
Month Num
Month short
Month Year
Month-YearOrder
Quarter
Quarter Num
Quarter Year
1
1
1
1

Data Model


Category
Cat-A
Jenny Jones
Cat-B
John Smith
1
*
Product
1
Prod-A
Cat-A
Red
2
Prod-B
Cat-B
Yellow
3
Prod-C
Cat-A
Blue
1
*
Sales
2
CY2017
10
1
CY2017
3
2
CY2018
5
2
CY2018
2
3
CY2018
11
*
Year
CY2017
CY2018
CY2019
CY2020
1

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

Start | Stop | Reset | mins: 10 | secs: 0 | type: Tea

Breaktime for PowerPoint by Flow Simulation Ltd.

Pin controls when stopped