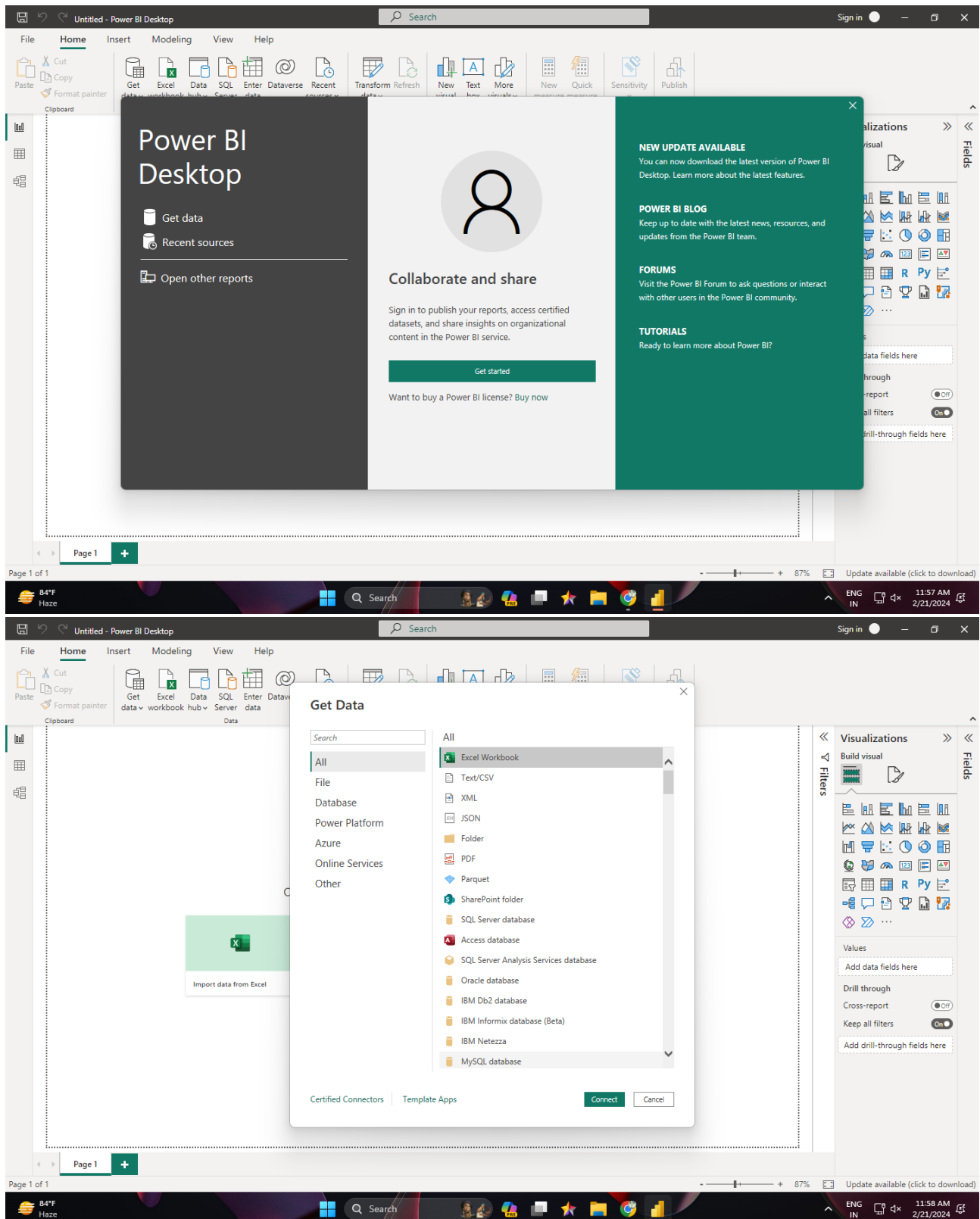
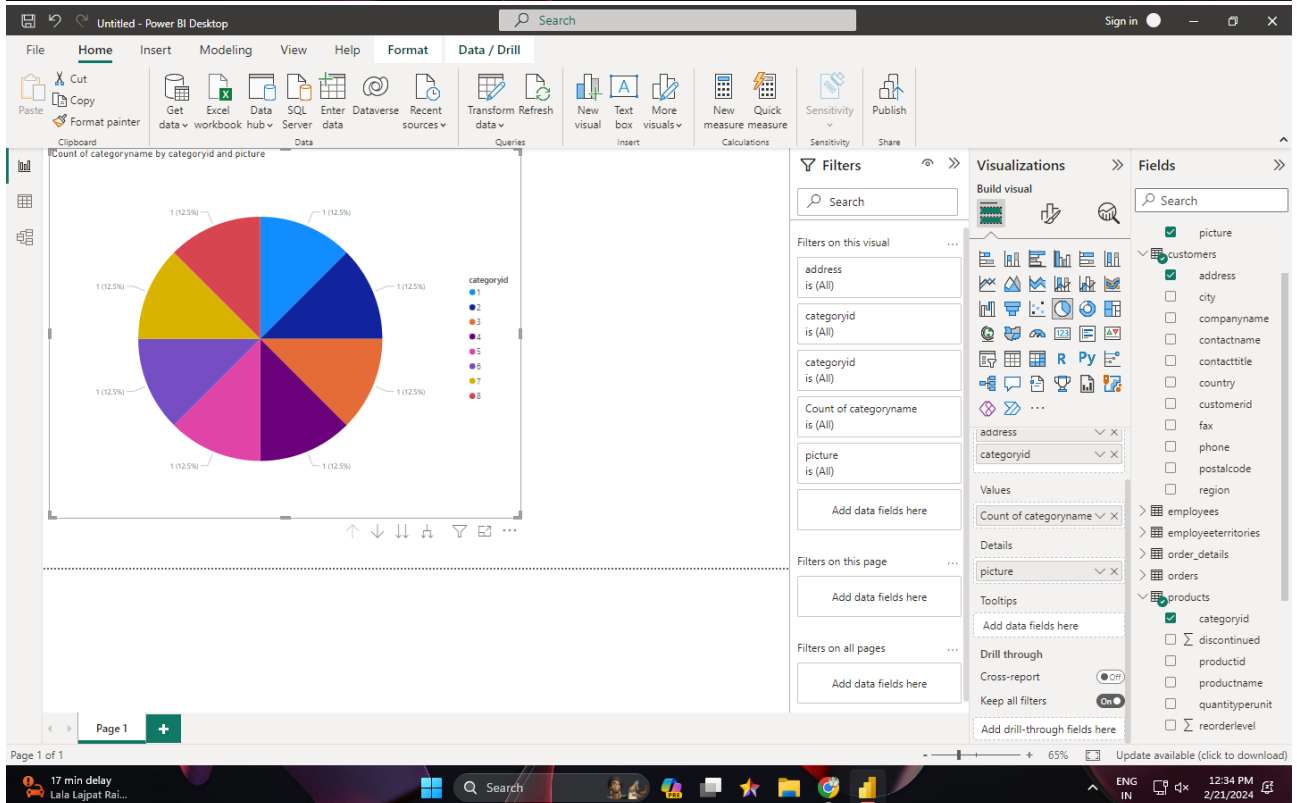
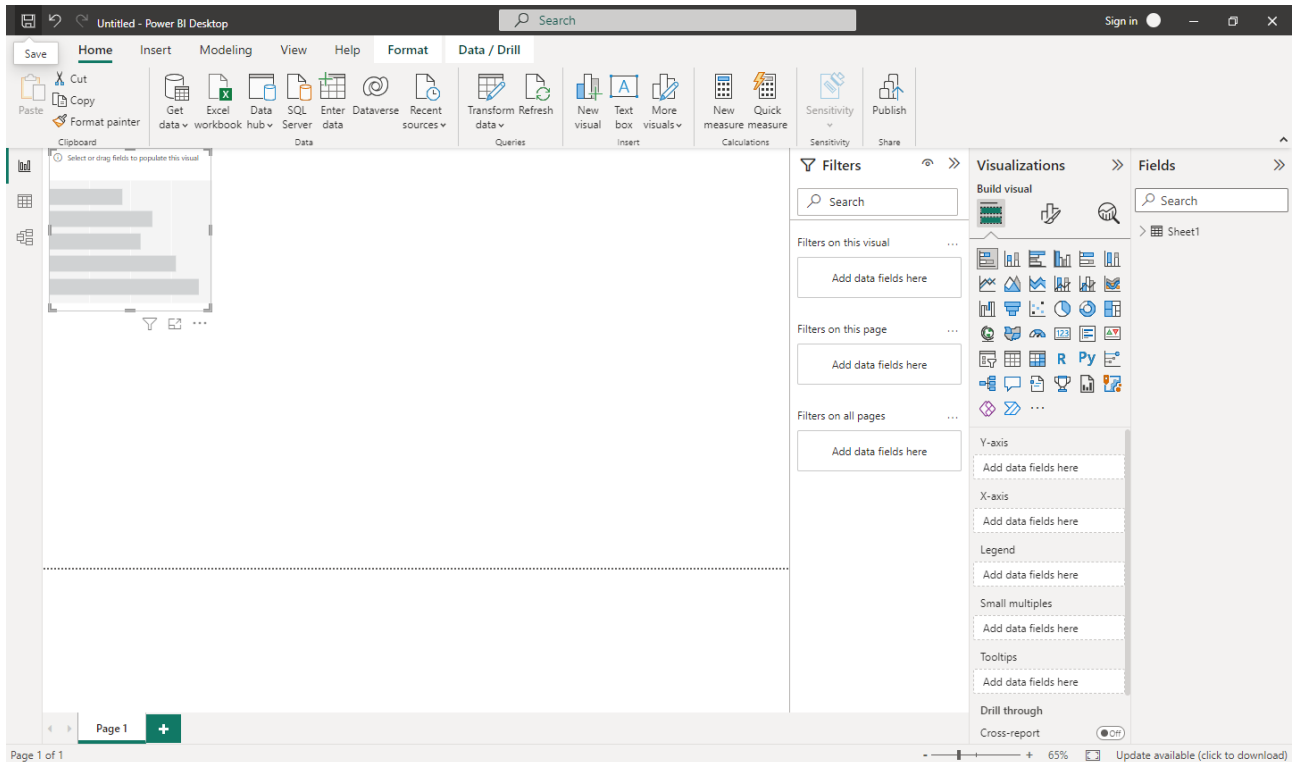
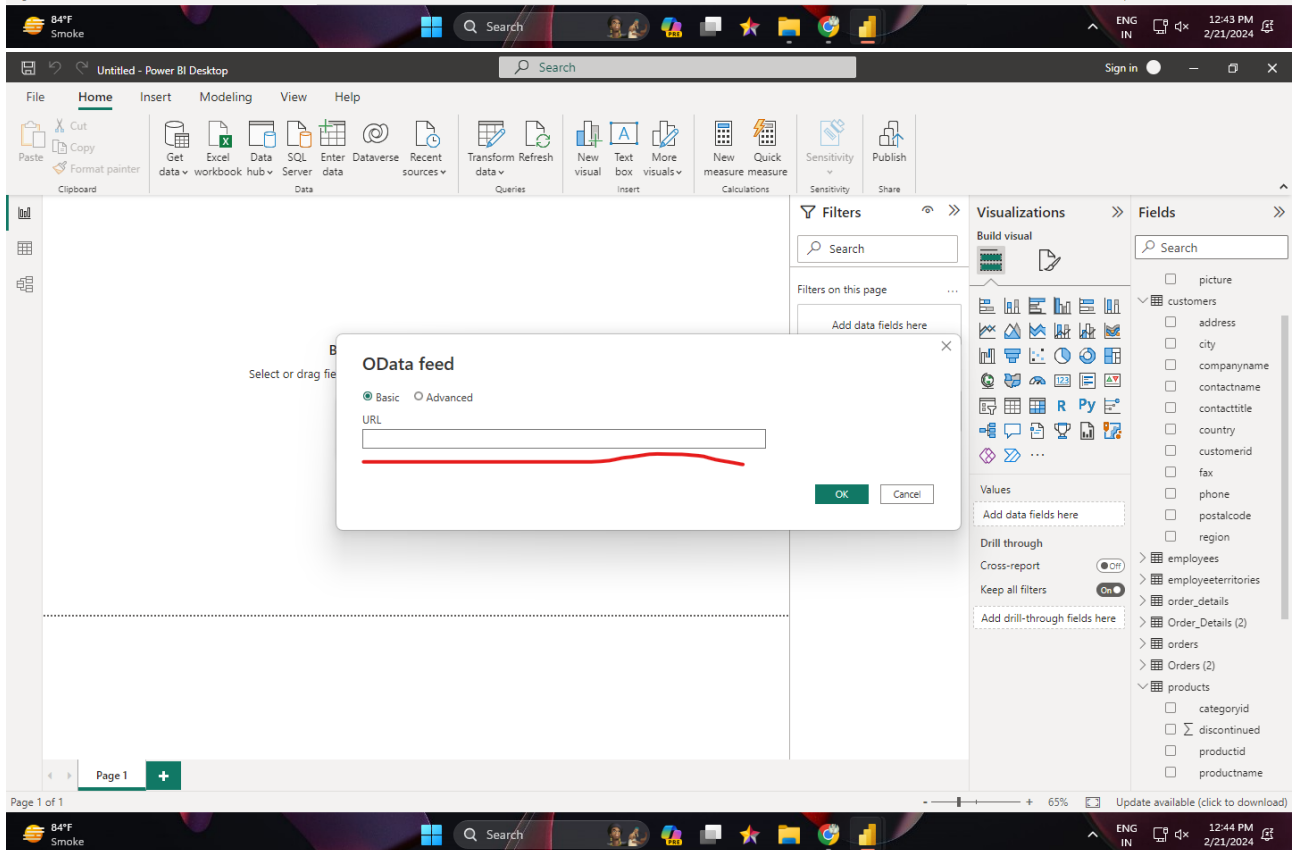
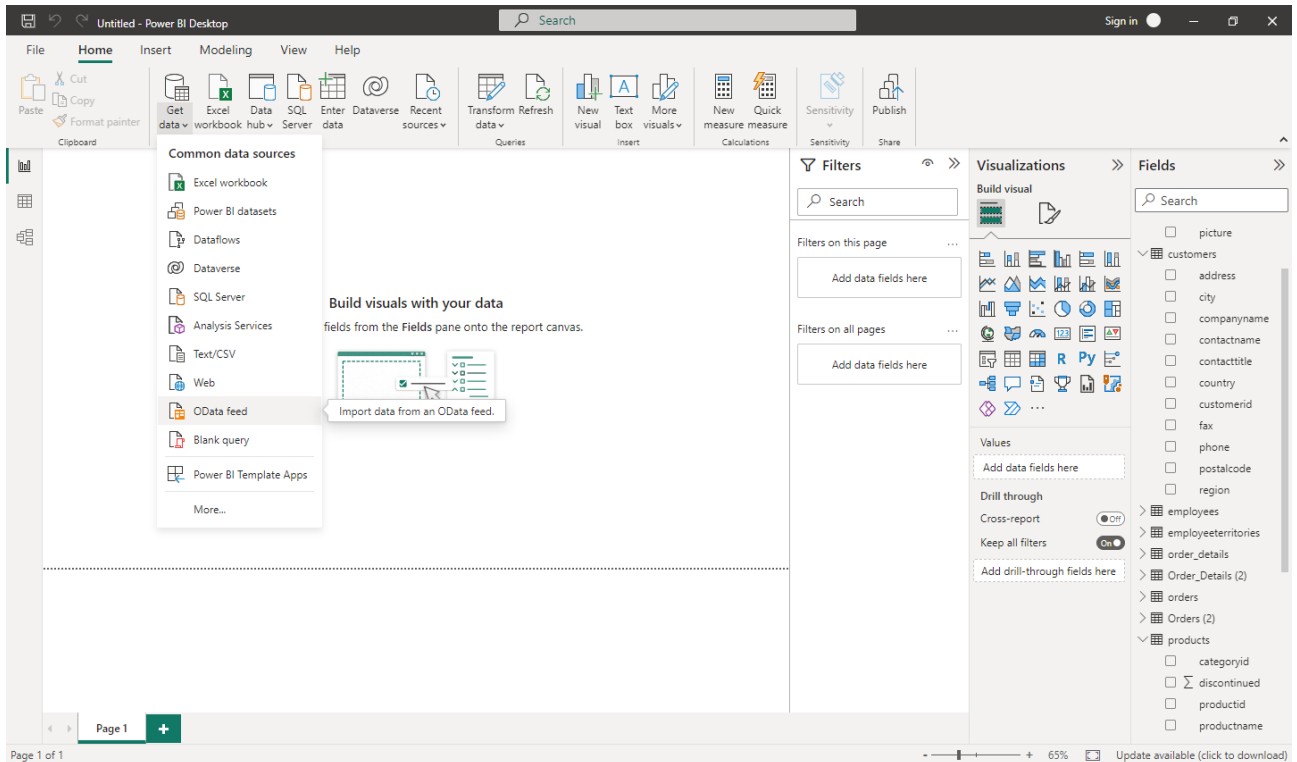


PRACTICAL 08: 05. IMPORT THE LEGACY DATA FROM DIFFERENT SOURCES SUCH AS (EXCEL, SQL SERVER, ORACLE etc.) AND LOAD IN THE TARGET SYSTEM. (YOU CAN DOWNLOAD SAMPLE DATABASE SUCH AS ADVENTURE WORKS, NORTHWIND, FOOD MART ETC.

(21/02/2024)







The image displays two screenshots of the Microsoft Power BI Desktop application interface.

Top Screenshot: Navigator Window

The 'Navigator' window is open, showing a list of data sources on the left and a preview of the 'Products' table on the right. The 'Products' table data is as follows:

ProductID	ProductName	SupplierID	CategoryID	Quantity
1	Chai	1	1	10
2	Chang	1	1	24
3	Aniseed Syrup	1	2	11
4	Chef Anton's Cajun Seasoning	2	2	48
5	Chef Anton's Gumbo Mix	2	2	36
6	Grandma's Boysenberry Spread	3	2	11
7	Uncle Bob's Organic Dried Pears	3	7	11
8	Northwoods Cranberry Sauce	3	2	11
9	Mishi Kobe Niku	4	6	18
10	Ikura	4	8	11
11	Queso Cabrales	5	4	11
12	Queso Manchego La Pastora	5	4	10
13	Konbu	6	8	2
14	Tofu	6	7	4
15	Genen Shouyu	6	2	24
16	Pavlova	7	3	3
17	Alice Mutton	7	6	20
18	Carnarvon Tigers	7	8	11
19	Teatime Chocolate Biscuits	8	3	11
20	Sir Rodney's Marmalade	8	3	3
21	Sir Rodney's Scones	8	3	24
22	Gustaf's Knäckebröd	9	5	24
23	Tunnbröd	9	5	11

Bottom Screenshot: Main Power BI Interface

The main interface shows the 'Build visuals with your data' prompt. The 'Fields' pane on the right lists the following tables and their columns:

- customers: picture, address, city, companyname, contactname, contacttitle, country, customerid, fax, phone, postalcode, region
- employees: employees, employeeterritories
- order_details: order_details, orders
- products: categoryid, discontinued, productid, productname, quantityperunit, reorderlevel

The image displays two screenshots of the Microsoft Power BI Desktop interface, specifically the Power Query Editor window.

Top Screenshot: The 'Power Query Editor' window is open, showing a table with 8 columns: categoryid, categoryname, description, picture, and others. The table contains 8 rows of data. The 'Query Settings' pane on the right shows the 'Name' as 'categories' and the 'Applied Steps' list.

Bottom Screenshot: The 'Power Query Editor' window is open, showing a table with 6 columns: orderid, productid, unitprice, quantity, discount, and Cost. The table contains 21 rows of data. A 'Custom Column' dialog box is open, showing the formula: `= [unitprice]*[quantity]-[discount]`. The 'Available columns' list on the right includes orderid, productid, unitprice, quantity, discount, and Cost. The 'Query Settings' pane on the right shows the 'Name' as 'order_details' and the 'Applied Steps' list.

Power BI-453 - Power Query Editor

File Home Transform Add Column View Tools Help

Column From Custom Examples Column Invoke Custom Function General Conditional Column Index Column Duplicate Column Format Merge Columns ABC 123 Extract Parse From Text Statistics Standard Scientific 10² Trigonometry Rounding Information Date Time Duration From Date & Time Text Analytics Vision Azure Machine Learning AI Insights

Queries [16]

categories customers employees employeeterritories order_details orders products region shippers shippers_tmp suppliers territories usstates Order_Details (2) Orders (2) Products (2)

Table.RemoveColumns(#"Added Custom2",{"Cost.1"})

orderid	productid	unitprice	quantity	discount	Cost
1	10248	11	14	12	168
2	10248	42	9.8	10	98
3	10248	72	34.8	5	174
4	10249	14	18.6	9	167.4
5	10249	51	42.4	40	1696
6	10250	41	7.7	10	77
7	10250	51	42.4	35	1483.85
8	10250	65	16.8	15	251.85
9	10251	22	16.8	6	100.75
10	10251	57	15.6	15	233.95
11	10251	65	16.8	20	336
12	10252	20	64.8	40	2591.95
13	10252	33	2	25	49.95
14	10252	60	27.2	40	1088
15	10253	31	10	20	200
16	10253	39	14.4	42	604.8
17	10253	49	16	40	640
18	10254	24	3.6	15	53.85
19	10254	55	19.2	21	403.05
20	10254	74	8	21	168
21	10255	2	15.2	20	304
22	10255	16	13.9	35	486.5
23	10255	36	15.2	25	380
24	10255	59	44	30	1320
25	10256	53	26.2	15	393
26	10256	77	10.4	12	124.8
27	10257	27	35.1	25	877.5
28	10257	39	14.4	6	86.4
29	10257	77	10.4	15	156

6 COLUMNS, 999+ ROWS Column profiling based on top 1000 rows

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84°F Smoke

Search

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Power BI-453 - Power Query Editor

File Home Transform Add Column View Tools Help

Column From Custom Examples Column Invoke Custom Function General Conditional Column Index Column Duplicate Column Format Merge Columns ABC 123 Extract Parse From Text Statistics Standard Scientific 10² Trigonometry Rounding Information Date Time Duration From Date & Time Text Analytics Vision Azure Machine Learning AI Insights

Queries [16]

categories customers employees employeeterritories order_details orders products region shippers shippers_tmp suppliers territories usstates Order_Details (2) Orders (2) Products (2)

Table.AddColumn(#"Removed Columns2", "Cost02", each [unitprice]*[unitsinstock]/[unitsonorder])

unitprice	unitsinstock	unitsonorder	reorderlevel	discontinued	Cost02
1	18	39	0	10	1
2	19	17	40	25	1
3	10				1.857142857
4	22				NaN
5	21.35				NaN
6	25				NaN
7	30				NaN
8	40				NaN
9	97				NaN
10	31				NaN
11	21				15.4
12	38				NaN
13	6				NaN
14	23.25				NaN
15	13				NaN
16	17.45				NaN
17	39				NaN
18	62.5				NaN
19	9.2				NaN
20	81				0.75
21	10				NaN
22	21				NaN
23	9				NaN
24	4.5	20	0	0	1
25	14	76	0	30	0
26	31.23	15	0	0	0
27	43.9	49	0	30	0
28	45.6	26	0	0	1
29	123.79	0	0	0	1

11 COLUMNS, 77 ROWS Column profiling based on top 1000 rows

PREVIEW DOWNLOADED AT 12:32 PM

84°F Smoke

Search

ENG IN 1:04 PM 2/21/2024

Custom Column

Add a column that is computed from the other columns.

New column name: Cost02

Custom column formula: = [unitprice]*[unitsinstock]/[unitsonorder]

Available columns: categoryid, quantityperunit, unitprice, unitsinstock, unitsonorder, reorderlevel, discontinued, Cost02

<< Insert

Learn about Power Query formulas

✓ No syntax errors have been detected.

OK Cancel

ABC 123	Cost02
	Infinity
	8.075
	1.857142857
	Infinity
	NaN
	Infinity
	Infinity
	Infinity
	Infinity
	Infinity
	15.4
	Infinity
	Infinity
	Infinity
	Infinity
	NaN
	Infinity
	Infinity
	0.75
	Infinity
	Infinity
	Infinity
	Infinity
	Infinity
	Infinity
	NaN

Power BI-453 - Power Query Editor

FileHomeTransformAdd ColumnViewToolsHelp

Column From Custom Invoke Custom Examples Column Function

General

Conditional Column Index Column Duplicate Column

Format Merge Columns Extract Parse

From Text

Statistics Standard Scientific Rounding Information

From Number

Date Time Duration

From Date & Time

Text Analytics

Vision Azure Machine Learning

AI Insights

Queries [16]

categories

customers

employees

employee territories

order_details

orders

products

region

shippers

shippers_tmp

suppliers

territories

usstates

Order_Details (2)

Orders (2)

Products (2)

fx

= Table.AddColumn(#"Changed Type", "Full Name", each [titleofcourtesy] & [firstname] & [lastname])

Query Settings

Custom Column

Add a column that is computed from the other columns.

New column name

Full Name

Custom column formula

= [titleofcourtesy]&[firstname]&[lastname]

Available columns

employeeid

lastname

firstname

title

titleofcourtesy

birthdate

hiredate

<< Insert

Learn about Power Query formulas

✓ No syntax errors have been detected.

OK

Cancel

19 COLUMNS, 9 ROWS

Column profiling based on top 1000 rows

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Smoke

Search

ENG

IN

1:29 PM

2/21/2024

Power BI-453 - Power Query Editor

FileHomeTransformAdd ColumnViewToolsHelp

Column From Custom Examples>Column

Invoke Custom Function

Index Column>

Duplicate Column

Format

ABC123Extract>

Parse>

From Text

Statistics

Standard

Scientific

Information>

From Number

Date

Time

Duration

From Date & Time

Text Analytics

Vision

Azure Machine Learning

AI Insights

Queries [16]

categories

customers

employees

employee territories

order_details

orders

products

region

shippers

shippers_tmp

suppliers

territories

usstates

Order_Details (2)

Orders (2)

Products (2)

fx

= Table.AddColumn("#Changed Type", "Full Name", each [titleofcourtesy] & [firstname] & [lastname])

notes

reportsto

photopath

Full Name

1	Andrew received his BTS commercial in 1974 and a Ph.D. in internatio...	Error	http://accweb/emmployees/fuller.bmp	Dr.AndrewFuller
2	Education includes a BA in psychology from Colorado State University L...		http://accweb/emmployees/devolio.bmp	Ms.NancyDevolio
3	Janet has a BS degree in chemistry from Boston College (1984). She h...		http://accweb/emmployees/leverling.bmp	Ms.JanetLeverling
4	Margaret holds a BA in English literature from Concordia College (1958...		http://accweb/emmployees/peacock.bmp	Mrs.MargaretPeacock
5	Steven Buchanan graduated from St. Andrews University, Scotland, wi...		http://accweb/emmployees/buchanan.bmp	Mr.StevenBuchanan
6	Michael is a graduate of Sussex University (MA, economics, 1983) and ...		http://accweb/emmployees/devolio.bmp	Mr.MichaelSuyama
7	Robert King served in the Peace Corps and traveled extensively before ...		http://accweb/emmployees/devolio.bmp	Mr.RobertKing
8	Laura received a BA in psychology from the University of Washington. ...		http://accweb/emmployees/devolio.bmp	Ms.LauraCallahan
9	Anne has a BA degree in English from St. Lawrence College. She is flue...		http://accweb/emmployees/devolio.bmp	Ms.AnneDodsworth

Query Settings

PROPERTIES

Name

employees

All Properties

APPLIED STEPS

Source

Navigation

Promoted Headers

Changed Type

Added Custom

19 COLUMNS, 9 ROWS

Column profiling based on top 1000 rows

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84°F

Smoke

Search

ENG IN

1:29 PM

2/21/2024

Query For Full Shipping Add.

Table.AddColumn("#Removed Columns1", "Full Shipping Add.", each [shipaddress] & [shipcity] & [shipregion] & [shippostalcode] & [shipcountry])

	ABC123 shipregion	ABC123 shippostalcode	ABC shipcountry	ABC123 Full Shipping Add.
	Error	51100	France	Error
	Error	44087	Germany	Error
o	RJ	05454-876	Brazil	Rua do Paço, 67Rio de JaneiroRJ05454-876Brazil
	Error	69004	France	Error
	Error	B-6000	Belgium	Error
o	RJ	05454-876	Brazil	Rua do Paço, 67Rio de JaneiroRJ05454-876Brazil
	Error	3012	Switzerland	Error
	Error	1204	Switzerland	Error
	SP	08737-363	Brazil	Rua do Mercado, 12ResendeSP08737-363Brazil
	Táchira	5022	Venezuela	Carrera 22 con Ave. Carlos Soublette #8-35San CristóbalTáchira5022V...
	Error	8010	Austria	Error
	Error	05022	Mexico	Error
	Error	50739	Germany	Error
o	RJ	02389-673	Brazil	Rua da Panificadora, 12Rio de JaneiroRJ02389-673Brazil
.	NM	87110	USA	2817 Milton Dr.AlbuquerqueNM87110USA
	Error	8010	Austria	Error
	Error	S-844 67	Sweden	Error
	Error	67000	France	Error
	Error	90110	Finland	Error
	Error	80805	Germany	Error
	DF	1081	Venezuela	5ª Ave. Los Palos GrandesCaracasDF1081Venezuela
	WA	98124	USA	1029 - 12th Ave. S.SeattleWA98124USA
	Error	90110	Finland	Error
	WY	82520	USA	P.O. Box 555LanderWY82520USA
.	NM	87110	USA	2817 Milton Dr.AlbuquerqueNM87110USA

Power BI-453 - Power Query Editor

File Home Transform Add Column View Tools Help

Column From Custom Examples Column Invoke Custom Function General Duplicate Column Format ABC 123 Extract Parse From Text Statistics Standard Scientific 10² Trigonometry Rounding Information Date Time Duration From Date & Time Text Analytics Vision Azure Machine Learning AI Insights

Queries [16]

- categories
- customers
- employees
- employeeterritories
- order_details
- orders
- products
- region
- shippers
- shippers_tmp
- suppliers
- territories
- usstates
- Order_Details (2)
- Orders (2)
- Products (2)

fx = Table.TransformColumnTypes(#"Promoted Headers",{{"stateid", Int64.Type}, {"statename", type text}, {"stateabbr", type text}, {"stateregion", type text}})

123 stateid	AB stateabbr	AB stateabbr	AB stateregion
1	1	Alabama	AL
2	2	Alaska	AK
3	3	Arizona	AZ
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25	25	Mississippi	MS
26	26	Missouri	MO

Custom Column

Add a column that is computed from the other columns.

New column name

Full Address

Custom column formula

= [stateregion] & [statename]

Available columns

- stateid
- statename
- stateabbr
- stateregion

<< Insert

Learn about Power Query formulas

✓ No syntax errors have been detected.

OK Cancel

Query Settings

PROPERTIES

Name

usstates

All Properties

APPLIED STEPS

- Source
- Navigation
- Promoted Headers
- Changed Type

4 COLUMNS, 51 ROWS Column profiling based on top 1000 rows

85°F Very high UV

Search

ENG IN 2:20 PM 2/21/2024

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Power BI-453 - Power Query Editor

File Home Transform Add Column View Tools Help

Column From Custom Examples Column Invoke Custom Function General Duplicate Column Format ABC 123 Extract Parse From Text Statistics Standard Scientific 10² Trigonometry Rounding Information Date Time Duration From Date & Time Text Analytics Vision Azure Machine Learning AI Insights

Queries [16]

- categories
- customers
- employees
- employeeterritories
- order_details
- orders
- products
- region
- shippers
- shippers_tmp
- suppliers
- territories
- usstates
- Order_Details (2)
- Orders (2)
- Products (2)

fx = Table.AddColumn(#"Changed Type", "Full Address", each [stateregion] & [statename])

123 stateid	AB stateabbr	AB stateabbr	AB stateregion	AB Full Address
1	1	Alabama	AL	southAlabama
2	2	Alaska	AK	northAlaska
3	3	Arizona	AZ	westArizona
4	4	Arkansas	AR	southArkansas
5	5	California	CA	westCalifornia
6	6	Colorado	CO	westColorado
7	7	Connecticut	CT	eastConnecticut
8	8	Delaware	DE	eastDelaware
9	9	District of Columbia	DC	eastDistrict of Columbia
10	10	Florida	FL	southFlorida
11	11	Georgia	GA	southGeorgia
12	12	Hawaii	HI	westHawaii
13	13	Idaho	ID	midwestIdaho
14	14	Illinois	IL	midwestIllinois
15	15	Indiana	IN	midwestIndiana
16	16	Iowa	IO	midwestIowa
17	17	Kansas	KS	midwestKansas
18	18	Kentucky	KY	southKentucky
19	19	Louisiana	LA	southLouisiana
20	20	Maine	ME	northMaine
21	21	Maryland	MD	eastMaryland
22	22	Massachusetts	MA	northMassachusetts
23	23	Michigan	MI	northMichigan
24	24	Minnesota	MN	northMinnesota
25	25	Mississippi	MS	southMississippi
26	26	Missouri	MO	southMissouri

Query Settings

PROPERTIES

Name

usstates

All Properties

APPLIED STEPS

- Source
- Navigation
- Promoted Headers
- Changed Type
- Added Custom

5 COLUMNS, 51 ROWS Column profiling based on top 1000 rows

85°F Smoke

Search

ENG IN 2:20 PM 2/21/2024

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Power BI - Power Query Editor

File Home Transform Add Column View Tools Help

Column From Custom Examples Column Invoke Custom Function General Duplicate Column

Format Merge Columns Extract Parse From Text

Statistics Standard Scientific Information

Trigonometry Rounding

Date Time Duration From Date & Time

Text Analytics Vision Azure Machine Learning

AI Insights

Queries [16]

- categories
- customers
- employees
- employee territories
- order_details
- orders
- products
- region
- shippers
- shippers_tmp
- suppliers**
- territories
- usstates
- Order_Details (2)
- Orders (2)
- Products (2)

Table.TransformColumnTypes(#"Promoted Headers",{"[supplierid", Int64.Type), {"companyname", type text}, {"contactname", type text}, {"contacttitle", type text}, {"address", type text}, {"city", type text}, {"region", type any}, {"postalcode", type text}, {"country", type text}, {"phone", type text}, {"fax", type any}, {"homepage", type any}})

name	contactname	contacttitle	address	city	region
1	Charlotte Cooper	Purchasing Manager	49 Gilbert St.	London	Error
2	Cajun Delights	Order Administrator	P.O. Box 78934	New Orleans	LA
3	y's Homestead	Sales Representative	707 Oxford Rd.	Ann Arbor	MI
4	Yoshi Nagase	Marketing Manager	9-8 Sekimai Musashino-shi	Tokyo	Error
5	de Quesos			Oviedo	Ast
6				Osaka	Error
7				Melbourne	Vict
8	uits, Ltd.			Manchester	Error
9	id AB			Göteborg	Error
10	ericanas LT			Sao Paulo	Error
11	n GmbH & C			Berlin	Error
12	ismittelgro			Frankfurt	Error
13	h Handels			Cuxhaven	Error
14	tini s.r.l.			Ravenna	Error
15	ier			Sandvika	Error
16	eries			Bend	OR
17	ia AB			Stockholm	Error
18	clésiastiq			Paris	Error
19	Seaford Ca			Boston	MA
20				Singapore	Error
21				Lyngby	Error
22	fabriek			Zaandam	Error
23				Lappeenranta	Error
24				Sydney	NSW
25				Montréal	Que
26					

Custom Column

Add a column that is computed from the other columns.

New column name

Details

Custom column formula

= [contactname] & [phone]

Available columns

- address
- city
- region
- postalcode
- country
- phone
- fax
- homepage

<< Insert

Learn about Power Query formulas

✓ No syntax errors have been detected.

OK Cancel

Query Settings

PROPERTIES

Name

suppliers

APPLIED STEPS

- Source
- Navigation
- Promoted Headers
- Changed Type

12 COLUMNS, 29 ROWS Column profiling based on top 1000 rows

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Upcoming Earnings

Search

ENG IN 2:22 PM 2/21/2024

Power BI - Power Query Editor

File Home Transform Add Column View Tools Help

Column From Custom Examples Column Invoke Custom Function General Duplicate Column

Format Merge Columns Extract Parse From Text

Statistics Standard Scientific Information

Trigonometry Rounding

Date Time Duration From Date & Time

Text Analytics Vision Azure Machine Learning

AI Insights

Queries [16]

- categories
- customers
- employees
- employee territories
- order_details
- orders
- products
- region
- shippers
- shippers_tmp
- suppliers**
- territories
- usstates
- Order_Details (2)
- Orders (2)
- Products (2)

Table.AddColumn(#"Changed Type", "Details", each [contactname] & [phone])

phone	fax	homepage	Details
(171) 555-2222	Error	Error	Charlotte Cooper(171) 555-2222
(100) 555-4822	Error	#CAJUN.HTM#	Shelley Burke(100) 555-4822
(313) 555-5735	(313) 555-3349	Error	Regina Murphy(313) 555-5735
(03) 3555-5011	Error	Error	Yoshi Nagase(03) 3555-5011
(98) 598 76 54	Error	Error	Antonio del Valle Saavedra(98) 598 76 54
(06) 431-7877	Error	Mayumi's (on the World Wide Web)#http://www.microsoft.com/acce...	Mayumi Ohno(06) 431-7877
(03) 444-2343	(03) 444-6588	Error	Ian Devling(03) 444-2343
(161) 555-4448	Error	Peter Wilson(161) 555-4448	Peter Wilson(161) 555-4448
031-987 65 43	031-987 65 91	Error	Lars Peterson031-987 65 43
(11) 555 4640	Error	Error	Carlos Diaz(11) 555 4640
(010) 9984510	Error	Error	Petra Winkler(010) 9984510
(069) 992755	Error	Plutzer (on the World Wide Web)#http://www.microsoft.com/access...	Martin Bein(069) 992755
(04721) 8713	(04721) 8714	Error	Sven Petersen(04721) 8713
(0544) 60323	(0544) 60603	#FORMAGGL.HTM#	Elio Rossi(0544) 60323
(012-953010	Error	Error	Beate Vileid(012-953010
(503) 555-9931	Error	Error	Cheryl Saylor(503) 555-9931
08-123 45 67	Error	Error	Michael Björn08-123 45 67
(1) 03.83.00.68	(1) 03.83.00.62	Error	Guyène Nodier(1) 03.83.00.68
(617) 555-3267	(617) 555-3389	Error	Robb Merchant(617) 555-3267
555-8787	Error	Error	Chandra Leka555-8787
43844108	43844115	Error	Niels Petersen43844108
(12345) 1212	(12345) 1210	Error	Dirk Luchte(12345) 1212
(953) 10956	Error	Error	Anne Heikkinen(953) 10956
(02) 555-5914	(02) 555-4873	G'day Mate (on the World Wide Web)#http://www.microsoft.com/acce...	Wendy Mackenzie(02) 555-5914
(514) 555-9022	Error	Error	Jean-Guy Lauzon(514) 555-9022

13 COLUMNS, 29 ROWS Column profiling based on top 1000 rows

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Upcoming Earnings

Search

ENG IN 2:22 PM 2/21/2024