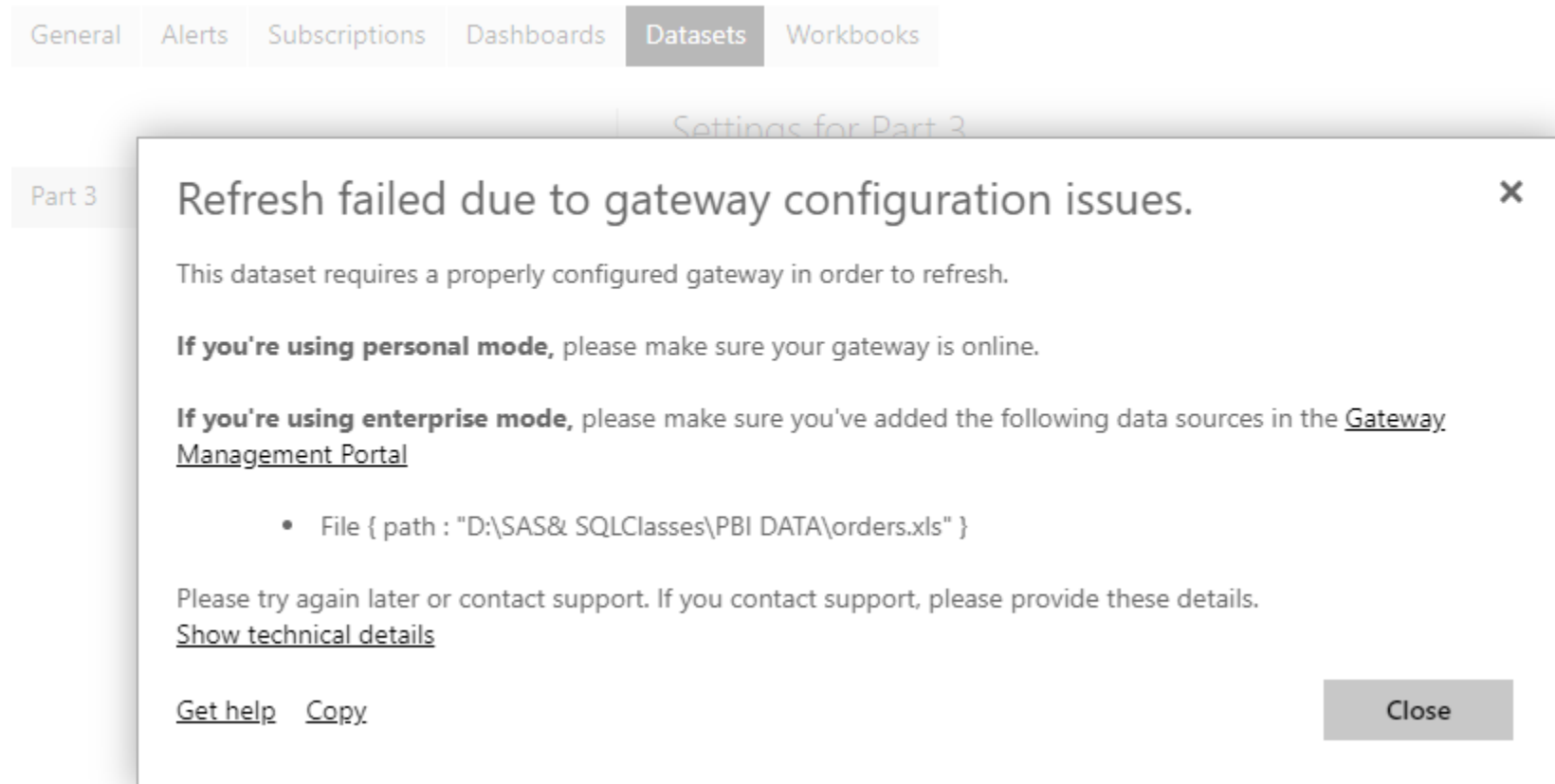


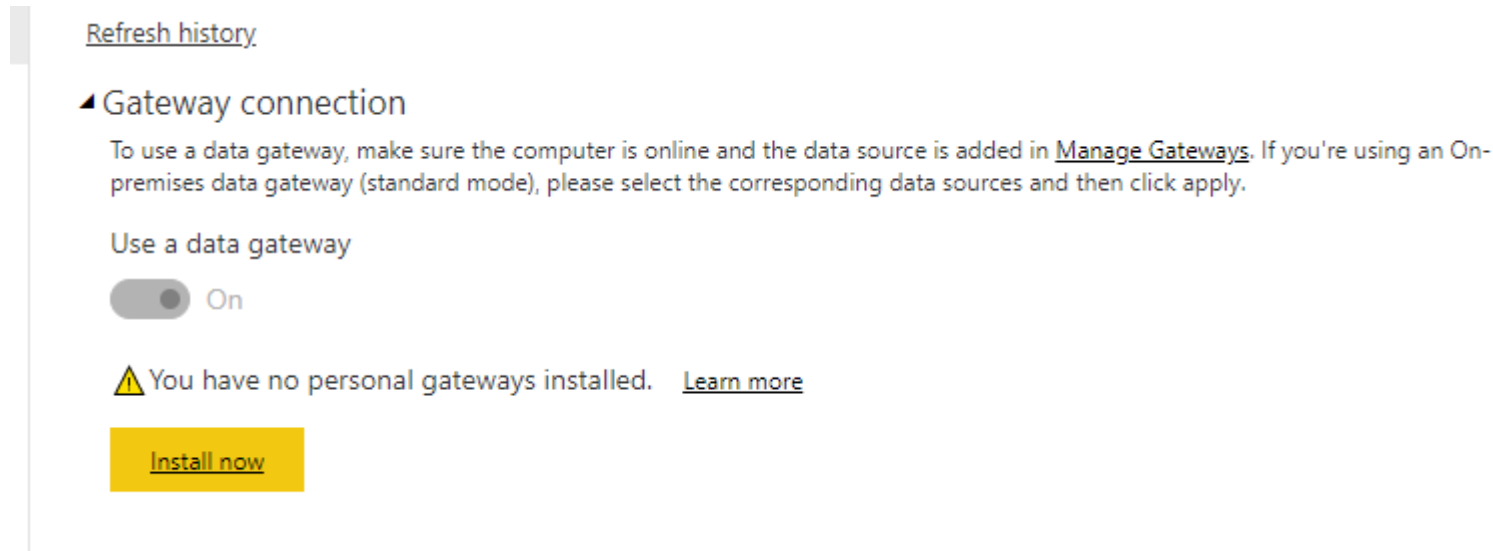
Refreshing Data in Power BI

To refresh the data you need to go to : My workspace -> Datasets -> Refresh



Refreshing Data in Power BI

The Refresh failed message is displayed as the Data Gateway is not configured. To resolve this : Download & Install Data Gateway.

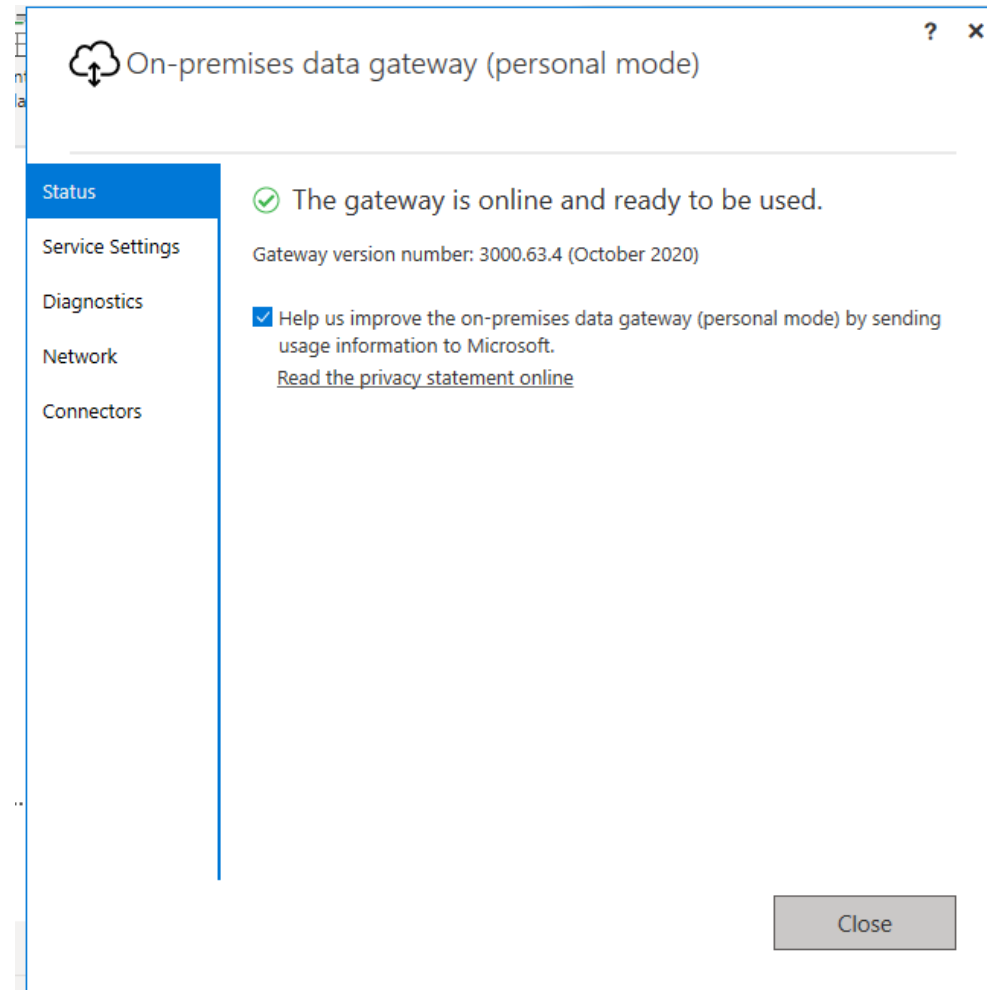


- Refresh the dataset
- Check for Username & password under
My workspace -> Datasets -> Settings -> Data Source Credentials
- Scheduled refresh (8 Schedules in Pro & 48 in Premium Account)



Refreshing Data in Power BI

Once the Gateway is installed and configured successfully, below confirmation will be displayed.



Refreshing Data in Power BI

Now try to refresh the Dataset. You may be prompted with the below message.

Can't refresh your data

The credentials you provided for the data source are invalid. Please check the credentials for all the data sources. Please try again later or contact support. If you contact support, please provide these details.

[Show technical details](#)

[Get help](#) [Copy](#)

To resolve this you need to specify the Data source credentials



×

Can't refresh your data

The credentials you provided for the data source are invalid. Please check the credentials for all the data sources. Please try again later or contact support. If you contact support, please provide these details.

[Show technical details](#)

[Get help](#) [Copy](#)

Settings for Part 3

Last refresh succeeded: Sat Oct 17 2020 19:16:32 GMT+0530 (India Standard Time)
[Refresh history](#)

▶ Gateway connection

◀ Data source

orders.xls

▶ Parameters

▶ Scheduled

▶ Q&A

▶ Featured Q

▶ Endorseme

Configure Part 3 ×

path
D:\SAS& SQLClasses\PBI DATA\orders.xls

Authentication method
WindowsWithoutImpersonation ▼

Privacy level setting for this data source
None ▼

Sign in Cancel

Scheduled Refresh in Power BI

You can automate the refresh by scheduling a refresh.

Turn on the Scheduled Refresh

Specify the frequency (Daily / Weekly)

Set the time

Specify a refresh failure email recipient

Apply

Scheduled refresh

Keep your data up to date

☒ On

Refresh frequency Daily

Time zone (UTC+05:30) Chennai, Kolkata, Mumbai, New Delhi

Time

7 30 PM ×

[Add another time](#)

☒ Send refresh failure notifications to the dataset owner

Email these users when the refresh fails

Apply

Discard



Note : Refresh can be done 8 times a day in Pro Account
In Premium account it can be done 48 times

ASSIGNMENT



Visualize the data in any meaningful way to help the institute to analyse the data.

Design a report for the planning data based on country, institute, department, year, quarter, and qualification.

KPI

- No of Students per Country
- No of Students per Institute
- No of Students per Department
- No of Students per Qualification
- Percentage of Withdrawn cases
- Time series analysis of active and withdrawn classes





Power Query

A ETL tool



Using Functions in Power Query

Power Query is a ETL tool (Extract Transform Load) which provide many function (Text Functions / Date Functions/ Number Functions)

Merge

Split

Change Case

Extract (left, right, substring, Delimiter)

The best part of Power Query is you do not have to write any formula.

To get the Power Query editor select the data source and click on Transform



Using Text Functions in Power Query

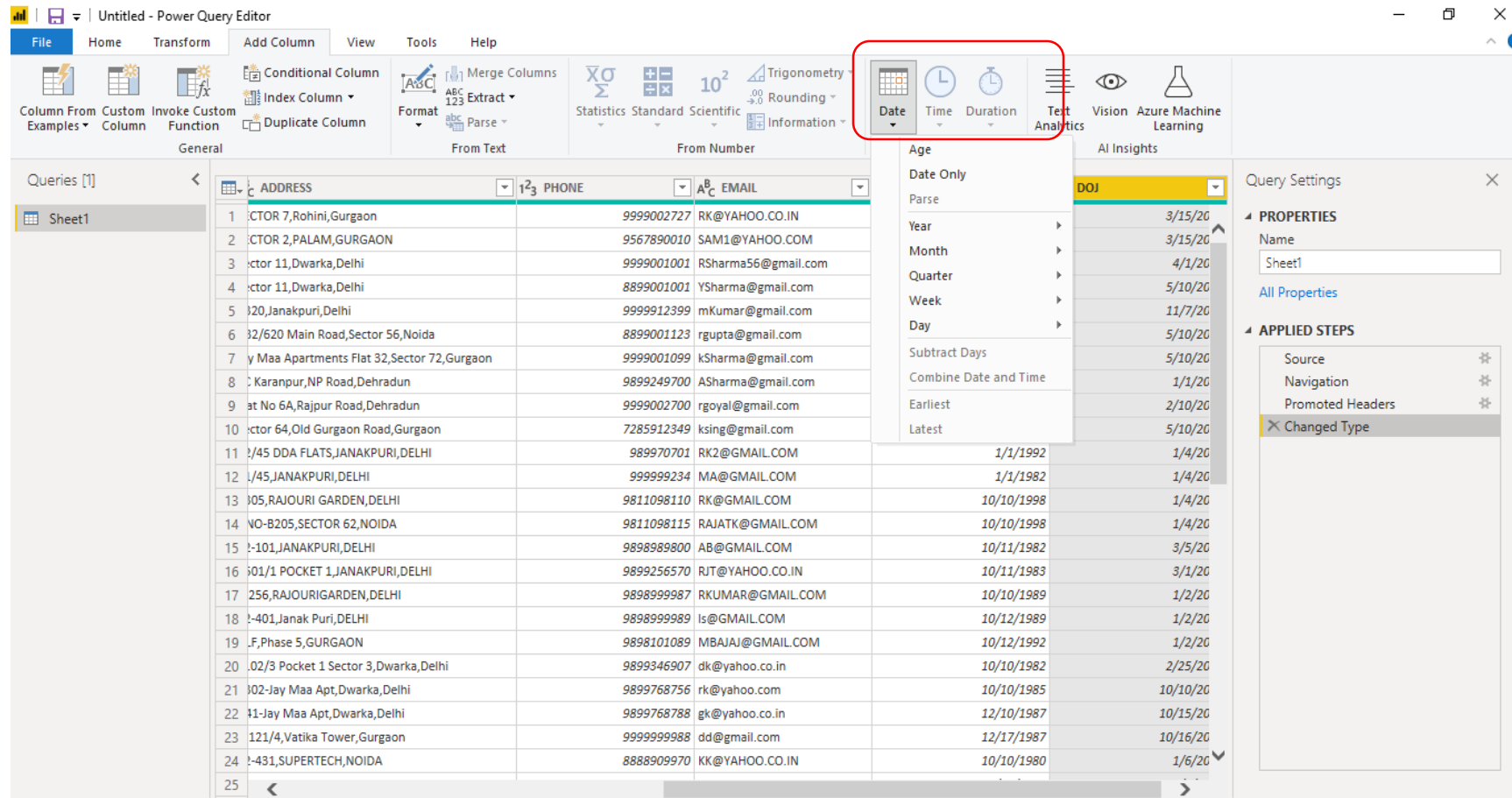
10 COLUMNS, 63 ROWS Column profiling based on top 1000 rows

PREVIEW DOWNLOADED AT 6:43 AM

To get the Power Query editor select the data source and click on Transform



Using Date Functions in Power Query



The screenshot displays the Power Query Editor interface. The ribbon at the top includes 'File', 'Home', 'Transform', 'Add Column', 'View', 'Tools', and 'Help'. The 'Transform' tab is active, showing various options like 'Conditional Column', 'Index Column', 'Duplicate Column', 'Merge Columns', 'Extract', 'Format', 'Parse', 'Statistics', 'Standard', 'Scientific', 'Rounding', 'Information', 'Date', 'Time', 'Duration', 'Text Analytics', 'Vision', and 'Azure Machine Learning'. The 'Date' function group is highlighted with a red box. The 'Date' dropdown menu is open, showing options: 'Age', 'Date Only', 'Parse', 'Year', 'Month', 'Quarter', 'Week', 'Day', 'Subtract Days', 'Combine Date and Time', 'Earliest', and 'Latest'. The main data table has columns 'ADDRESS', 'PHONE', and 'EMAIL'. The 'Query Settings' pane on the right shows 'Properties' (Name: Sheet1) and 'Applied Steps' (Source, Navigation, Promoted Headers, Changed Type).

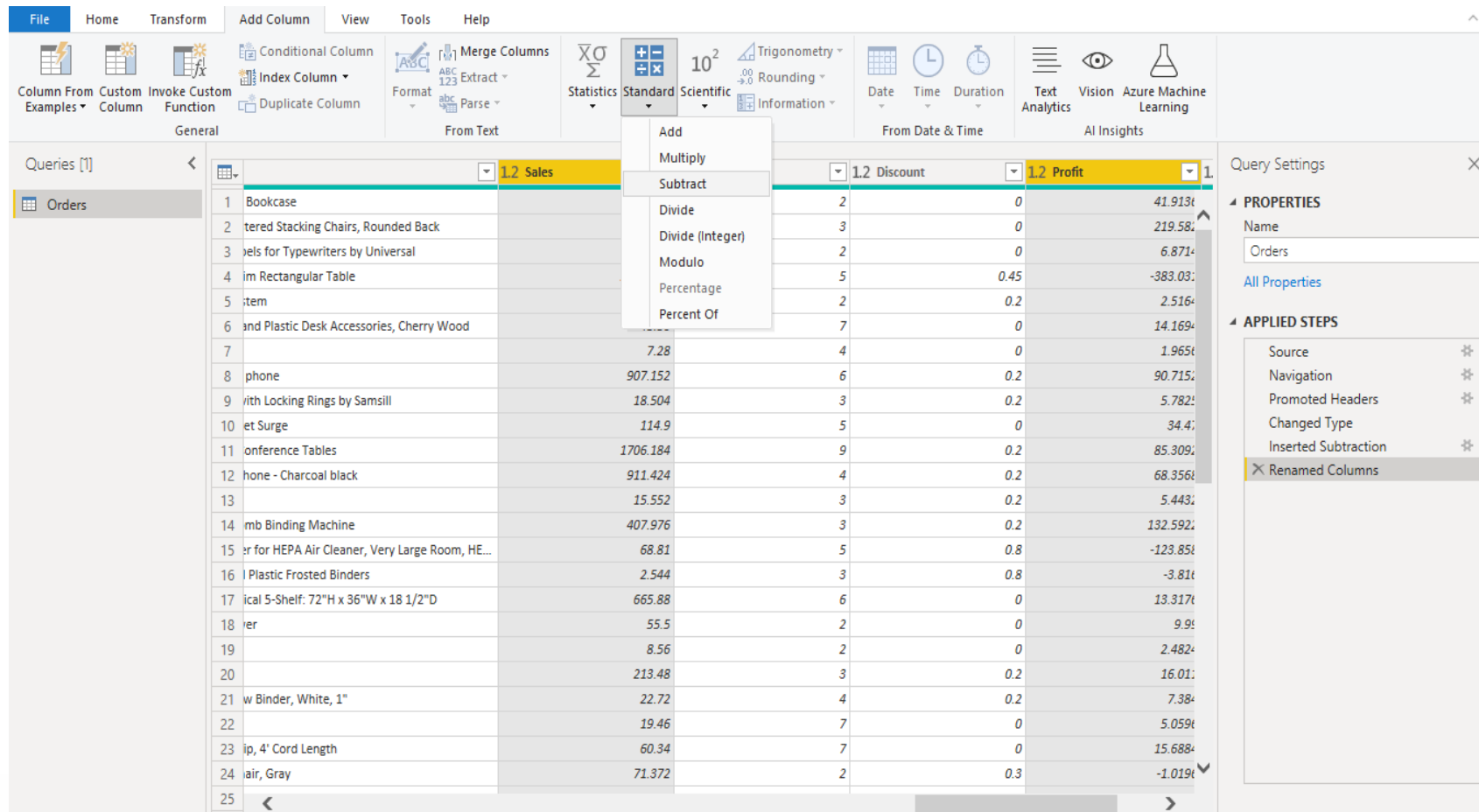
	ADDRESS	PHONE	EMAIL
1	CTOR 7,Rohini,Gurgaon	9999002727	RK@YAHOO.CO.IN
2	CTOR 2,PALAM,GURGAON	9567890010	SAM1@YAHOO.COM
3	ctor 11,Dwarka,Delhi	9999001001	RSharma56@gmail.com
4	ctor 11,Dwarka,Delhi	8899001001	YSharma@gmail.com
5	020,Janakpuri,Delhi	9999912399	mKumar@gmail.com
6	32/620 Main Road,Sector 56,Noida	8899001123	rgupta@gmail.com
7	y Maa Apartments Flat 32,Sector 72,Gurgaon	9999001099	kSharma@gmail.com
8	C Karanpur,NP Road,Dehradun	9899249700	ASharma@gmail.com
9	at No 6A,Rajpur Road,Dehradun	9999002700	rgoyal@gmail.com
10	ctor 64,Old Gurgaon Road,Gurgaon	7285912349	ksing@gmail.com
11	2/45 DDA FLATS,JANAKPURI,DELHI	989970701	RK2@GMAIL.COM
12	1/45,JANAKPURI,DELHI	999999234	MA@GMAIL.COM
13	05,RAJOURI GARDEN,DELHI	9811098110	RK@GMAIL.COM
14	NO-B205,SECTOR 62,NOIDA	9811098115	RAJATK@GMAIL.COM
15	2-101,JANAKPURI,DELHI	9898989800	AB@GMAIL.COM
16	01/1 POCKET 1,JANAKPURI,DELHI	9899256570	RJT@YAHOO.CO.IN
17	256,RAJOURIGARDEN,DELHI	9898999987	RKUMAR@GMAIL.COM
18	2-401,Janak Puri,DELHI	9898999989	Is@GMAIL.COM
19	F,Phase 5,GURGAON	9898101089	MBAIAJ@GMAIL.COM
20	02/3 Pocket 1 Sector 3,Dwarka,Delhi	9899346907	dk@yahoo.co.in
21	02-Jay Maa Apt,Dwarka,Delhi	9899768756	rk@yahoo.com
22	11-Jay Maa Apt,Dwarka,Delhi	9899768788	gk@yahoo.co.in
23	121/4,Vatika Tower,Gurgaon	9999999988	dd@gmail.com
24	2-431,SUPERTECH,NOIDA	8888909970	KK@YAHOO.CO.IN
25			

Date functions like Day, Month Year, Subtract, Day Name, Month Name, calculate Age



Using Number Functions in Power Query

In Power Query you can use around 32 calculations without writing any formula just simple button clicks. Add, Subtract, Multiply Divide, Percentage, Percentage of, Round, Sign, Is Even, Is Odd



The screenshot displays the Microsoft Power Query Editor interface. The ribbon at the top includes tabs for File, Home, Transform, Add Column, View, Tools, and Help. The 'Add Column' tab is active, showing a 'Standard' dropdown menu with options: Add, Multiply, Subtract, Divide, Divide (Integer), Modulo, Percentage, and Percent Of. The main data area shows a table with columns: Item, 1.2 Sales, 1.2 Discount, and 1.2 Profit. The table contains 25 rows of data. On the right, the 'Query Settings' pane is visible, showing the 'Properties' section with the name 'Orders' and the 'Applied Steps' section with a list of steps: Source, Navigation, Promoted Headers, Changed Type, Inserted Subtraction, and Renamed Columns.

	Item	1.2 Sales	1.2 Discount	1.2 Profit
1	Bookcase			
2	tered Stacking Chairs, Rounded Back			
3	pels for Typewriters by Universal			
4	im Rectangular Table			
5	stem			
6	and Plastic Desk Accessories, Cherry Wood			
7		7.28	4	0
8	phone	907.152	6	0.2
9	with Locking Rings by Samsill	18.504	3	0.2
10	et Surge	114.9	5	0
11	onference Tables	1706.184	9	0.2
12	hone - Charcoal black	911.424	4	0.2
13		15.552	3	0.2
14	mb Binding Machine	407.976	3	0.2
15	er for HEPA Air Cleaner, Very Large Room, HE...	68.81	5	0.8
16	l Plastic Frosted Binders	2.544	3	0.8
17	ical 5-Shelf: 72"H x 36"W x 18 1/2"D	665.88	6	0
18	er	55.5	2	0
19		8.56	2	0
20		213.48	3	0.2
21	w Binder, White, 1"	22.72	4	0.2
22		19.46	7	0
23	ip, 4' Cord Length	60.34	7	0
24	air, Gray	71.372	2	0.3
25				



ASSIGNMENT



- Create a visual to display the average shipping days per state.
- Bifurcate the Regional sales count on the basis of profit & loss
- Create a visual to display the sales pattern on the basis of week day
- Create a employee code containing 1st character of 1st name, 1st character of last name and last 4 digits of EID.
- Create a visual to display Monthly Birthday Status of the employees



Appending Sheets in Power Query

Multiple sheets in Excel can be appended as a single sheet in Power BI.

Go To Append Queries -> Append Query as New -> Select The sheets to be appended -> Click Add -> Ok

The screenshot displays the Power Query 'Append' dialog box. The 'Available tables' list includes APR20, FEB20, JAN20, MAR20, and Sales2020. The 'Tables to append' list contains Sales2020. The 'Three or more tables' radio button is selected. The background shows a data table with columns: Date, Policy Id, premium, and Comm.

Date	Policy Id	premium	Comm
1/1/2020	P0001	10000	1000
1/2/2020	P0002	30000	3000
1/3/2020			
1/4/2020			
1/5/2020			
1/6/2020			
1/7/2020			
1/8/2020			
1/9/2020			
1/10/2020			
1/11/2020			
2/1/2020			
2/2/2020			
2/3/2020			
2/4/2020			
2/5/2020			
2/6/2020			
2/7/2020			
2/8/2020			
2/9/2020			
2/10/2020			
3/1/2020			
3/2/2020			
3/3/2020	P0003	40000	4000
3/4/2020	P0004	20000	2000

Note: Columns Name should be same.

To display only the appended sheet in Power BI clear the ENABLE LOAD option for other sheets.



Merging Sheets in Power Query

Merging Sheets in Power Query can be considered as advanced lookup.

Go To Merge Queries -> Select The tables to be merged -> Select the common field -> Specify the join type -> Ok

The screenshot displays the 'Merge' dialog box in Power Query. The 'SAL' table is selected as the first table, and 'Sheet1' is selected as the second table. The 'Join Kind' is set to 'Left Outer (all from first, matching from second)'. The 'Fuzzy matching options' section shows a green checkmark and the text 'The selection matches 41 of 42 rows from the first table.' The 'Merge Queries' button in the top right corner is highlighted with a red box. The 'Query Settings' pane on the right shows the 'PROPERTIES' and 'APPLIED STEPS' sections.

EID	DEPT	DESI	SALARY
1001	OPS	Director	400000
1002	OPS	VP	250000
1003	ADMIN	SR MANAGER	134165
1004	MIS	Manager	104175
1005	HR	ASSOCIATE	321021

EID	NAME	FNAME	LNAME	ADDRESS	PHONE	EMAIL	DO
1001	RAMESH GUPTA	RAMESH	GUPTA	SECTOR 7,Rohini,Gurgaon	9999002727	RK@YAHOO.CO.IN	9/1
1002	Sandeep Sharma	Sandeep	Sharma	SECTOR 2,PALAM,GURGAON	9567890010	SAM1@YAHOO.COM	9/15
1003	Rajesh Sharma	Rajesh	Sharma	Sector 11,Dwarka,Delhi	9999001001	RSharma56@gmail.com	3/16
1004	Yogeshwar Sharma	Yogeshwar	Sharma	Sector 11,Dwarka,Delhi	8899001001	YSharma@gmail.com	9/25



Merging Sheets can also be done in multiple data source & Multiple Columns

Columns From Example in Power Query

CFE is Just like Fast Fill In Excel. Many of the Text & date functions can be utilized without writing any function, Just by few clicks. (Split, Merge, Date Parts, Part of AlphaNumeric Data)

The screenshot displays the Microsoft Power Query Editor interface. The ribbon at the top includes tabs for File, Home, Transform, Add Column, View, Tools, and Help. The 'Add Column' tab is active, showing options like 'Column From Examples', 'Custom Column', 'Invoke Custom Function', 'Conditional Column', 'Index Column', and 'Duplicate Column'. A tooltip is visible over the 'Column From Examples' button, stating: 'Use examples and the current selection to create a new column in this table. (Ctrl+Shift+E)'. The main data area shows a table with the following columns: Row ID, Order ID, Order Date, Ship Date, Ship Mode, and Customer ID. The table contains 25 rows of data. The right-hand pane shows the 'Query Settings' for the 'Orders' query, including 'PROPERTIES' (Name: Orders) and 'APPLIED STEPS' (Source, Navigation, Promoted Headers, Changed Type, Inserted Text Between Delimit..., Reordered Columns). The status bar at the bottom indicates '22 COLUMNS, 999+ ROWS' and 'Column profiling based on top 1000 rows'. The preview was downloaded at 7:37 AM.

Row ID	Order ID	Order Date	Ship Date	Ship Mode	Customer ID
1	CA-2016-152156	11/8/2016	11/11/2016	Second Class	CG-12520
2	CA-2016-152156	11/8/2016	11/11/2016	Second Class	CG-12520
3	CA-2016-138688	6/12/2016	6/16/2016	Second Class	DV-13045
4	US-2015-108966	10/11/2015	10/18/2015	Standard Class	SO-20335
5	US-2015-108966	10/11/2015	10/18/2015	Standard Class	SO-20335
6	CA-2014-115812	6/9/2014	6/14/2014	Standard Class	BH-11710
7	CA-2014-115812	6/9/2014	6/14/2014	Standard Class	BH-11710
8	CA-2014-115812	6/9/2014	6/14/2014	Standard Class	BH-11710
9	CA-2014-115812	6/9/2014	6/14/2014	Standard Class	BH-11710
10	CA-2014-115812	6/9/2014	6/14/2014	Standard Class	BH-11710
11	CA-2014-115812	6/9/2014	6/14/2014	Standard Class	BH-11710
12	CA-2014-115812	6/9/2014	6/14/2014	Standard Class	BH-11710
13	CA-2017-114412	4/15/2017	4/20/2017	Standard Class	AA-10480
14	CA-2016-161389	12/5/2016	12/10/2016	Standard Class	IM-15070
15	US-2015-118983	11/22/2015	11/26/2015	Standard Class	HP-14815
16	US-2015-118983	11/22/2015	11/26/2015	Standard Class	HP-14815
17	CA-2014-105893	11/11/2014	11/18/2014	Standard Class	PK-19075
18	CA-2014-167164	5/13/2014	5/15/2014	Second Class	AG-10270
19	CA-2014-143336	8/27/2014	9/1/2014	Second Class	ZD-21925
20	CA-2014-143336	8/27/2014	9/1/2014	Second Class	ZD-21925
21	CA-2014-143336	8/27/2014	9/1/2014	Second Class	ZD-21925
22	CA-2016-137330	12/9/2016	12/13/2016	Standard Class	KB-16585
23	CA-2016-137330	12/9/2016	12/13/2016	Standard Class	KB-16585
24	US-2017-156909	7/16/2017	7/18/2017	Second Class	SF-20065
25					

