

MODULE 1.1

THE POWER QUERY EDITOR

You can open the Power Query editor from the Excel's Data tab, by going to **Data > Get Data > Launch Power Query Editor**.

You can also automatically launch the editor by importing data into Power Query. Simply select the appropriate option from the **Get & Transform Data** group on the Ribbon.

Formula Bar:
Activate it from the View Tab

The screenshot shows the Power Query Editor window for a query named 'SalesReport'. The ribbon includes tabs for File, Home, Transform, Add Column, and View. The Home tab is active, showing options like Close & Load, Refresh Preview, and Properties. The Transform tab shows options like Choose Columns, Remove Columns, Keep Rows, Remove Rows, Sort, Split Column, Group By, Data Type, Use First Row as Headers, Replace Values, Combine, Manage Parameters, Data source settings, and New Source. The Add Column tab shows New Source and Recent Sources. The View tab shows the Formula Bar with the formula '= Table.TransformColumns(#"Inserted Text Between...'. The main area displays a table with columns: Document Date, Customer Name, and Article Description. The bottom status bar shows '5 COLUMNS, 35 ROWS' and 'Column profiling based on top 1000 rows'. The right sidebar shows the 'Query Settings' pane with 'Name' set to 'SalesReport' and 'Applied Steps' including 'Capitalized Each Word'. Annotations include: 'List of queries in the current workbook' pointing to the Queries list; 'How many rows and columns loaded' pointing to the status bar; 'If more than a 1000 rows are loaded, click on the text to base column profiling on the full dataset.' pointing to the status bar; 'Name of the Query (Also the final table name)' pointing to the Name field; 'Applied Steps record each transformation. You can adjust, delete or add new steps anytime. (Note: there is no "undo" button in PQ)' pointing to the Applied Steps list; and 'If preview of data is outdated, click on "refresh preview" from the Home Tab' pointing to the Refresh Preview button.

List of queries in the current workbook

How many rows and columns loaded

If more than a 1000 rows are loaded, click on the text to base column profiling on the full dataset.

Name of the Query (Also the final table name)

Applied Steps record each transformation. You can adjust, delete or add new steps anytime. (Note: there is no "undo" button in PQ)

If preview of data is outdated, click on "refresh preview" from the Home Tab

MODULE 1.2**UNDERSTANDING DATA TYPES**

It is very important to define your fields (*columns*) with the proper data types. This ensures the following:

- Data can be properly interpreted/understood.
- Data can be manipulated properly.
- Data cannot be manipulated improperly.
- Proper level of numeric precision is maintained.

1.2	Decimal Number
\$	Currency
1 ² ₃	Whole Number
%	Percentage
	Date/Time
	Date
	Time
	Date/Time/Timezone
	Duration
ABC	Text
	True/False
	Binary
	Using Locale...

Data Type		Description and Use	M Code
Decimal Number	1.2	Maximum 15 digits regardless of decimal placement.	type number
Currency	\$	4 digits to the right of decimal; maximum 19 digits regardless of decimal placement. Anything after the 4th decimal place is rounded.	Currency.Type
Whole Number	1 ² ₃	Integer value (<i>no decimal precision</i>). Maximum 19 digits. Any fractions are rounded.	Int64.Type
Percentage	%	Displayed as percentages in Power Query; displayed as decimals in a workbook.	Percentage.Type
Date/Time		Date & Time in a single column. Stored as a decimal type.	type datetime
Date		Dates from 1900 to 9999 are supported. Stored as whole numbers.	type date
Time		Time only. Stored as decimal type.	type time
Date/Time/Timezone		UTC Date/Time	type datetimetimezone
Duration		Length of time shown as days, hours, minutes, and seconds. Stored as decimal type.	type duration
Text	ABC	Text and numbers. Maximum of 268K characters.	type text
True/False		Boolean value.	type logical
Binary		A sequence of bytes (<i>e.g. when loading files from a folder</i>).	type binary
Using Locale...		Important if importing data from sources that have different regional settings.	
Any	ABC 123	Set numbers (<i>ex: dates and decimals</i>) according to regional settings.	type any