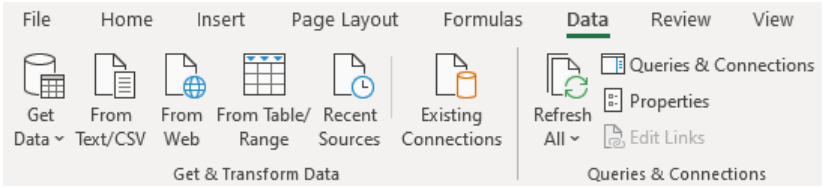
WEEK 1 — GET AND TRANSFORM (POWER QUERY) — PART 1

Get and Transform is a new and powerful way to import and manipulate data in Excel. This week is just the beginning.

You access **Get and Transform** on the **Data** Ribbon (it looks slightly different in older versions of Excel). Under **Get Data** you can select the source of your data. Common sources include a Table in the current workbook, an Excel or CSV file, or a database. You can also import all files in a folder.



CREATE A TABLE

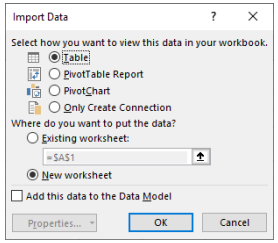
When creating a query from data in the same Excel file it will automatically be converted to a table. It is good practice to create the table yourself by going to **Insert > Table** or **Ctrl+T**. Rename the table on the **Table Design** ribbon, then create the query. The name will carry through to become the name of the query. If you do not wish to convert the data to a table, connect to it from a different workbook.

FORMULA BAR

Like the Excel workbook formula bar, the Power Query Editor formula bar allows you to view and edit the M code for the current formula. Make it visible by going to **View > Formula Bar**. You can use the f_x button to add a new custom step.

LOAD TO

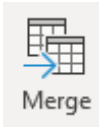
When you import data, you can choose whether to include it as a table in your workbook or just create a connection. A connection is useful if the query is used as input to other queries, but you do not need to view it directly. In O365 you can also load the data directly to a PivotTable or PivotChart.



APPEND QUERIES

Append queries allow you to stack datasets on top of each other. Ensure that the tables have the same column names before appending them, otherwise Excel will not append correctly. The columns do not need to be in the same order, but the names must match.

MERGE QUERIES



You use Merge when you want to add tables side-by-side (add columns from one table to another). When you Merge, you specify which columns contain the values used to match between the tables, often ID or Name. You can match multiple columns by holding down Ctrl.

SPLIT AND MERGE COLUMNS

A common issue is having several pieces of information in 1 column. You can use Split Column to extract these into separate columns. There are many ways to split the data, depending on how your data is arranged. The opposite of this is Merge Columns, where you can take the contents of 2 or more columns and join them together with the separator of your choice. Like TEXTJOIN in Excel.

JOIN KINDS

When merging tables, you can choose what to do when there are rows that do not match between the tables. This is called the Join Kind. In older versions of Excel, you need to edit the M code of the merge to choose the Join Kind.

Left Outer

All rows from the first table and matching rows from the second table.

M: JoinKind.LeftOuter

Right Outer

All rows from the second table and matching rows from the first table.

M: JoinKind.RightOuter

Inner

Only rows that match in both tables.

M: JoinKind.Inner

Full Outer

All rows from both tables.

M: JoinKind.FullOuter

Left Anti

All rows in the first table which do not match the second table.

M: JoinKind.LeftAnti

Right Anti

All rows in the second table which do not match the first table.

M: JoinKind.RightAnti

RENAME A QUERY

Just like with tables, it is good practice to give your query a suitable name. You can change it in the Query Settings when you are creating it, or right-click > Rename in the Queries & Connections panel.