TODAY's MENU

HERE WE SERVE POWER QUERY M.

COMBINE MULTIPLE TABLES FROM FILES IN A FOLDER

From all files in this Folder:

	Content	Name	Data
1	Binary	CompanyA.xlsx	Table
2	Binary	CompanyB.xlsx	Table
3	Binary	CompanyC.xlsx	Table

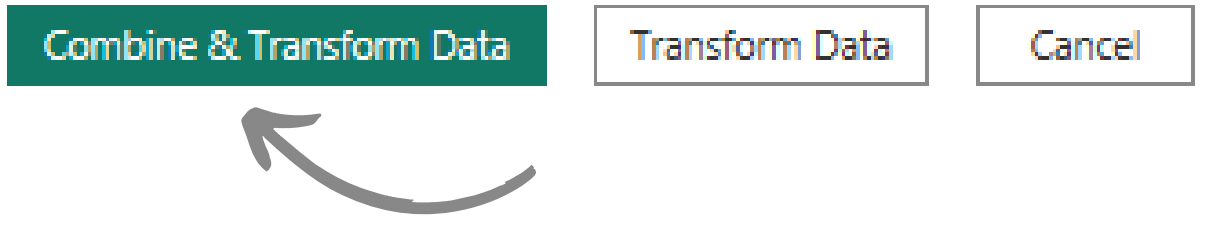
Combine all excel tables

Name	Data	Item	Kind	Hidden
CompanyC3	Table	CompanyC3	Table	*FALSE*
CompanyC2	Table	CompanyC2	Table	*FALSE*
CompanyC1	Table	CompanyC1	Table	

DID YOU KNOW?

Let me set the scene...

When you connect to a Folder and choose: *Combine & Transform Data*
You can select a Sample file to design logic that will be applied to all.



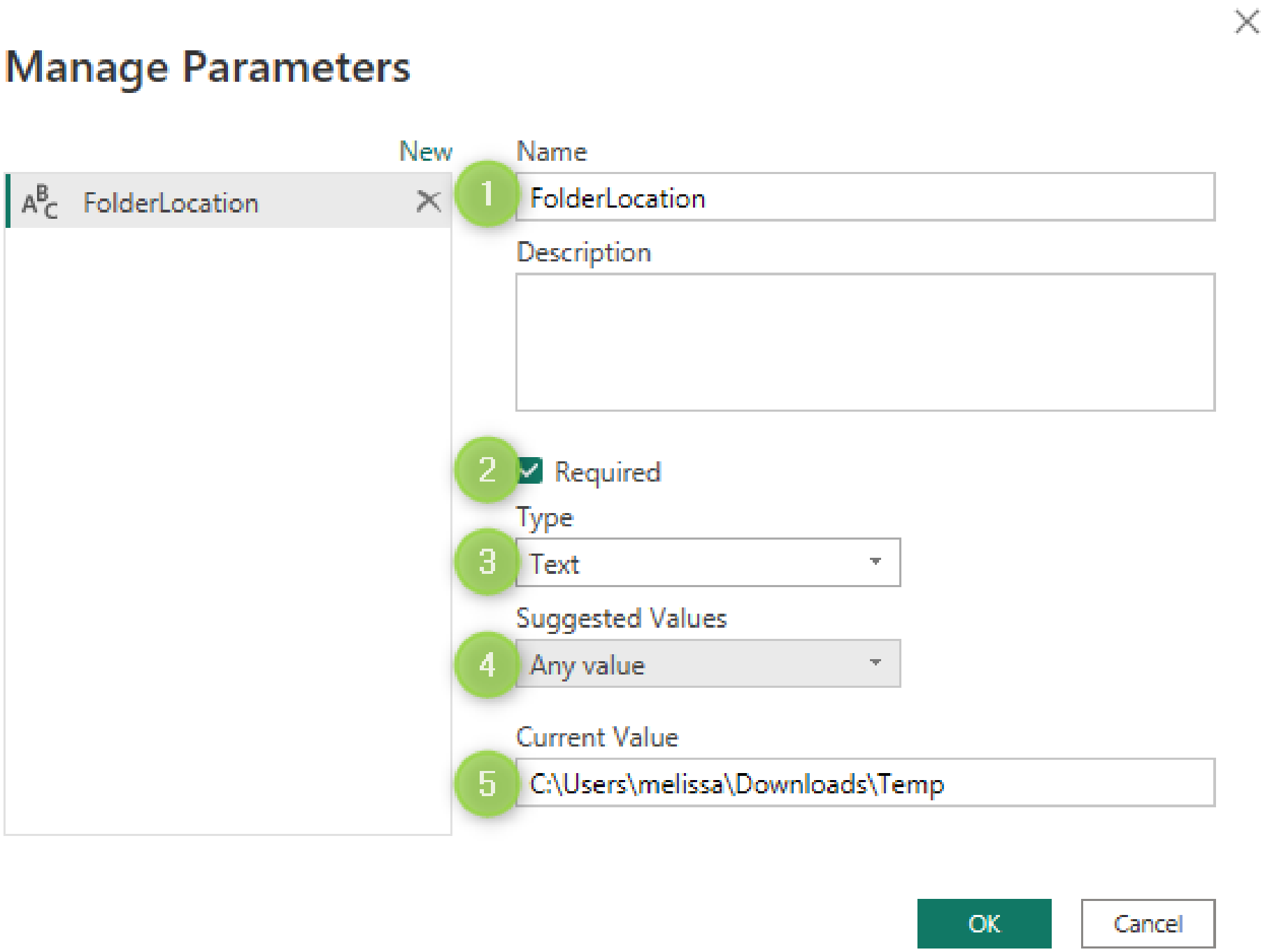
When all files in the folder contain a single table with the exact same name, this functionality is seriously amazing!

But what if tables in those files have a different name?
Or you want to get and transform multiple tables from those files?

Let's design a method to deal with that!

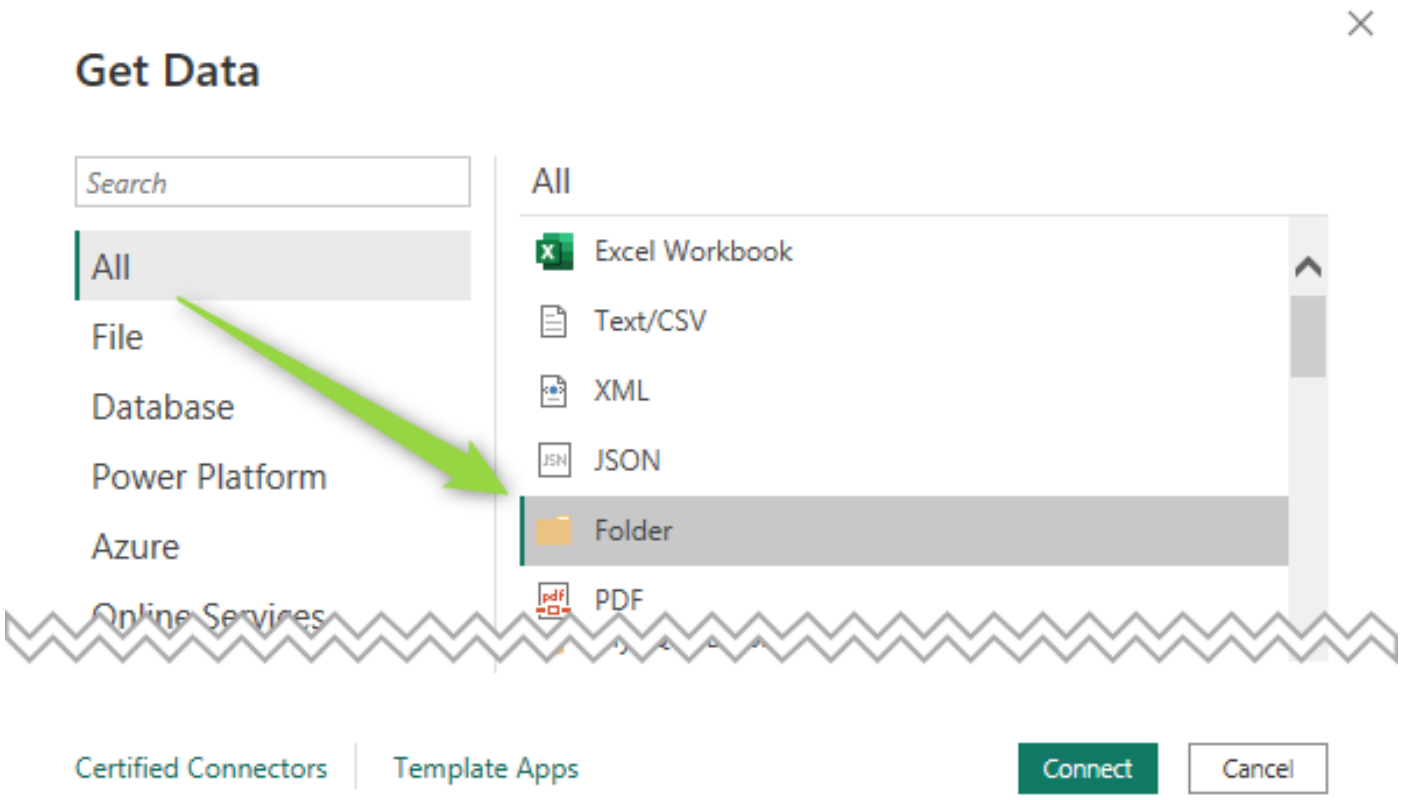
Create a Folder location Parameter

Use a Parameter for the File location, that way if the folder is moved, you can easily update this to restore the Query.



Get Data

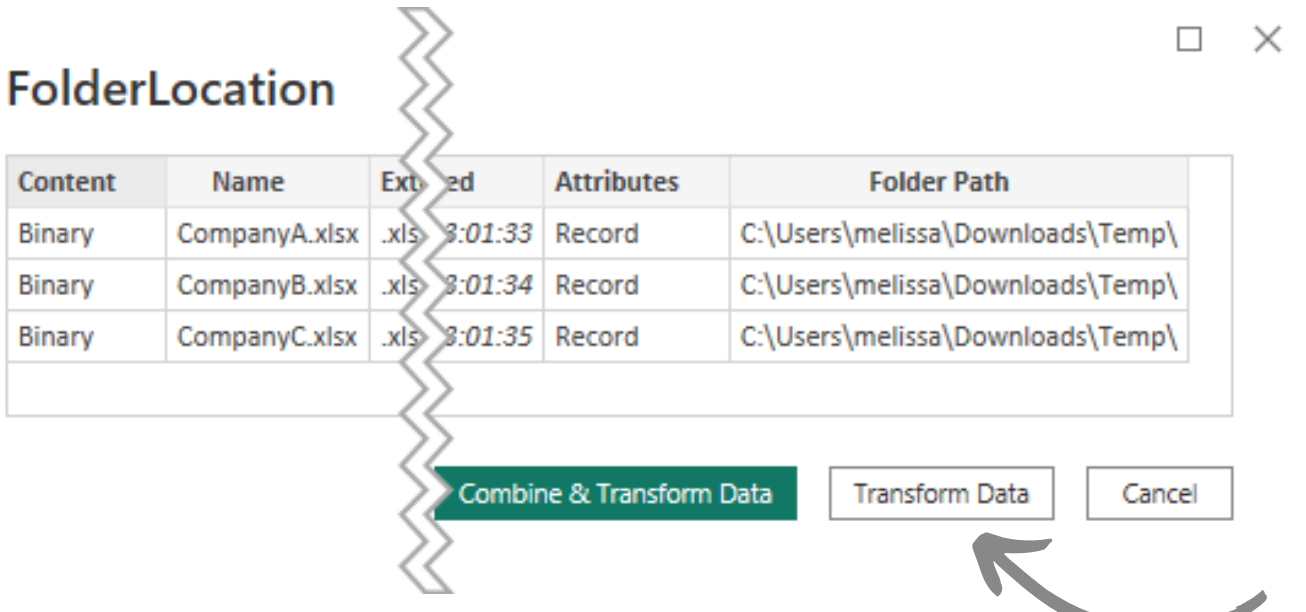
Select: New Source / More
This window will be shown, in the "All" section, you'll find "Folder"



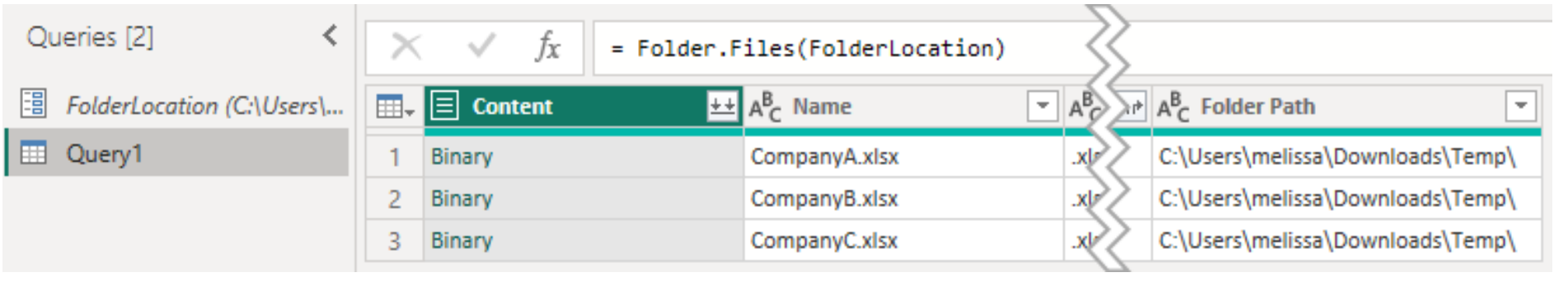
Switch to Parameter
And enter the *FileLocation* parameter name

Select "Transform Data"

Instead of *Combine & Transform Data*, select: *Transform Data*

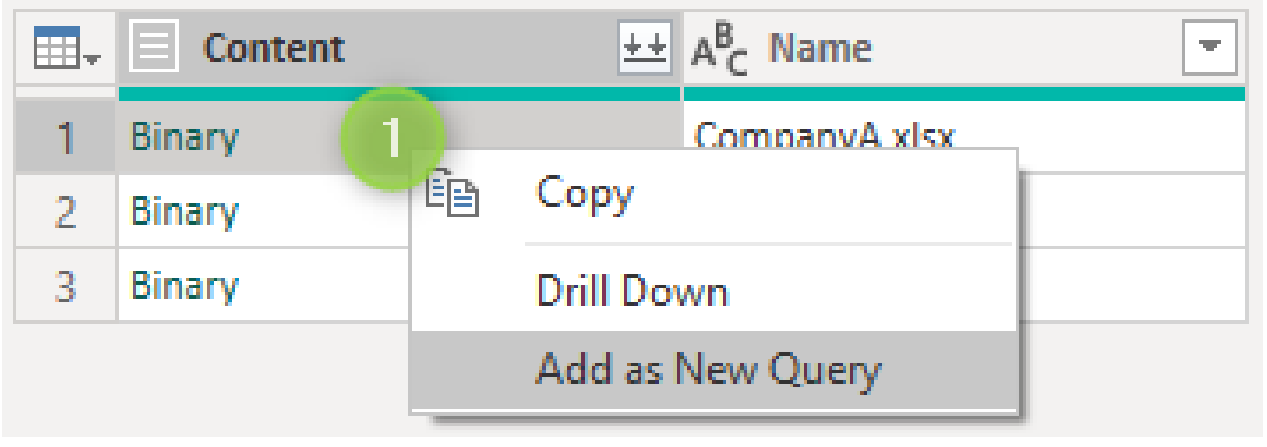


This will add *Query1* and shows the folder content



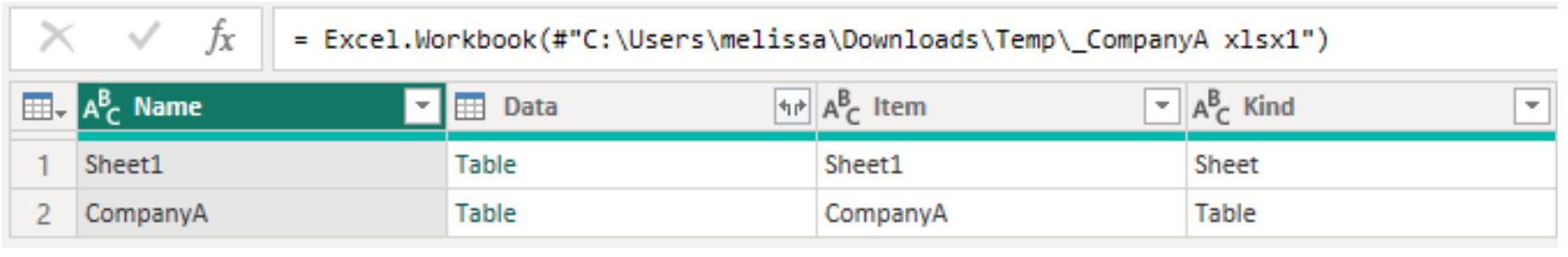
Create a helper Query

Right click in the white space (1), select *Add as New Query*



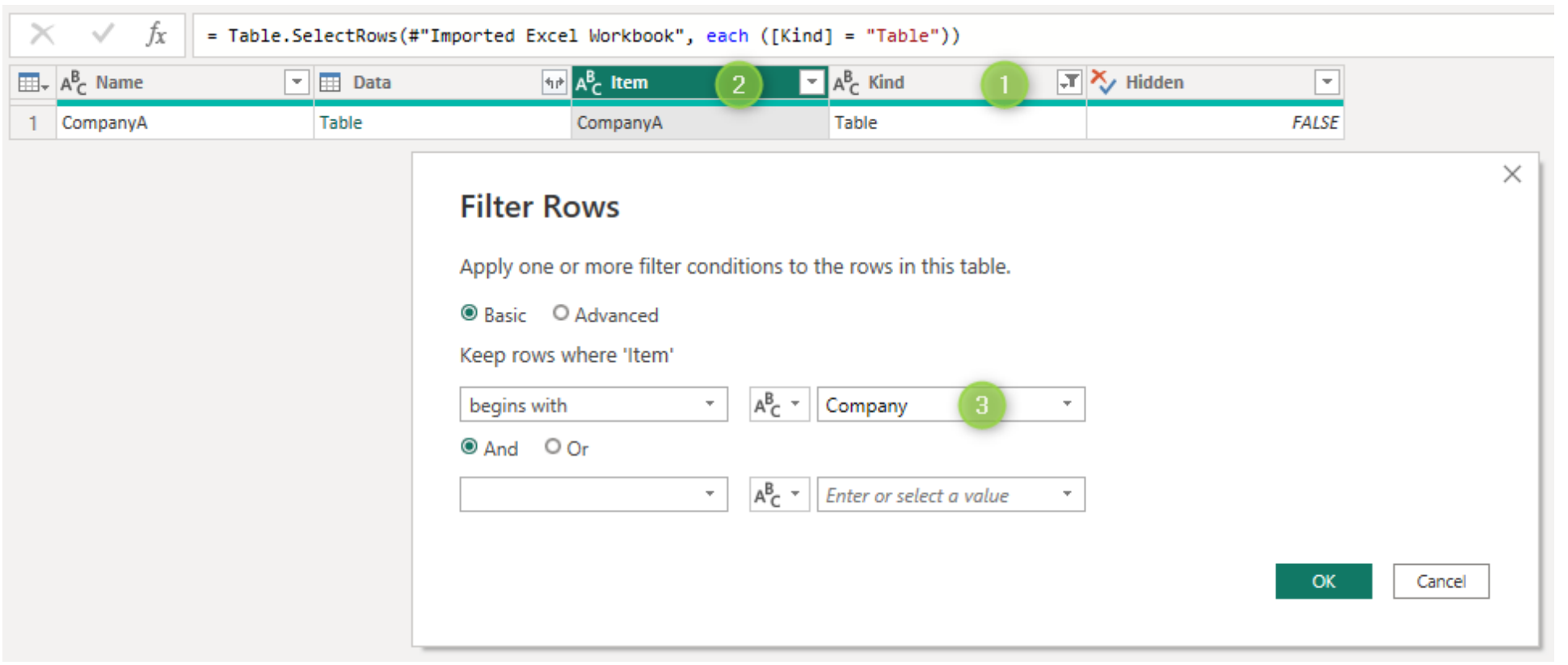
Double click the file (2)

This calls *Excel.Workbook* and shows the sample file content

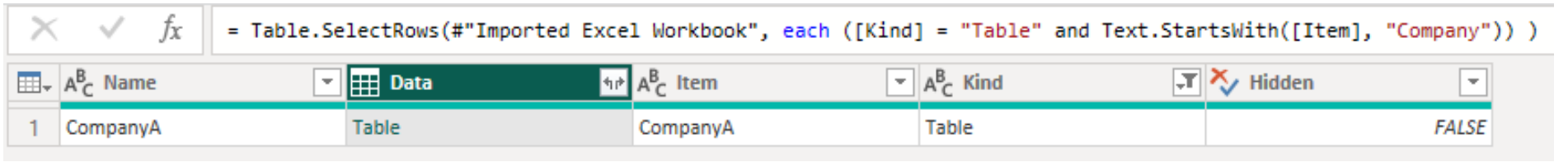


Create a filter that identifies all Excel tables

Use the User Interface to create a set of filters that can be applied to all files in the folder and obtains the required tables from each of them.

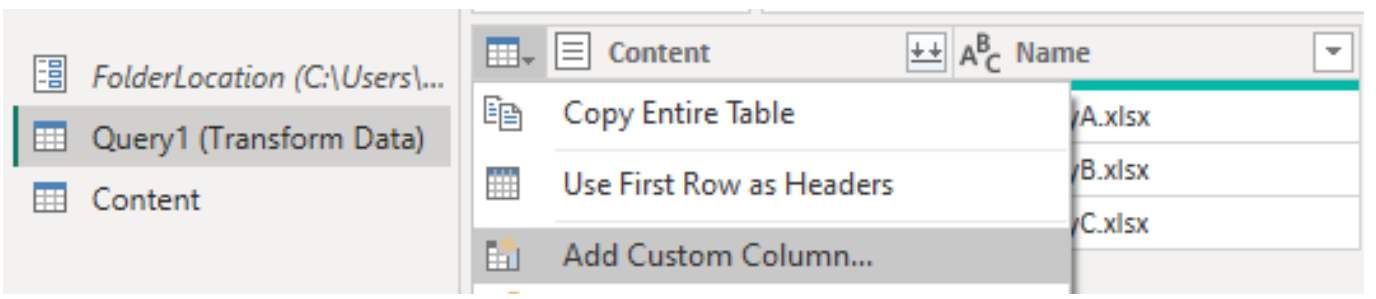


Combine filters into a single step using **and/or** keywords, when more than one step was created (validate the result). Like below.

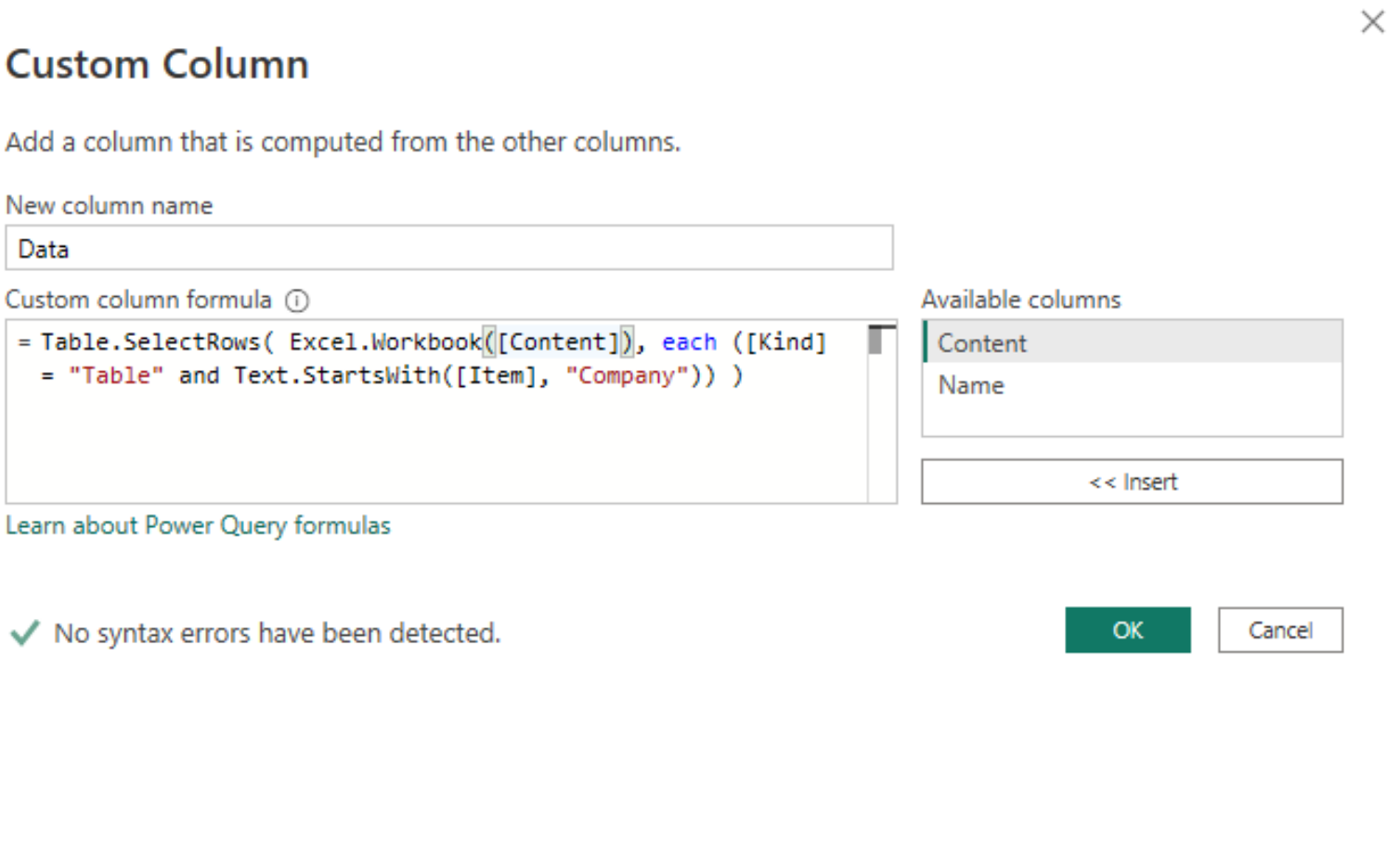


Transfer the logic generated with the UI

Time to translate all these actions to *Query1*. Tip. Click on that mini table icon in the top left of the table to *Add a Custom Column*.

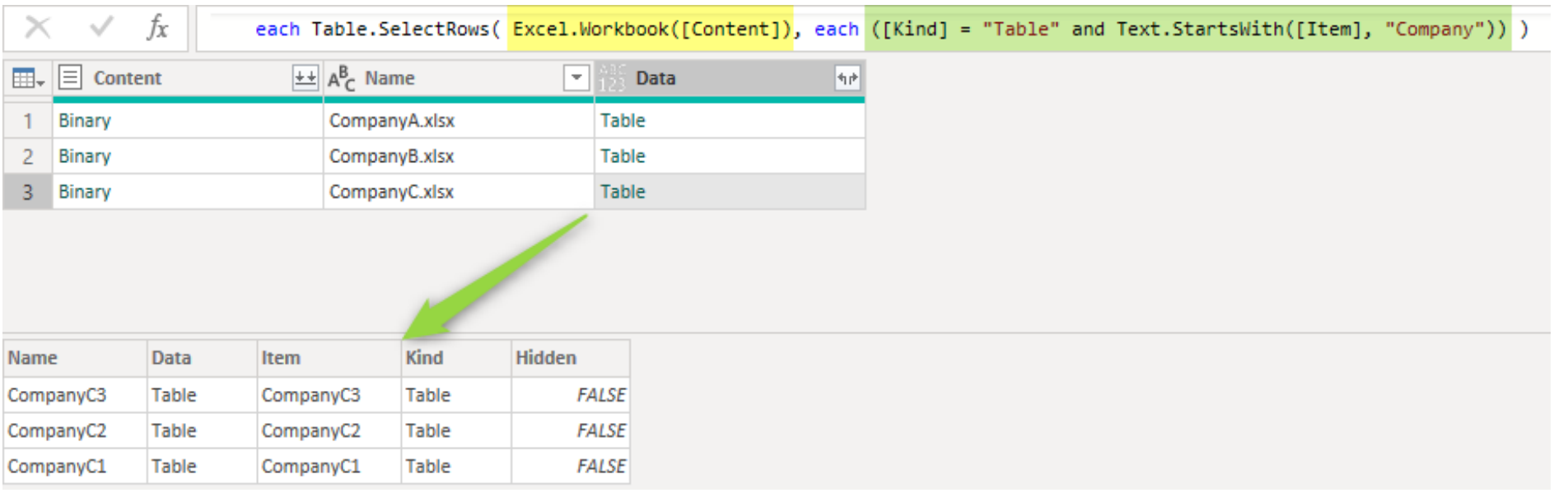


Copy the single step filter logic from the helper query. Replace the initial table *#"Imported Excel Workbook"* with *Excel.Workbook* and insert the *[Content]* column by double clicking that name on the right.

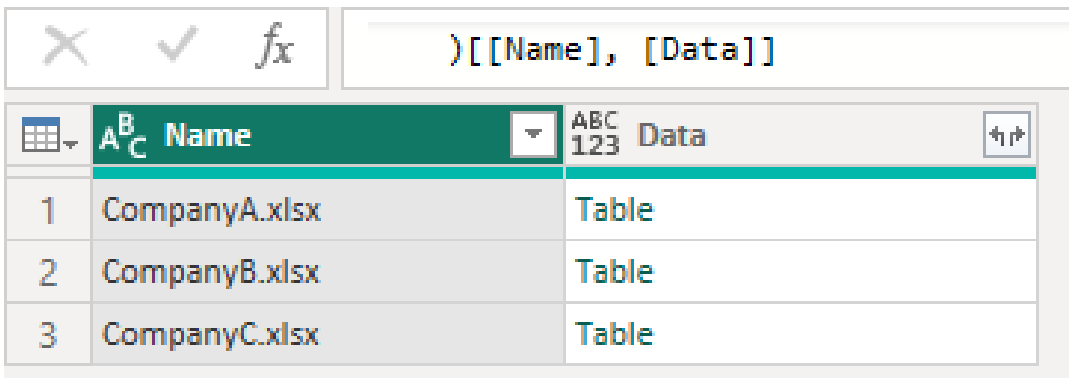


Preview the result

Click in the whitespace, this will show an additional preview section down below. This file returns multiple tables, all meeting our criteria.

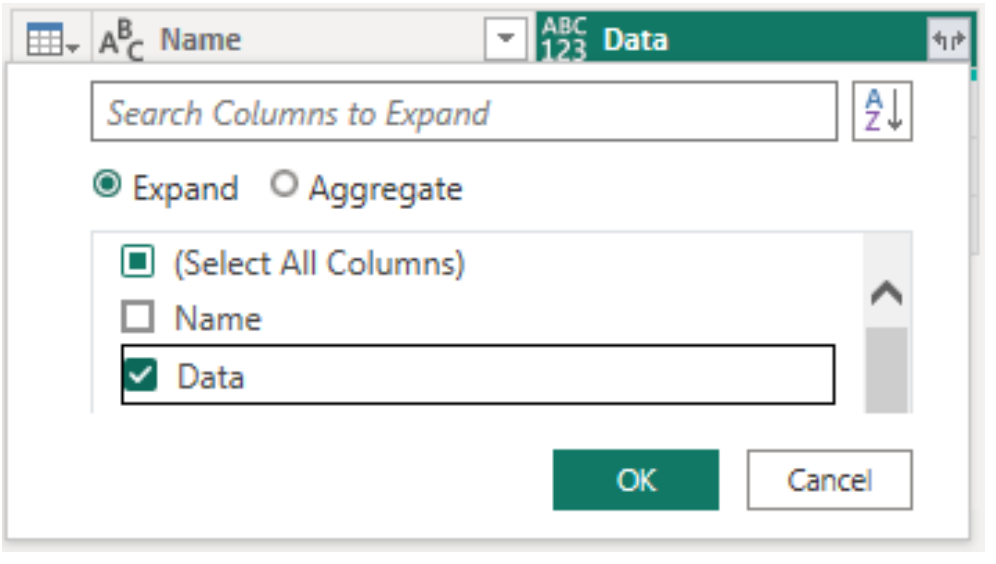


Select the columns of interest using the UI or use projection, to return only the Name and Data Column

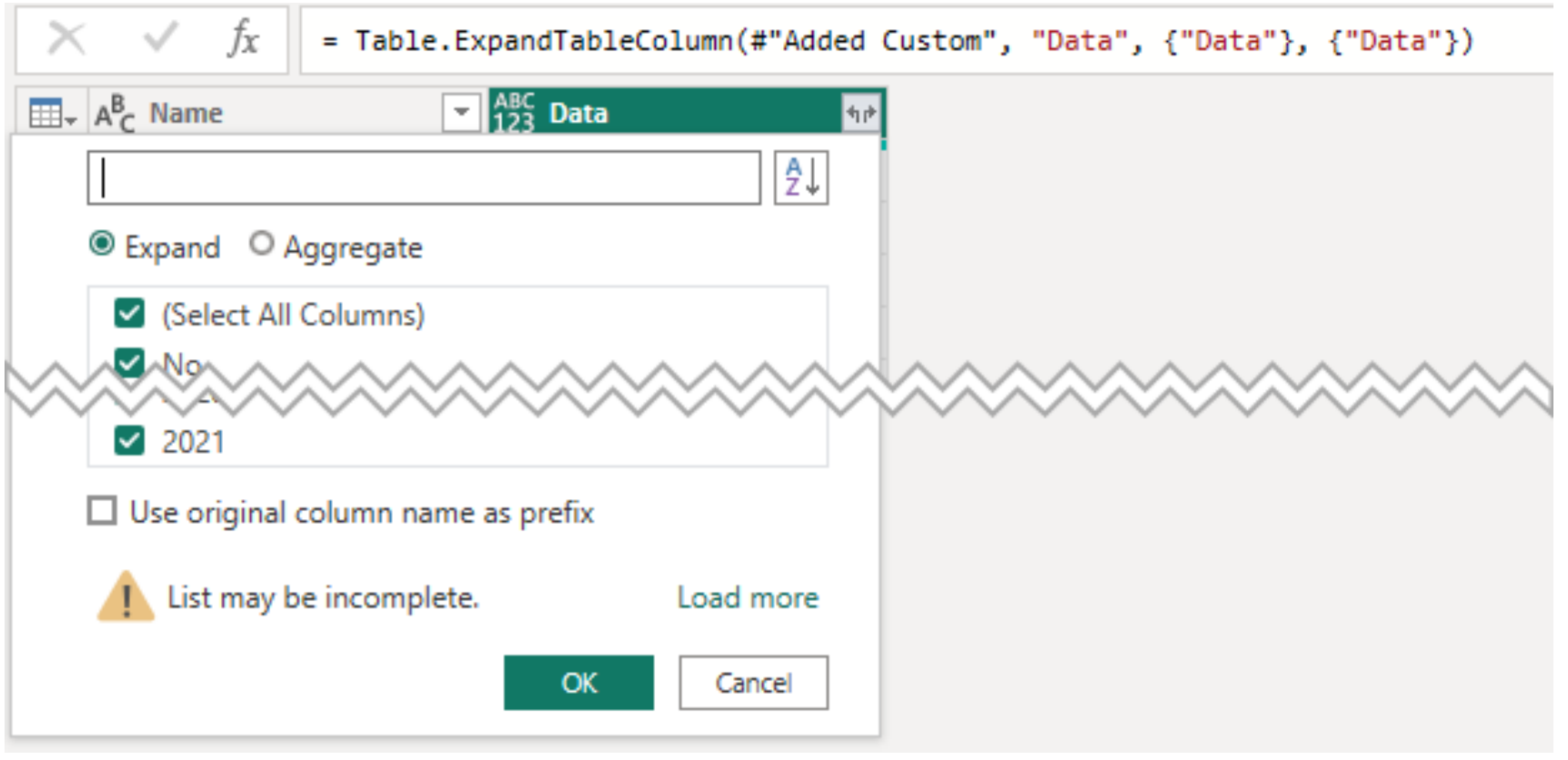


Extract Data columns

Use the sideward arrows to expand the Data column and get the Data field

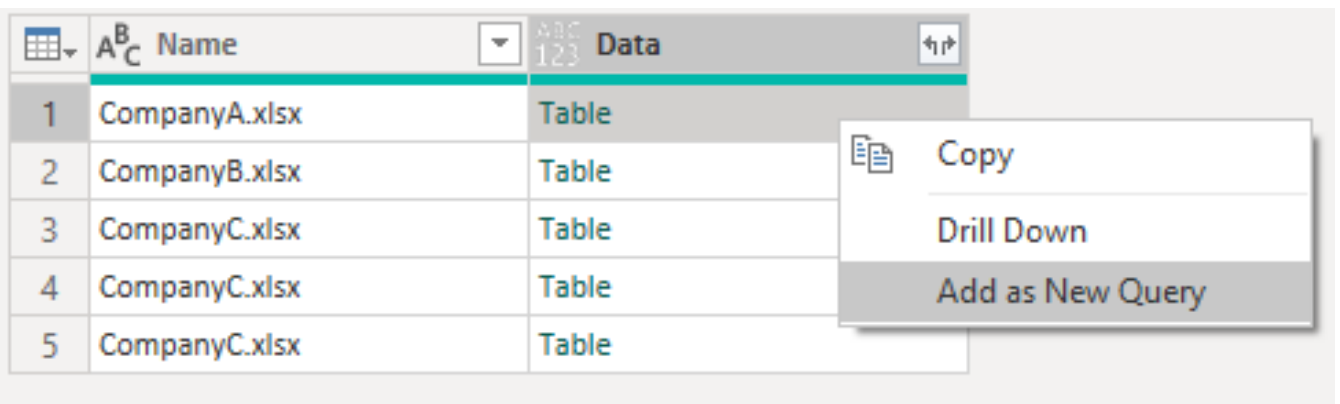


Repeat this for the extracted Data as well

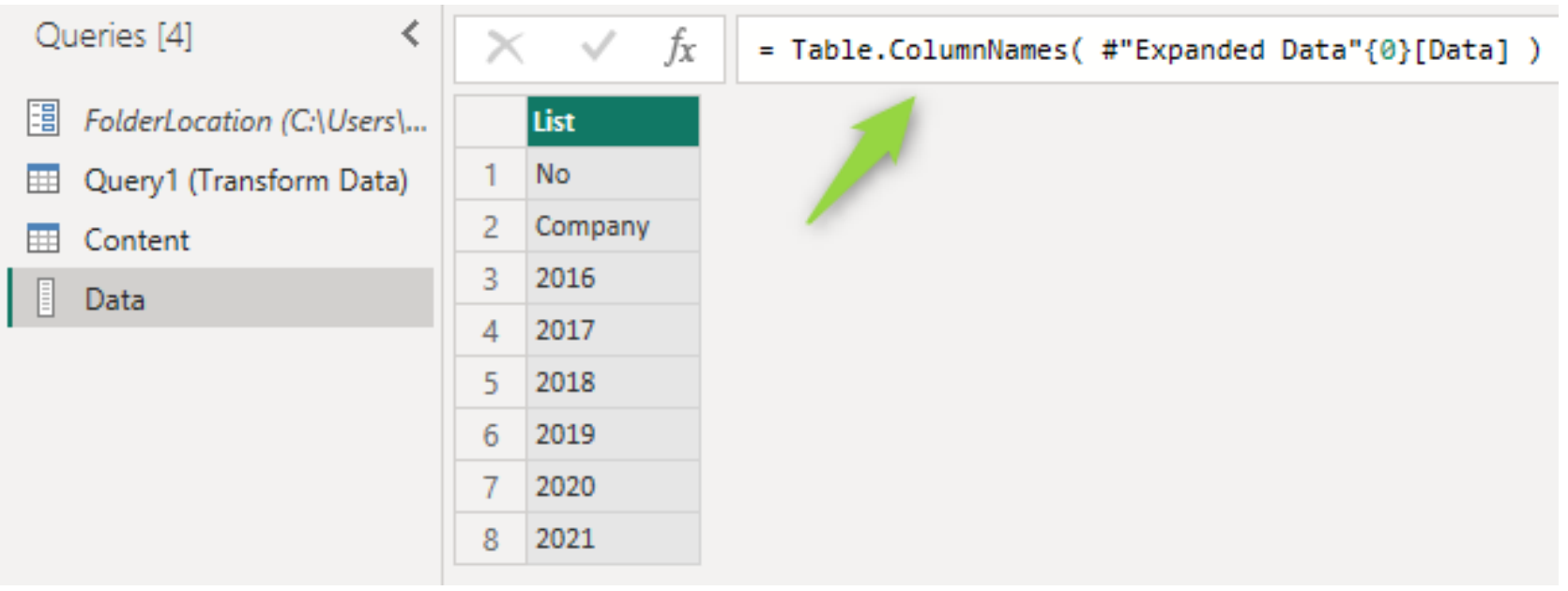


Improve the code for the final Expand step

In the Applied steps, select the step before the final Expand operation.
Right click in the whitespace beside a table and *Add as New Query*



In the formula bar wrap *Table.ColumnNames* around the drill down syntax, as illustrated here, to return a list with Column Names.
Rename this query, I've called it: *GetColNames*



Improve the code for the final Expand step

Select the final Expand step in *Query1* and replace the hard coded lists with column names with the name of the helper query: *GetColNames*

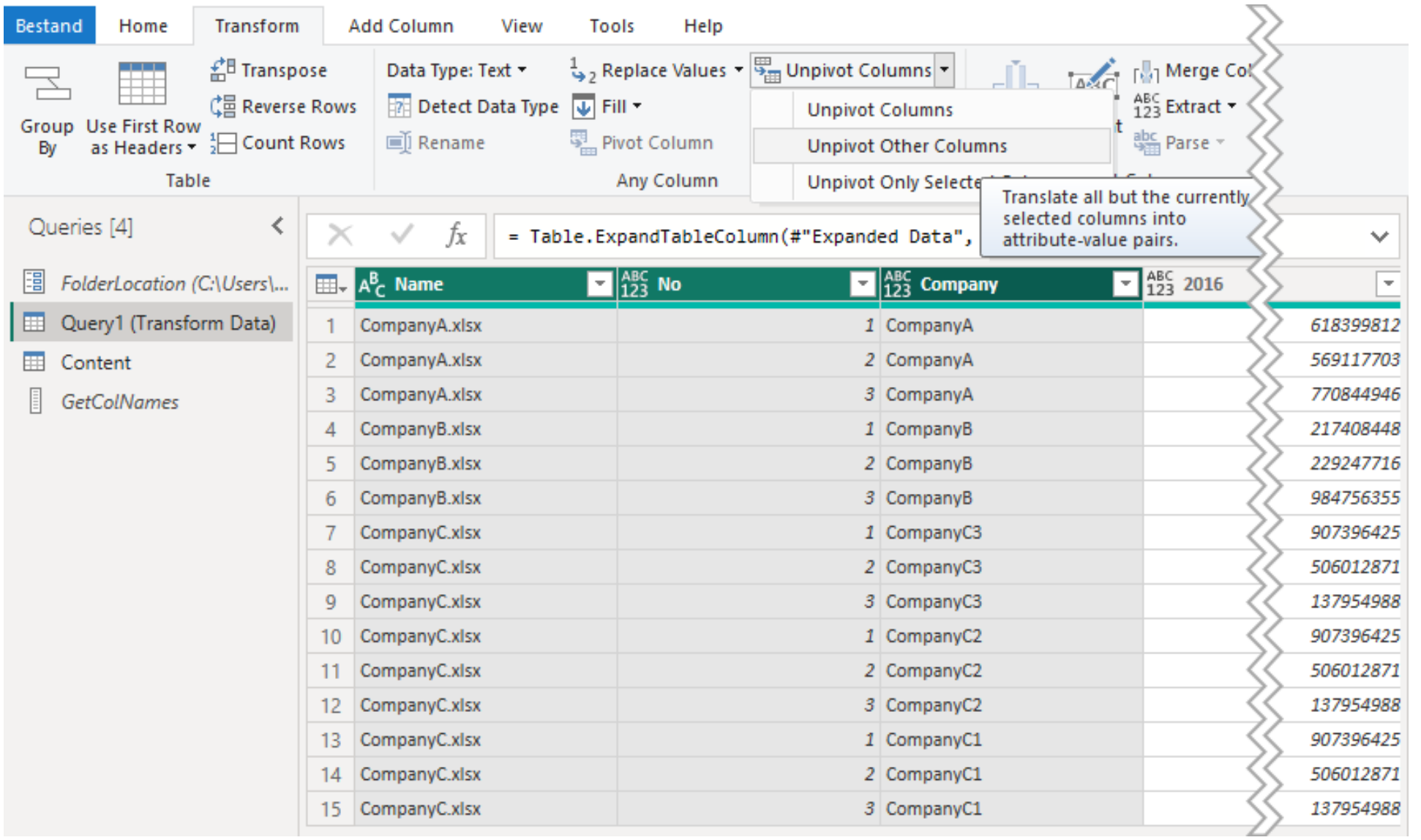
```
= Table.ExpandTableColumn(#"Expanded Data", "Data", GetColNames)
```

	Name	No	Company	2016	2021
1	CompanyA.xlsx	1	CompanyA	8791	618399812
2	CompanyA.xlsx	2	CompanyA	7835	569117703
3	CompanyA.xlsx	3	CompanyA	4516	770844946
4	CompanyB.xlsx	1	CompanyB	7643	217408448
5	CompanyB.xlsx	2	CompanyB	6335	229247716
6	CompanyB.xlsx	3	CompanyB	3466	984756355
7	CompanyC.xlsx	1	CompanyC3	2537	907396425
8	CompanyC.xlsx	2	CompanyC3	7665	506012871
9	CompanyC.xlsx	3	CompanyC3	3615	137954988
10	CompanyC.xlsx	1	CompanyC2	2537	907396425
11	CompanyC.xlsx	2	CompanyC2	7665	506012871
12	CompanyC.xlsx	3	CompanyC2	3615	137954988
13	CompanyC.xlsx	1	CompanyC1	2537	907396425
14	CompanyC.xlsx	2	CompanyC1	7665	506012871
15	CompanyC.xlsx	3	CompanyC1	3615	137954988

Don't forget to "Disable load" for both helper queries. You can do so by right clicking their name in the Queries Pane.

Final steps

Select all row header columns, go to Transform/ Unpivot Columns/ Unpivot Other Columns.



And set appropriate column types for all columns. Done!

I LOVE SOLVING PRACTICAL PROBLEMS WITH POWER QUERY/ M.