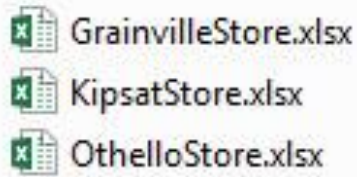


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Files used for Import

- 1) Import data from the three Excel Files, one for each store. When we use Power Query to import, we will need to extract the store name from the file name. The files are shown here:

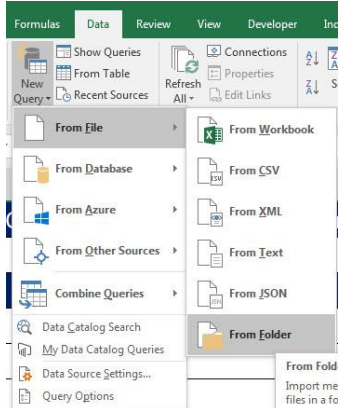


- 2) Each Excel File has sheets that contain sales for certain SalesReps. The Sheet Names contain the SalesRep names. When we use Power Query to import, we will need to extract the SalesRep names from the Sheet Names. The files are shown here:

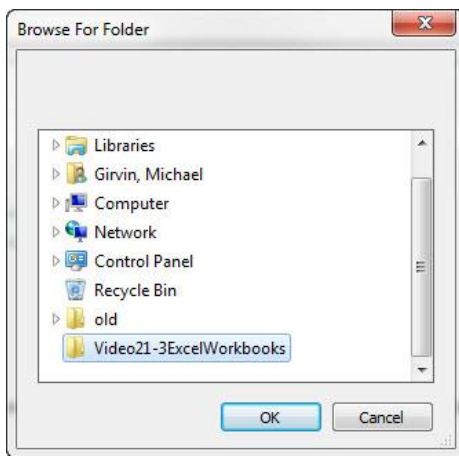
Grainville Store Excel File:				KipsatStore Excel File:				Othello Store Excel File:			
	A	B	C		A	B	C		A	B	C
1	Date	Product	Sales	1	Date	Product	Sales	1	Date	Product	Sales
2	4/16/2015	Majestic Beaut	\$308	2	6/3/2015	Carlota	\$513	2	5/23/2016	Majestic Beaut	\$732
3	7/16/2015	Sunshine	\$324	3	6/23/2015	Quad	\$216	3	4/2/2016	Tri Fly	\$145
4	1/19/2015	Aspen	\$398	4	10/21/2016	Bellen	\$457	4	1/3/2015	Quad	\$464
5	4/3/2015	Bellen	\$348	5	3/1/2016	Quad	\$357	5	8/26/2015	Aussie Round	\$474
6	12/26/2016	Sunshine	\$496	6	11/2/2015	Carlota	\$414	6	5/12/2015	Tri Fly	\$535
7	5/16/2016	Bellen	\$117	7	5/6/2015	Aspen	\$325	7	3/4/2015	Aussie Round	\$844
8	12/26/2015	Sunshine	\$400	8	6/21/2015	Aussie Round	\$912	8	10/20/2016	Tri Fly	\$681
9	7/27/2015	Aspen	\$450	9	8/7/2015	Majestic Beaut	\$995	9	10/11/2015	Tri Fly	\$835
Gardenia SheliaDawn Min Sheet1				Timmy Chin Tyrone				Jo Mo Phil Gigi			

Multiple Excel Workbooks with Multiple Sheets

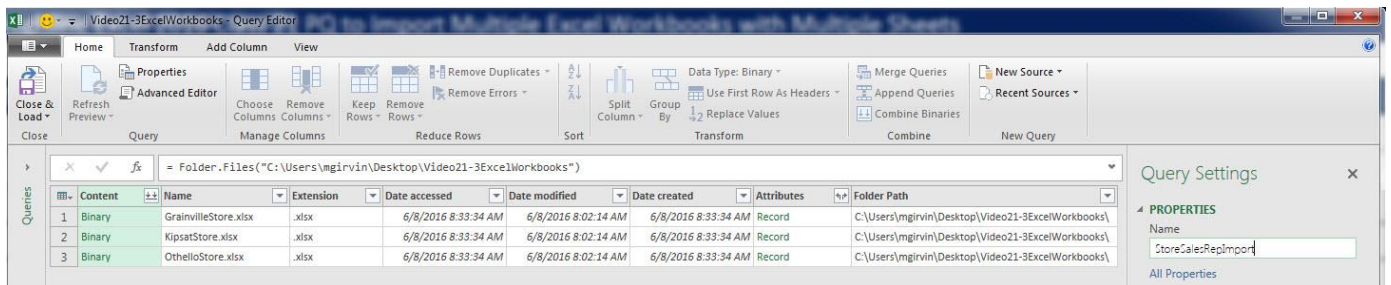
1) Data Ribbon Tab, New Query, From File, From Folder:



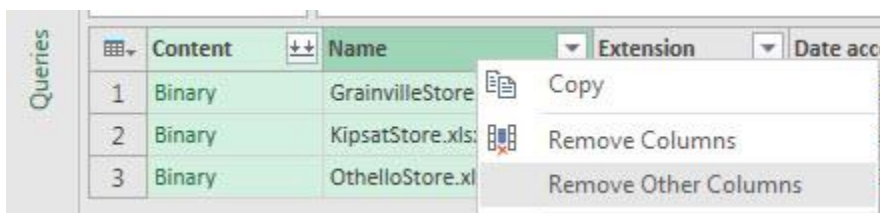
2) Browse to Folder with files:



3) The Power Query Editor window should look like this (including naming the query “StoreSalesReplImport”):



4) Highlight Content and Name columns and then right-click and point to Remove Other Columns.



Get "City" names from Excel file names

- 5) Highlight Name column and in the Home Ribbon Tab, Transform group, click the Replace button, and replace "Store.xlsx" with nothing.

Replace Values

Value To Find

Store.xlsx

Replace With

- 6) Result should look like:

	Content	Name
1	Binary	Grainville
2	Binary	Kipsat
3	Binary	Othello

The name of the city that the sale was made in comes from the file name.

- 7) We can't use the Double Arrow to expand data because that is only for Text Files. We have Excel Workbook File "Content" that contains many different objects.

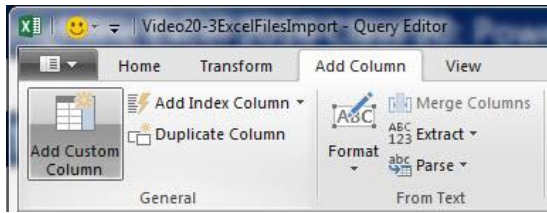


- 8) Excel Workbook File "Content":
- The Context Column contains Excel data.
 - Excel Workbook File data is different than Text File Data.
 - Text File Data has only Text
 - Excel Workbook File data has many potential objects inside the file. Excel Workbook File Objects such as:
 1. Sheets
 2. Excel Tables
 3. Defined Names

Use Power Query Function: Excel.Workbook([Content],true)

- 9) In order to get to the data that is on the Sheets in the Excel File, we need to add a new column and use the Power Query function **Excel.Workbook**
- 10) In order to not have the Field Names in each table show up as records in our table, we will use true in the second argument of the Excel.Workbook function.

11) In the Add Column Ribbon Tab, click “Add Custom Column”



12) Name column: GetExcelData. Create Power Query Formula: =Excel.Workbook([Content],true). This formula will extract all the objects in the Excel Workbook File (such as Sheets, Tables, Defined Names).

Add Custom Column

New column name

GetExcelData

Custom column formula:

=Excel.Workbook([Content],true)

Available columns:

Name
Content

<< Insert

[Learn about Power Query formulas](#)

✓ No syntax errors have been detected.

OK

Cancel

13) New column created by Excel.Workbook Function:

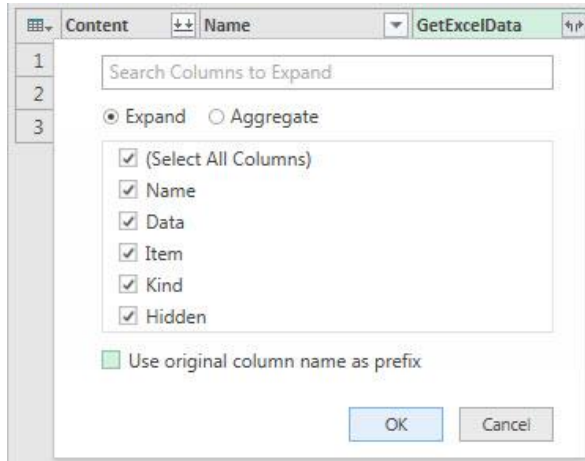
	Content	Name	GetExcelData
1	Binary	Grainville	Table
2	Binary	Kipsat	Table
3	Binary	Othello	Table

14) We don't need Content Column anymore, so Right-click Content and click on “Remove”.

15) From the GetExcelData column, click this button (Expand button):



16) Expand Button (Double outward pointing arrow) shows this dialog box with the different objects (make sure check box unchecked):



17) Now the Power Query Editor looks like this:

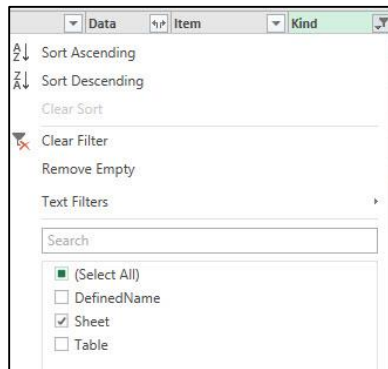
	Name	Name.1	Data	Item	Kind	Hidden
1	Grainville	Gardenia	Table	Gardenia	Sheet	FALSE
2	Grainville	SheliaDawn	Table	SheliaDawn	Sheet	FALSE
3	Grainville	Min	Table	Min	Sheet	FALSE
4	Grainville	Sheet1	Table	Sheet1	Sheet	FALSE
5	Grainville	Names	Table	Names	Table	FALSE
6	Kipsat	Timmy	Table	Timmy	Sheet	FALSE
7	Kipsat	Chin	Table	Chin	Sheet	FALSE
8	Kipsat	Tyrone	Table	Tyrone	Sheet	FALSE
9	Othello	Jo	Table	Jo	Sheet	FALSE
10	Othello	Mo	Table	Mo	Sheet	FALSE
11	Othello	Phil	Table	Phil	Sheet	FALSE
12	Othello	Gigi	Table	Gigi	Sheet	FALSE
13	Othello	Sales	Table	Sales	DefinedName	FALSE

18) What different columns mean:

- Name = Name of object
- Data = Data in objects
- Item = Name of object
- Kind = what sort of object, such as: Sheet, Excel Table, Defined Name and so on.
- Hidden = tells you if object is hidden.

Get "Sales Rep" names from Excel Worksheet names

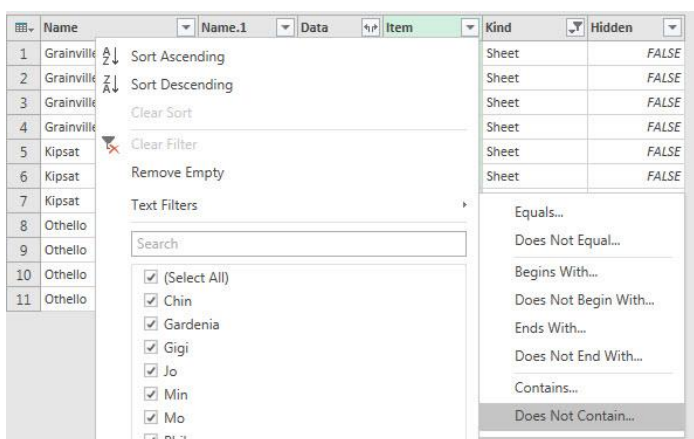
- 19) From the Kind Column we see that we have a Defined Name and a Table. We want to filter out the Defined Name and Table, so we use the Filter to check only “Sheet” object. This filter will keep on the objects that are sheets:



- 20) Now we only have Sheet Objects; the Power Query Editor looks like this:

	Name	Name.1	Data	Item	Kind	Hidden
1	Grainville	Gardenia	Table	Gardenia	Sheet	FALSE
2	Grainville	SheliaDawn	Table	SheliaDawn	Sheet	FALSE
3	Grainville	Min	Table	Min	Sheet	FALSE
4	Grainville	Sheet1	Table	Sheet1	Sheet	FALSE
5	Kipsat	Timmy	Table	Timmy	Sheet	FALSE
6	Kipsat	Chin	Table	Chin	Sheet	FALSE
7	Kipsat	Tyrone	Table	Tyrone	Sheet	FALSE
8	Othello	Jo	Table	Jo	Sheet	FALSE
9	Othello	Mo	Table	Mo	Sheet	FALSE
10	Othello	Phil	Table	Phil	Sheet	FALSE
11	Othello	Gigi	Table	Gigi	Sheet	FALSE

- 21) The Item column has the name of the object. We want the sheets with the SalesRep names such as “Gardenia” or “Gigi”. To get the sheets with the SalesRep names we want to eliminate the sheets with the default name “Sheet” by creating a “Does Not Contain” filter with the word “Sheet”:



22) In the “Does Not Contain” textbox type: “Sheet”:

Filter Rows

Show rows where: Item

does not contain Sheet

☒ And ☐ Or

OK

23) After “Does Not Contain ‘Sheet’” Filter Query Editor looks like:

	Name	Name.1	Data	Item	Kind	Hidden
1	Grainville	Gardenia	Table	Gardenia	Sheet	FALSE
2	Grainville	SheliaDawn	Table	SheliaDawn	Sheet	FALSE
3	Grainville	Min	Table	Min	Sheet	FALSE
4	Kipsat	Timmy	Table	Timmy	Sheet	FALSE
5	Kipsat	Chin	Table	Chin	Sheet	FALSE
6	Kipsat	Tyrone	Table	Tyrone	Sheet	FALSE
7	Othello	Jo	Table	Jo	Sheet	FALSE
8	Othello	Mo	Table	Mo	Sheet	FALSE
9	Othello	Phil	Table	Phil	Sheet	FALSE
10	Othello	Gigi	Table	Gigi	Sheet	FALSE

The name of the SalesRep who made the sale comes from the Sheet name.

24) Highlight Data and Name and Item columns and right-click and click on “Remove Other Columns”:

	Name	Name.1	Data	Item	Kind	Hidden
1	Grainville	Gardenia	Table	Gardenia		
2	Grainville	SheliaDawn	Table	SheliaDawn		
3	Grainville	Min	Table	Min		
4	Kipsat	Timmy	Table	Timmy		

Copy
Remove Columns
Remove Other Columns

25) This leaves us with three columns. The Data column has the Excel Tables with Field Names.

26) To expand the tables, click the expand button on the Data Column.

	Name	Data	Item
1	Grainville	Table	Gardenia
2	Grainville	Table	SheliaDawn
3	Grainville	Table	Min

27) Click OK (make sure check box unchecked):

Search Columns to Expand

☒ Expand ☐ Aggregate

☒ (Select All Columns)
☒ Date
☒ Product
☒ Sales

☐ Use original column name as prefix

OK Cancel

28) We can finally see the actual data from the Excel files. And we have a Proper Data Set with only one set of Field Names in the first row of the data set.

	Name	Item	Date	Product	Sales
1	Grainville	Gardenia	4/16/2015	Majestic Beaut	308
2	Grainville	Gardenia	7/16/2015	Sunshine	324
3	Grainville	Gardenia	1/19/2015	Aspen	398
4	Grainville	Gardenia	4/3/2015	Bellen	348
5	Grainville	Gardenia	12/26/2016	Sunshine	496
6	Grainville	Gardenia	5/16/2016	Bellen	117
7	Grainville	Gardenia	12/26/2015	Sunshine	400

29) Rename column 1 "City". Rename column 2 "SalesRep".

30) Check each column for proper Data Type.

31) Close and Load To a Table on a New Sheet:

Load To

Select how you want to view this data in your workbook.

☒ Table
☐ Only Create Connection

Select where the data should be loaded.

☒ New worksheet
☐ Existing worksheet:
\$A\$2

☐ Add this data to the Data Model

Load Cancel

32) Finished Table looks like:

	A	B	C	D	E
1	City ▼	Date ▼	Product ▼	Sales ▼	SalesRep ▼
2	Grainville	4/16/2015	Majestic Beaut	308	Gardenia
3	Grainville	7/16/2015	Sunshine	324	Gardenia
4	Grainville	1/19/2015	Aspen	398	Gardenia
5	Grainville	4/3/2015	Bellen	348	Gardenia
6	Grainville	12/26/2016	Sunshine	496	Gardenia
7	Grainville	5/16/2016	Bellen	117	Gardenia
8	Grainville	12/26/2015	Sunshine	400	Gardenia
9	Grainville	7/27/2015	Aspen	450	Gardenia

Cumulative List of Keyboards Throughout Class:

- 1) **Esc Key:**
 - i. Closes Backstage View (like Print Preview).
 - ii. Closes most dialog boxes.
 - iii. If you are in Edit mode in a Cell, Esc will revert back to what you had in the cell before you put the Cell in Edit mode.
- 2) **F2 Key** = Puts formula in Edit Mode and shows the rainbow colored Range Finder.
- 3) **SUM Function: Alt + =**
- 4) **Ctrl + Shift + Arrow** = Highlight column (Current Region).
- 5) **Ctrl + Backspace** = Jumps back to Active Cell
- 6) **Ctrl + Z** = Undo.
- 7) **Ctrl + Y** = Undo the Undo.
- 8) **Ctrl + C** = Copy.
- 9) **Ctrl + X** = Cut.
- 10) **Ctrl + V** = Paste.
- 11) **Ctrl + PageDown** = expose next sheet to right.
- 12) **Ctrl + PageUp** = expose next sheet to left.
- 13) **Ctrl + 1** = Format Cells dialog box, or in a chart it opens Format Chart Element Task Pane.
- 14) **Ctrl + Arrow**: jumps to the bottom of the "Current Region", which means it jumps to the last cell that has data, right before the first empty cell.
- 15) **Ctrl + Home** = Go to Cell A1.
- 16) **Ctrl + End** = Go to last cell used.
- 17) Alt keyboards are keys that you hit in succession. Alt keyboards are keyboards you can teach yourself by hitting the Alt key and looking at the screen tips.
 - i. Create PivotTable dialog box: **Alt, N, V**
 - ii. Page Setup dialog box: **Alt, P, S, P**
 - iii. Keyboard to open Sort dialog box: **Alt, D, S**
- 18) **ENTER** = When you are in Edit Mode in a Cell, it will put thing in cell and move selected cell DOWN.
- 19) **CTRL + ENTER** = When you are in Edit Mode in a Cell, it will put thing in cell and keep cell selected.
- 20) **TAB** = When you are in Edit Mode in a Cell, it will put thing in cell and move selected cell RIGHT.
- 21) **SHIFT + ENTER** = When you are in Edit Mode in a Cell, it will put thing in cell and move selected cell UP.
- 22) **SHIFT + TAB** = When you are in Edit Mode in a Cell, it will put thing in cell and move selected cell LEFT.
- 23) **Ctrl + T** = Create Excel Table (with dynamic ranges) from a Proper Data Set.
 - i. Keyboard to name Excel Table: **Alt, J, T, A**
 - ii. **Tab** = Enter Raw Data into an Excel Table.
- 24) **Ctrl + Shift + ~ (`)** = General Number Formatting Keyboard.
- 25) **Ctrl + ;** = Keyboard for hardcoding today's date.
- 26) **Ctrl + Shift + ;** = Keyboard for hardcoding current time.
- 27) **Arrow Key** = If you are making a formula, Arrow key will "hunt" for Cell Reference.
- 28) **Ctrl + B** = Bold the Font
- 29) **Ctrl + * (on Number Pad) or Ctrl + Shift + 8** = Highlight Current Table.
- 30) **Alt + Enter** = Add Manual Line Break (Word Wrap)
- 31) **Ctrl + P** = Print dialog Backstage View and Print Preview
- 32) **F4 Key** = If you are in Edit mode while making a formula AND your cursor is touching a particular Cell Reference, F4 key will toggle through the different Cell References:
 - i. **A1** = Relative
 - ii. **\$A\$1** = Absolute or "Locked"

- iii. **A\$1** = Mixed with Row Locked (Relative as you copy across the columns AND Locked as you copy down the rows)
 - iv. **\$A1** = Mixed with Column Locked (Relative as you copy down the rows AND Locked as you across the columns)
- 33) **Ctrl + Shift + 4** = Apply Currency Number Formatting
- 34) **Tab key** = When you are selecting a Function from the Function Drop-down list, you can select the function that is highlighted in blue by using the Tab key.
- 35) **F9 Key** = To evaluate just a single part of formula while you are in edit mode, highlight part of formula and hit the F9 key.
- i. If you are creating an Array Constant in your formula: Hit F9.
 - ii. If you are evaluating the formula element just to see what that part of the formula looks like,
REMEMBER: to Undo with Ctrl + Z.
- 36) **Alt, E, A, A** = Clear All (Content and Formatting)
- 37) Evaluate Formula One Step at a Time Keyboard: **Alt, M, V**
- 38) Keyboard to open Sort dialog box: **Alt, D, S**
- 39) **Ctrl + Shift + L** = Filter (or **Alt, D, F, F**) = Toggle key for Filter Drop-down Arrows
- 40) **Ctrl + N** = Open New File
- 41) **F12** = Save As (Change File Name, Location, File Type)
- 42) Import Excel Table into Power Query Editor: **Alt, A, P, T**
- 43) **Ctrl + 1 (When Chart element in selected)**: Open Task Pane for Chart Element
- 44) **F4 Key** = If you are in Edit mode while making a formula AND your cursor is touching a particular Cell Reference, F4 key will toggle through the different Cell References:
- i. **A1** = Relative
 - ii. **\$A\$1** = Absolute or "Locked"
 - iii. **A\$1** = Mixed with Row Locked (Relative as you copy across the columns AND Locked as you copy down the rows)
 - iv. **\$A1** = Mixed with Column Locked (Relative as you copy down the rows AND Locked as you across the columns)
- 45) Keyboard to open Scenario Manager = **Alt, T, E**
- 46) **Ctrl + Tab** = Toggle between Excel Workbook File Windows
- 47) **Ctrl + Shift + F3** = Create Names From Selection
- 48) **Ctrl + F3** = open Name Manager
- 49) **F3** = Paste Name or List of Names
- 50) **Alt + F4** = Close Active Window
- 51) **Window Key + Up Arrow** = Maximize Active Window
- 52) **Ctrl + Shift + Enter** = Keystroke to enter Array Formulas that: 1) have a function argument that requires it, or 2) whether or not you are entering the Resultant Array into multiple cells simultaneously.
- 53) **Ctrl + /** = Highlight current Array
- 54) Data Validation Dialog Box: **Alt, D, L**
- 55) **F11** = Create Chart on a new sheet
- 56) **Alt + F11** = Create Chart on currently selected sheet.
- 57) New Format Rule dialog box: **Alt, H, L, N**
- 58) Delete conditional Formatting Rule: **Alt, O, D, D**
- 59) Manage Rule dialog box keyboard: **Alt, O, D**
- 60) "Format values where this formula is true": **Alt, H, L, N, PageDown, Tab**
- 61) Shift + F11 = Insert a New Sheet
- 62) Ctrl + F1 = Toggle Ribbon Tabs on and off
- 63) Ctrl + Alt + F5 = Refresh All Data in Excel Workbook.

64) Zoom to Selection = **Alt, W, G**

65) Ctrl + F = Find

66) Ctrl + H = Find and Replace

67) Advanced Filter keyboard: Alt, A, Q or Alt, D, F, A

New Keyboards in This Video:

68) ??