# Data Analysis & Business Intelligence Made Easy with Excel Power Tools Excel Data Analysis Basics = E-DAB

## Notes for Video:

## E-DAB-06-Power Query (Get & Transform) to Clean, Transform, Import Data

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### 1. <u>What is Power Query?</u>

- 1) What does Power Query do?
  - 1. Import Data from External sources
    - i. External sources such as text files, folders that contains multiple files, Excel workbooks, SQL databases and more.
  - 2. Clean Data
    - i. Like split data in a column into three columns
  - 3. Transform Data
    - i. Like combining multiple tables into one Proper Data Set
  - 4. Loads Data to these locations:
    - i. Excel Sheet = Data in cells in Excel Worksheet.
    - ii. PivotTable Cache = data in behind the scenes PivotTable Cache.
    - iii. Power Pivot Data Model = Data in behind the scenes Power Pivot Columnar Database (Data Model) which can hold millions of rows of data.
- 2) Reminder of the goal of Data Analysis and why will need Power Query :
  - 1. Data Analysis:
    - i. Converting Raw Data into Useful Information
  - 2. Proper Data Set:
    - i. Field Names / Column Headers in first row
    - ii. Records in each row (sales transactions, employee records and so on)
    - iii. Empty cells all around data set (or Excel row or column headers)
  - 3. "Bad Data"
    - i. "Bad Data" = Raw Data that is not in a Proper Data Set form.
    - ii. If we don't have a Proper Data Set than we can use Excel Data Analysis features.
    - iii. So when we get "Bad Data", we have to clean and transform the data so it becomes data that is stored in a Proper Data Set.
    - iv. Power Query (Get & Transform Data) is an Excel Feature that can clean and transform data.
  - 4. Importing Data:
    - i. We do not always have our data in our Excel file.
    - ii. Power Query will allow us to import data from any source and then load it to our desired location (such as Excel Worksheet, PivotTable Cache or the Data Model)

- 3) Power Query history :
  - 1. Power Query has been around since Excel 2013

Or:

- 2. In Excel 2010 & 2013 Power Query was an add-in that you had to download and install
- 3. In Excel 2016 Power Query become the "Get & Transform" group in the Data Ribbon Tab.
- 4. Depending on the version of Excel that you have, the Get & Transform group looks different.
  - i. If you have Office 365, your "Get and Transform Data" group may look like this:



ii. If you have Office 2016, your "Get and Transform" group may look like this:



- 4) If your data is in an Excel sheet, you must convert the data to an Excel Table using the Excel Table feature.
  - 1. This is to ensure that if you add new data, the output from Power Query will update when new data is added.
  - 2. Then you click the "From Table" button in the Get & Transform group in the Data Ribbon Tab to put the Excel Data into the Power Query Editor:
    - i. In Office 365 the "From Table/Range" button looks like this:



ii. In a version that is Office 2016 the "From Table" button looks like this:



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- 5) If you have data from an external source, we can begin the process of importing the data by clicking the following button:
  - i. In a version that is NOT Office 365 to get external data click the "Get Data" button:



ii. In a version that is NOT Office 365 to get external data click the "New Query" button:



- 6) If you ever need to edit, delete or look at your query, you must open the Query Pane. The button to click to open the Query Pane is in a different location depending on whether or not you have Office 365:
  - 1. In Office 365, you click the "Queries and Connections" button in the Queries and Connections group in the Data Ribbon Tab:



2. In a version that is NOT Office 365, you click the "Show Queries" button in the Get & Transform group in the Data Ribbon Tab:



- 3. If you ever need to edit or look at your query, you can double-click the query in the Query Pane. You can right-click the query and point to edit also.
- 4. If you need to delete your query and start over, you can delete the query in the Queries Pane.

- 7) Clean Data with Power Query (Get & Transform), Flash Fill or formulas?
  - 1. Use Flash Fill when the data cleaning is a one-time event and you don't need the solution to update when the source data changes.
  - 2. Use Formulas when the data cleaning solution needs immediately update when the source data changes.
  - 3. Use Power Query when you need the solution to update after you click the Refresh button.
- 8) Other reasons to use Power Query rather than Flash Fill, Formulas and other methods of cleaning and transforming data:
  - 1. Power Query can be significantly easier when the cleaning is complicated or has multiple steps, especially as compared to formulas
  - 2. If the data is coming from an external source, Power Query can be significantly easier than any other method.
  - 3. If you have multiple files that you need to transform into a single Proper Data Set, like in the example in our video, Power Query is significantly easier than any other method.
  - 4. The "Query" created with Power Query an be linked to a reporting solution. And you are allowed to go back and edit that query at any time, and then simply refresh the report and it will reflect the changes made in the query.
- 9) Every time we use Power Query, we create a new "Query".
  - 1. The word "Query" means to ask a question.
  - 2. When we start a "Query" based on a Start or Begin Data Set, we are asking a question of the data set.
  - 3. For example:
    - i. If our Start or Begin Data Set looks like this:

Description	Amount
Carlota / 05/05/2016 / West	485

ii. We might want to ask the question or "Query": "Can I see the Description Column Split into three separate columns?", where the answer to the "Query" would look like this:

Product	Date	Region	Sales
Carlota	5/5/2016	West	485

#### 10) Power Query uses "Data Types" for each Column / Field

- 1. "Data Type" indicates what sort of data can go in a particular Field or Column.
  - For example, we may designate a column as one of these Data Types:
    - **Text**: Where the column can only contain Text values
    - Date: Where the column can only contain Date values
    - Whole Number: Where the column can only contain Whole Numbers with no decimals
    - **Currency**: Where column can contain Currency amounts with up to 4 decimals
    - There are more Data Types also ...
- 2. When you designate a Column / Field as a specific data type, you are building a more robust data storage system, because you are assuring that the right kind of data goes into the column.
- 3. Power Query and Access both use "Data Types".
- 4. *Important*: If you do not choose the correct data type for each column, the data analysis features in Excel, like a PivotTable may not work correctly.

For example:

- A Date Field without the Date Data Type cannot group in a PivotTable.
- A Sales Column without a number Data Type may not be able to be summed.

#### 11) Delimiter?

- 1. A delimiter is a character or set of characters that separate data that should be broken apart into separate columns
  - For example, for this data: Carlota / 05/05/2016 / West
    - The delimiter is " / " (Space, Forward Slash, Space).
    - The delimiter tells us how the data should be split into separate columns.
    - The resultant data should be:

Carlota / 05/05/2016 / West 485 - Carlota 5/5/2	016 West	485

#### 12) Why store data in Text Files?

1. Because there are so many different systems for storing data, one of the common files types used to transfer data from one system to another system is the "Text File".

Examples of Text File extensions:

- ".txt"
- ".csv"

The Delimiters used for different text files:

- ".txt" uses a Tab as the delimiter
- ".csv" uses comma as the delimiter

#### 13) Change Load Location:

1. To change the Load locations (like change from PivotTable Cache to Excel Table in Worksheet), open Queries & Connections Pane, right-click query, click on "Load To...", as seen here:

	0000000	
	Сору	
临	Paste	
	Edit	
×	Delete	
۵.	Rename	
	Refresh	
	Load To	

### 2. Example 1: PivotTable Gets New Source Text File Each Month

1) From the Data Ribbon Tab, in the Get & Transoform Data group, click the Get Data dropdown arrow, as seen here:



3) Navigate to the file that you have placed in a designated location (same location you will use next month), click the file, and then click the Import button, as seen below:

X	Import Data	×
🔄 🄄 🔹 ↑ 퉬 → SurveyDataFolder	✓ C Search SurveyDataFol	der 🔎
Organize 🔻 New folder	8== -	· 🔟 🔞
🔊 Microsoft Excel	▲ Name	Date mod
🔆 Favorites	March2019.txt	3/7/2019
Desktop		
🚺 Downloads		
归 Recent places		
	v <	>
File name: March2019.txt	✓ Text Files (*.prn;*.bxt;	*.csv) 🗸
	Tools 💌 Import	Cancel

4) Verify that the Delimiter is Tab and then click Transform Data (in some versions the button says "Edit"), as seen here:

ile Origin		Delimiter	Data Type Detection	1	
1252: Western E	uropean (Windows) 🔹	Tab	<ul> <li>Based on first 200 r</li> </ul>	rows 🔻	
Column1	Column2				
Type of Company	Employment Plan Over N	lext 12 Months			
Private	Add Employees				
Private	Add Employees				
Private	Add Employees				
Private	Add Employees				Click Transform Data
Private	Add Employees			<b>-</b>	Click Transform Data
Private	Add Employees				(in some versions the
Private	Add Employees		Verify Delimiter		(in some versions the
Private	Add Employees		1		button says "Edit")
Private	Add Employees				Successive Earch
Private	Add Employees				
Private	Add Employees				
Private	Add Employees				
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Private	Add Employees				
	Add Employees				
Private	ridd employees				

5)

6) The text data has been opened in the Power Query Editor. Name the Query "TextSurveyTable", and then in the Applied Steps Pane, use the Red X to delete the "Changed Type" step, as seen below:



7) In upper left corner of table, click dropdown and the click on "Use First Row as Header", as seen here:



8) The Applied Steps list should show three steps (as seen below). In the Home Ribbon Tab on the far left, click dropdown for Close & Load, then click on "Close & Load To..."

	)• <del>•</del>			١	「extSurv	/eyTab	le - Pov	ver Qu	ery Editor				-	□ ×	]	
File		Home	Transform Ad	ld Column	View									^ <b>(</b> )		
Close	Ba F	Refresh review +	Properties Advanced Editor Manage •	Manage Columns •	Reduce Rows •	A↓ X↓	Split Column •	Group By	Data Type: Text	ow a lues	s Headers 🔻	Combine	Manage Parameters •	Data sou *		
	Close	& Load				Sort			Transform				Parameters	Data Sou		
<u> </u>	Close & Load To Table. TransformColumnTypes (#"Promoted Headers",								`S",	~	Query	Settin	gs	×		
Queries	1 2	A <sup>B</sup> C Priv Priv	ave your changes to close the Query Edito and specify where the esults.	this query, window, load the	Ply, Plan Over Next 12 Months V				^	PROPER Name TastSur	RTIES	TIES				
	3	Private		es	15 All Dec					Textour	Dreportion					
	4 Private Ac			Add Employees				All Properties								
	5	Private		Click on							O STEPS				Three	
	7	Private		Cli							Sou	rce		8		<u></u>
	8	Private	"C	lose &	Load To"				× Char	noted Hea	ders	×		Steps in		
	9	Private									P C CHA	igea iype				Annlied
	10	Private		Add Employe	es											Applied
	11	Private		Add Employe	es										N	Steps list.
	12	Private		Add Employe	985 107											-
	13	Private		Add Employe												
	14	Private		Add Employe	es.											
	16	Private		Add Employe	es											
	17	Private		Add Employe	es											

9) In you have Office 365, you can use the "PivotTable Report" option in the Import Data dialog box to load the data to a PivotTable Cache, as seen here:

Import Data 🛛 ? 🛛 🗙								
Select how you want to view this data in your workbook.								
= SRS2								
Add this data to the Data <u>M</u> odel								
Properties • OK Cancel								

10) In you do NOT have Office 365, you can use the "Table" option in the Load To dialog box to load the data to a PivotTable Cache, as seen here:

Select how you want	to view this data in your workbook.
<ul> <li>Table</li> </ul>	
📔 🔿 Only Create Cor	nnection
<ul> <li>New worksneet</li> </ul>	
C Existing worksheet: \$A\$15	
C Existing worksheet: \$A\$15	E Dete Madel

11) If you load it to the PivotTable Cache, you will see the "Queries and Connections" Pane that lists the query named "TextSurveyTable", and you will see the PivotTable Field List.



12) We can build our PivotTable and PivotChart Report based on the data imported from the text file into the PivotTable Cache, as seen here:

	٨	P	6		D	c			
1	^	5					Queries & Conn 👻 🗙	PivotTable Fields	▼ X
2							Querier Connections	Choose fields to add to report:	(ñ) -
3		Count of Type of Company	Type of Comp	any 💌			Queries Connections	choose neids to add to report.	197 ·
4		Employment Plan Over Next 12 Months	<ul> <li>Private</li> </ul>	Public	Grand	Total	1 query	Search	Q
5		Add Employees		37	32	69	The state of the second st		
6		Lay Off Employees		16	42	58	III TextSurveyTable	✓ Type of Company	
7		No Change		19	34	53	180 rows loaded.	Employment Plan Over Next 12 Me	onths
8		Grand Total		72	108	180		More Tables	
9									
10		Count of Type of Company	Type of Comp	any 💌					
11		Employment Plan Over Next 12 Months	<ul> <li>Private</li> </ul>	Public	Grand	Total			
12		Add Employees		51.4%	29.6%	38.3%			
13		Lay Off Employees		22.2%	38.9%	32.2%			
14		No Change		26.4%	31.5%	29.4%			
15		Grand Total		100.0%	100.0%	100.0%			
16									
17		It looks like Private and Public plans are go	oing in opposite	directions.					
18		Add Employees is: 51% for Priviate Firms, b	but 30% for Publ	ic Firms.				5	
19		Lay Off Employees is: 22% for Private Firms	s, but 39% for Pu	ublic Firms				Drag fields between areas below:	
20								T Filters	III Columns
21			🔳 Private 📕 Pu	blic					Type of Company
22		51.4%							
23		20.52	38.	9%	21 50	v			
24		29.6%	22.2%		26.4%				
25									
26									
27		Add Employees	Lay Off Employe	tes	No Change			≡ Rows	≥ Values
28		Employr	ment Plan Over N	ext 12 Months				Employment Plan Over Next 12 🔻	Count of Type of Company 🔹
29									
20									

13) If we do not need to keep a historical record of our report, and next month when we have a new text file in our designated location, we can open the query by double clicking it in the Queries and Connections Pane, as seen below:



14) In the Power Query Editor, in the Applied Steps list, double-click the first step named "Source".

	)• -	-				Te	tSurvey	Table - Power Query E	ditor				-	□ ×	
File		Home	Transform Ad	id Column	View									^ <b>(</b>	2
Close 8 Load •	k I P	Refresh Preview *	Properties	Manage Columns <del>•</del>	Reduce Rows •	Ž↓ Z↓ Colu	it Grou nn ▼ By	Data Type: Text ▼ Use First Row as Hea <sup>p</sup> 1, 2 Replace Values	ders 🔻	Combine	Manage Parameters •	Data source settings	Pew Source ▼ CoRecent Sources ▼		
Close			Query			Sort		Transform			Parameters	Data Sources	New Query		
>	> $f_x$ = Table.TransformColumnTypes(#"Promoted Headers", {{"Type of Company", type text},									• •	Query Settings		$\times$		
eries		A <sup>B</sup> C Typ	pe of Company 🔄	A <sup>B</sup> <sub>C</sub> Employment Plan Over Next 12 Months											
Ő	1	Private		Add Employe	es						~	Name	165		
	2	Private		Add Employe	es							Tauto			
	3	Private		Add Employe	es							TextSurve			
	4	Private		Add Employe	es							All Proper	ties		
	5	Private		Add Emplo									CTEDC		
	6	Private		Add Emplo	do	uble-c	ick th	e first step				APPLIED	STEPS		
	7	Private		Add Emplo								Source		*	
	8	Private		Add Emplo		name	ed "So	ource".				Promo	oted Headers	*	
	9	Private		Add Emplo								× Chang	jed Type		
	10	Private		Add Employe	es										
	44	Deliverate		And Country											

15) The file path looks like this (for March):

Comma-Separated Values	
Basic O Advanced	
File path	
C:\Users\FamilyUse\Desktop\SurveyDataFolder\March2019.txt	Browse
Open file as	
Csv Document *	

16) Change the name from March to "April". Then click OK.

Comma-Separated Values	
Basic O Advanced	
File path	
C:\Users\FamilyUse\Desktop\SurveyDataFolder\April2019.txt	Browse
Open file as	
Csv Document *	

17) Go back to your PivotTable and Right-click and then point to Refresh. If you loaded the data to the sheet and then built your PivotTable based on the data in the sheet, you will need to refresh the query in the Queries & Connections Pane, then refresh the PivotTable. Here is the updated PivotTable shown here:

Count of Type of Company	Type of Company 💌		
Employment Plan Over Next 12 Months	<ul> <li>Private</li> </ul>	Public	Grand Total
Add Employees	36.0%	30.5%	33.0%
Lay Off Employees	30.3%	37.1%	34.0%
No Change	33.7%	32.4%	33.0%
Grand Total	100.0%	100.0%	100.0%

It looks like Private and Public plans are similar this month. They have converged since last month's survey. Add Employees is: 36% for Priviate Firms, but 31% for Public Firms. Lay Off Employees 30% for Private and 37% for Public.



18) In the video, we also saw how to preserve the historical report, by copying the Query in the Queries & Connections Pane, then edit the source file destination, and then load the new query to a new PivotTable.

## 3. Example 2: Clean and Transform Bad Data For PivotTable

 On the sheet named "Ex(2)" there is a table with two Columns/Fields named "Description" and "Amount". The Description column is "Bad Data" because we can't use the Product, Date or Region in a PivotTable Report unless we break it apart into three columns. This is what the data looks like:

1	A	B
14	Description	Amount
15	Carlota / 05/05/2016 / West	485
16	Aspen / 04/02/2016 / South	804
17	Yanaki / 05/02/2016 / South	790
18	FlatTop / 04/11/2016 / South	965

- 2) Notice that what separates the Product, Date and Region columns is a "delimiter". The delimiter for this column is " / ", that is a space, forward slash and a space.
- 3) In order to use data from an Excel Sheet we must convert the data to an Excel Table. We can convert the table of data to an Excel Table by clicking in a single cell and using the keyboard Ctrl + T. In the Properties group in the Table Tools Design Ribbon Tab we can name the table "StartSalesTable".
- 4) To bring the Excel Table into the "Power Query Editor Window", click in one cell in the Excel Table and in the Data Ribbon Tab, in the "Get & Transform" group, click the "From Table" button:
  - i. In Office 365 it looks like this:

1.



ii. In a version that is NOT Office 365, it looks like this:



5) A New window opens up that reads "Query Editor" or "Power Query" in title Bar. On the Right, we want to click in Query Settings Task Pane Name textbox and name the Query "SalesProperDataSet". This name is the name of the Query and the name of the "Cleaned" Excel Table that will be loaded back into Excel.



6) Click on the "Description" Column Header to select the whole column

XI   🤇	<u>.</u>	=   Start	SalesTable - Query Edi	tor				
18 -		Home	Transform Add	l Column View				
Close of Load	BL F	Refresh Preview *	Advanced Editor	Choose Remove Columns * Columns * Manage Columns	Keep Remove Rows * Rows * Reduce Rows	2↓ Z↓ Sort	Split Column + By	Data Type: Text ▼ Use First Row as Headers ▼ <sup>1</sup> → <sub>2</sub> Replace Values Transform
>		A <sup>B</sup> <sub>C</sub> De	scription	▼ 1 <sup>2</sup> 3 Amount ▼				
S	1	Carlota	/05/05/2016 / West	485				
uen	2	Aspen /	/ 04/02/2016 / South	804				
ø	3	Yanaki	/ 05/02/2016 / South	790				
	4	FlatTop	/ 04/11/2016 / South	965				
	5	Carlota	/05/21/2016 / South	620				
	6	Carlota	/05/15/2016 / East	305				

- 7) Notice that in the Description column, what separates the Product, Date and Region columns is a "delimiter". The delimiter for this column is " / ", that is a space, forward slash and a space. Now we need to split the Description column into three separate columns.
- 8) In the Query Editor Home Ribbon Tab, in the Transform group, click on the Split button and then click on "By Delimiter":



9) The Split By Delimiter dialog box pops up and looks like this:

miter
p <mark>lit the te</mark> x
ST0875

10) From the "Select or enter delimiter" drop-down, select "Custom" like this:

Space	
Colon	
Comma	
Equals Sign	
Semicolon	
Space	
Tab	
Custom	

11) Type a space, forward slash and then space, like this:

Specify the delimiter used	to split the text column.		
Select or enter delimiter			
Custom	1 <b>4</b> 1		
/			
Split at			
<ul> <li>Left-most delimiter</li> </ul>			
<ul> <li>Right-most delimiter</li> </ul>			
Each occurrence of the d	limiter		
Advanced options			

12) After you click OK, the new "split" data set looks like this:

	-	Home	Transform	Ac	ld Column View					
Close Load Clos	& F + P	Refresh review *	Advanced Manage	Editor	Choose Remo Columns * Colum Manage Colum	ove ns T	Keep Remove Rows * Rows * Reduce Rows	⊉↓ ∡↓ Sort	Split Group Column + By	Data Type: Text ▼ Use First Row as Headers ▼ ↓ 2 Replace Values Transform
es <		A <sup>B</sup> <sub>C</sub> De	scription.1	-	Description.2	-	A <sup>B</sup> <sub>C</sub> Description.3	-	1 <sup>2</sup> 3 Amount	
	1	Carlota			5/5/2	West		485		
uen	2	Aspen			4/2/2	South		804		
0	3	Yanaki			5/2/2	South		790		
	4	FlatTop	)		4/11/2016		South		965	
	5	Carlota			5/21/2016		South		620	
	6	Carlota			5/15/2016		East		305	
	7	Carlota			5/19/2016		West		426	
	8	Yanaki			5/6/2	016	East		319	

13) Notice that the Column Header / Field Names are not useful names.

14) To rename each Column Header / Field, double click the Column Header / Field Name, type name and hit Enter. The renamed columns should look like this:

	-	Home 1	ransform	n Add	Column	View									
Close Load Clos	8. F ≠ Pi e	Refresh review +	Properti Advance Manage Query	ed Editor	Choo Colum Man	se Remove ns * Columns * age Columns	Keep F Rows - Reduce	Remove Rows * Rows	AJ AJ Sort	Split Column •	roup By	Data Type: Whole Number > Image: Whole Number > Image: Use First Row as Headers > Image: Values Transform			
>		A <sup>B</sup> <sub>C</sub> Produc	t 🔽	Date	-	A <sup>B</sup> <sub>C</sub> Region	✓ 1 <sup>2</sup> 3 Si	ales	-						
	1	Carlota		5	/5/2016 We	/5/2016 West		4	485	4	485	485	485		
ueri	2	Aspen		4	/2/2016	2/2016 South			804						
0	3	Yanaki		4	/2/2016 South				790						
	4	FlatTop		4/	11/2016	11/2016 South		965							
	5	Carlota		5/	21/2016	South		62		620					
	6	Carlota		5/	15/2016	East		30							
	7	Carlota		5/	19/2016	West			426						
	8	Yanaki		4	6/2016	East			319						

15) Now we want to take a closer look at each Column Header / Field Name and notice the icons like "ABC", Calendar Icon and "123". These are the Data Types for each column. These Data Types assure that the right kind of data goes into the column. The Product, Date and Region all have the correct Data Type. But the Sales Field needs to have the Data Type changed to "Currency" Data Type. To do this, click the "123" icon on the left side of the Sales Column Header and then click on Currency, like this:

A <sup>B</sup> <sub>C</sub> Region	123 5	ales
West	1.2	Decimal Number
South	\$	Currency
South	1 <sup>2</sup> 3	Whole Number
South	%	Percentage
South	1012	Date/Time
East		Date
West		Date
East		Time
East	40	Date/Time/Timezone
West	O	Duration
East	ABC	Text
South	×	True/False
West	(Y)	

16) Now our Query is finished. Notice that the steps of the query are listed on the right. These steps can be viewed by clicking on them and can be edited if necessary.

1 -	ł	Home Transform	Add Column	View									
ose &	R Pr	Refresh review + Manage	s I Editor Choo Colum	se Remove	Keep Remove Rows * Rows *	2↓ ∡↓	Split Column + By 1 2, 2 Replace Values	Merge Queries * Append Queries * Combine Files	Mar Param	nage eters *	Data source settings	Recent Source	e * urces '
lose		Query	Man	age Columns	Reduce Rows	Sort	Transform	Combine	Paran	neters	Data Sources	New Que	ry
	<b>.</b>	A <sup>B</sup> <sub>C</sub> Product ▼	Date 💌	A <sup>B</sup> <sub>C</sub> Region	<ul> <li>\$ Sales</li> </ul>	-				Ou	erv Setting	ns	
	1	Carlota	5/5/2016	West		485				60	ory obtaining	3-	
	2	Aspen	4/2/2016	South		804				▲ PRO	PERTIES		
	3	Yanaki	5/2/2016	South		790			1.20	Nar	ne		
	4	FlatTop	4/11/2016	South		965			m	Sa	esProperDataSe	et	
	5	Carlota	5/21/2016	South		620				All	Properties		
	6	Carlota	5/15/2016	East		305							
	7	Carlota	5/19/2016	West		426				A API	PLIED STEPS		
	8	Yanakî	5/6/2016	East		319				1	Source		
	9	Yanaki	5/7/2016	East		540				19	Changed Type		
	10	Quad	5/20/2016	West		864					Split Column b	y Delimiter	3
	11	Quad	4/29/2016	East		1083					Changed Type1	1	
	12	Quad	4/18/2016	South		636					Renamed Colu	mns	
	13	FlatTop	4/25/2016	West		1200				×	Changed Type	2	
	14	Yanaki	5/30/2016	South		563							
	15	Carlota	5/4/2016	East		1219							
	16	Carlota	5/18/2016	West		736				-			
	17	Flastan	A 10 12010	14/		005							

17) To load the Cleaned & Transformed Proper Data Set to an Excel Sheet, in the Home Ribbon Tab, in the Close group (all the way on the left), click the Close & Load drop-down arrow and then click on the "Close & Load To..." option

	Home Transform	Add Column View	
Close	a Refresh Preview → Manage	s I Editor Choose Remove Columns + Columns + Rows + Row	2J XA
	Close & Load	Manage Columns Reduce Rows	Sor
	Close & Load To	Date y AB Region y C Sales	_
	I TTA WC I LOUGCE	AC region p sales	

- 18) The next dialog box that pops-up depends on what version you have:
  - i. If you have Office 365, then your dialog box looks like this and is named "Import Data":

PIVOTIADIE RE	port	
i O Pivot <u>C</u> hart		
📄 🔘 <u>O</u> nly Create 🕯	Connection	
Where do you want to p	ut the data?	
Existing workshee	et:	
=\$A\$15		<b>1</b>
New worksheet		
Add this data to the I	Data Model	

ii. If you do NOT have Office 365, then your dialog box looks like this and is named "Load To":

Load To
Select how you want to view this data in your workbook.     Select how you want to view this data in your workbook.    Select how you want to view this data in your workbook.   Select how you want to view this data in your workbook.   Select how you want to view this data in your workbook.  Select how you want to view this data in your workbook.  Select how you want to view this data in your workbook.  Select how you want to view this data in your workbook.  Select how you want to view this data in your workbook.  Select how you want to view this data in your workbook.  Select how you want to view this data in your workbook.  Select how you want to view this data in your workbook.  Select how you want to view this data in your workbook.  Select how you want to view this data in your workbook.  Select how you want to view this data in your workbook.  Select how you want to view this data in your workbook.  Select how you want to view this data in your workbook.  Select how you want to view this data in your workbook.  Select how you want to view this data in your workbook.  Select how you want to view this data in your workbook.  Select how you want to view this data in your workbook.  Select how you want to view this data in your workbook.  Select how you want to view this data in your workbook.  Select how you want to view this data in you workbook.  Select how you want to view this data in you workbook.  Select how you want to view this data in you workbook.  Select how you want to view this data in you workbook.  Select how you want to view this data in you workbook.  Select how you want to view this data in you workbook.  Select how you want to view this data in you workbook.  Select how you want to view this data in you workbook.  Select how you workb
Select where the data should be loaded. New worksheet Existing worksheet: \$A\$15 B
Add this data to the Data Model

- iii. In either dialog box you now select "Table" and "New Worksheet" dialog buttons.
- iv. By selecting the "Table" option we are create a new Excel Table on a new sheet. This Excel Table will be have the same name as the Query and will be the Power Query Output or Result.

19) After the Cleaned & Transformed Proper Data Set is loaded to an Excel Sheet, we can see that the name of the Query and the name of the new Excel Table are the same. They are both named SalesProperDataSet ". After the data is loaded, be sure to name the sheet "Cleaned Data". Notice that the Query Pane shows that 365 records have been loaded.

		EB25GetAndTran	isformPowerQueryStart.xlsr			Table Tools Query Too						Girvin, Michael 📧 —	
File	Home Insert Page	Layout Formulas Dat:	a Review View	Developer Add-ins	ACROBAT Power Pivot	Design Query	♀ Tell me what y	ou want to do					ıd s
ble Name slesProper Resize 1 Properti	E Summurize with P rDataS II-II Removementicate Table E Convert to Range ties Too	Insert Export Re	Properties Proper	Header Row First ( Total Row Last ) Banded Rows Banc Table S	Column [⊻] Filter Button Column Jed Columns tyle Options		Table	Styles	· · · · · · · · · · · · · · · · · · ·				
18 <b>1</b> 38 C	ð•ii•0•🗣 ն	🔁 +											
41	• I × V	fr Product									1		
1	А	В	С	D	E	F	G	Н	Ι	J		Queries & Conn	iec
1	Product	Date 🛛	Region	🖬 Sales 🛛 🗖								Queries Connections	
2	Carlota	5/5/2016	West	485								SalesProperDataSet	-
3	Aspen	4/2/2016	South	804	Same Na	me for b	oth:					365 rows loaded.	
4	Yanaki	5/2/2016	South	790	1) Query	1						$\sim$	-
5	FlatTop	4/11/2016	South	965	And								
6	Carlota	5/21/2016	South	620	2) Cleane	ed Excel <sup>-</sup>	Table th	at is loade	d to a ne	w sheet			
7	Carlota	5/15/2016	East	305	** It is si	multane		th an Evo	al Table a	nd the			
8	Carlota	5/19/2016	West	426						nu the			
9	Yanaki	5/6/2016	East	319	Output ii	rom Pow	ler Quer	У				1	
10	Yanaki	5/7/2016	East	540									
11	Quad	5/20/2016	West	864		Bo su	re to nar	na chaot					
12	Quad	4/29/2016	East	1083		"Clean				This is co	llod +		
13	Quad	4/18/2016	South	636		Clear	ied Data	1			neu u	ne Query	
14	FlatTop	4/25/2016	West	1200		-				Pane. Yo	u may	y have more	e
15	Yanaki	5/30/2016	South	563						Queries I	isted	here.	
3 F	Cover Proper F	Data Set Data Analysis	So Far In Class	hat Power Query does	Cleaned Data Ex(1) E	x(2) Hd 🕀							

20) Now we can build a PivotTable Report from our cleaned data:

	Α	B C	D	Е	F	G	н	1	J	К	L			
1	Product	🗸 Date 🛛 💌 Region 💌	Sales 💌		Sum of Sales (	5)	Region 💌					Queries & Conne 👻 🗙	PivotTable Fie	lds 👻 🗙
2	Carlota	5/5/2016 West	485		Date	Product	East	South	West	Grand Total		Quarter   Connections	Channe Galida ta add ta a	
3	Aspen	4/2/2016 South	804		Apr	Aspen	7,913	11,219	9,171	28,303		Queries Connections	Choose fields to add to i	eport:
4	′anaki	5/2/2016 South	790			Carlota	11,489	2,636	7,704	21,829		2 queries	Search	Q
5	latTop	4/11/2016 South	965			FlatTop	7,783	8,324	10,077	26,184				/-
6	Carlota	5/21/2016 South	620			Quad	6,339	10,154	8,304	24,797		I extSurvey lable	✓ Product	
7	Carlota	5/15/2016 East	305			Sunset	6,095	12,394	6,254	24,743		194 rows loaded.	✓ Date	
8	Carlota	5/19/2016 West	426			Yanaki	8,074	3,792	6,609	18,475		StartSalesTable	✓ Region	
9	′anaki	5/6/2016 East	319		Apr Total		47,693	48,519	48,119	144,331		365 rows loaded.	✓ Sales	
10	′anaki	5/7/2016 East	540		May	Aspen	8,791	7,547	10,616	26,954			More Tables	
11	Quad	5/20/2016 West	864			Carlota	8,407	6,012	2,639	17,058				
12	Quad	4/29/2016 East	1083			FlatTop	5,098	5,942	3,613	14,653				
13	Quad	4/18/2016 South	636			Quad	8,475	9,117	10,724	28,316				
14	latTop	4/25/2016 West	1200			Sunset	3,233	6,307	8,537	18,077				
15	′anaki	5/30/2016 South	563			Yanaki	4,751	9,135	4,377	18,263				
16	Carlota	5/4/2016 East	1219		May Total		38,755	44,060	40,506	123,321				
17	Carlota	5/18/2016 West	736		Grand Total		86,448	92,579	88,625	267,652				
18	latTop	4/9/2016 West	895											
19	Quad	5/6/2016 South	785										Drag fields between are	as below:
20	Quad	5/22/2016 East	942										T Filters	III Columns
21	latTop	4/28/2016 West	1086											Pasian
22	Aspen	5/16/2016 South	990											Region
23	latTop	5/3/2016 East	901											
24	Carlota	4/28/2016 East	756											
25	Aspen	5/18/2016 West	964											
26	Aspen	5/6/2016 East	465											
27	Aspen	5/28/2016 West	683										Rows	$\Sigma$ Values
28	Aspen	5/16/2016 West	1168										Date 💌	Sum of Sales (\$) 🔻
29	Quad	4/26/2016 South	729										Product *	
30	(anaki	4/6/2016 East	1172											

21) Back on the sheet "Ex(2)", select the new data (new records) in the range AA15:AB130, like in this picture:

1	Ζ	AA	AB	AC
10				
11		New Records:		
12				
13		Description	Amount	
14				
15		Yanaki / 07/03/2016 / South	1071	
16		Quad / 06/12/2016 / East	606	
17		Quad / 06/07/2016 / East	842	
18		Yanaki / 06/29/2016 / East	1232	
19		Yanaki / 07/20/2016 / West	1165	
20		Aspen / 07/24/2016 / South	1165	
21		Quad / 07/24/2016 / South	1142	
22		Sunset / 06/02/2016 / South	405	
23		FlatTop / 07/31/2016 / South	403	
24		Quad / 06/21/2016 / West	1194	
25		Carlota / 07/14/2016 / South	588	
26		Carlota / 07/14/2016 / South	1143	
+	•	Cleaned Data Ex(1) Ex(2) Hom	ne 🕂 🗄	4

22) Select cell A380 below the original data set, the Excel Table named, "StartSalesTable", like in this picture:

1	A	В	С
377	Quad / 04/08/2016 / East	432	
378	FlatTop / 04/14/2016 / West	484	
379	FlatTop / 05/11/2016 / East	903	
380			
381			
202			

23) Paste the copied new records so they become part of the Excel Table named StartSalesTable"", like this:

4	Description 🗸	Amount 🖵
7	Quad / 04/08/2016 / East	432
8	FlatTop / 04/14/2016 / West	484
9	FlatTop / 05/11/2016 / East	903
0	Yanaki / 07/03/2016 / South	1071
1	Quad / 06/12/2016 / East	606
2	Quad / 06/07/2016 / East	842
3	Yanaki / 06/29/2016 / East	1232
4	Yanaki / 07/20/2016 / West	1165
5	Aspen / 07/24/2016 / South	1165
6	Quad / 07/24/2016 / South	1142
7	Sunset / 06/02/2016 / South	405
8	FlatTop / 07/31/2016 / South	403
9	Quad / 06/21/2016 / West	1194
0	Carlota / 07/14/2016 / South	588

24) Go back to the Query Output, the Excel Table "SalesProperDataSet" with the cleaned data, and then right-click and click on the "Refresh" option. This will update the Power Query Output, which means it will run through all the listed steps in the Power Query window and re-load the complete new data set.

1	A	В	$\mathbf{B} \ \mathbf{I} \equiv \mathbf{A} \cdot \mathbf{A} \cdot \mathbf{H} \cdot \mathbf{A}$
1	Product 💌	Date	
2	Carlota	5/5/2	X Cut
3	Aspen	4/2/2	E Copy
4	Yanaki	5/2/2	Paste Ontions:
5	FlatTop	4/11/2	
6	Carlota	5/21/2	
7	Carlota	5/15/2	Paste Special •
8	Carlota	5/19/2	Distance Smart Lookup
9	Yanaki	5/6/2	👌 <u>R</u> efresh
10	Yanaki	5/7/2	Insert 🕨

25) Then in the PivotTable, right-click and click on the "Refresh" option. This will refresh the PivotTable Cache Data storage.

G Sum of S Months	Cali B	bri $\cdot$ 11 $\cdot$ $I \equiv \bigcirc \cdot$	A A A •	\$ - 9 - 6.0	, 1 % , ≣ % ∛
⊖ Apr	-	Acnon	¢7 0'	13.00	\$11,219.00
		Copy		9.00	\$2,636.00
	8 0	Format Cells		3.00	\$8,324.00
	lè	<u>R</u> efresh		9.00	\$10,154.00
-		Sort	×	5.00	\$12,394.00
		Filter	×	4.00	\$3,792.00
Apr Tota	~	Su <u>b</u> total "Mon	ths"	3.00	\$48,519.00

26) The completed project should look like this:

A	B C	D	E F	G	Н	1	J	K	L				
1 Product	🕶 Date 🛛 💌 Region	✓ Sales ▼	Sum of Sales (	\$)	Region 💌					חר	Queries & Conne 👻 🗙	PivotTable Fie	lds 👻 🗙
2 Carlota	5/5/2016 West	485	Date	Product	East	South	West	Grand Total				a	
3 Aspen	4/2/2016 South	804	Apr	Aspen	7,913	11,219	9,171	28,303			Queries Connections	Choose fields to add to	report:
4 Yanaki	5/2/2016 South	790		Carlota	11,489	2,636	7,704	21,829			2 queries	Search	0
5 FlatTop	4/11/2016 South	965		FlatTop	7,783	8,324	10,077	26,184					/-
6 Carlota	5/21/2016 South	620		Quad	6,339	10,154	8,304	24,797			III TextSurveyTable	✓ Product	
7 Carlota	5/15/2016 East	305		Sunset	6,095	12,394	6,254	24,743			194 rows loaded.	✓ Date	
8 Carlota	5/19/2016 West	426		Yanaki	8,074	3,792	6,609	18,475			StartSalesTable	✓ Region	
9 Yanaki	5/6/2016 East	319	Apr Total		47,693	48,519	48,119	144,331			481 rows loaded.	✓ Sales	
10 Yanaki	5/7/2016 East	540	May	Aspen	8,791	7,547	10,616	26,954				More Tables	
11 Quad	5/20/2016 West	864		Carlota	8,407	6,012	2,639	17,058					
12 Quad	4/29/2016 East	1083		FlatTop	5,098	5,942	3,613	14,653					
13 Quad	4/18/2016 South	636		Quad	8,475	9,117	10,724	28,316					
14 FlatTop	4/25/2016 West	1200		Sunset	3,233	6,307	8,537	18,077					
15 Yanaki	5/30/2016 South	563		Yanaki	4,751	9,135	4,377	18,263					
16 Carlota	5/4/2016 East	1219	May Total		38,755	44,060	40,506	123,321					
17 Carlota	5/18/2016 West	736	Jun	Aspen	683	2,364	1,963	5,010					
18 FlatTop	4/9/2016 West	895		Carlota	4,264	1,659	4,091	10,014					
19 Quad	5/6/2016 South	785		FlatTop	817	2,728	1,646	5,191				Drag fields between are	as below:
20 Quad	5/22/2016 East	942		Quad	3,092	4,872	3,492	11,456				T Filters	Columns
21 FlatTop	4/28/2016 West	1086		Sunset	2,276	2,611	439	5,326				1 Finders	
22 Aspen	5/16/2016 South	990		Yanaki	3,893	1,041	2,103	7,037					Region
23 FlatTop	5/3/2016 East	901	Jun Total		15,025	15,275	13,734	44,034					
24 Carlota	4/28/2016 East	756	Jul	Aspen	1,945	2,472	3,615	8,032					
25 Aspen	5/18/2016 West	964		Carlota	1,472	2,902	1,446	5,820					
26 Aspen	5/6/2016 East	465		FlatTop	1,756	4,734	1,063	7,553					
27 Aspen	5/28/2016 West	683		Quad	2,995	2,016	2,591	7,602				Rows	$\Sigma$ Values
28 Aspen	5/16/2016 West	1168		Sunset	1,171	827	3,060	5,058				Date 👻	Sum of Sales (\$) 🔻
29 Quad	4/26/2016 South	729		Yanaki	2,247	4,194	3,517	9,958				Product -	
30 Yanaki	4/6/2016 East	1172	Jul Total		11,586	17,145	15,292	44,023					
31 Quad	4/8/2016 West	260	Grand Total		113,059	124,999	117,651	355,709					

## 4. Example 3: Import Multiple Text Files

 After you download the zipped folder named "EB25FileDownloads" to the desktop (or some other location) and then unzip the folder, you will see that there are two text files and one folder named "Start" inside, like in this picture:



2) If you look inside the Start Folder, you will see two Text Files. This is the folder where we store our Text File data and we only put ".txt" files in this folder. Each file contains the Sales Data for a single month. As seen in this picture:



3) If you right-click the Text File named "01-April.txt" and click on "Open With", then click on "Word" you will see this:

Product → Date→Region → Sales¶
Aspen+4/1/2016 → West+471¶
Aspen+4/1/2016 → West→1007¶
Quad→ 4/1/2016 → West→ 697¶
Carlota → 4/1/2016 → West→286¶
Aspen+4/1/2016 → West → 450¶
Yanaki → 4/2/2016 → West→551¶
Aspen+4/2/2016 → South+804¶
Carlota → 4/2/2016 → East→889¶
Sunset → 4/3/2016 → South+789¶
Quad→ 4/3/2016 → South+1140¶
Sunset → 4/3/2016 → South+1096¶
Quad→ 4/3/2016 → South+1064¶
Aspen+4/3/2016 → South+652¶
Sunset → 4/3/2016 → East→ 391¶
Quad→ 4/3/2016 → East→ 447¶
Ouad → 4/4/2016 → West → 3859

4) Each one of the Text Files has four columns of data, where each column is separated by a Tab delimiter. This means that the Text File contains the columns Product, Date, Region and Sales and each column is separated by a Tab. Tab delimited data is a common way that different systems can share data. This data came from a data storage system that exported monthly data in a Tab Delimited form. This is good for us because Power Query can easily interpret Tab Delimited data and can easily combine the different Text Files into a single Proper Data Set.

- 5) Our goal is to combine (sometimes referred to as "append") the text files into a single Proper Data Set.
- 6) Go to the sheet named "Ex(3)" and select cell A11. Then in the Data Ribbon Tab, in the Get & Transform Group start a new query to import the Text Files from a Folder. How we start a new query to import from a folder depends on the version you have:
  - i. In Office 365, you click the "Get Data" button in the Get & Transform Data group in the Data Ribbon Tab:



ii. In a version that is NOT Office 365, you click the "New Queries" button in the Get & Transform group in the Data Ribbon Tab:



7) From the drop-down, you select "From File" and then click on "From Folder", like in this picture:



8) Click in the Browse textbox, then click on the Browse button, and navigate to the Start Folder, like in this picture:

10 11		Browse For Folder	
12 13 14 15 16 17	Folder Folder Browse	When we point to the Start Folder, bill Libraries bill Computer bill Computer bill Computer bill Computer bill Computer bill Recycle Bin bill EB25FileDownloads	тy
18 19 20 21 22	OK Cancel	OK Cancel	

- 9) Click OK in the "Browse For Folder" dialog box. Click OK in the "Folder" dialog box.
- 10) In the next dialog box, select the Combine button drop-down and then select "Combine and Edit", like in this picture:

Content	Name	Extension	Date accessed	Date modified	Date created	Attributes	Folder Path
Binary	01-April.txt	.txt	11/25/2017 12:03:16 PM	11/24/2017 1:20:14 PM	11/25/2017 12:03:16 PM	Record	C:\Users\mgirvin\D
Binary	02-May.txt	.txt	11/25/2017 12:03:16 PM	11/24/2017 1:20:48 PM	11/25/2017 12:03:16 PM	Record	C:\Users\mgirvin\De
۲			m				Þ.
۲			m		Combine Y Load	•	edit Cancel
۲			17		Combine + Load		Edit Cancel
•					Combine    Combine & Load  Combine & Edit  Combine & Load		Edit Cancel

11) In the next dialog box, make sure that the Delimiter is Tab. If it is, click OK.

Specify th	e settings f	or each f	ile. Learn	more			
xample F	le:						
First file			( <b>v</b> )				
ile Origin			/	Delimiter		Data Type Detection	
1252: We	stern Europe	ean (Wind	c vs) 🔻	Tab	×.	Base on first 200 rows 🔹	La.
Product	Date	Region	Sales				*
Aspen	4/1/2016	West	471				=
Aspen	4/1/2016	West	1007				
Quad	4/1/2016	West	697				
Carlota	4/1/2016	West	286				
Aspen	4/1/2016	West	450				_

12) When the Query Editor comes up, name the query "MonthlyTextSalesProperDataSet"", as seen here:

Home Transform Add Col	umn	View							
Refresh Manage * Co lose & Query	hoose lumns Janag	Remove Columns + e Columns Rec	Remove s → Rows → Control Con	Split Column + By 1 Tra	Type: Text + Jse First Row as Head Replace Values nsform	ers * Combine	Manage Parameters + Parameters Data Sources	lew Source + Recent Sources + New Query	
ueries [6]		A <sup>B</sup> <sub>C</sub> Source.Name	▼ A <sup>B</sup> <sub>C</sub> Product	- Date -	A <sup>B</sup> <sub>C</sub> Region 7 1	2 <sub>3</sub> Sales 👻		×	
🖌 🎫 Transform File from Start [3]	1	01-April.txt	Aspen	4/1/2016	West	471	· Query Settings	~	
🔺 🛑 Sample Query [2]	2	01-April.txt	Aspen	4/1/2016	West	1007	▲ PROPERTIES		
Sample File	3	01-April.txt	Quad	4/1/2016	West	697	Name		
Sample File Parameter1 (Sa	4	01-April.txt	Carlota	4/1/2016 West		286	MonthlyTextSalesProperDataSet		
Transform Sample File from St	5 01-April.txt		Aspen	4/1/2016	West	450			
f. The form for the form state	6	01-April.txt	Yanaki	4/2/2016	West	551			
Jr Transform File from Start	7	01-April.txt	Aspen	4/2/2016	South	804	APPLIED STEPS		
Other Queries [2]	8	01-April.txt	Carlota	4/2/2016	East	889	Source	*	
SalesProperDataSet	9	01-April.txt	Sunset	4/3/2016	South	789	Invoke Custom Funct	ion1 🕀	
MonthlyTextSalesProperDataS	10	01-April.txt	Quad	4/3/2016	South	1140	Renamed Columns1		
	11	01-April.txt	Sunset	4/3/2016	South	1096	Removed Other Colu	mns1 🕀	
	12	01-April.txt	Quad	4/3/2016	South	1064	Expanded Table Colu	mn1	
	13	01-April.txt	Aspen	4/3/2016	South	652	X Changed Type		
	14	01-April.txt	Sunset	4/3/2016	East	391			
	15	01-April.txt	Quad	4/3/2016	East	447			
	16	01-April.txt	FlatTop	4/4/2016	East	368			
	17	01-April.txt	Quad	4/4/2016	West	385			
	18	01-April.txt	FlatTop	4/4/2016	West	379			

13) Right-click Source.Name Column Header and then click on Remove, like seen here:

-	A <sup>B</sup> <sub>C</sub> Source.Name	-	A <sup>B</sup> <sub>C</sub> Product	- Dat
1	01-April.txt	EB	Сору	
2	01-April.txt	LIU	Remove	
1	10000	~		

14) Change the Data Type for the Sales Field to Currency, like in this picture:

123 S	ales	*	
1.2	Decim	al Num	oer
\$	Currer	псу	

15) The finished query should look like this:

Home Transform Add	Column	View							
ose & Refresh Preview V Manage V Query	Choo Colum Man	se Remove ns * Columns * age Columns	Keep Remove Rows * Rows * Reduce Rows Sor	Split Column + By	Data Type: Currency * Use First Row as Headers * to 2 Replace Values Transform	Combine •	Manage Parameters Parameter	→ Data source settings Data Sources New Query	▼ Ces ▼
ueries [6]	۰ 🗖	+ A <sup>B</sup> <sub>C</sub> Product	T Date T	A <sup>B</sup> <sub>C</sub> Region 💌	\$ Sales		(	Duerv Settings	
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fr. Transform Eile from Start	6	Yanaki	4/2/201	5 West	551				
	7	Aspen	4/2/2010	5 South	804			APPLIED STEPS	
Other Queries [2]	8	Carlota	4/2/2010	5 East	889			Source	-12
III SalesProperDataSet	9	Sunset	4/3/201	5 South	789			Invoke Custom Function1	-11
MonthlyTextSalesProperDataS	1	) Quad	4/3/201	5 South	1140			Renamed Columns1	
	1	L Sunset	4/3/201	5 South	1096			Removed Other Columns1	-11
	1	2 Quad	4/3/201	5 South	1064			Expanded Table Column1	
	1	3 Aspen	4/3/2010	5 South	652			Changed Type	
	14	1 Sunset	4/3/201	5 East	391			Removed Columns	
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	1	5 FlatTop	4/4/201	5 East	368				
	1	7 Quad	4/4/201	5 West	385		-		

16) From the Home Ribbon Tab, in the Close group, click the Close & Load drop-down and then click on Close & Load option, like seen here:

Close &	Refresh								
Load *	Preview + Man								
Clo Clo	Close & Load								

17) When the new table loads, be sure to name the sheet "CleanedTextData". In the Queries Pane you can see a lot of steps that were automatically created to combine the text files. At the bottom of the Queries Pane you can see the two queries that we created and you can see the number of rows that were loaded.

	А	В	с	D	E	F	G	Н	I.	J	Queries & Conno 💌 🗙
1	Product 💌	Date 💌	Region 💌	Sales 💌							Queries & Conne
2	Aspen	4/1/2016	West	471							ueries Connections
3	Aspen	4/1/2016	West	1007							
4	Quad	4/1/2016	West	697							queries
5	Carlota	4/1/2016	West	286							Transform File from Start [3]
6	Aspen	4/1/2016	West	450							
7	Yanaki	4/2/2016	West	551		_					🔺 🛑 Sample Query [2]
8	Aspen	4/2/2016	South	804		_					Sample File Parameter1 (
9	Carlota	4/2/2016	East	889			Lots of s	teps			Connection only
10	Sunset	4/3/2016	South	789							
11	Quad	4/3/2016	South	1140			automa	tically		$\prec$	🗏 Sample File
12	Sunset	4/3/2016	South	1096			created	by Powe	er 📃		Connection only.
13	Quad	4/3/2016	South	1064			Ouory ta	, combir			Transform Sample File fro
14	Aspen	4/3/2016	South	652			Query to		le		Connection only
15	Sunset	4/3/2016	East	391			Text File	s.			connection only.
16	Quad	4/3/2016	East	447							$f_x$ Transform File from Start
17	FlatTop	4/4/2016	East	368							Connection only.
18	Quad	4/4/2016	West	385							( Comparies [3]
19	FlatTop	4/4/2016	West	379							
20	Aspen	4/4/2016	East	733		_					TextSurveyTable
21	Carloto	A/A/2016	South	597							194 rows loaded.
22	As Nam	he the sh	neet	1205			These a	re the th	nree		III StartSalesTable
23	As			858			aueries	that we			481 rows loaded
24	su "Cle	anedTex	dtData"	399			ana at a d	Varia			401 TOWS TOADEd.
25	Su			1108			created	. You ma	ау		MonthlyProperDataSet
26	Sunset	4/5/2016	South	560			have me	ore quer	ries		481 rows loaded.
27	Quad	4/5/2016	South	1037			listed by	aro			
28	Carlota	4/5/2016	East	935			iisteu iii				
29	Carlota	4/6/2016	Wes	650		<b>L</b> _					
30	Yanaki	4/6/2016	East	1172							
31	Aspen	4/6/2016	South	230							
32	Aspen	4/6/2016	West	771							
33	Aspen	4/7/2016	East 🕈	593							
34	Carlota	4/7/2016	West	601						-	
	۰۰۰ ···	Ex(2)	CleanedT	extData	Ex(3)	÷ :	•			•	

18) Now go back to the "EB25FileDownloads" folder and copy the June and July text files and then paste them into the "Start" folder, like seen here:

	5FileD	ownloads 🕨 Start
Organize 🔻 🧷	Open	Share with 💌
Favorites E Desktop Downloads Recent Places C OneDrive		Name 01-April.txt 02-May.txt 03-June.txt 04-July.txt

19) Now go back to the "MonthlyTextSalesProperDataSet" Power Query Output and right-click and then click on the "Refresh" option. In the Queries Pane you will see that the new Text Files for June and July have been included in the Table:

