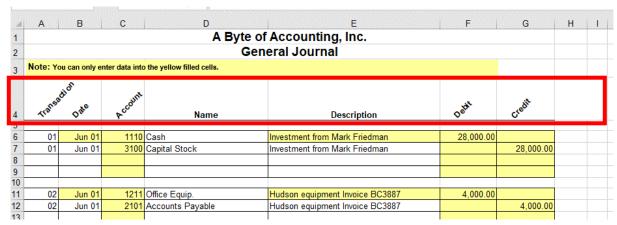
Using Power BI

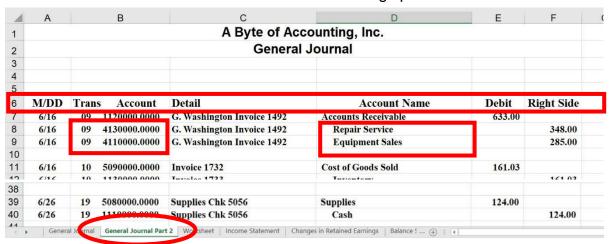
Power BI is a business analytics service by Microsoft. It aims to provide interactive visualizations and business intelligence capabilities with an interface simple enough for end users to create their own reports and dashboards. In this exercise, you will Extract the General Journal file, Transform the data into the required format (a General Ledger and an Unadjusted Trial Balance), and then Load the transformed data into Power BI.

The **first eight journal entries** for A Byte of Accounting are stored on an Excel sheet named General Journal and were extracted, transformed and loaded in Part 1



The next **eleven journal entries** for A Byte of Accounting were created by another employee and are stored on an Excel sheet named General Journal Part 2. As you review the new file note the differences:

- 1. The column headings are in row 6
- 2. The column headings are different
- 3. The columns are in a different order
- 4. Column B contains both the transaction number and the account number
- 5. The account number layout is different
- 6. The account name sometimes contains leading spaces



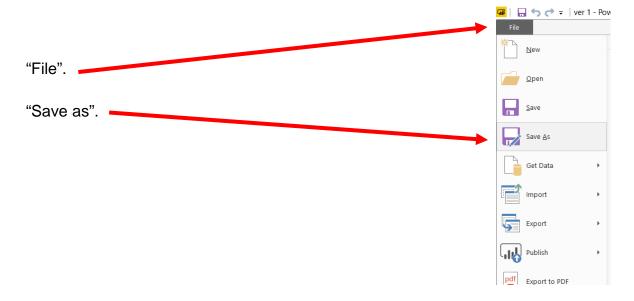
End with the General Ledger

4	Α	В	С	D	Е	F	G	н	
1		Name	Transactio	Date	Descriptio		Credit	Running Ba	alance
2	1110	Cash	1		Investmer		0	28000	
3	1110	Cash	3	2018-06-0	Hailey Cor	0	7000	21000	
4	1110	Cash	5		Scanner, J	0	125	20875	
5	1110	Cash	7	2018-06-0	Pd A/p ck6	0	640	20235	
6	1110	Cash	8	2018-06-1	Services po	11000	0	31235	
7	1110	Cash	12		To Payroll	0	1430.01	29805	
8	1110	Cash	13	2018-06-2	Receipt Ca	633	0	30438	
9	1110	Cash	14	2018-06-2	Monthly Ir	0	326	30112	
10	1110	Cash	15	2018-06-2	Maint Chk	0	190	29922	
11	1110	Cash	19	2018-06-2	Supplies Cl	0	124	29798	
12	1120	Accounts	09	2018-06-1	G. Washin	633	0	633	
13	1120	Accounts I	13	2018-06-2	Receipt Ca	0	633	0	
14	1120	Accounts I	16	2018-06-2	J. Adans Ir	350	0	350	
15	1130	Inventory	10	2018-06-1	Invoice 17	0	161.025	-161.02	
16	1130	Inventory	17	2018-06-1	Invoice 17	0	147.84	-308.86	
17	1130	Inventory	18	2018-06-2	Purchased	3350	0	3041.14	
18	1211	Office Equ	2	2018-06-0	Hudson ec	4000	0	4000	
19	1211	Office Equ	5	2018-06-0	Scanner, J	125	0	4125	
20	1311	Computer	3	2018-06-0	Hailey Cor	7000	0	7000	
21	2101	Accounts I	2	2018-06-0	Hudson ec	0	4000	-4000	
22	2101	Accounts	4	2018-06-0	Avery Rep	0	725	-4725	
23	2101	Accounts	6	2018-06-0	Zac Adver	0	3380	-8105	
24	2101	Accounts	7	2018-06-0	Pd A/p ck6	640	0	-7465	
25	2101	Accounts I	18	2018-06-2	Purchased	0	3350	-10815	
26	2120	Payroll Lia	11	2018-06-1	Salary Exp	0	1430.01	-1430.01	
27	2120	Payroll Lia	12	2018-06-1	To Payroll	1430.01	0	0	
28	3100	Capital Sto	1	2018-06-0	Investmer	0	28000	-28000	
29	4100	Computer	8	2018-06-1	Services pr	0	11000	-11000	
30	4110	Equipmen	09	2018-06-1	G. Washin	0	285	-285	
31	4110	Equipmen	16	2018-06-2	J. Adans Ir	0	264	-549	
32	4130	Repair Ser	09	2018-06-1	G. Washin	0	348	-348	
33	4130	Repair Ser	16	2018-06-2	J. Adans Ir	0	86	-434	
34	5030	Advertisin	6	2018-06-0	Zac Adver	3380	0	3380	
35	5030	Insurance	14	2018-06-2	Monthly Ir	326	0	3706	
36	5040	Repairs &	4	2018-06-0	Avery Rep	725	0	725	
37	5080	Supplies	19	2018-06-2	Supplies Cl	124	0	124	
38	5090	Cost of Go	10	2018-06-1	Invoice 17	161.025	0	161.02	
39	5090	Cost of Go	17	2018-06-1	Invoice 17	147.84	0	308.86	
40	5220	Maintena	15	2018-06-2	Maint Chk	190	0	190	
41	5380	Salary	11	2018-06-1	Salary Exp	1430.01	0	1430.01	

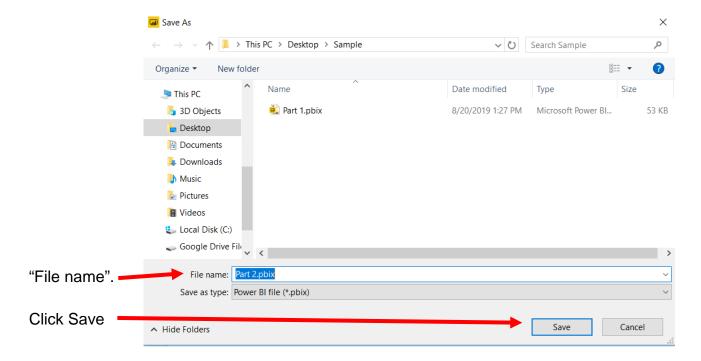
And the Unadjusted Trial Balance

1	А	В	
1	Account And Name	Balance	
2	1110 Cash	29797.99	
3	1120 Accounts Receivable	350	
4	1130 Inventory	3041.14	
5	1211 Office Equip.	4125	
6	1311 Computer Equip.	7000	
7	2101 Accounts Payable	-10815	
8	2120 Payroll Liabilities	0	
9	3100 Capital Stock	-28000	
10	4100 Computer & Consulting	-11000	
11	4110 Equipment Sales	-549	
12	4130 Repair Service	-434	
13	5030 Advertising Expense	3380	
14	5030 Insurance Expense	326	
15	5040 Repairs & Maint. Expens	725	
16	5080 Supplies	124	
17	5090 Cost of Goods Sold	308.86	
18	5220 Maintenance/Janitorial	190	
19	5380 Salary	1430.01	

Open the Power BI file file used in Part 1 and rename the Power BI file as Part 2.

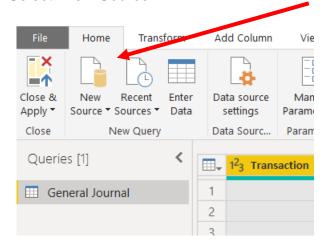


A new pop-up screen appears, select the location you want to save the file.

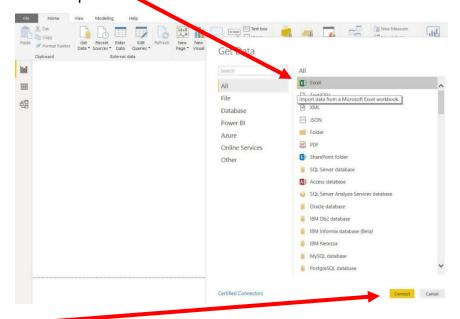


Operation 1: New Source Input second Excel data set

Select "New Source".

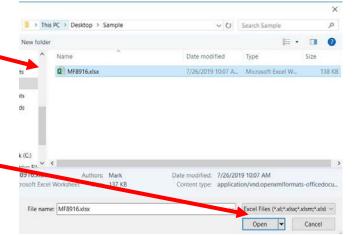


Select "Excel" from the Drop-down.



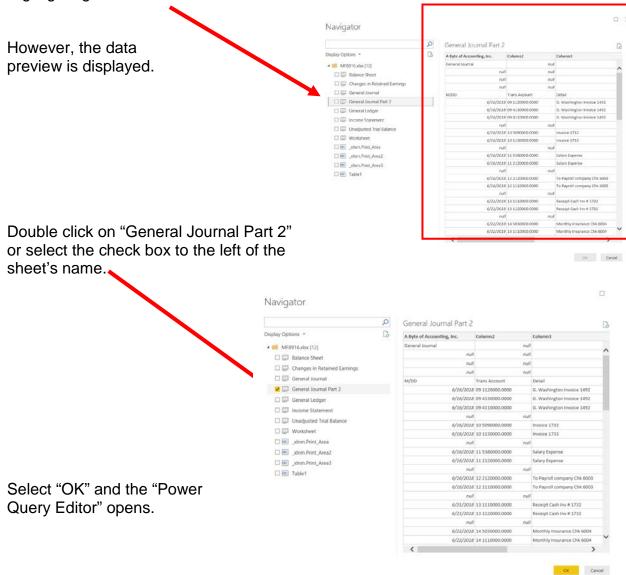
Select "Connect".

Select the file.



Select "Open".

Highlighting the desired sheet does not activate the "OK" button.



Now there are two queries. After you perform a transformation, the changes are recoded in the "Applied Steps" section.

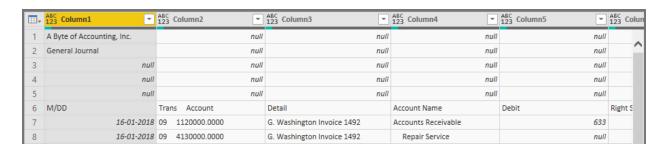


The program automatically added **APPLIED STEPS** steps. Note that it did not correctly 삼 Source 4 find the row that contains the Navigation "Headers". Promoted Headers 0 × Changed Type Select "Changed Type". APPLIED STEPS 상 Source 슈 Navigation Promoted Headers 삼 Right click and select "Delete". \times Changed Type **Edit Settings** Rename Delete Delete Until End Insert Step After ▲ Move Up Move Down **Extract Previous** View Native Query Properties...

Delete the step "Promoted Headers", leaving us with two steps.

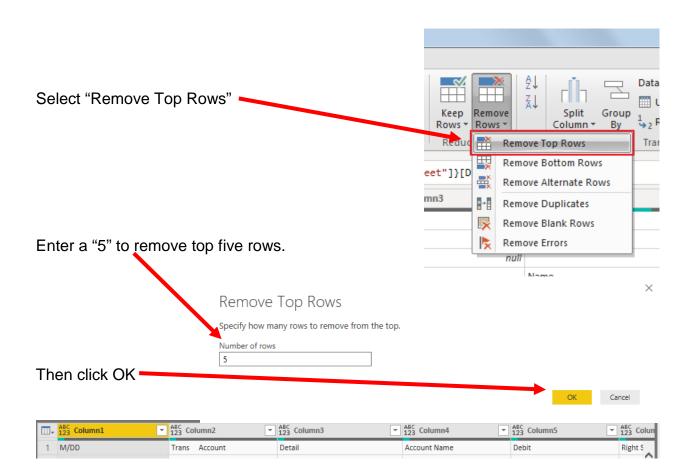


Operation 2: Fix the Headers – The field headers are in the sixth row of the source document. Remove the top five rows to move the headers to the first row and then promote them to the Query Editors' headers.

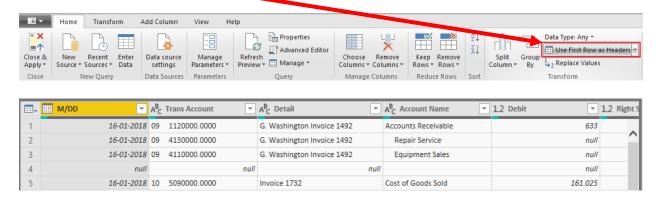


Select "Remove Rows".

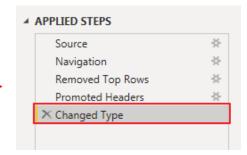




To promote the first row in the current data to Query Editors' headers, select "Use First Row as Headers".



Note: After you perform a transformation, the changes are recoded in the "Applied Steps" section. If you incorrectly did a step you can easily delete the step and do it again.

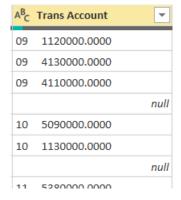


Operation 3: Split Column - Separate one column into many columns

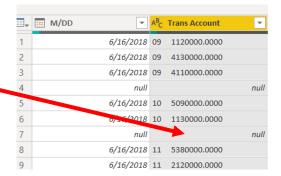
"Trans Account" is a merged field of the transaction number and the account number separated by spaces. The spaces are referred to as delimiters. Common delimiters are commas, dashes, and semicolons.

Each space is treated as a separate delimiter.

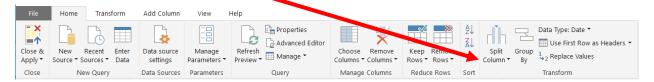
Therefore, we will convert one field into six fields.

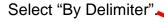


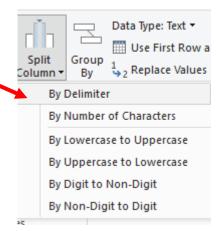
Select the column "Trans Account".

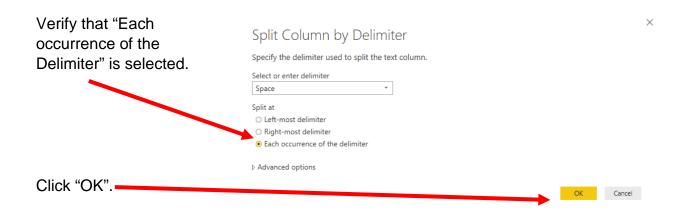


Select "Split Column".

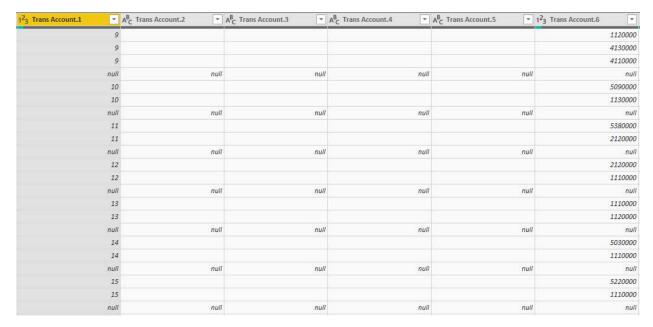








The "Trans Account" column is now split into six columns with 1 to 6 as the suffix to the column names.



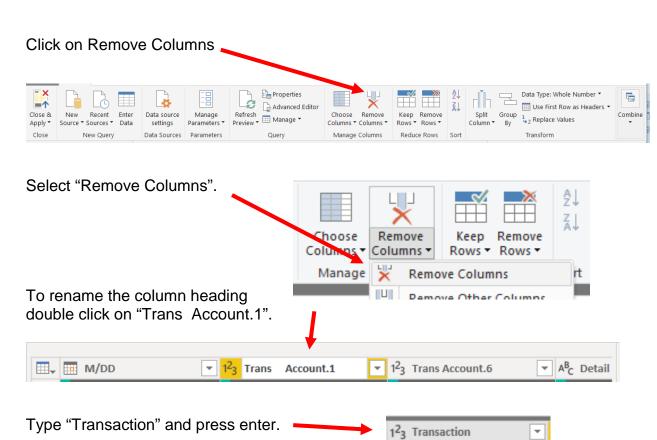
Six new fields are created from parsing the "Trans Account" field, four of which will be empty and should be removed.

Operation 4: Clean Up. Remove extra columns, rename columns and change the type of the columns

Select columns "Trans Account.2" to "Trans Account.5" by clicking on the heading

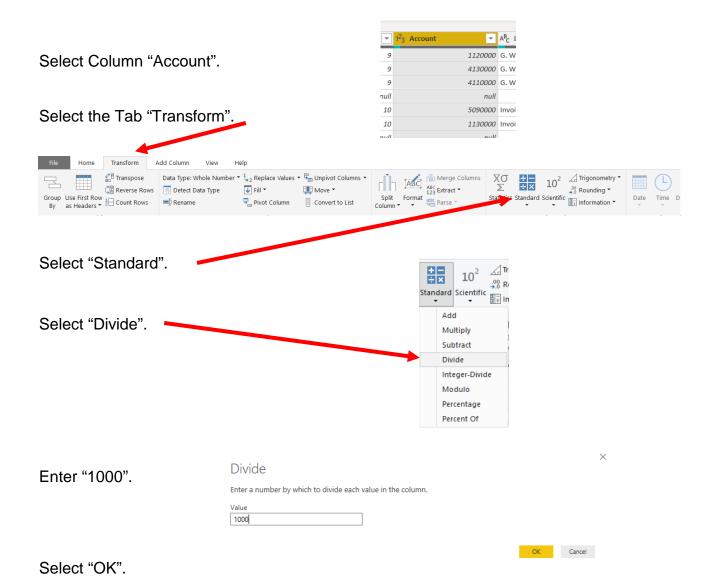
"Trans Account.2" holding down the pressings "Shift" and at the same time clicking on the column heading "Trans Account.5"





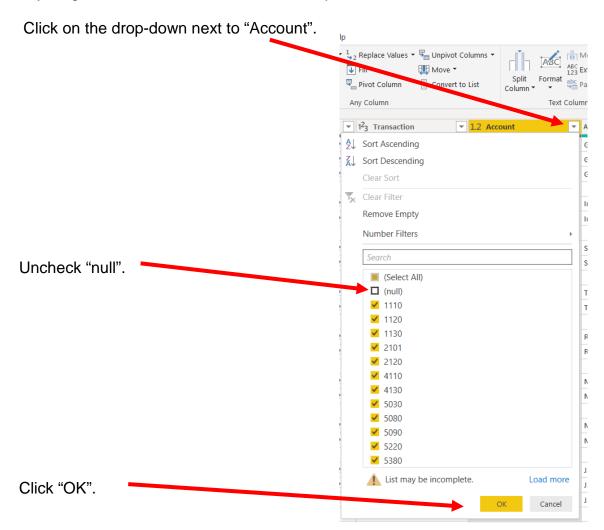
In the same way rename "Trans Account.6" to "Account".

The account number is a seven-digit number, whereas the old data set (General Journal) used a four-digit account number. The two data sets are going to be merged and, therefore, the same account numbering system must be used for both data sets. Each item in "Account Number" column has an extra "000" at the end of the account number and must be divided by 1000.



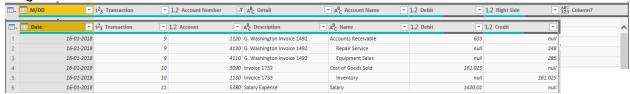
Operation 5: - Exclude rows that do not contain Account Number

You can observe that there are several rows that do not contain account numbers. We can add a filter step which will remove such rows. Note that we are not deleting anything from the source data file. This will just exclude records from the final table.

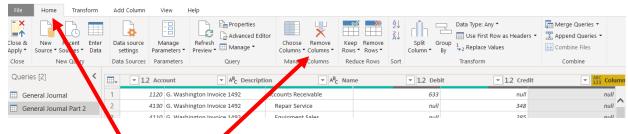


Operation 6: Clean Up – Rename fields and remove un-necessary columns from the query.

Rename "M/DD" to "Date", "Detail" to "Description", "Account Name" to "Name" and "Right Side" to "Credit".



Select "Column7".

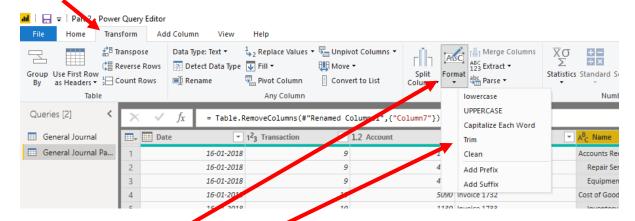


Select "Home".

Select "Remove Column".

In the column "Name" there are spaces before some words. Select column "Name"

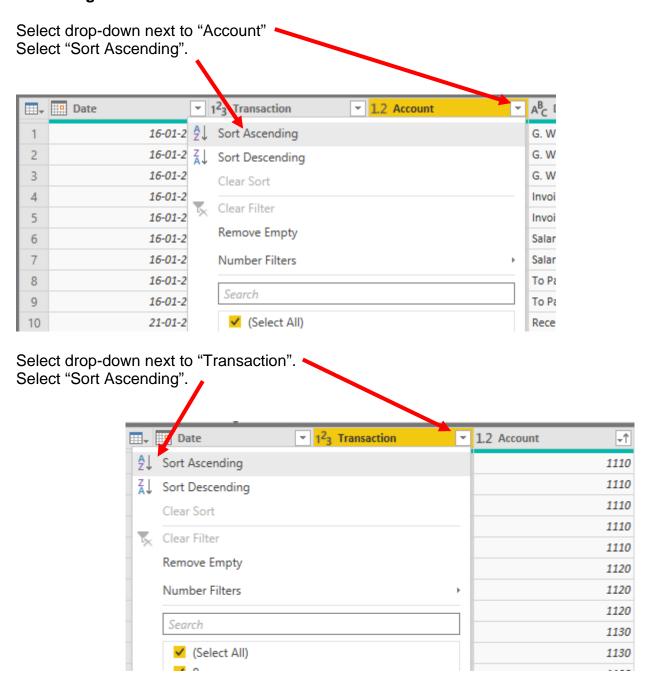
Select Transform.



Select "Format".

Select "Trim".

Operation 7: Sort Columns. Sort "Account" and "Transaction" Columns in ascending order



This will sort the table based on these two columns.

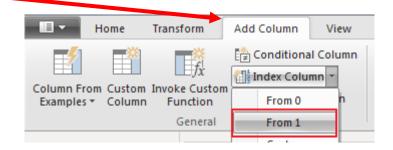
Operation 8: Indexing. Adding Index column

While we are in the Power Query Editor, the sort which we just performed prevails here. For it to reflect and be retained throughout Power BI, we have to add an Index Column.

Select "Add Column".

Select "Index Column".

Select "From 1".

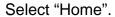


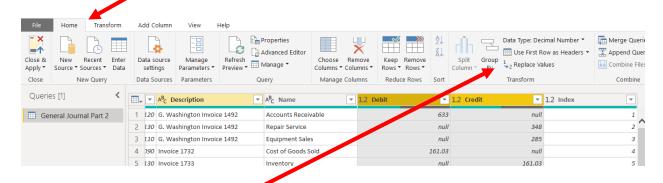
This will add a new column named "Index".



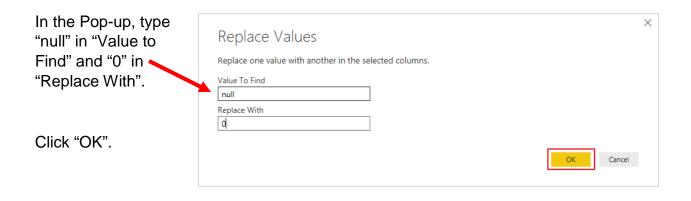
Operation 9: Replace Values. Replace "Null" with "0"

Select Columns "Debit" and "Credit". Use Ctrl + Click to perform a multi column select.



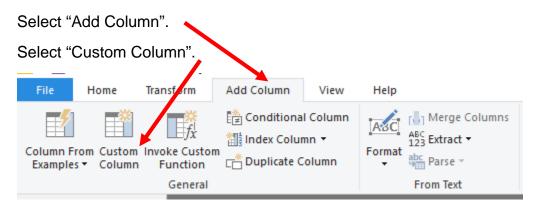


Select "Replace Values"

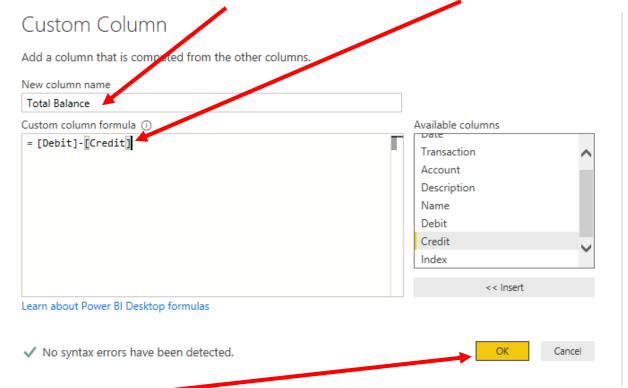


This replaces all null values with 0.

Operation 10: Add Custom Column. Add a new column that existed in the first data stream, "Total Balance".



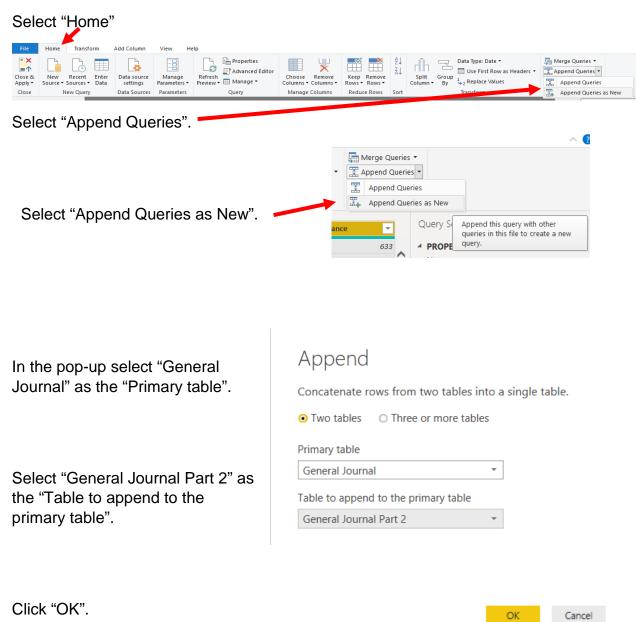
In the Pop-up, Enter Name as "Total Balance" and Formula as [Debit]-[Credit]



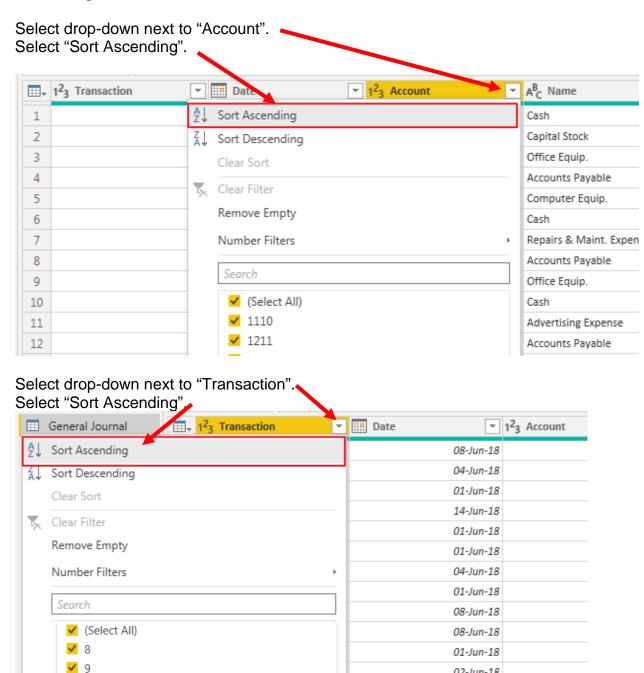
Click OK



Operation 11: Union. Appending General Journal and General Journal Part 2



Operation 5: Sort Columns. Sort "Account" and "Transaction" Columns in ascending order



This will sort the table based on these two columns.

✓ 10

✓ 11

12

02-Jun-18

01-Jun-18

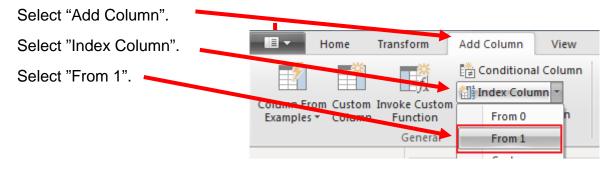
14-Jun-18

OR-lun-18

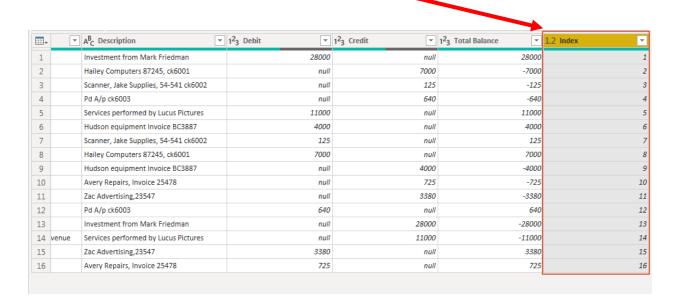
Remove the "Index" column.

Add a new "Index" column.

While we are in the Power Query Editor, the sort which we just performed prevails here. For it to reflect and be retained throughout Power BI, we'll add an Index Column.

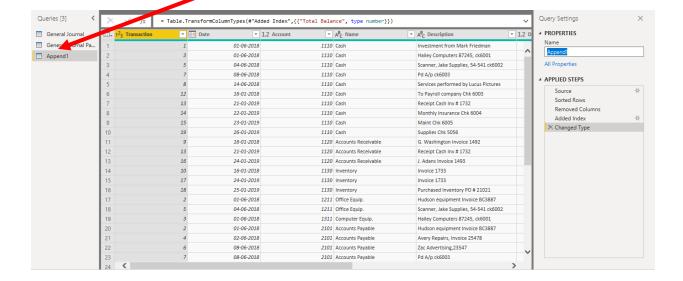


This will add a new column named "Index".



Remove the Index column and add a new one again to this table as we did before.

This creates a query named Append1.

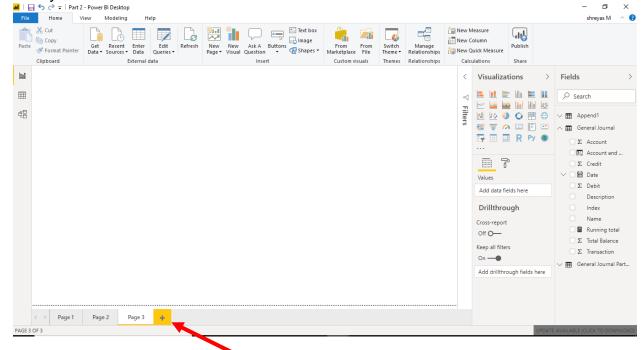


Operation 11: Load data. Click on "Close and Apply"

This loads the data onto Power BI from Power Query Editor



Now you'll be back to the main window of Power BI.



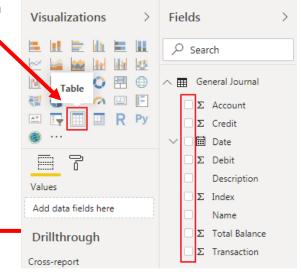
Make sure you add a new page as shown in above.

Operation 9: Create a "Table Visual"

Click on the Table icon under the Visualization section to add a table.

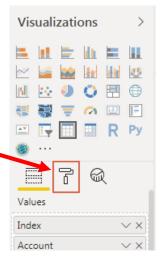
The order that you select the fields is used to determine the order in which the fields are displayed in the table. Click on the box next to each field in the order that you want the fields to be displayed.

- 1. Index
- 2. Account
- 3. Name
- 4. Transaction
- 5. Date
- 6. Description
- 7. Debit
- 8. Credit
- 9. Total Balance



											_
Index	Account	Name	Transaction	Year	Quarter	Month	Day	Description	Debit	Credit	Total Balance
1.00	1,110.00	Cash	1	2018	Qtr 2	June	- 1	Investment from Mark Friedman	28,000.00	0.00	28,000.00
2.00	1,110.00	Cash	3	2018	Qtr 2	June	- 1	Hailey Computers 87245, ck6001	0.00	7,000.00	-7,000.00
3.00	1,110.00	Cash	5	2018	Qtr 2	June	4	Scanner, Jake Supplies, 54-541 ck6002	0.00	125.00	-125.00
4.00	1,110.00	Cash	7	2018	Qtr 2	June	8	Pd A/p ck6003	0.00	640.00	-640.00
5.00	1,110.00	Cash	8	2018	Qtr 2	June	14	Services performed by Lucus Pictures	11,000.00	0.00	11,000.00
6.00	1,110.00	Cash	12	2018	Qtr 1	January	16	To Payroll company Chk 6003	0.00	1,430.01	-1,430.01
7.00	1,110.00	Cash	13	2019	Qtr 1	January	21	Receipt Cash Inv # 1732	633.00	0.00	633.00
8.00	1,110.00	Cash	14	2019	Qtr 1	January	22	Monthly Insurance Chk 6004	0.00	326.00	-326.00
9.00	1,110.00	Cash	15	2019	Qtr 1	January	23	Maint Chk 6005	0.00	190.00	-190.00
10.00	1,110.00	Cash	19	2019	Qtr 1	January	26	Supplies Chk 5056	0.00	124.00	-124.00
11.00	1,120.00	Accounts Receivable	9	2018	Qtr 1	January	16	G. Washington Invoice 1492	633.00	0.00	633.00
12.00	1,120.00	Accounts Receivable	13	2019	Qtr 1	January	21	Receipt Cash Inv # 1732	0.00	633.00	-633.00
13.00	1,120.00	Accounts Receivable	16	2019	Qtr 1	January	24	J. Adans Invoice 1493	350.00	0.00	350.00
14.00	1,130.00	Inventory	10	2018	Qtr 1	January	16	Invoice 1733	0.00	161.03	-161.03
15.00	1,130.00	Inventory	17	2019	Qtr 1	January	24	Invoice 1733	0.00	147.84	-147.84
16.00	1,130.00	Inventory	18	2019	Qtr 1	January	25	Purchased Inventory PO # 21021	3,350.00	0.00	3,350.00
17.00	1,211.00	Office Equip.	2	2018	Qtr 2	June	_1	Hudson equipment Invoice BC3887	4,000.00	0.00	4,000.00

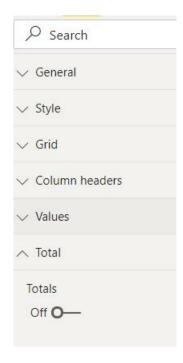
Now that you have it in a tabular format, you can do some formatting changes. Click on the Format tool when the visual is selected.



With this, you will be able to edit the various properties of the table:

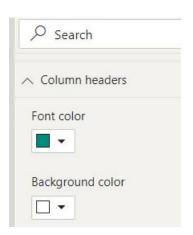
Select "Total".

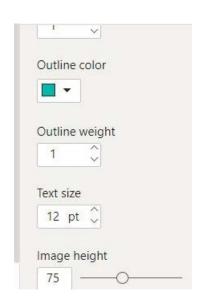
Select "Off".



Select "Grid".

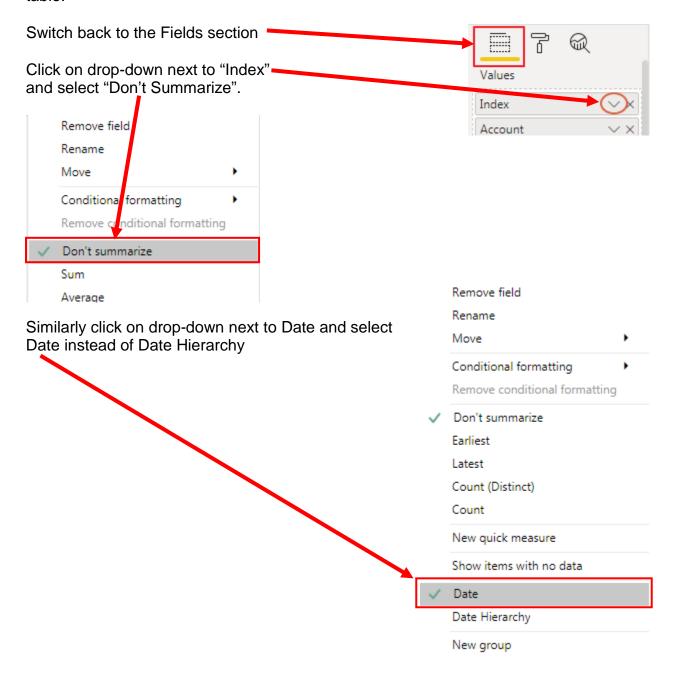
Select "Text Size" and change to 12 or a preferred size (You might have to readjust the table size as necessary).





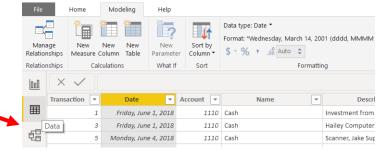
These formatting options only impact/change the visual appearance in Power Bi and will not have any impact on the data exported from Power BI.

Now we'll make some changes to the formatting of the fields which are added on the table.



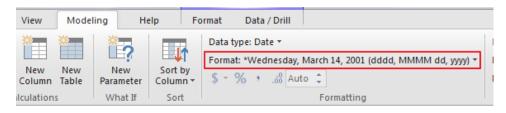
Operation 10: Changing fields display format

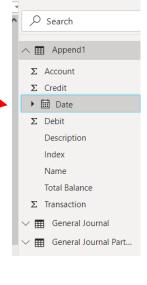
Verify that "Data" mode is selected.



You can select any field from the fields list by clicking on it. Select "Date".

Click, or double click if necessary on the default date format.

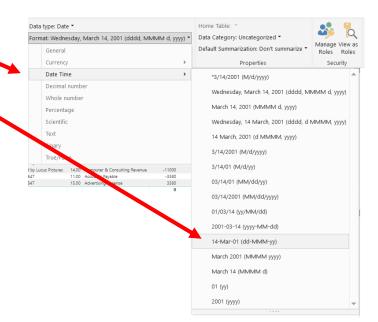




Fields

Select "Date Time"

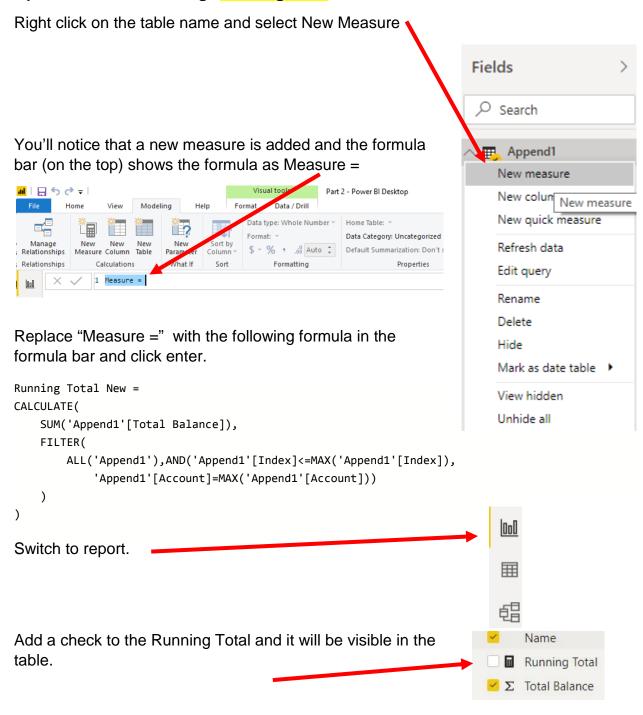
Select "dd--MMM-yy".



The Updated table

Index Acco If it is not sorted by "Index" select "Index" in the header. And the table will be sorted by Index Index A

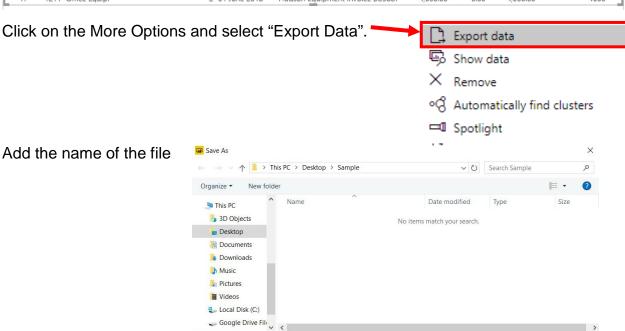
Operation 11: Calculating "Running Total"



Operation 12: Exporting data to Excel

Select the table and notice that you get More Options indicated by 3 dots (...) on the top right or the bottom right of the table visual.





File name: General Ledger 2.csv
Save as type: CSV File (*.csv)

→ Hide Folders

Select Save

Navigate to the location and double click to onpen the CSV file you just saved.

You'll notice that the data from the visual is exported into CSV

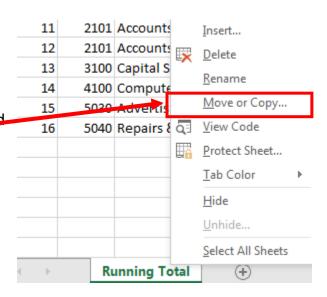
4	Α	В	С	D	E	F	G	Н	I	J	K
1	Index	Account	Name	Transactio	Date	Description	Debit	Credit	Total Bala	Running to	otal
2	1	1110	Cash	1	########	Investme	28000		28000	28000	
3	2	1110	Cash	3	########	Hailey Co	mputers 87	7000	-7000	21000	
4	3	1110	Cash	5	#########	Scanner, J	ake Suppli	125	-125	20875	
5	4	1110	Cash	7	#########	Pd A/p ck	5003	640	-640	20235	
6	5	1110	Cash	8	########	Services p	11000		11000	31235	
7	6	1211	Office Equ	2	########	Hudson e	4000		4000	4000	
8	7	1211	Office Equ	. 5	#########	Scanner, J	125		125	4125	
9	8	1311	Computer	3	########	Hailey Co	7000		7000	7000	
10	9	2101	Accounts	2	########	Hudson e	quipment I	4000	-4000	-4000	
11	10	2101	Accounts	4	########	Avery Rep	airs, Invoi	725	-725	-4725	
12	11	2101	Accounts	6	########	Zac Adver	tising,2354	3380	-3380	-8105	
13	12	2101	Accounts	7	########	Pd A/p ck	640		640	-7465	
14	13	3100	Capital Sto	1	########	Investme	nt from Ma	28000	-28000	-28000	
15	14	4100	Computer	8	########	Services p	erformed	11000	-11000	-11000	
16	15	5030	Advertisir	6	########	Zac Adver	3380		3380	3380	
17	16	5040	Repairs &	4	***************************************	Avery Rep	725		725	725	

Change the columns' widths and formats.

1	Α	В	С	D	E	F	G	Н	I	J
1	Index	Account	Name	Transaction	Date	Description	Debit	Credit	Total Balance	Running total
2	1	1110	Cash	1	01-06-18	Investment from Mark Friedman	28000		28000	28000
3	2	1110	Cash	3	01-06-18	Hailey Computers 87245, ck6001		7000	-7000	21000
4	3	1110	Cash	5	04-06-18	Scanner, Jake Supplies, 54-541 ck6002		125	-125	20875
5	4	1110	Cash	7	08-06-18	Pd A/p ck6003		640	-640	20235
6	5	1110	Cash	8	14-06-18	Services performed by Lucus Pictures	11000		11000	31235
7	6	1211	Office Equip.	2	01-06-18	Hudson equipment Invoice BC3887	4000		4000	4000
8	7	1211	Office Equip.	5	04-06-18	Scanner, Jake Supplies, 54-541 ck6002	125		125	4125
9	8	1311	Computer Equip.	3	01-06-18	Hailey Computers 87245, ck6001	7000		7000	7000
10	9	2101	Accounts Payable	2	01-06-18	Hudson equipment Invoice BC3887		4000	-4000	-4000
11	10	2101	Accounts Payable	4	02-06-18	Avery Repairs, Invoice 25478		725	-725	-4725
12	11	2101	Accounts Payable	6	08-06-18	Zac Advertising,23547		3380	-3380	-8105
13	12	2101	Accounts Payable	7	08-06-18	Pd A/p ck6003	640		640	-7465
14	13	3100	Capital Stock	1	01-06-18	Investment from Mark Friedman		28000	-28000	-28000
15	14	4100	Computer & Consulting Revenue	8	14-06-18	Services performed by Lucus Pictures		11000	-11000	-11000
16	15	5030	Advertising Expense	6	08-06-18	Zac Advertising, 23547	3380		3380	3380
17	16	5040	Repairs & Maint. Expense	4	02-06-18	Avery Repairs, Invoice 25478	725		725	725
10										

Before you perform the next step, make sure the original file MF8916.xlsx is Open

You can copy this tab from the CSV to the original Excel by right clicking on the tab and selecting Move or Copy



Select the Excel file you want to move the sheet to

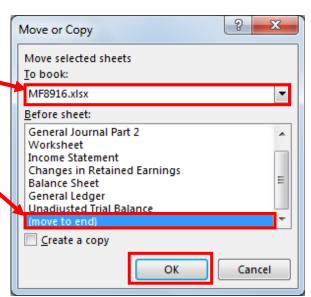
Scroll till the end and click on (move to end)

Then click OK

Rename the tab as General Ledger

The General Ledger has been created successfully

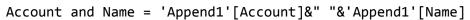
"Save" and "Close" the Excel file.

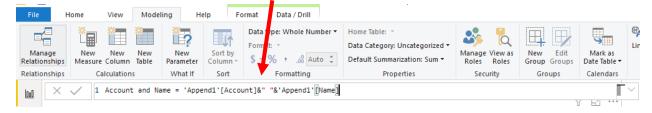


Operation 13: Calculating "Unadjusted Trial Balance"

To calculate the Total Balance for each account, first create a new column which is a combination of Account and Name Append1 To do this, Right click on the table name and select New New measure Column New column New quick New column Refresh data Edit query Rename Delete You'll notice that a new measure is added and the formula Hide bar (on the top) shows the formula as Column = View Modeling A Text box 0 🖺 Сору Switch Format Painter ⊈ Shapes ▼ Oueries Data ' Relationships Page ▼ Visual Ouestion Marketplace File Theme ' Insert

Enter the following formula in the formula bar and press Enter to add the new column

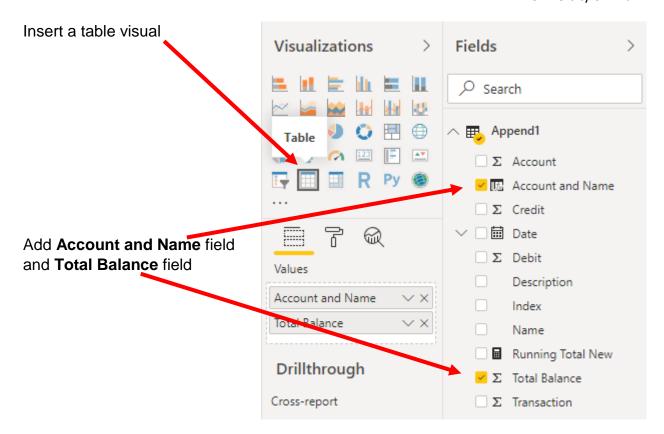




Add a new Page by clicking on the + icon seen next to Page 3 at the bottom

1 Column =





After basic formatting changes as mentioned in Operation 10, you'll see a table like

this:

Follow the steps mentioned in Operation 12 to Export this table as Unadjusted Trial Balance

Save and close Excel and Power BI Desktop

