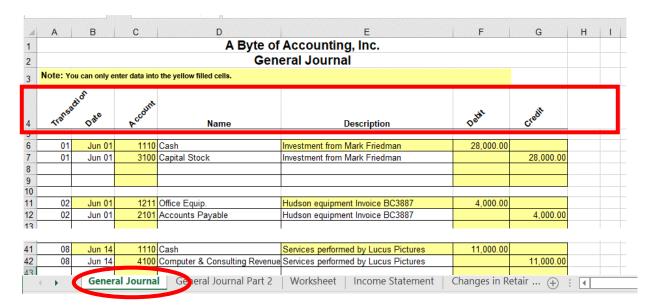
Part 1: The First Stream	1
Part 2: Append the Second Stream	- 30

Using Alteryx

Alteryx is used by several Big Four accounting firms to automate the ETL process. 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 Excel.

The journal entries for *A Byte of Accounting* are stored in an Excel sheet titled General Journal. Notice that the column headings are in the fourth row, and some rows do not have account numbers.

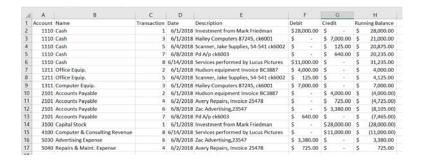
Begin with the General Journal



End with the General Ledger

and

the Unadjusted Trial Balance



A	Α	В
1	Account And Name	Balance
2	1110 Cash	31235
3	1211 Office Equip.	4125
4	1311 Computer Equip.	7000
5	2101 Accounts Payable	-7465
6	3100 Capital Stock	-28000
7	4100 Computer & Consulting Revenue	-11000
8	5030 Advertising Expense	3380
9	5040 Repairs & Maint. Expense	725
10		

Start Alteryx

There are four major parts of the Alteryx window. The first is the Canvas, and that's where we're going to create the workflow. Second, the Tools Palette is where all the tools are stored. Third, the Configuration area is where the tool settings are modified. Lastly, the Results window shows us the result after we select "Run" to apply the changes.

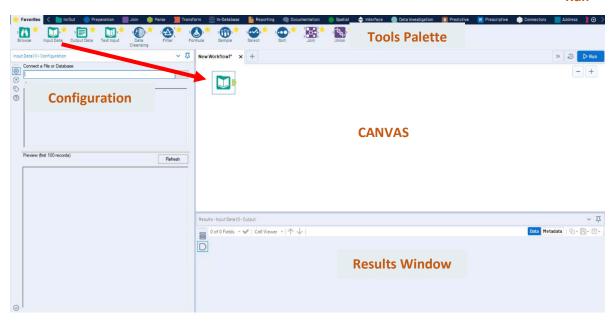
Tool 1: Input Data Tool - Input Excel file

Drag the "Input Data Tool"



from the Tools Palette to the Canvas.

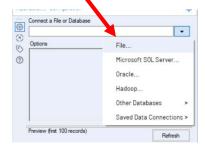
Run



In the Configuration area, select the "Connect a File or Database" drop-down arrow.



Select "File".

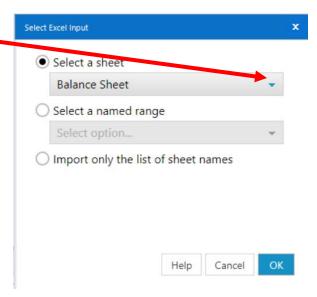


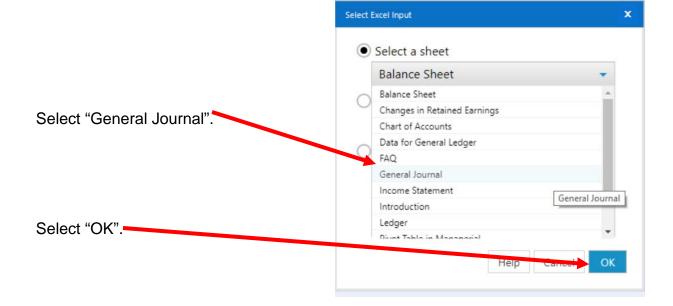
Browse for the desired file and select the version with the .xlsx file extension.

Select "Open".



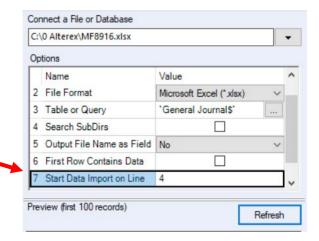
Select the drop-down arrow to the right of "Balance Sheet".





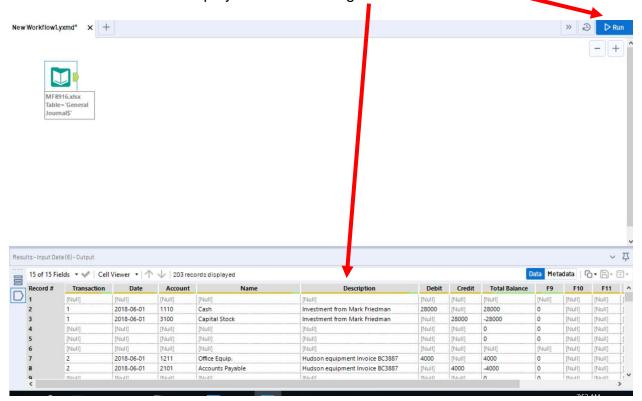
Remember that the field names are in the fourth row.

In the Configuration area, change the number in "Start Data Import on Line" to "4".



Select "Run".

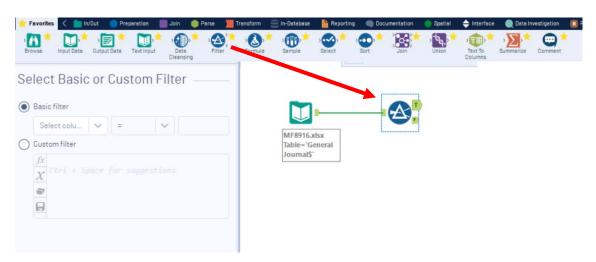
The Results window will display the field headings and the data.



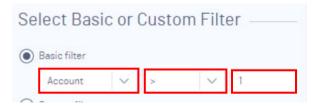
Tool 2: Filter Tool – Exclude all rows that do not contain data

There are several rows that do not contain an account number. We can modify the working dataset so that it includes only those rows that contain account numbers greater than one. Note that we are not deleting anything from the source data file. The working dataset will be split into two subsets. The first subset, "True", will include all rows with account numbers greater than one. The second subset, "False", will contain all rows with account numbers less than one.

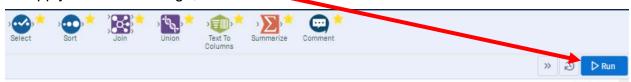
Drag the "Filter Tool" from the Tools Palette to the right of the "Input Data Tool" on the Canvas. The two will be connected automatically. The outflow from the tool on the left is the inflow to the one on the right.



With the "Filter Tool" selected, the "Basic" filter in the Configuration area can be modified to filter the field "Account" for those accounts greater than "1'.



To apply the latest change, select "Run"

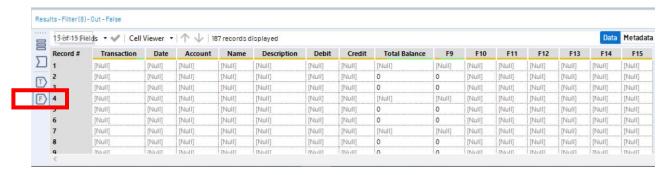


We can view three different datasets in the Results window.

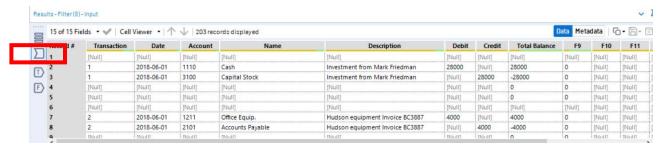
The records that meet the filtered conditions, "Account > 1", are displayed as T (True).



The records that do not meet the filtered conditions are displayed as F (False).

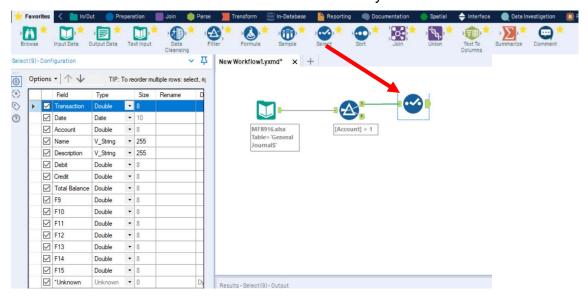


The data being filtered can also be displayed.

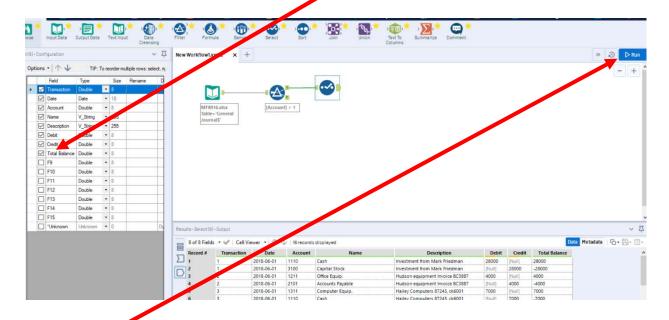


Tool 3: Select Tool – Remove fields that contain no data, from F8 to F15

Drag the "Select Tool" from the Tools Palette to the True output of the "Filter Tool" on the Canvas. The two will be connected automatically.



Remove the extra fields by unchecking them.

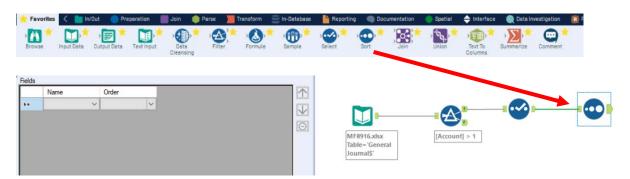


Tool 4: Select Tool – Sort by "Account" and then "Transaction"

Notice that the original data from Excel had a hidden column "**Total Balance**" that contained the following formula: "Debits – Credits".

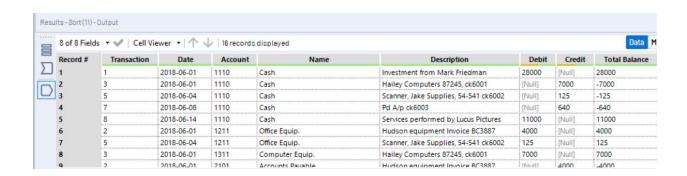
The data is displayed as it was extracted from the source document. We want to have the data in "Account" order and subsequently in "Transaction" order.

Drag the "Sort Tool" from the Tools Palette to the right of the "Select Tool" on the Canvas. The two will be connected automatically. The outflow from the tool on the left is the inflow to the one on the right.



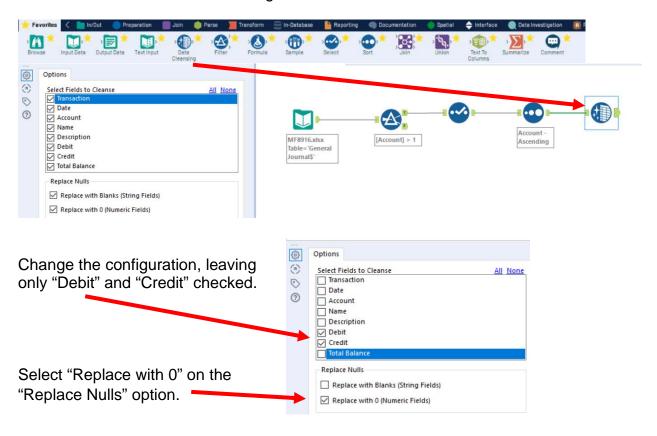
Change the sort configuration of "Account" and "Transaction" to "Ascending".





Tool 5: Data Cleansing Tool – Replace "Null" with "0"

There are cells in the "Debit" and "Credit" columns that are coded as "Null". Drag the "Data Cleansing Tool" from the Tools Palette to the right of the "Sort Tool" on the Canvas. The two will be connected automatically. The outflow from the tool on the left is the inflow to the one on the right.



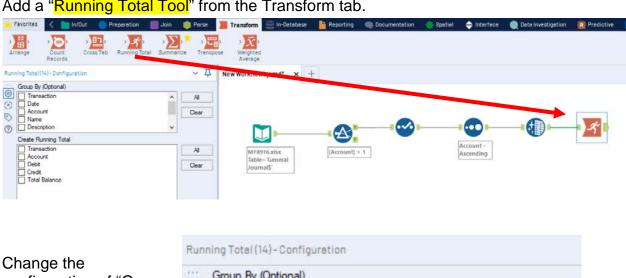


Tool 6: Running Total Tool – Create a "Running Total"

The General Ledger has a running balance within each account.

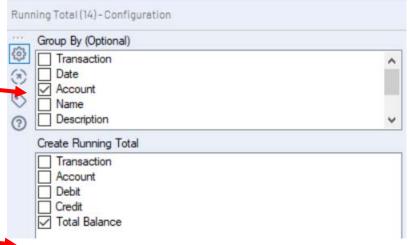
Drag the "Running Total Tool" from the Transform tab to the right of the "Data" Cleaning Tool" on the Canvas. The two will be connected automatically. The outflow from the tool on the left is the inflow to the one on the right.

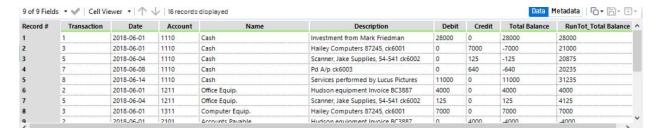
Add a "Running Total Tool" from the Transform tab.



configuration of "Group By" to "Account".

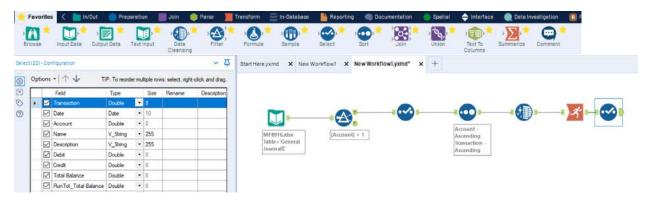
Select "Total Balance" on "Create Running Total".

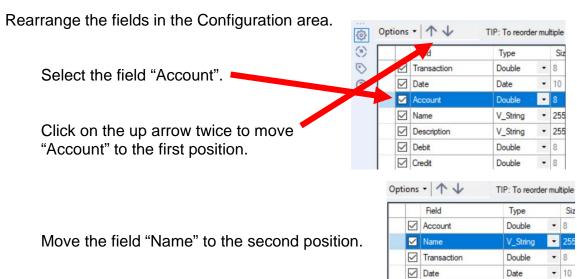


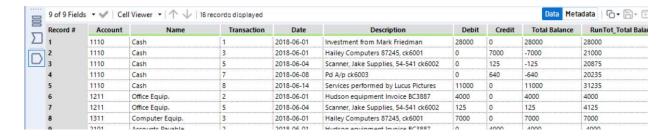


Tool 7: Select Tool Display – "Account" and "Name" in front of "Transaction"

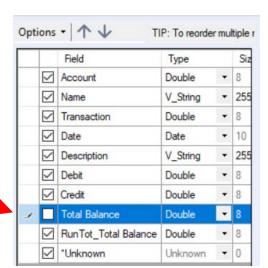
Drag another "Select Tool" to the right of the "Running Total Tool" on the Canvas. The two will be connected automatically. The outflow from the tool on the left is the inflow to the one on the right.

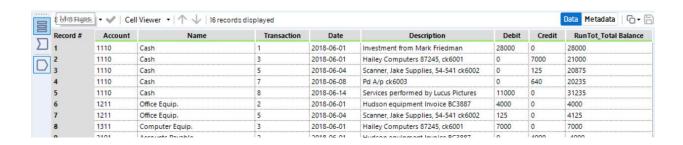




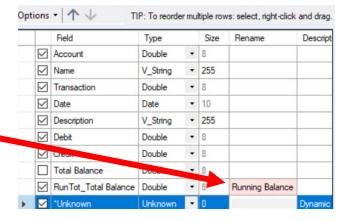


Remove the field "Total Balance" from the output by unchecking it.





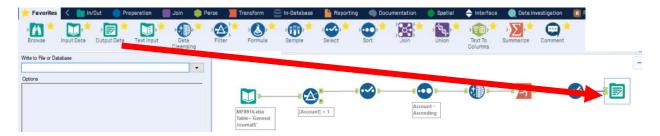
Change the name of the field "Run Tot_Total Balance" to "Running Balance".

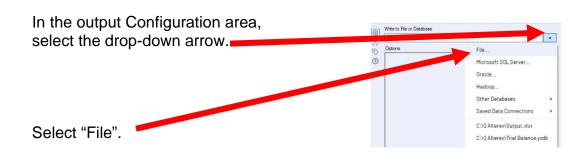


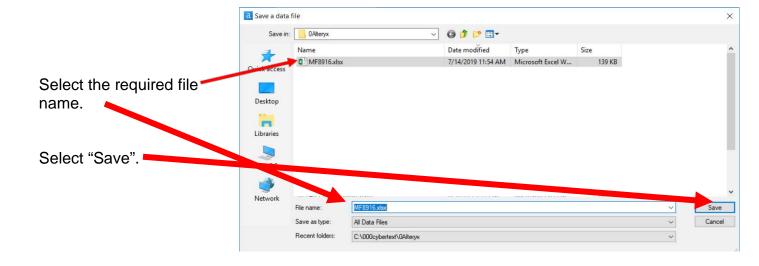


Tool 8: Select Tool Output Data Tool: We now want to export the cleaned and assembled General Ledger to Excel.

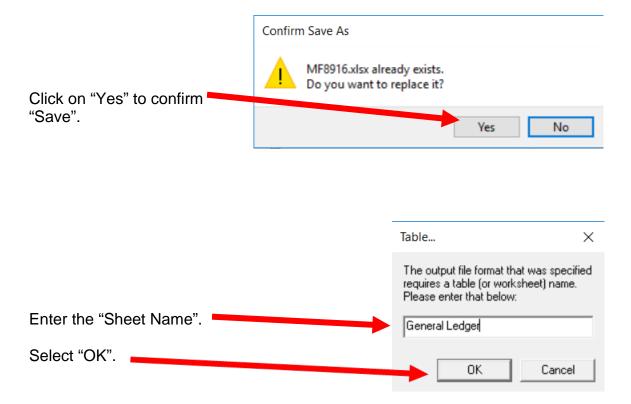
Drag an "Output Data Tool" to the right of the "Select Tool" on the Canvas. The two will be connected automatically. The outflow from the tool on the left is the inflow to the one on the right.







Alteryx Part 1



Open the file in Excel.

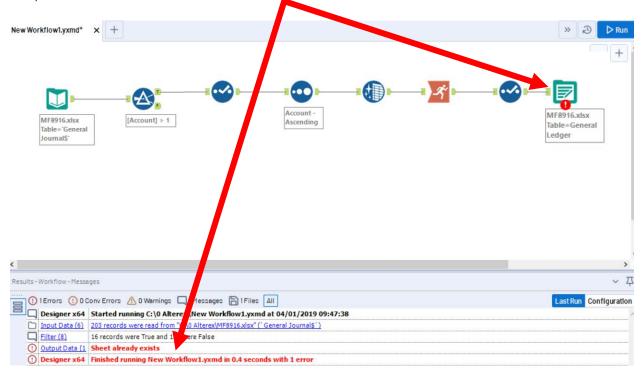
	Α	В	С	D	E	F	G	Н	1
1	Account	Name	Transactio	Date	Description	Debit	Credit	Running Ba	lance
2	1110	Cash	1	6/1/2018	Investmen	28000	0	28000	
3	1110	Cash	3	6/1/2018	Hailey Con	0	7000	21000	
4	1110	Cash	5	6/4/2018	Scanner, Ja	0	125	20875	
5	1110	Cash	7	6/8/2018	Pd A/p ck6	0	640	20235	
6	1110	Cash	8	#######	Services pe	11000	0	31235	
7	1211	Office Equ	2	6/1/2018	Hudson eq	4000	0	4000	
8	1211	Office Equ	5	6/4/2018	Scanner, Ja	125	0	4125	
9	1311	Computer	3	6/1/2018	Hailey Con	7000	0	7000	
10	2101	Accounts F	2	6/1/2018	Hudson eq	0	4000	-4000	
11	2101	Accounts F	4	6/2/2018	Avery Repa	0	725	-4725	
12	2101	Accounts F	6	6/8/2018	Zac Advert	0	3380	-8105	
13	2101	Accounts F	7	6/8/2018	Pd A/p ck6	640	0	-7465	
14	3100	Capital Sto	1	6/1/2018	Investmen	0	28000	-28000	
15	4100	Computer	8	#######	Services pe	0	11000	-11000	
16	5030	Advertising	6	6/8/2018	Zac Advert	3380	0	3380	
17	5040	Repairs &	4	6/2/2018	Avery Repa	725	0	725	
18									

Change the columns' widths and formats.

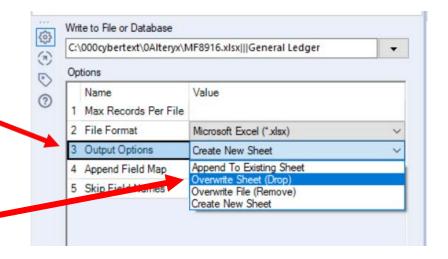
	Α	В	С	D	E	F	G		Н	
1	Account	Name	Transaction	Date	Description	Debit	Credit	Run	ning Balance	
2	1110	Cash	1	6/1/2018	Investment from Mark Friedman	\$28,000.00	\$ -	\$	28,000.00	
3	1110	Cash	3	6/1/2018	Hailey Computers 87245, ck6001	\$ -	\$ 7,000.00	\$	21,000.00	
4	1110	Cash	5	6/4/2018	Scanner, Jake Supplies, 54-541 ck6002	\$ -	\$ 125.00	\$	20,875.00	
5	1110	Cash	7	6/8/2018	Pd A/p ck6003	\$ -	\$ 640.00	\$	20,235.00	
6	1110	Cash	8	6/14/2018	Services performed by Lucus Pictures	\$11,000.00	\$ -	\$	31,235.00	
7	1211	Office Equip.	2	6/1/2018	Hudson equipment Invoice BC3887	\$ 4,000.00	\$ -	\$	4,000.00	
8	1211	Office Equip.	5	6/4/2018	Scanner, Jake Supplies, 54-541 ck6002	\$ 125.00	\$ -	\$	4,125.00	
9	1311	Computer Equip.	3	6/1/2018	Hailey Computers 87245, ck6001	\$ 7,000.00	\$ -	\$	7,000.00	
10	2101	Accounts Payable	2	6/1/2018	Hudson equipment Invoice BC3887	\$ -	\$ 4,000.00	\$	(4,000.00)	
11	2101	Accounts Payable	4	6/2/2018	Avery Repairs, Invoice 25478	\$ -	\$ 725.00	\$	(4,725.00)	
12	2101	Accounts Payable	6	6/8/2018	Zac Advertising,23547	\$ -	\$ 3,380.00	\$	(8,105.00)	
13	2101	Accounts Payable	7	6/8/2018	Pd A/p ck6003	\$ 640.00	\$ -	\$	(7,465.00)	
14	3100	Capital Stock	1	6/1/2018	Investment from Mark Friedman	\$ -	\$28,000.00	\$	(28,000.00)	
15	4100	Computer & Consulting Revenue	8	6/14/2018	Services performed by Lucus Pictures	\$ -	\$11,000.00	\$	(11,000.00)	
16	5030	Advertising Expense	6	6/8/2018	Zac Advertising,23547	\$ 3,380.00	\$ -	\$	3,380.00	
17	5040	Repairs & Maint. Expense	4	6/2/2018	Avery Repairs, Invoice 25478	\$ 725.00	\$ -	\$	725.00	
10										

And, the General Ledger has been created successfully.

"Save" and "Close" the Excel file. Return to Alteryx and select "Run" for the second time. But, there is an error! The sheet already exits.



In the output Configuration area, select "Output Options".



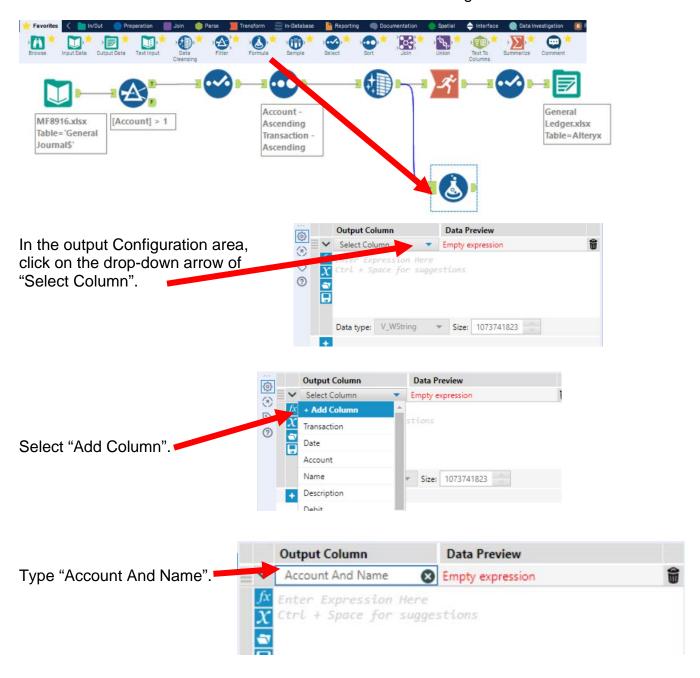
Select "Run".

Select "Overwrite Sheet" (which drops the old sheet).

The "Unadjusted Trial Balance" will summarize the "Total Balance" by account number with the account name attached for clarity.

Tool 9: Select Tool Formula: We now want to combine the fields "Account" and "Name". "Account" is a numeric field, while "Name' is a string, and we would like to have two spaces between the fields.

Drag a "Formula Tool" under the "Running Balance Tool" branching from the "Cleansing Tool" on the Canvas. The two will be connected automatically. The outflow from the tool on the left is the inflow to the one on the right.



Alteryx Part 1 Mark Friedman University of Miami

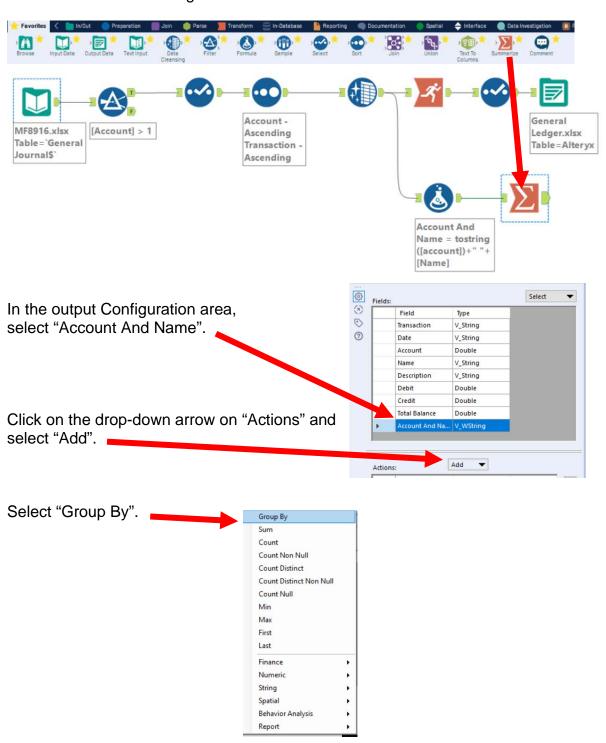
Type the following formula tostring([account])+" "+[Name]

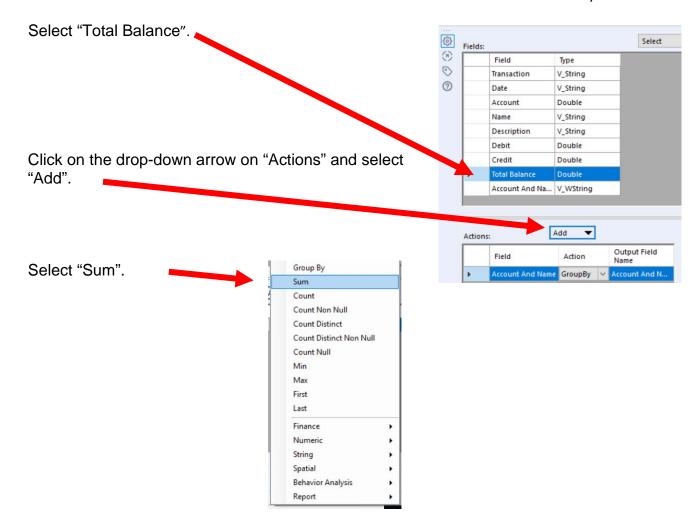




Tool 10: Select Tool Summary: We now want to create an "Unadjusted Trial Balance" by calculating the account balances.

Drag a "**Summary Tool**" to the right of the "**Cleansing tool**" on the Canvas. The two will be connected automatically. The outflow from the tool on the left is the inflow to the one on the right.



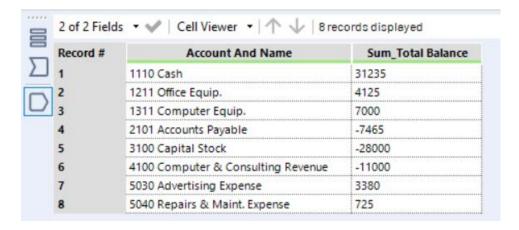


Select "Run".

Select the output of the "Summary Tool".



And, the "Unadjusted Trial Balance" is created.

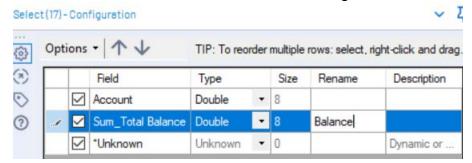


Tool 11: Select Tool – Rename a field

Drag another "Select Tool" to the right of the "Summary Tool" on the Canvas. The two will be connected automatically. The outflow from the tool on the left is the inflow to the one on the right.



Rename the "Sum_Total Balance" in the Configuration area to "Balance".

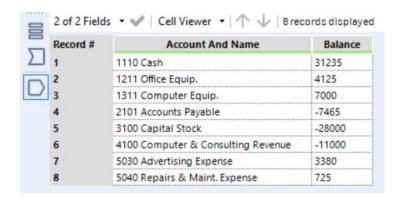


Select "Run".

Select the output of the "Select Tool".

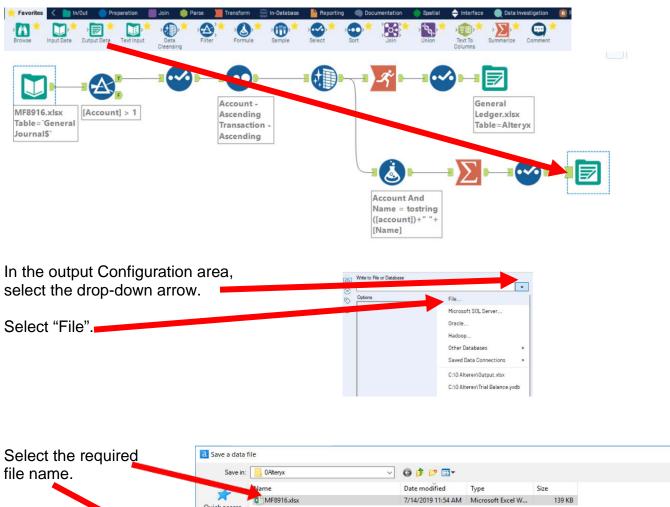


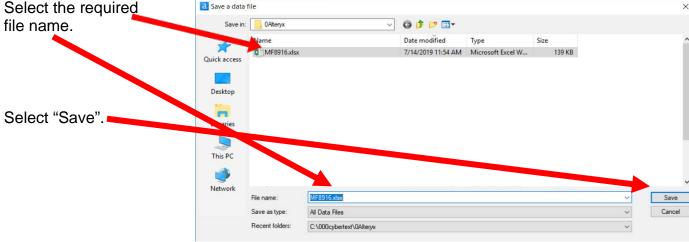
And, the Unadjusted Trial Balance is created.

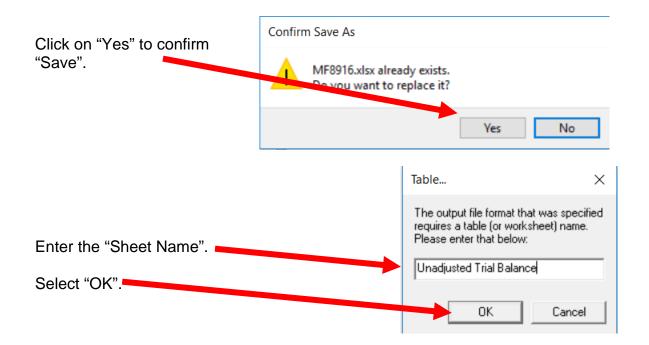


Tool 12: Select Output Data Tool: We now want to export the "Unadjusted Trial Balance" to Excel.

Drag an "Output Data Tool" to the right of the "Select Tool" on the Canvas. The two will be connected automatically. The outflow from the tool on the left is the inflow to the one on the right.

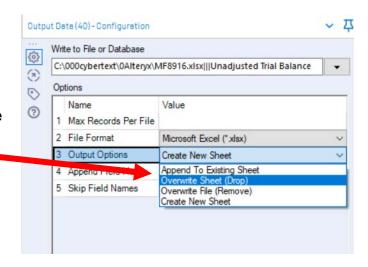






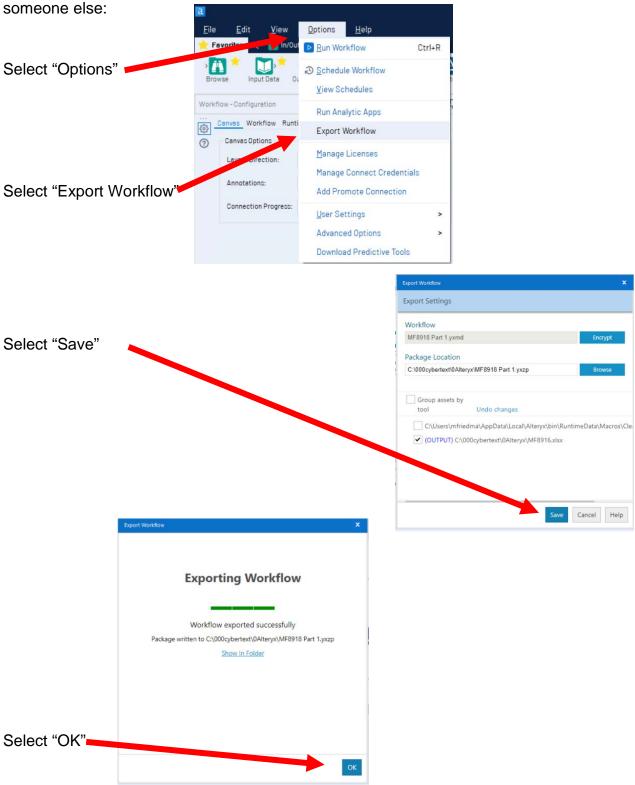
In the output Configuration area, Select "Output Options".

Select "Overwrite Sheet" (which drops the old Sheet).

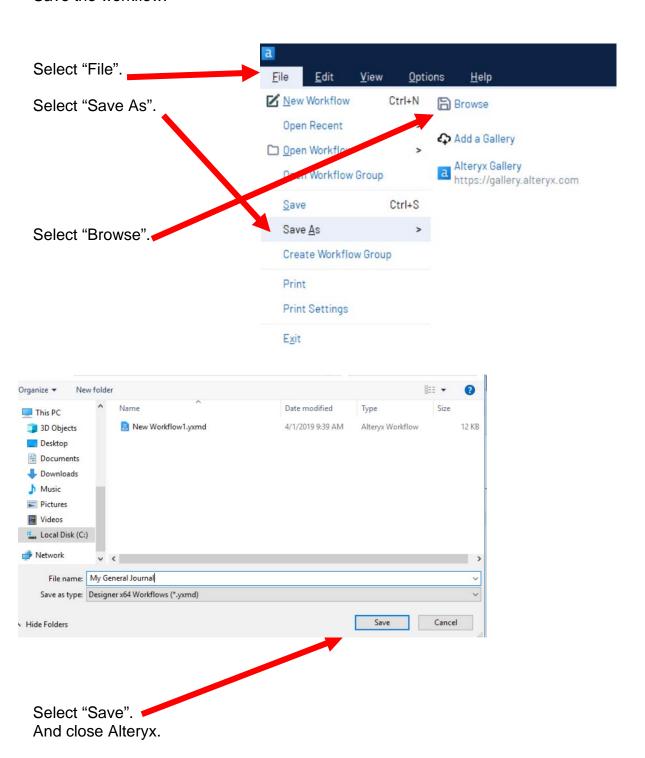


4	А	В	С	D	Е	F	G
1	Account And Name	Balance					
2	1110 Cash	31235					
3	1211 Office Equip.	4125					
4	1311 Computer Equip.	7000					
5	2101 Accounts Payable	-7465					
6	3100 Capital Stock	-28000					
7	4100 Computer & Consulting Revenue	-11000					
8	5030 Advertising Expense	3380					
9	5040 Repairs & Maint. Expense	725					
10							
11							
12							

To export the workflow and the related input files so that you can send the files to



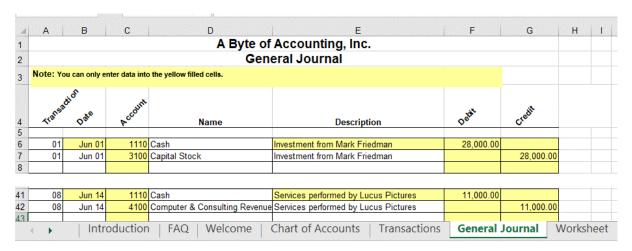
Save the workflow.



Alteryx Part 2

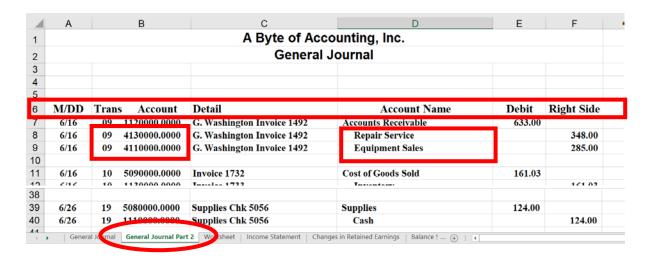
Alteryx is used by several big four accounting firms to automate the **ETL** process. In this exercise you will Extract a General Journal sheet, **T**ransform the data into the required format (combine two General Journal sheets into a General Ledger and an Unadjusted Trial Balance) and then **L**oad the transformed data into Excel.

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

1		В	С	D	E	F	G	Н	- 1
1	Account	Name	Transactio	Date	Descriptio	Debit	Credit	Running B	alance
2	1110	Cash	1	2018-06-0	Investmen	28000	0	28000	
3	1110	Cash	3	2018-06-0	Hailey Con	0	7000	21000	
4	1110	Cash	5	2018-06-0	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	2018-06-1	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 F	09	2018-06-1	G. Washin	633	0	633	
13	1120	Accounts 6	13	2018-06-2	Receipt Ca	0	633	0	
14	1120	Accounts 6	16	2018-06-2	J. Adans In	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 Con	7000	0	7000	
21	2101	Accounts F	2	2018-06-0	Hudson ec	0	4000	-4000	
22	2101	Accounts F	4	2018-06-0	Avery Rep	0	725	-4725	
23	2101	Accounts F	6	2018-06-0	Zac Adver	0	3380	-8105	
24	2101	Accounts F	7	2018-06-0	Pd A/p ck6	640	0	-7465	
25	2101	Accounts F	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	Investmen	0	28000	-28000	
29	4100	Computer	8	2018-06-1	Services po	0	11000	-11000	
30	4110	Equipmen	09	2018-06-1	G. Washin	0	285	-285	
31	4110	Equipmen	16	2018-06-2	J. Adans In	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 In	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		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	

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And the Unadjusted Trial Balance

	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

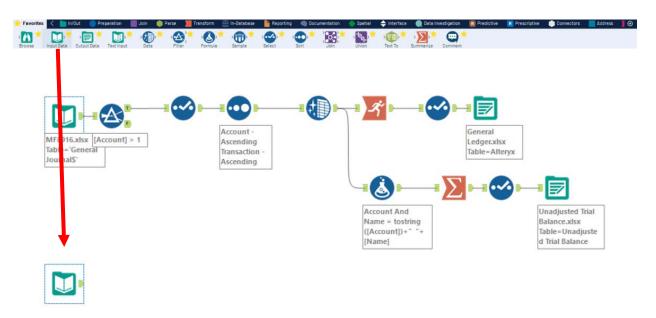
Start Alteryx

Tool 1: Input Data Tool - Input Excel file

Drag the "Input Data Tool"



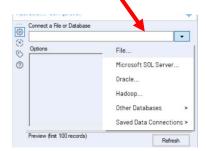
from the Tools Palette to the Canvas.



In the Configuration area, select the "Connect a File or Database" drop-down arrow.



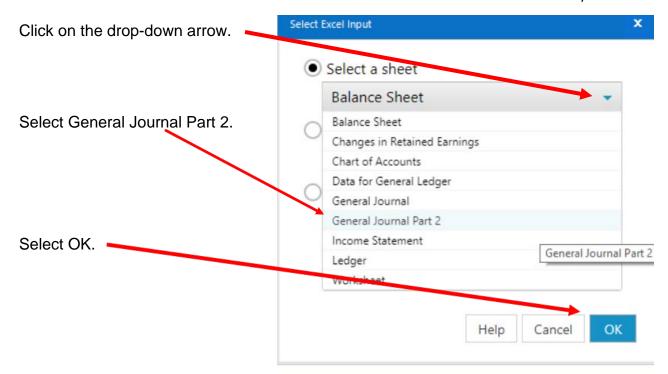
Select "File".

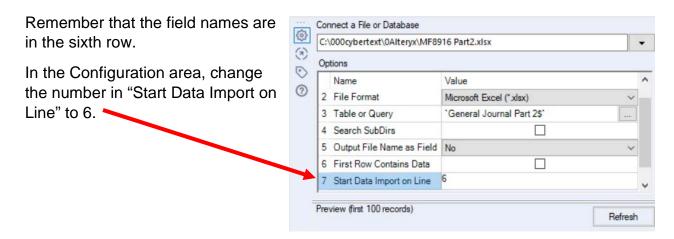


Browse for the desired file and select the version with the .xlsx file extension.

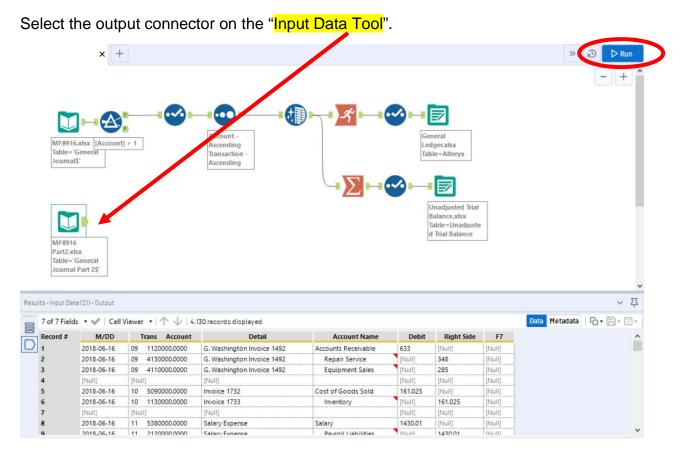
Select "Open".







Select "Run".



The "Results" window will display the field headings and the data.

Tool 2: Text To Columns Tool – Separate one column into many columns

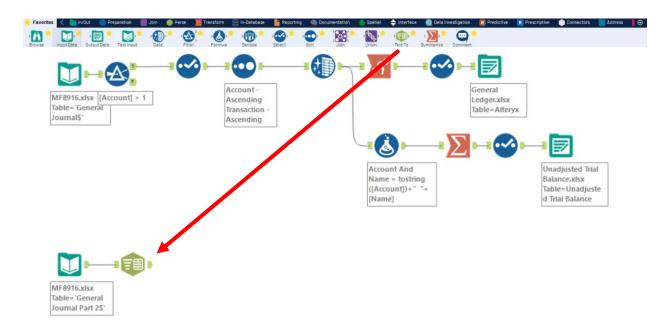
Column B in the source document contains a merged field of the transaction number and the account number separated by spaces. The spaces are referred to as the delimiter. Common delimiters are commas, dashes, and semicolons.

Each space is treated as a separate delimiter.

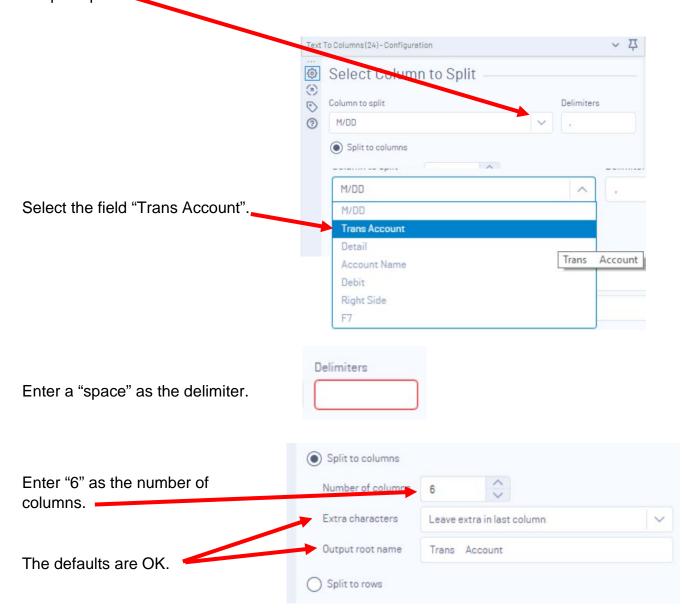
Therefore, we will convert one field into six fields.

В
s Account
1120000.0000
4130000.0000
4110000.0000
5090000.0000
1130000.0000

Drag the "**Text To Columns Tool**" from the Tools Palette to the right of the "Input Data Tool" on the Canvas. The two will be connected automatically. The outflow from the tool on the left is the inflow to the one on the right.

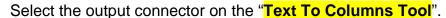


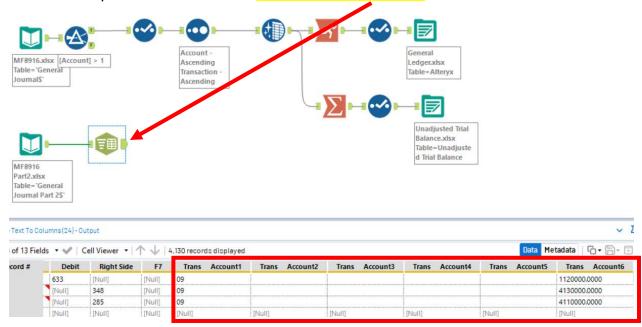
With the "Text To Columns Tool" selected, click the drop-down arrow on the "Column to Split" option.



To apply the latest change, select "Run".







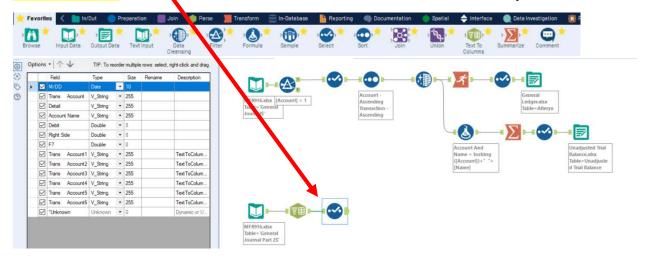
The "Results" window will display the field headings and the data.

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

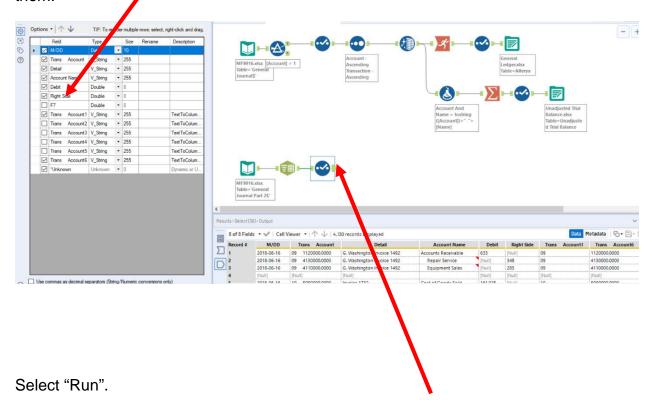
The account number field in the new file will be a seven-digit number; whereas the old file used a four-digit account number therefore, "Trans Account6" will have to be converted.

Tool 3: Select Tool – Remove extra fields, rename fields and change the type of field

Drag the "Select Tool" from the Tools Palette to the right of the "Text To Columns Tool" on the Canvas. The two will be connected automatically.



Remove the extra fields, "Trans Account2" - "Trans Account5", by unchecking them.



Subsequently, select the output connector on the "Select Tool".

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Rename all the fields that do not Options - | 1 4 TIP: To reorder multiple rows: select, right-click and dra-**(6)** correspond with the field names in the (3) Field Rename Size 0 $\overline{\mathbf{V}}$ old file. However, at this time do not → 255 3 Trans V_String rename "Trans Account6" to **→** 255 ✓ Detail V_String Description "Account". A formula has to be created Account Name V_String **-** 255 Name ✓ Debit Double · 8 to convert to the format before the field Right Side **-** 8 is renamed. **+** 8 ☐ F7 Double · 255 ✓ Trans V_String Transaction TextToColum. **→** 255 V_String TextToColum. · 255 Account3 V_String TextToColum... Trans **255** TextToColum... Account4 V String → 255 Trans TextToColum... Account5 V String **▼** 8 TextToColum.

Change the type of the "Trans Account6" field from "V_String" to "Double", i.e., a numeric value.

Unknown *

+ 0

Dynamic or U.

Unknown

Select "Run".

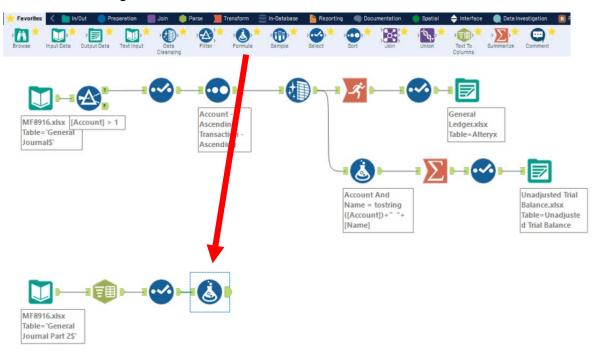
Then, select the output connector on the "Select Tool".

The new field headings are correct.



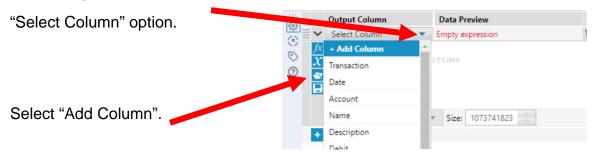
Tool 4: Formula Tool: We now want to convert the new file's seven-digit account number to the old file's four-digit code by dividing it by 1000.

Drag a "**Formula Tool**" to the right of the "**Select Tool**" on the Canvas. The two will be connected automatically. The outflow from the tool on the left is the inflow to the one on the right.

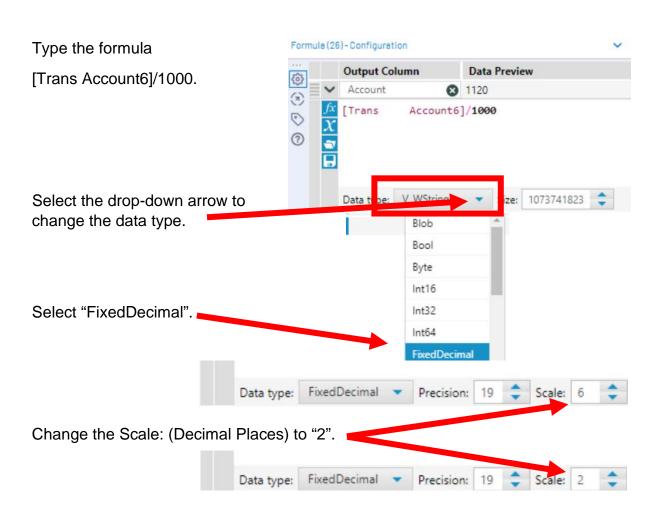


In the "Output Configuration" area,

Select drop-down arrow on the

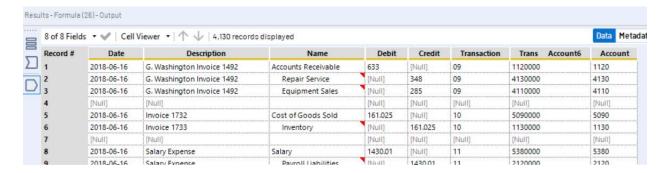






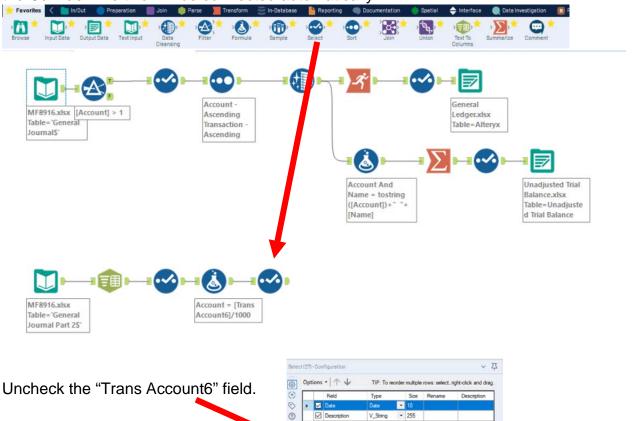
Select "Run".

Select the output connector on the "Formula Tool".



Tool 5: Select Tool – Remove extra fields

Drag another "Select Tool" from the Tools Palette to the right of the "Formula Tool" on the Canvas. The two will be connected automatically.



Name

☑ Debit

☑ Trans

☐ Trans

Account

"Unkn

+ 255 - 255

• 255

V_WString • 107...

Text ToColu

TextToColu

V_String

Double

Double

Select "Run".

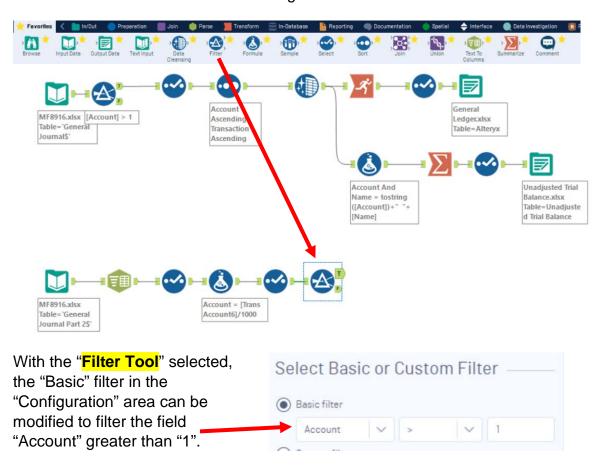
Select the output connector on the "Select Tool".



Tool 6: Filter Tool – Remove extra rows

There are several rows that do not contain an account number. We can modify the working dataset so that it includes only the rows that contain account numbers greater than one. Note that we are not deleting anything from the source data file. The working dataset will be split into two subsets. The first subset, "True", will include all rows that have account numbers greater than one. The second subset, "False", will contain all rows that have account numbers less than one.

Drag the "Filter Tool" from the Tools Palette to the right of the "Select Tool" on the Canvas. The two will be connected automatically. The outflow from the tool on the left is the inflow to the one on the right.



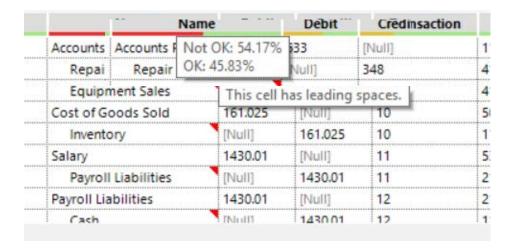
To apply the latest change, select "Run".

Select the True output connector on the "Filter Tool".

Select the "T" in the "Results" area.



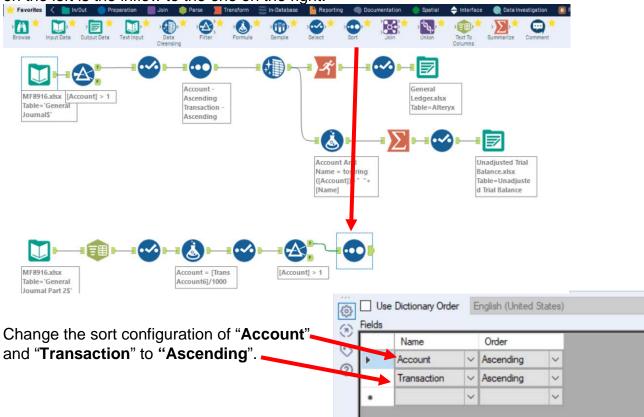
Something is wrong in the "Name" field; 54.17% of the data has leading spaces. We will have to remove the spaces when we remove the "Null".



Tool 7: Select Tool – Sort by "Account" and then "Transaction"

The data is displayed as it was extracted from the source document. We want to have the data in the "Account" order and then in "Transaction" order.

Drag the "Sort Tool" from the Tools Palette to the True connector of the "Filter Tool" on the Canvas. The two will be connected automatically. The outflow from the tool on the left is the inflow to the one on the right.



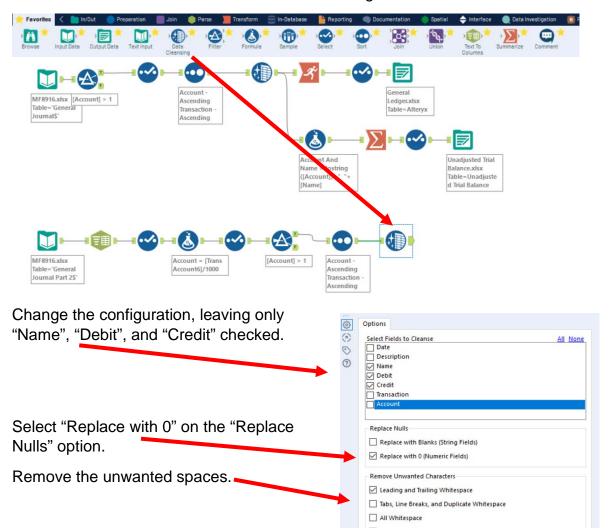
To apply the latest change, select "Run". Select the True output connector on the "Filter Tool".

Record #	Date	Description	Name	Debit	Credit	Transaction	Account
1	2018-06-16	To Payroll company Chk 6003	Cash	[Null]	1430.0	12	1110
2	2018-06-21	Receipt Cash Inv # 1732	Cash	633	[Null]	13	1110
3	2018-06-22	Monthly Insurance Chk 6004	Cash	[Null]	326	14	1110
4	2018-06-23	Maint Chk 6005	Cash	[Null]	190	15	1110
5	2018-06-26	Supplies Chk 5056	Cash	[Null]	124	19	1110
6	2018-06-16	G. Washington Invoice 1492	Accounts Receivable	633	[Null]	09	1120
7	2018-06-21	Receipt Cash Inv # 1733	Accounts Receivable	[Null]	633	13	1120
8	2018-06-24	J. Adans Invoice 1493	Accounts Receivable	350	[Null]	16	1120
q	2018-06-16	Invoice 1733	Inventory	[NinIII	161 02	10	1130

Tool 8: Data Cleansing Tool – Replace "Null" with "0" and remove leading spaces

There are cells in the "Debit" and "Credit" columns that are coded as "Null".

Drag the "Data Cleansing Tool" from the Tools Palette to the right of the "Sort Tool" on the Canvas. The two will be connected automatically. The outflow from the tool on the left is the inflow to the one on the right.

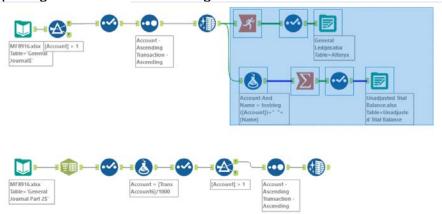


Select "Run".
Select the output connector on the "Data Cleansing Tool".

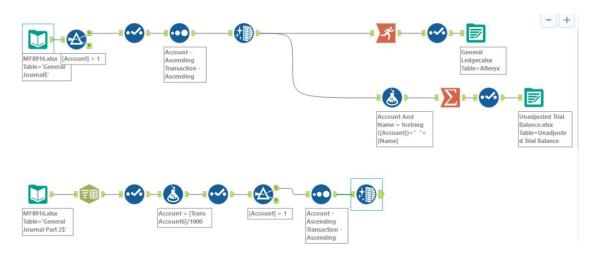
Record #	Date	Description	Name	Debit	Credit	Transaction	Account
1	2018-06-16	To Payroll company Chk 6003	Cash	0	1430.01	12	1110
2	2018-06-21	Receipt Cash Inv # 1732	Cash	633	0	13	1110
3	2018-06-22	Monthly Insurance Chk 6004	Cash	0	326	14	1110
4	2018-06-23	Maint Chk 6005	Cash	0	190	15	1110
5	2018-06-26	Supplies Chk 5056	Cash	0	124	19	1110
6	2018-06-16	G. Washington Invoice 1492	Accounts Receivable	633	0	09	1120
7	2018-06-21	Receipt Cash Inv # 1732	Accounts Receivable	0	633	13	1120

Tool 9: Union Tool: Appends multiple data streams into one stream based upon the field name or record position.

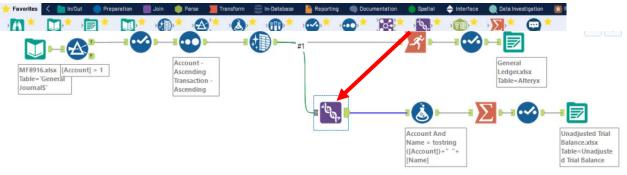
Rearrange the top flow by clicking and dragging a box around the seven tools in the upper-right corner and releasing the mouse.



Click the right arrow on the keyboard and the seven tools will move to the right.

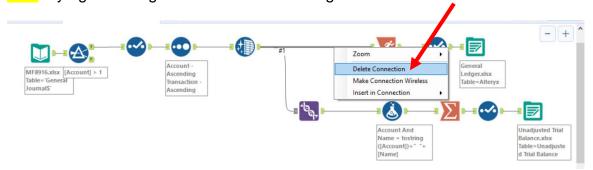


Drag the "Union Tool" from the Tools Palette to the position between the path from the top "Data Cleansing Tool" to the "Formula Tool".

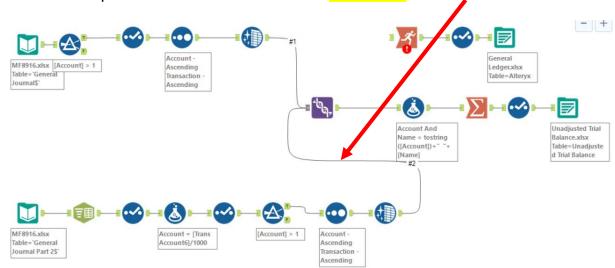


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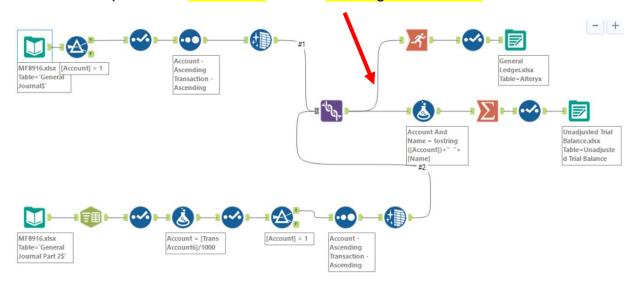
Delete the connection between the top "Data Cleansing Tool" and the "Running Total Tool" by right clicking on the line and selecting "Delete Connection".



Connect the output of the bottom stream to the "Union Tool".

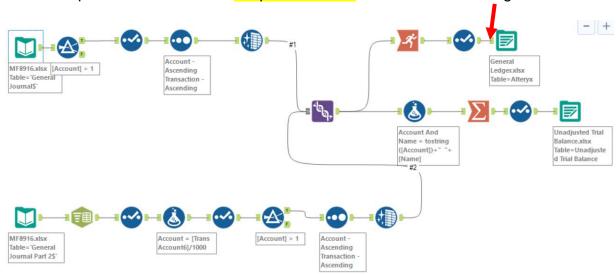


Connect the output of the "Union Tool" to the "Running Balance Tool".



Select "Run".

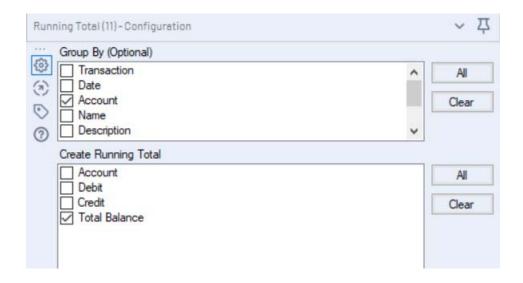
Select the input connector on the "Output Data Tool" for the General Ledger.



Something is wrong! The running balance is zero for several rows from the second input stream . . .



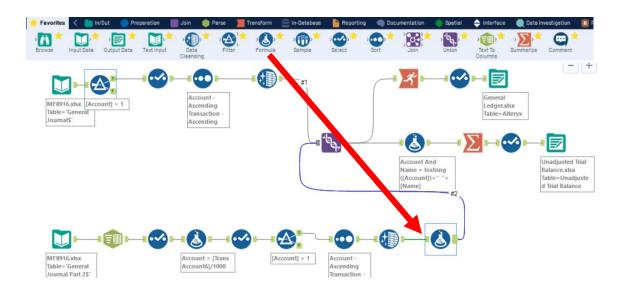
Select the "Running Balance Tool".

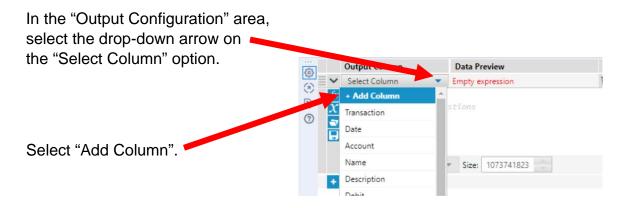


The running balance is based on the "Total Balance" field that does not exist in the second stream.

Tool 9: Formula Tool: We need to create a new field in the second stream, "Total Balance", which will have the following formula: Debit – Credit. This will produce a positive number if it is a debit amount and a negative number if it is a credit amount.

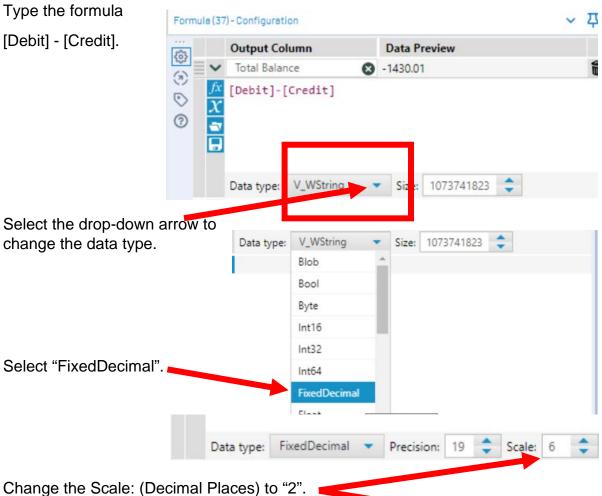
Drag a "Formula Tool" to a position on the path between the bottom "Data Cleansing Tool" and the "Union Tool" on the Canvas. The three tools will be automatically connected. The data flows into the left side of the tool and out of the right side of the tool.





Type the name of the new field "Total Balance".

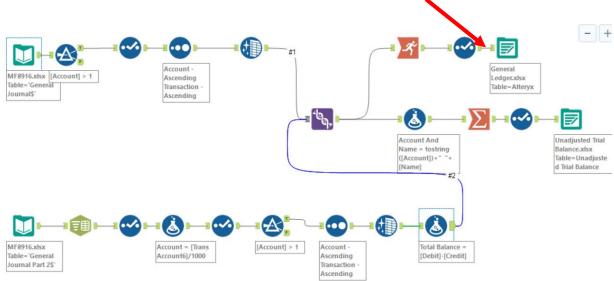
Alteryx Part 2





Select "Run".

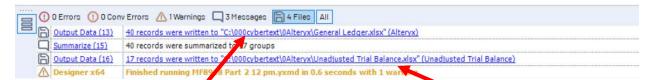
Select the input connector on the "Output Data Tool" for the General Ledger.



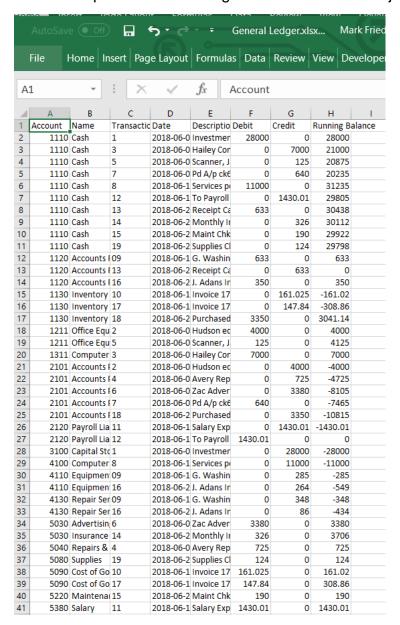
Everything looks great!

Record #	Account	Name	Transaction	Date	Description	Debit	Credit	Running Balance
1	1110	Cash	1	2018-06-01	Investment from Mark Friedman	28000	0	28000
2	1110	Cash	3	2018-06-01	Hailey Computers 87245, ck6001	0	7000	21000
3	1110	Cash	5	2018-06-04	Scanner, Jake Supplies, 54-541 ck6002	0	125	20875
4	1110	Cash	7	2018-06-08	Pd A/p ck6003	0	640	20235
5	1110	Cash	8	2018-06-14	Services performed by Lucus Pictures	11000	0	31235
6	1110	Cash	12	2018-06-16	To Payroll company Chk 6003	0	1430.01	29804.99
7	1110	Cash	13	2018-06-21	Receipt Cash Inv # 1732	633	0	30437.99
8	1110	Cash	14	2018-06-22	Monthly Insurance Chk 6004	0	326	30111.99
9	1110	Cash	15	2018-06-23	Maint Chk 6005	0	190	29921.99
10	1110	Cash	19	2018-06-26	Supplies Chk 5056	0	124	29797.99
11	1120	Accounts Receivable	09	2018-06-16	G. Washington Invoice 1492	633	0	633
12	1120	Accounts Receivable	13	2018-06-21	Receipt Cash Inv # 1732	0	633	0
13	1120	Accounts Receivable	16	2018-06-24	J. Adans Invoice 1493	350	0	350
14	1130	Inventory	10	2018-06-16	Invoice 1733	0	161.025	-161.02
15	1130	Inventory	17	2018-06-16	Invoice 1733	0	147.84	-308.86
16	1130	Inventory	18	2018-06-25	Purchased Inventory PO # 21021	3350	0	3041.14
17	1211	Office Equip.	2	2018-06-01	Hudson equipment Invoice BC3887	4000	0	4000
18	1211	Office Equip.	5	2018-06-04	Scanner, Jake Supplies, 54-541 ck6002	125	0	4125
19	1311	Computer Equip.	3	2018-06-01	Hailey Computers 87245, ck6001	7000	0	7000
20	2101	Accounts Payable	2	2018-06-01	Hudson equipment Invoice BC3887	0	4000	-4000
21	2101	Accounts Payable	4	2018-06-02	Avery Repairs, Invoice 25478	0	725	-4725
22	2101	Accounts Payable	6	2018-06-08	Zac Advertising,23547	0	3380	-8105
23	2101	Accounts Payable	7	2018-06-08	Pd A/p ck6003	640	0	-7465
24	2101	Accounts Payable	18	2018-06-25	Purchased Inventory PO # 21021	0	3350	-10815
25	2120	Payroll Liabilities	11	2018-06-16	Salary Expense	0	1430.01	-1430.01
26	2120	Payroll Liabilities	12	2018-06-16	To Payroll company Chk 6003	1430.01	0	0
27	3100	Capital Stock	1	2018-06-01	Investment from Mark Friedman	0	28000	-28000

Select "Run".

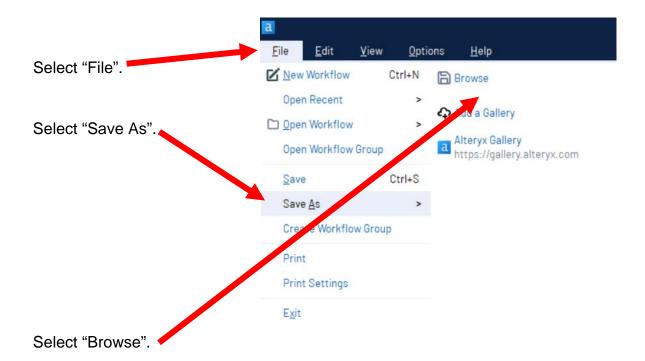


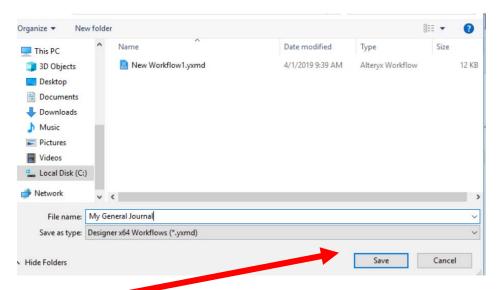
Click and open the Excel Ledger and the Excel Unadjusted Trial Balance.



\square	A	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

Save the workflow.





Select "Save".

And, close Alteryx.

Great Job!