

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, **Transform** the data into the required format (combine two General Journal sheets into a General Ledger and an Unadjusted Trial Balance) and then **Load** 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.

A Byte of Accounting, Inc.									
General Journal									
Note: You can only enter data into the yellow filled cells.									
Transaction	Date	Account	Name	Description	Debit	Credit			
01	Jun 01	1110	Cash	Investment from Mark Friedman	28,000.00				
01	Jun 01	3100	Capital Stock	Investment from Mark Friedman		28,000.00			
08	Jun 14	1110	Cash	Services performed by Lucus Pictures	11,000.00				
08	Jun 14	4100	Computer & Consulting Revenue	Services performed by Lucus Pictures		11,000.00			

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

A Byte of Accounting, Inc.							
General Journal							
M/DD	Trans	Account	Detail	Account Name	Debit	Right Side	
6/16	09	4120000.0000	G. Washington Invoice 1492	Accounts Receivable	633.00		
6/16	09	4130000.0000	G. Washington Invoice 1492	Repair Service		348.00	
6/16	09	4110000.0000	G. Washington Invoice 1492	Equipment Sales		285.00	
6/16	10	5090000.0000	Invoice 1732	Cost of Goods Sold	161.03		
6/26	19	5080000.0000	Supplies Chk 5056	Supplies	124.00		
6/26	19	1110000.0000	Supplies Chk 5056	Cash		124.00	

End with the General Ledger

	A	B	C	D	E	F	G	H	I
1	Account	Name	Transactio	Date	Description	Debit	Credit	Running Balance	
2	1110	Cash	1	2018-06-0	Investment	28000	0	28000	
3	1110	Cash	3	2018-06-0	Hailey Cor	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 ck	0	640	20235	
6	1110	Cash	8	2018-06-1	Services pr	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 In	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 r	09	2018-06-1	G. Washin	633	0	633	
13	1120	Accounts r	13	2018-06-2	Receipt Ca	0	633	0	
14	1120	Accounts r	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 Cor	7000	0	7000	
21	2101	Accounts r	2	2018-06-0	Hudson ec	0	4000	-4000	
22	2101	Accounts r	4	2018-06-0	Avery Rep	0	725	-4725	
23	2101	Accounts r	6	2018-06-0	Zac Adver	0	3380	-8105	
24	2101	Accounts r	7	2018-06-0	Pd A/p ck	640	0	-7465	
25	2101	Accounts r	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 Stc	1	2018-06-0	Investment	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 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 In	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	

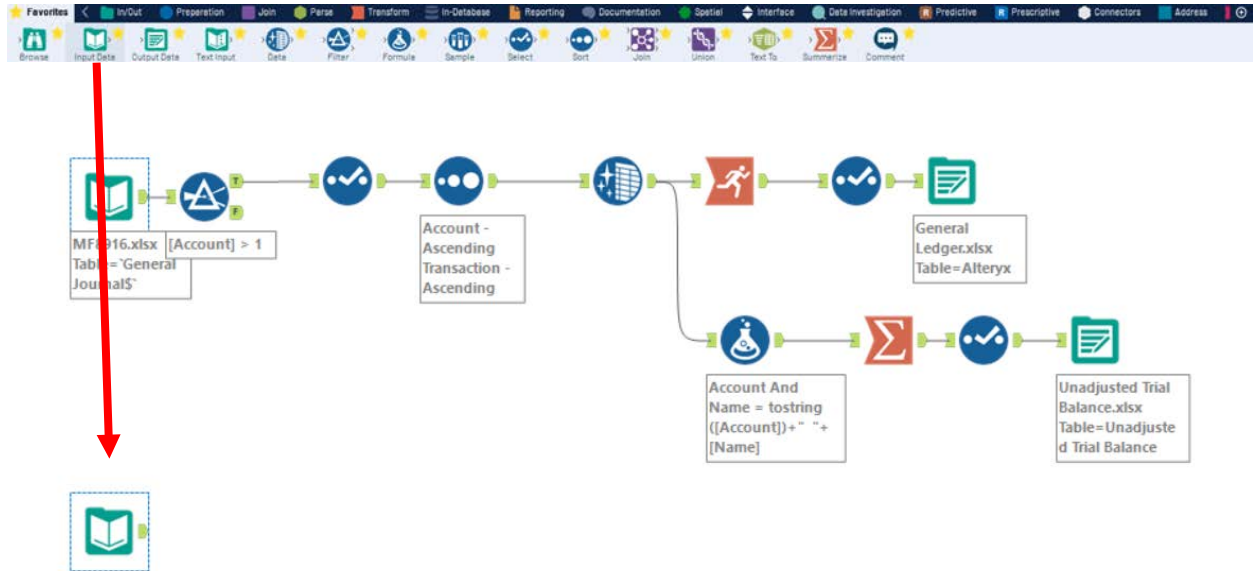
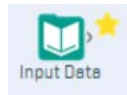
And the Unadjusted Trial Balance

	A	B
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

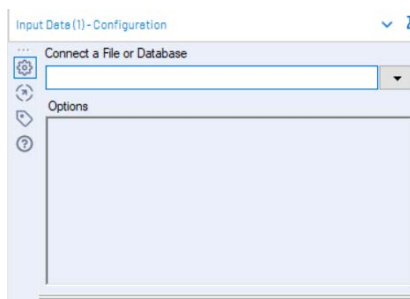
Start Alteryx

Tool 1: Input Data Tool – Input Excel file

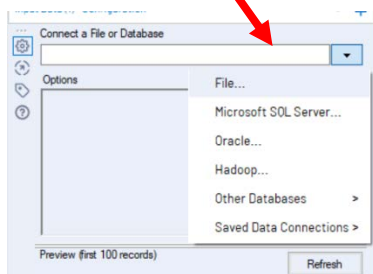
Drag the “Input Data Tool” from the Tools Palette to the Canvas.



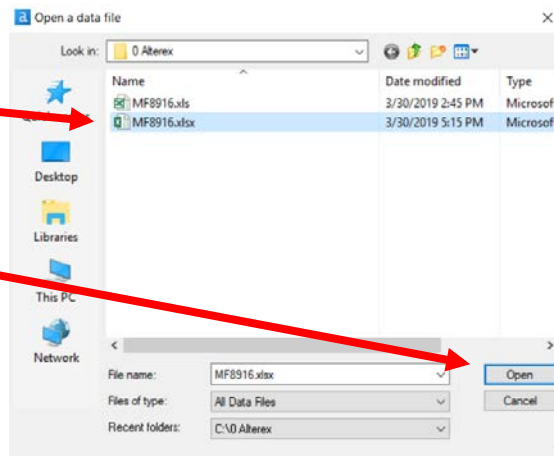
In the Configuration area, select the “Connect a File or Database” drop-down arrow.



Select “File”.



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

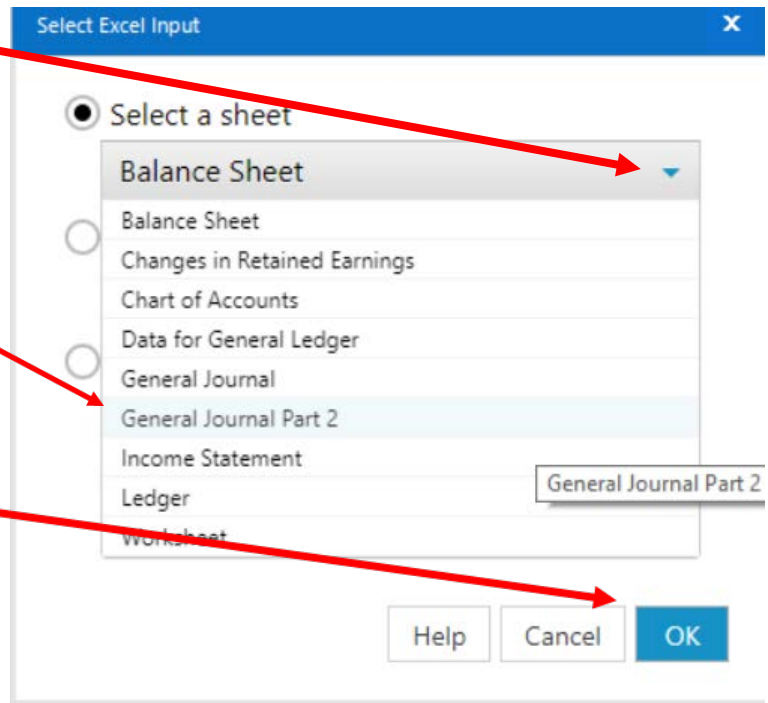


Select “Open”.

Click on the drop-down arrow.

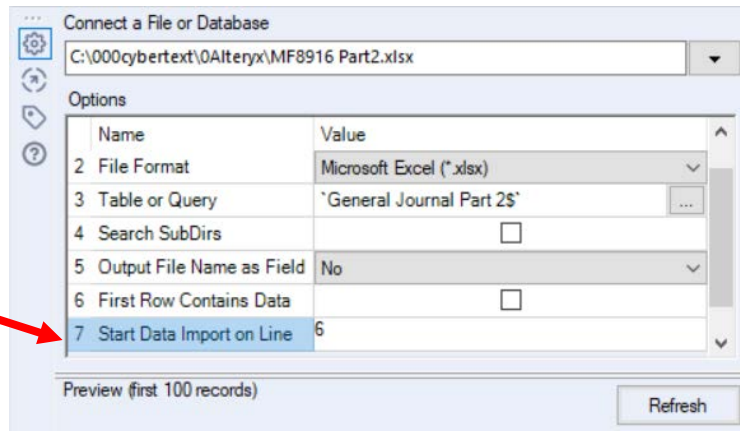
Select General Journal Part 2.

Select OK.



Remember that the field names are in the sixth row.

In the Configuration area, change the number in “Start Data Import on Line” to 6.



Select “Run”.

Select the output connector on the “Input Data Tool”.

The workflow canvas shows several tools connected in a sequence. The 'MF8916 Part2.xlsx' tool is highlighted with a red arrow pointing to its output connector. The 'Run' button in the top right corner is circled in red.

Below the canvas, the 'Results - Input Data (21) - Output' window is displayed, showing a table with 7 fields and 4,130 records displayed.

Record #	M/DD	Trans	Account	Detail	Account Name	Debit	Right Side	F7
1	2018-06-16	09	1120000.0000	G. Washington Invoice 1492	Accounts Receivable	633	[Null]	[Null]
2	2018-06-16	09	4130000.0000	G. Washington Invoice 1492	Repair Service	[Null]	348	[Null]
3	2018-06-16	09	4110000.0000	G. Washington Invoice 1492	Equipment Sales	[Null]	285	[Null]
4	[Null]	[Null]	[Null]	[Null]	[Null]	[Null]	[Null]	[Null]
5	2018-06-16	10	5090000.0000	Invoice 1732	Cost of Goods Sold	161.025	[Null]	[Null]
6	2018-06-16	10	1130000.0000	Invoice 1733	Inventory	[Null]	161.025	[Null]
7	[Null]	[Null]	[Null]	[Null]	[Null]	[Null]	[Null]	[Null]
8	2018-06-16	11	5380000.0000	Salary Expense	Salary	1430.01	[Null]	[Null]
9	2018-06-16	11	2120000.0000	Salary Expense	Payroll Liabilities	[Null]	1430.01	[Null]

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

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

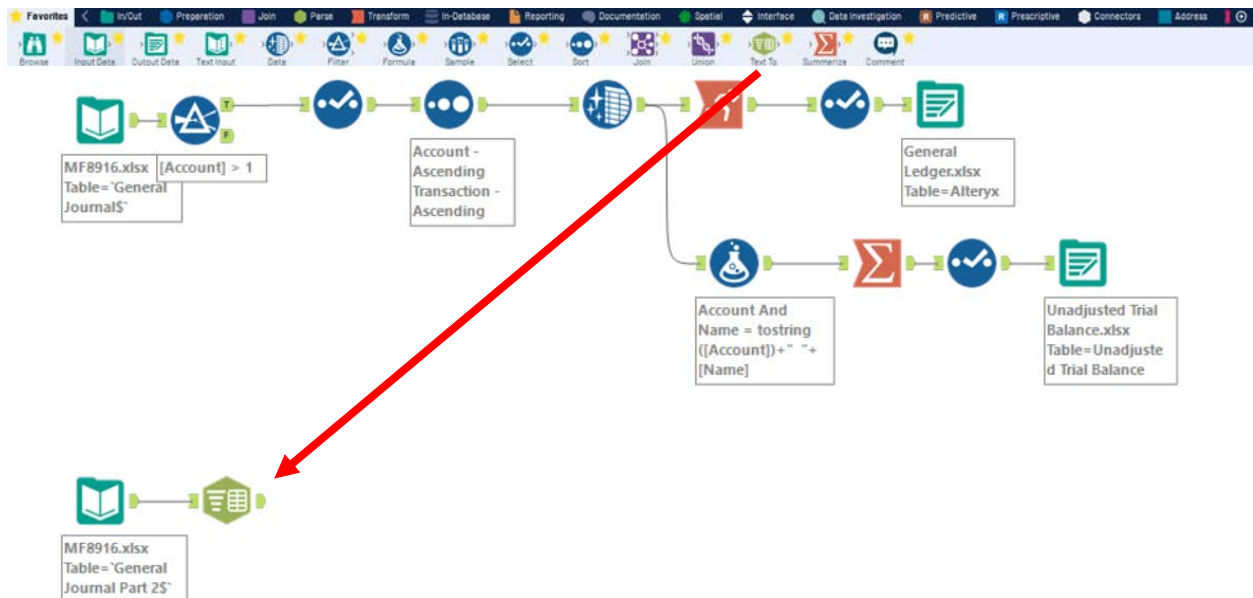
Column B in the source document contains a merged field of the transaction number and the account number separated by spaces. The spaces are referred to as the delimiter. Common delimiters are commas, dashes, and semicolons.

Each space is treated as a separate delimiter.

Therefore, we will convert one field into six fields.

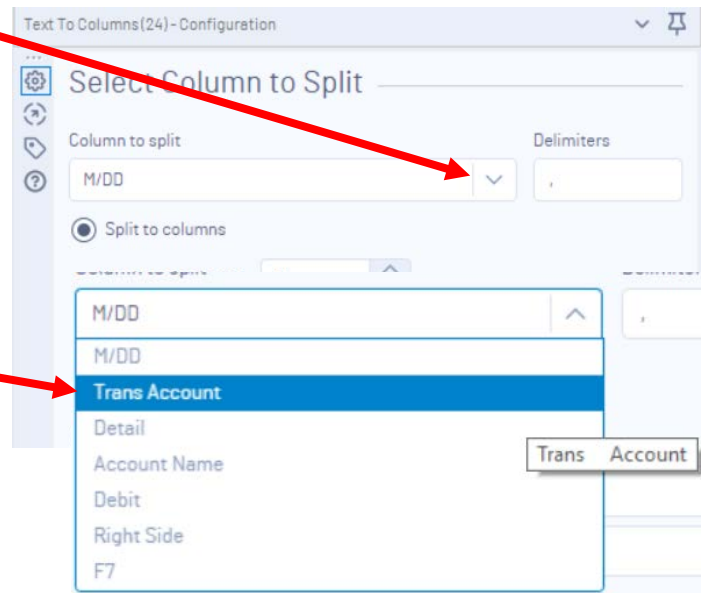
B	
Trans	Account
09	1120000.0000
09	4130000.0000
09	4110000.0000
10	5090000.0000
10	1130000.0000

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.

Select the field “Trans Account”.

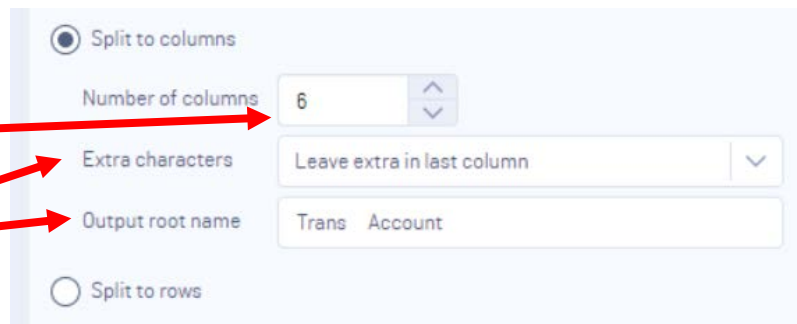


Enter a “space” as the delimiter.

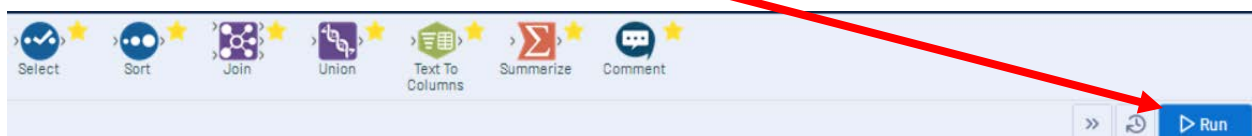


Enter “6” as the number of columns.

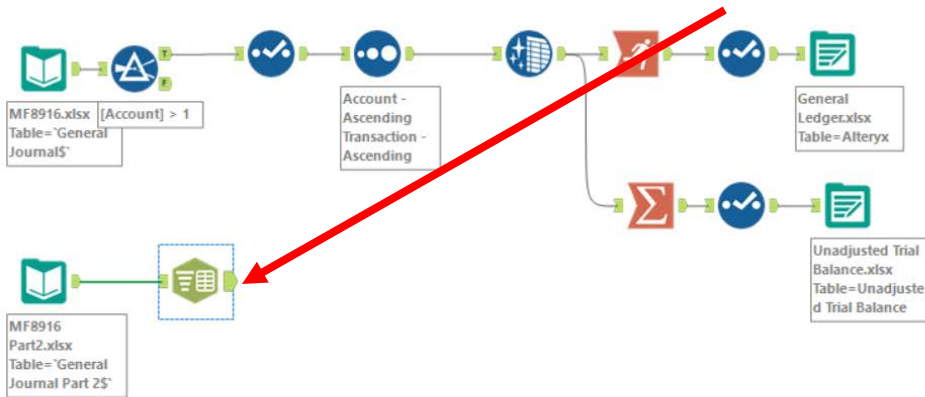
The defaults are OK.



To apply the latest change, select “Run”.



Select the output connector on the **Text To Columns Tool**.

[illegible]

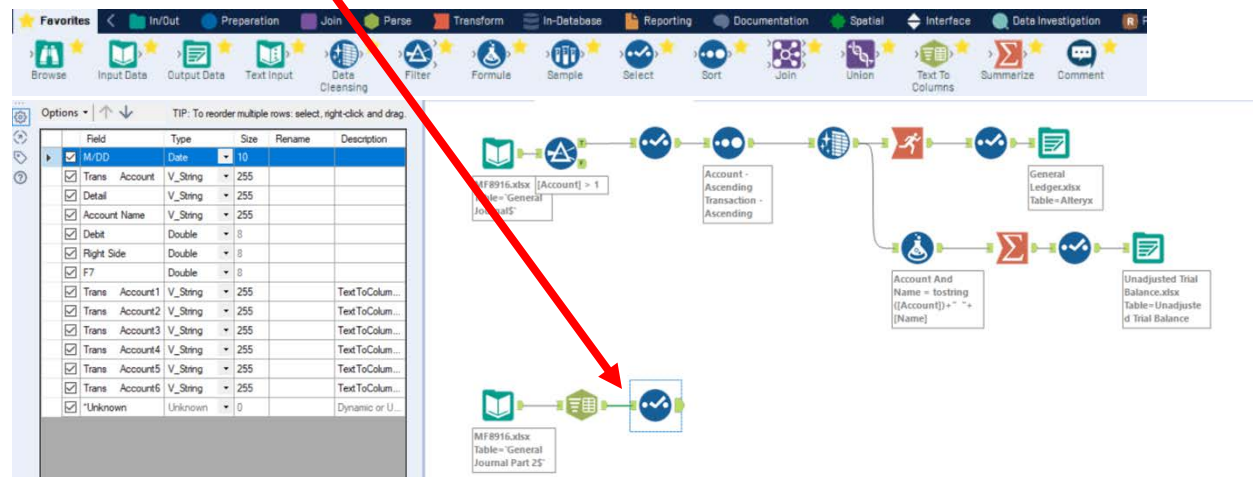
The “Results” window will display the field headings and the data.

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

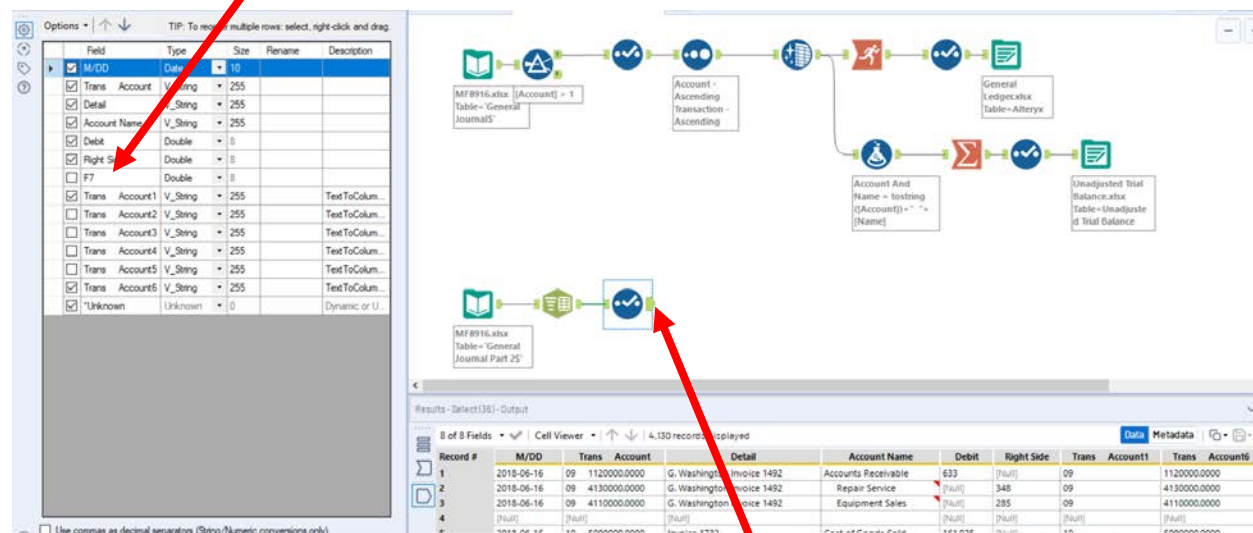
The account number field in the new file will be a seven-digit number; whereas the old file used a four-digit account number therefore, “Trans Account6” will have to be converted.

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.



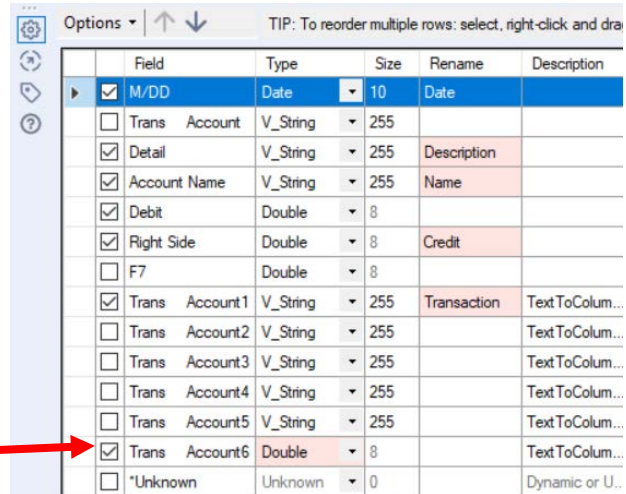
Remove the extra fields, “Trans Account2” - “Trans Account5”, by unchecking them.



Select “Run”.

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

Rename all the fields that do not correspond with the field names in the old file. However, at this time do not rename “Trans Account6” to “Account”. A formula has to be created to convert to the format before the field is renamed.



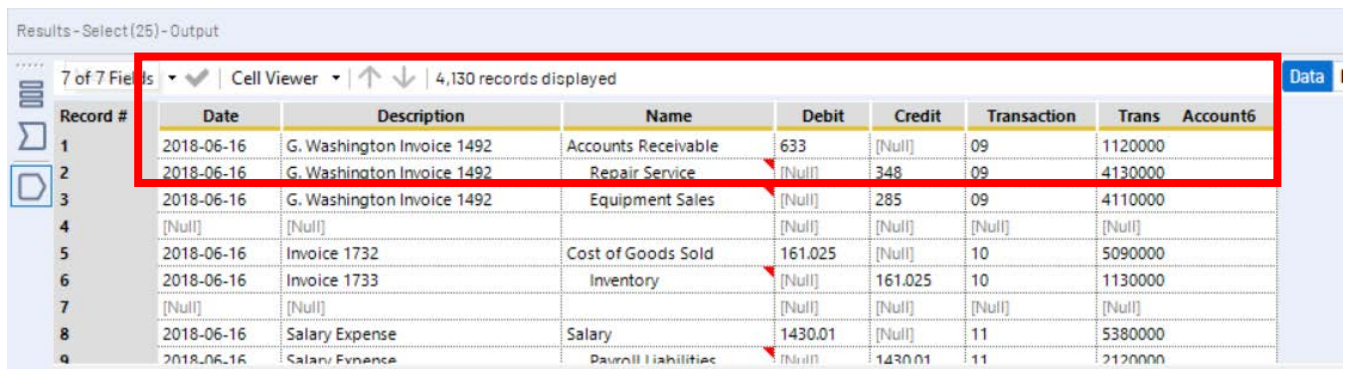
Field	Type	Size	Rename	Description
☒ M/DD	Date	10	Date	
☐ Trans Account	V_String	255		
☒ Detail	V_String	255	Description	
☒ Account Name	V_String	255	Name	
☒ Debit	Double	8		
☒ Right Side	Double	8	Credit	
☐ F7	Double	8		
☒ Trans Account1	V_String	255	Transaction	TextToColum...
☐ Trans Account2	V_String	255		TextToColum...
☐ Trans Account3	V_String	255		TextToColum...
☐ Trans Account4	V_String	255		TextToColum...
☐ Trans Account5	V_String	255		TextToColum...
☒ Trans Account6	Double	8		TextToColum...
☐ *Unknown	Unknown	0		Dynamic or U...

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

Select “Run”.

Then, select the output connector on the “**Select Tool**”.

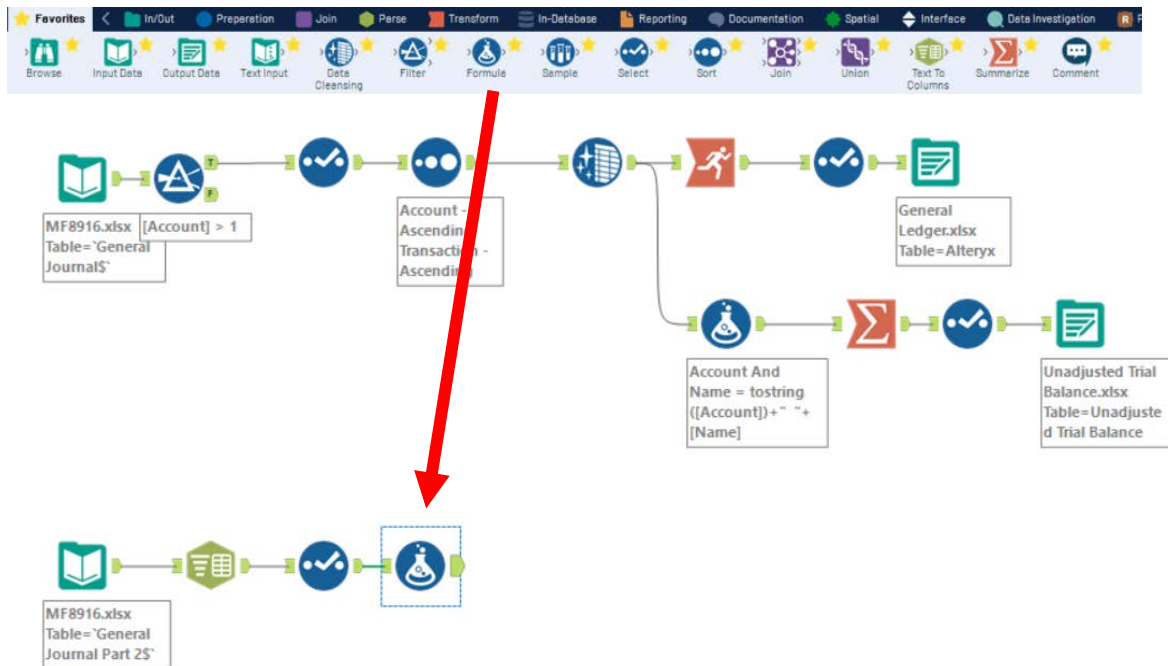
The new field headings are correct.



Record #	Date	Description	Name	Debit	Credit	Transaction	Trans	Account6
1	2018-06-16	G. Washington Invoice 1492	Accounts Receivable	633	[Null]	09	1120000	
2	2018-06-16	G. Washington Invoice 1492	Repair Service	[Null]	348	09	4130000	
3	2018-06-16	G. Washington Invoice 1492	Equipment Sales	[Null]	285	09	4110000	
4	[Null]	[Null]		[Null]	[Null]	[Null]	[Null]	
5	2018-06-16	Invoice 1732	Cost of Goods Sold	161.025	[Null]	10	5090000	
6	2018-06-16	Invoice 1733	Inventory	[Null]	161.025	10	1130000	
7	[Null]	[Null]		[Null]	[Null]	[Null]	[Null]	
8	2018-06-16	Salary Expense	Salary	1430.01	[Null]	11	5380000	
9	2018-06-16	Salary Expense	Payroll Liabilities	[Null]	1430.01	11	2120000	

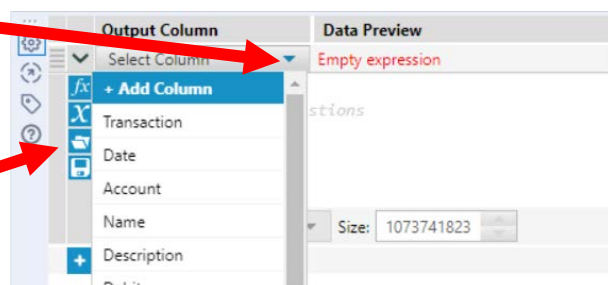
Tool 4: Formula Tool: We now want to convert the new file's seven-digit account number to the old file's four-digit code by dividing it by 1000.

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.

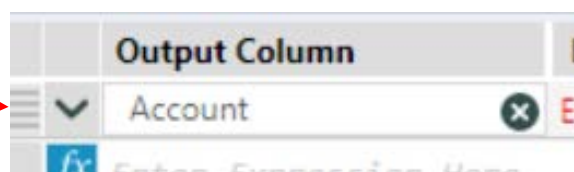


In the “Output Configuration” area,
Select drop-down arrow on the
“Select Column” option.

Select “Add Column”.



Type “Account”.



Type the formula

[Trans Account6]/1000.

Select the drop-down arrow to change the data type.

Select "FixedDecimal".

Change the Scale: (Decimal Places) to "2".

Select "Run".

Select the output connector on the "Formula Tool".

Formula(26) - Configuration

Output Column: Account 1120

Formula: [Trans Account6]/1000

Data type: V_WString

Size: 1073741823

Data type: FixedDecimal

Precision: 19

Scale: 6

Data type: FixedDecimal

Precision: 19

Scale: 2

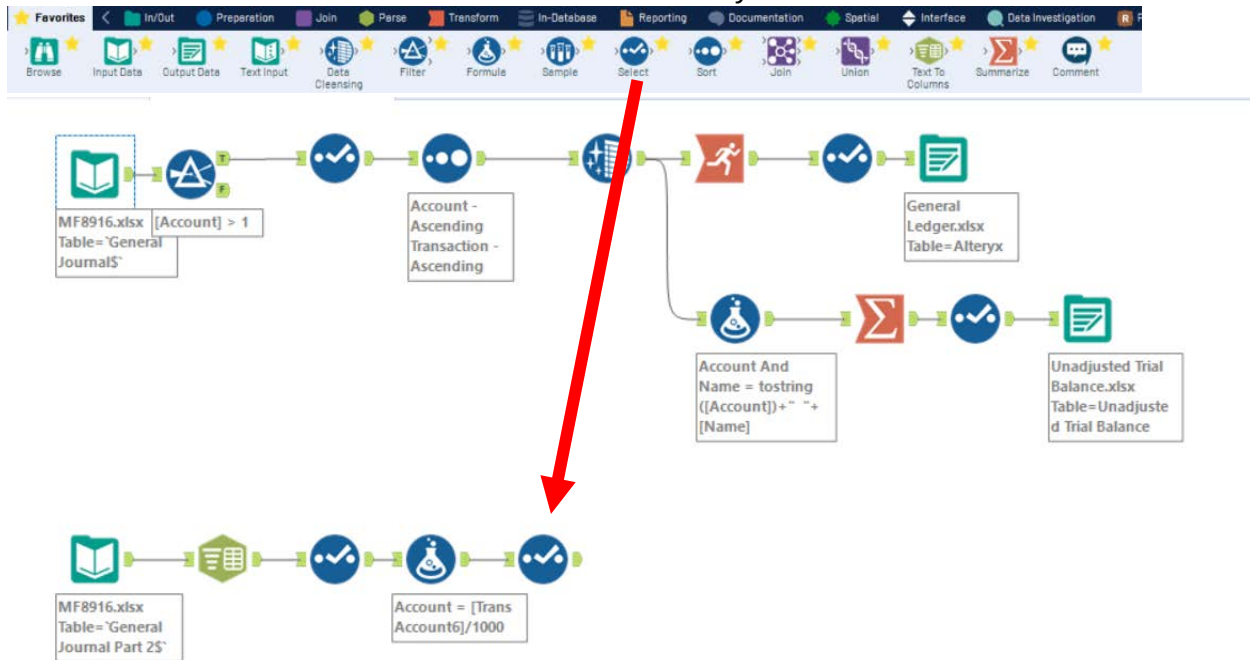
Results - Formula (26) - Output

8 of 8 Fields | Cell Viewer | 4,130 records displayed

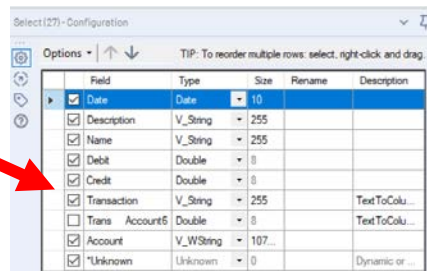
Record #	Date	Description	Name	Debit	Credit	Transaction	Trans	Account6	Account
1	2018-06-16	G. Washington Invoice 1492	Accounts Receivable	633	[Null]	09	1120000	1120	
2	2018-06-16	G. Washington Invoice 1492	Repair Service	[Null]	348	09	4130000	4130	
3	2018-06-16	G. Washington Invoice 1492	Equipment Sales	[Null]	285	09	4110000	4110	
4	[Null]	[Null]		[Null]	[Null]	[Null]	[Null]	[Null]	
5	2018-06-16	Invoice 1732	Cost of Goods Sold	161.025	[Null]	10	5090000	5090	
6	2018-06-16	Invoice 1733	Inventory	[Null]	161.025	10	1130000	1130	
7	[Null]	[Null]		[Null]	[Null]	[Null]	[Null]	[Null]	
8	2018-06-16	Salary Expense	Salary	1430.01	[Null]	11	5380000	5380	
9	2018-06-16	Salary Expense	Payroll Liabilities	[Null]	1430.01	11	2120000	2120	

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.



Uncheck the “Trans Account6” field.



Select “Run”.

Select the output connector on the “**Select Tool**”.

Results - Select(27) - Output

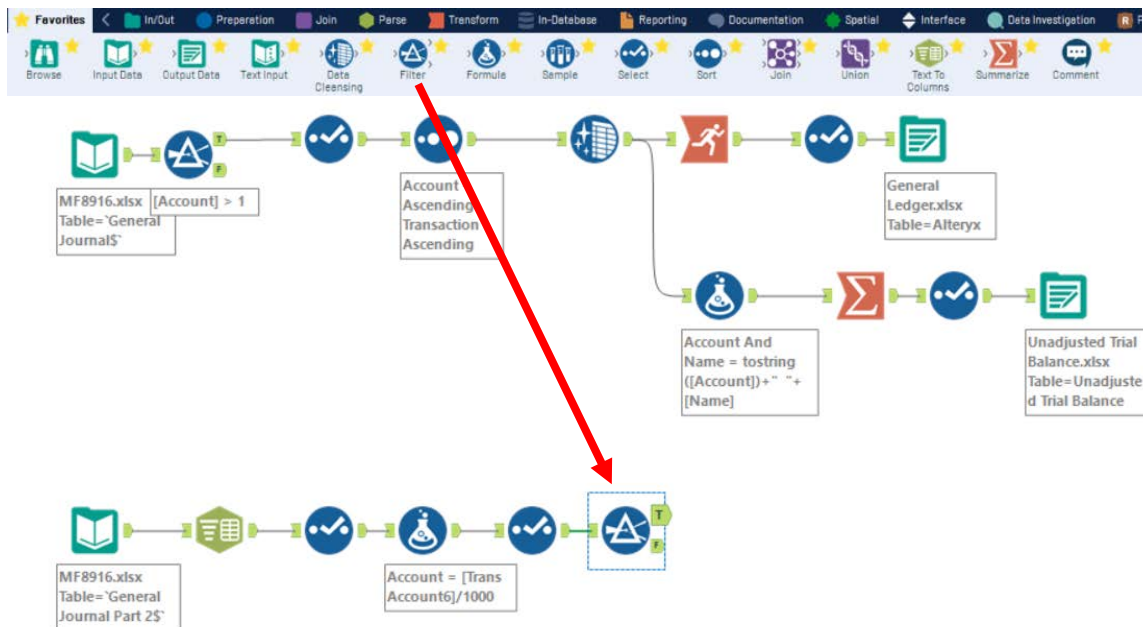
7 of 7 Fields | Cell Viewer | 4,130 records displayed

Record #	Date	Description	Name	Debit	Credit	Transaction	Account
1	2018-06-16	G. Washington Invoice 1492	Accounts Receivable	633	[Null]	09	1120
2	2018-06-16	G. Washington Invoice 1492	Repair Service	[Null]	348	09	4130
3	2018-06-16	G. Washington Invoice 1492	Equipment Sales	[Null]	285	09	4110
4	[Null]	[Null]		[Null]	[Null]	[Null]	[Null]
5	2018-06-16	Invoice 1732	Cost of Goods Sold	161.025	[Null]	10	5090
6	2018-06-16	Invoice 1733	Inventory	[Null]	161.025	10	1130
7	[Null]	[Null]		[Null]	[Null]	[Null]	[Null]
8	2018-06-16	Salary Expense	Salary	1430.01	[Null]	11	5380
9	2018-06-16	Salary Expense	Payroll Liabilities	[Null]	1430.01	11	2120

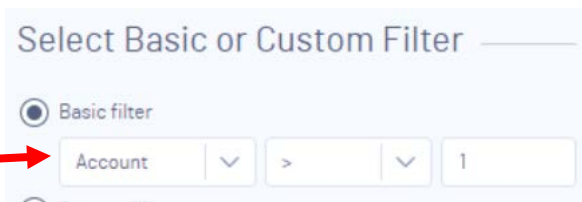
Tool 6: Filter Tool – Remove extra rows

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.



With the “**Filter Tool**” selected, the “Basic” filter in the “Configuration” area can be modified to filter the field “Account” greater than “1”.



To apply the latest change, select “Run”.

Select the True output connector on the “**Filter Tool**”.

Select the “T” in the “Results” area.

7 of 7 Fields | Cell Viewer | 24 records displayed

	Date	Description	Name	Debit	Credit	Transaction	Acc
1	2018-06-16	G. Washington Invoice 1492	Accounts Receivable	633	[Null]	09	1120
2	2018-06-16	G. Washington Invoice 1492	Repair Service	[Null]	348	09	4130
3	2018-06-16	G. Washington Invoice 1492	Equipment Sales	[Null]	285	09	4110
4	2018-06-16	Invoice 1732	Cost of Goods Sold	161.025	[Null]	10	5090
5	2018-06-16	Invoice 1733	Inventory	[Null]	161.025	10	1130
6	2018-06-16	Salary Expense	Salary	1430.01	[Null]	11	5380
7	2018-06-16	Salary Expense	Payroll Liabilities	[Null]	1430.01	11	2120
8	2018-06-16	To Payroll company Chk 6003	Payroll Liabilities	1430.01	[Null]	12	2120
9	2018-06-16	To Payroll company Chk 6003	Cash	[Null]	1430.01	12	1110

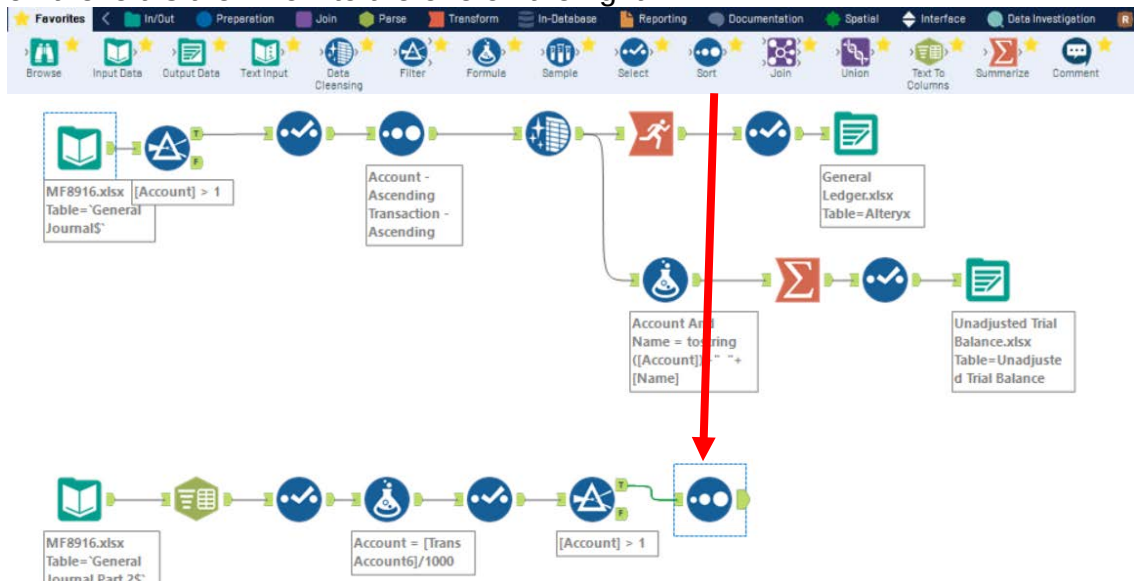
Something is wrong in the “Name” field; 54.17% of the data has leading spaces. We will have to remove the spaces when we remove the “Null”.

		Name	Debit	Credit	Transaction
Accounts	Accounts	Not OK: 54.17%	633	[Null]	1
Repair	Repair	OK: 45.83%	[Null]	348	4
Equipment Sales		This cell has leading spaces.			4
Cost of Goods Sold		161.025	[Null]	10	50
Inventory		[Null]	161.025	10	1
Salary		1430.01	[Null]	11	5
Payroll Liabilities		[Null]	1430.01	11	2
Payroll Liabilities		1430.01	[Null]	12	2
Cash		[Null]	1430.01	12	1

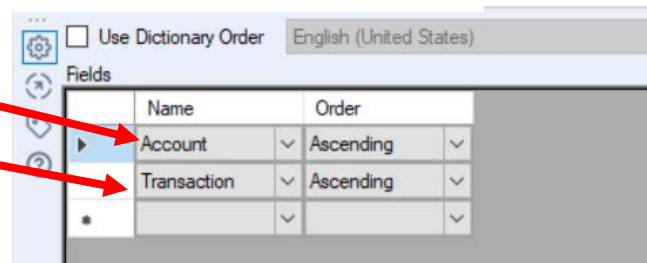
Tool 7: Select Tool – Sort by “Account” and then “Transaction”

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.



Change the sort configuration of “Account” and “Transaction” to “Ascending”.



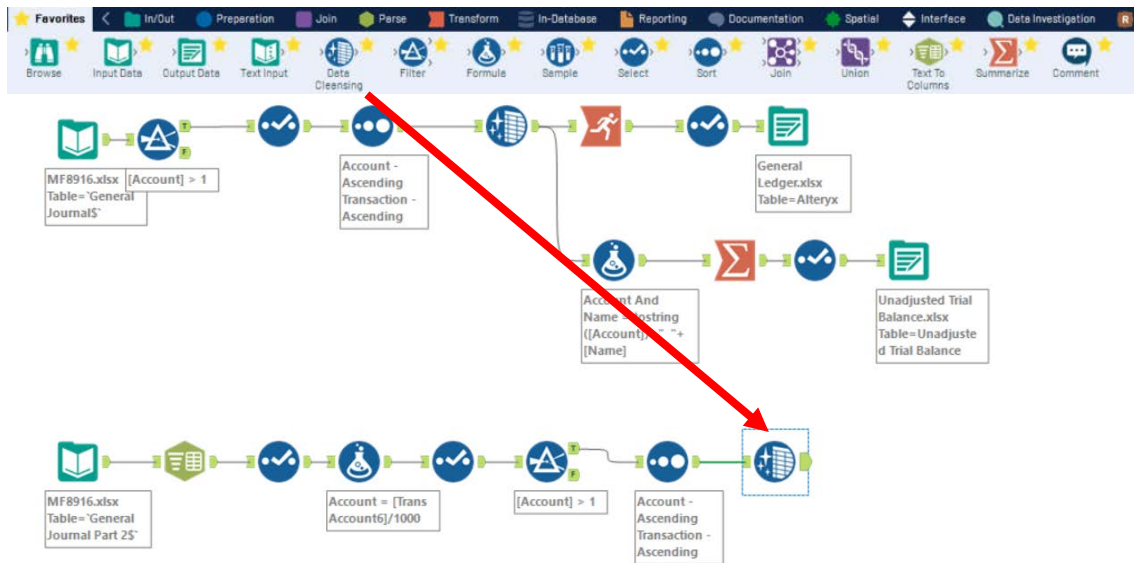
To apply the latest change, select “Run”.
Select the True output connector on the **Filter Tool**.

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. Adams Invoice 1493	Accounts Receivable	350	[Null]	16	1120
9	2018-06-16	Invoice 1733	Inventory	[Null]	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.



Change the configuration, leaving only “Name”, “Debit”, and “Credit” checked.

Select “Replace with 0” on the “Replace Nulls” option.

Remove the unwanted spaces.

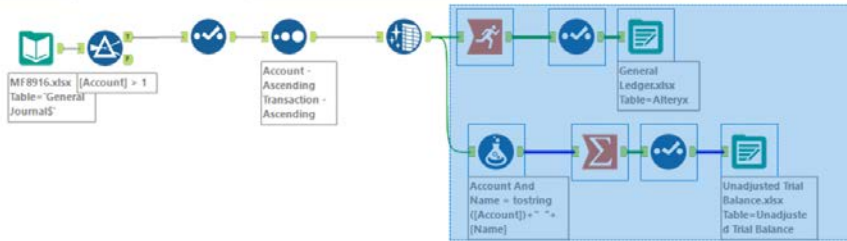
Select “Run”.

Select the output connector on the **Data Cleansing Tool**.

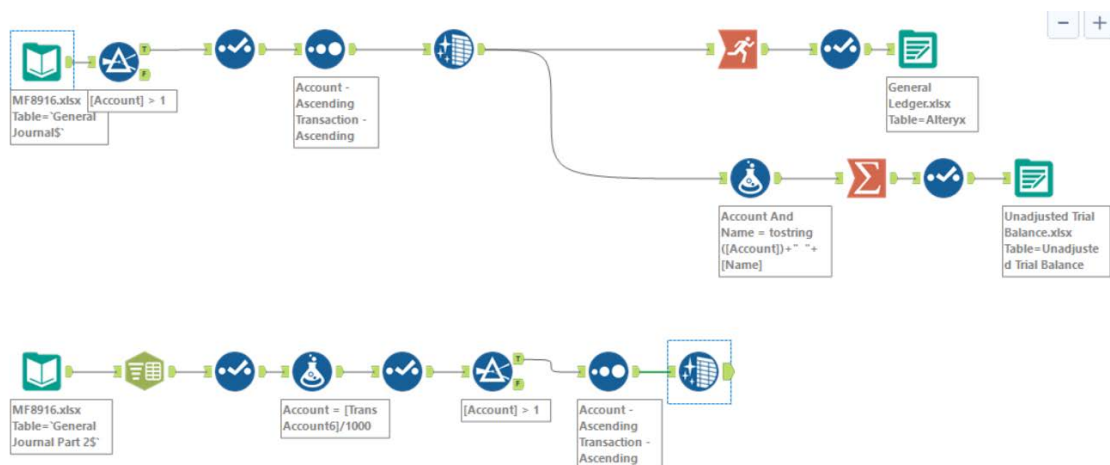
Record #	Date	Description	Name	Debit	Credit	Transaction	Account
1	2018-06-16	To Payroll company Chk 6003	Cash	0	1430.01	12	1110
2	2018-06-21	Receipt Cash Inv # 1732	Cash	633	0	13	1110
3	2018-06-22	Monthly Insurance Chk 6004	Cash	0	326	14	1110
4	2018-06-23	Maint Chk 6005	Cash	0	190	15	1110
5	2018-06-26	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.

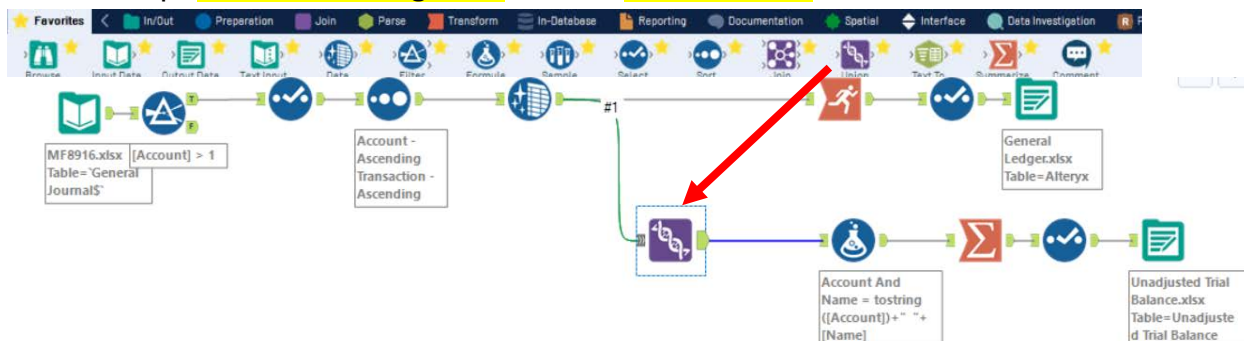
Rearrange the top flow by clicking and dragging a box around the seven tools in the upper-right corner and releasing the mouse.



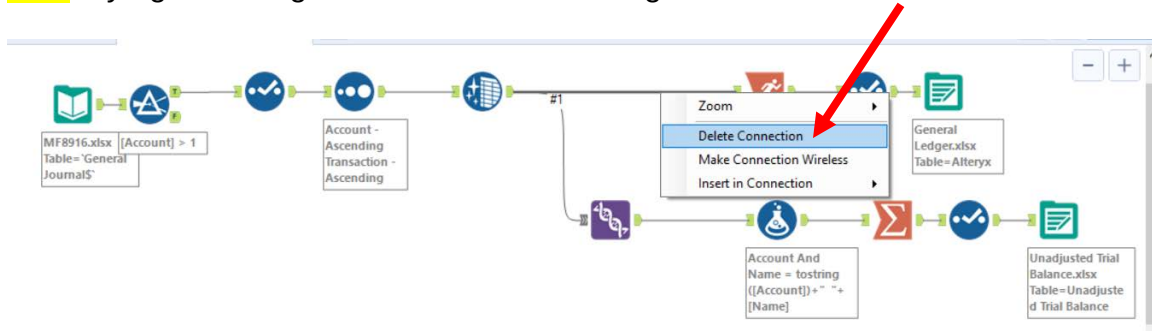
Click the right arrow on the keyboard and the seven tools will move to the right.



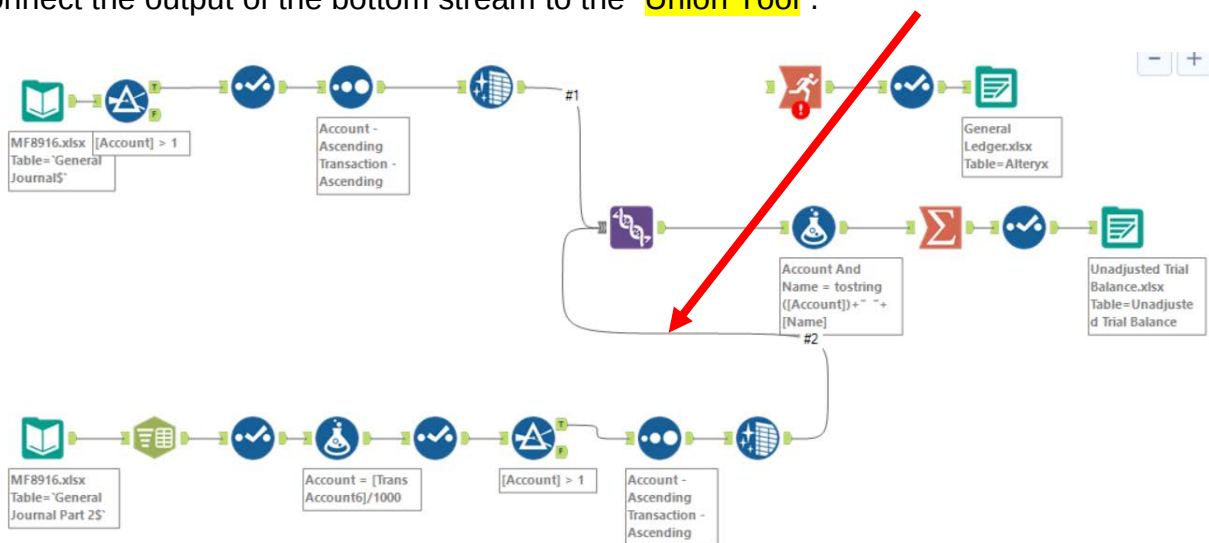
Drag the **“Union Tool”** from the Tools Palette to the position between the path from the top **“Data Cleansing Tool”** to the **“Formula Tool”**.



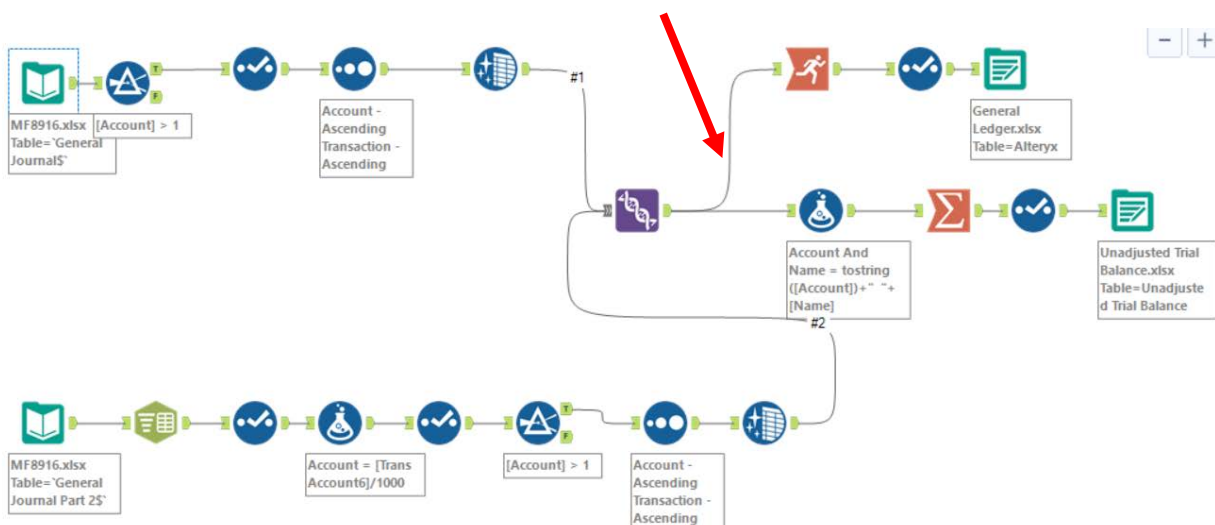
Delete the connection between the top “**Data Cleansing Tool**” and the “**Running Total Tool**” by right clicking on the line and selecting “Delete Connection”.



Connect the output of the bottom stream to the “**Union Tool**”.

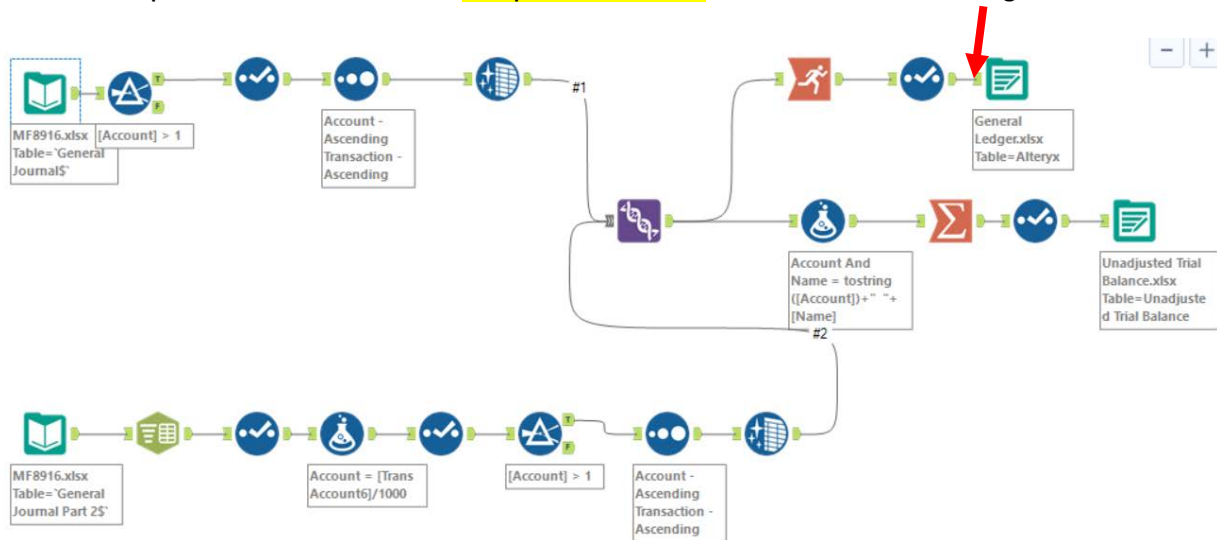


Connect the output of the “**Union Tool**” to the “**Running Balance Tool**”.



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 . . .

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 Lucas Pictures	11000	0	31235
6	1110	Cash	12	2018-06-16	To Payroll company Chk 6003	0	1430.01	31235
7	1110	Cash	13	2018-06-21	Receipt Cash Inv # 1732	633	0	31235
8	1110	Cash	14	2018-06-22	Monthly Insurance Chk 6004	0	326	31235
9	1110	Cash	15	2018-06-23	Maint Chk 6005	0	190	31235
10	1110	Cash	19	2018-06-26	Supplies Chk 5056	0	124	31235
11	1120	Accounts Receivable	09	2018-06-16	G. Washington Invoice 1492	633	0	0
12	1120	Accounts Receivable	13	2018-06-21	Receipt Cash Inv # 1732	0	633	0
13	1120	Accounts Receivable	16	2018-06-24	J. Adams Invoice 1493	350	0	0
14	1130	Inventory	10	2018-06-16	Invoice 1733	0	161.02	0
15	1130	Inventory	17	2018-06-16	Invoice 1733	0	147.84	0
16	1130	Inventory	18	2018-06-25	Purchased Inventory PO # 21021	3350	0	0
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

Select the “Running Balance Tool”.

The screenshot shows the configuration window for the 'Running Total (11)' tool. The window has a title bar 'Running Total (11) - Configuration' with a dropdown arrow and a pin icon. Below the title bar, there are three icons: a gear (selected), a refresh icon, and a help icon. The main area is divided into two sections. The first section is 'Group By (Optional)' with a list of fields: Transaction, Date, Account, Name, and Description. The 'Account' field is checked. To the right of this list are 'All' and 'Clear' buttons. The second section is 'Create Running Total' with a list of fields: Account, Debit, Credit, and Total Balance. The 'Total Balance' field is checked. To the right of this list are 'All' and 'Clear' buttons.

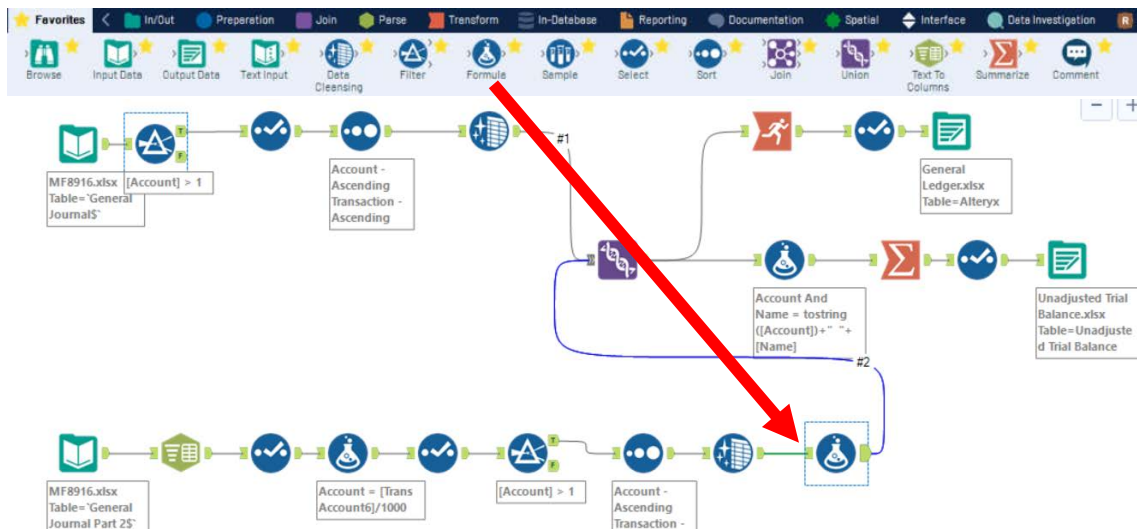
Group By (Optional)	
☐	Transaction
☐	Date
☒	Account
☐	Name
☐	Description

Create Running Total	
☐	Account
☐	Debit
☐	Credit
☒	Total Balance

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

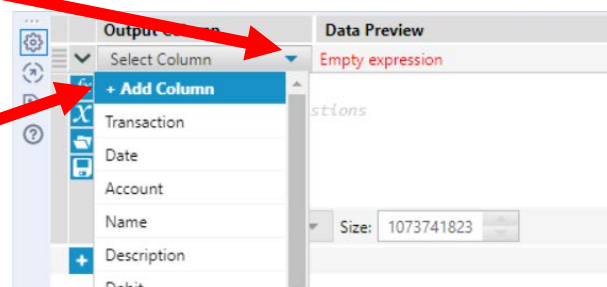
Tool 9: Formula Tool: We need to create a new field in the second stream, “Total Balance”, which will have the following formula: Debit – Credit. This will produce a positive number if it is a debit amount and a negative number if it is a credit amount.

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.

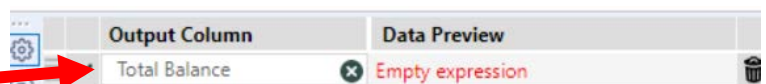


In the “Output Configuration” area, select the drop-down arrow on the “Select Column” option.

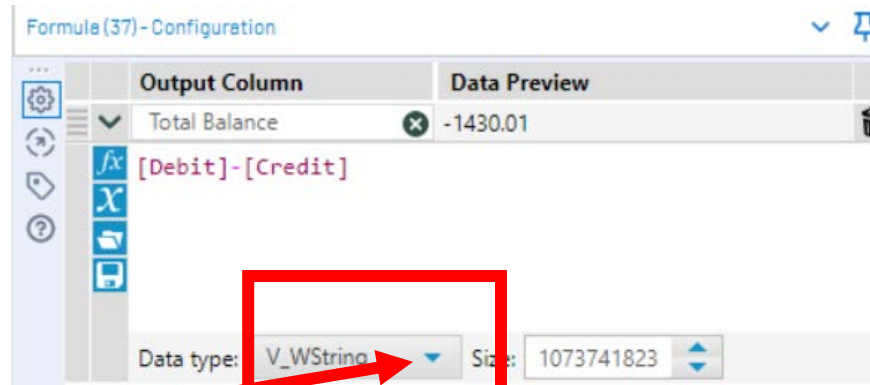
Select “Add Column”.



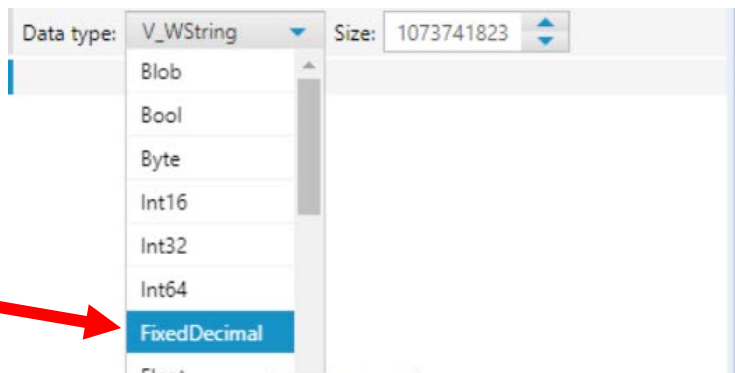
Type the name of the new field
“Total Balance”.



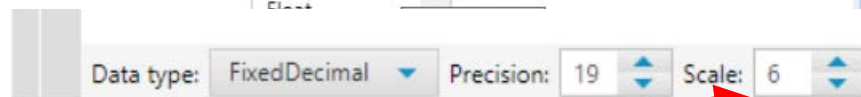
Type the formula
[Debit] - [Credit].



Select the drop-down arrow to
change the data type.



Select "FixedDecimal".

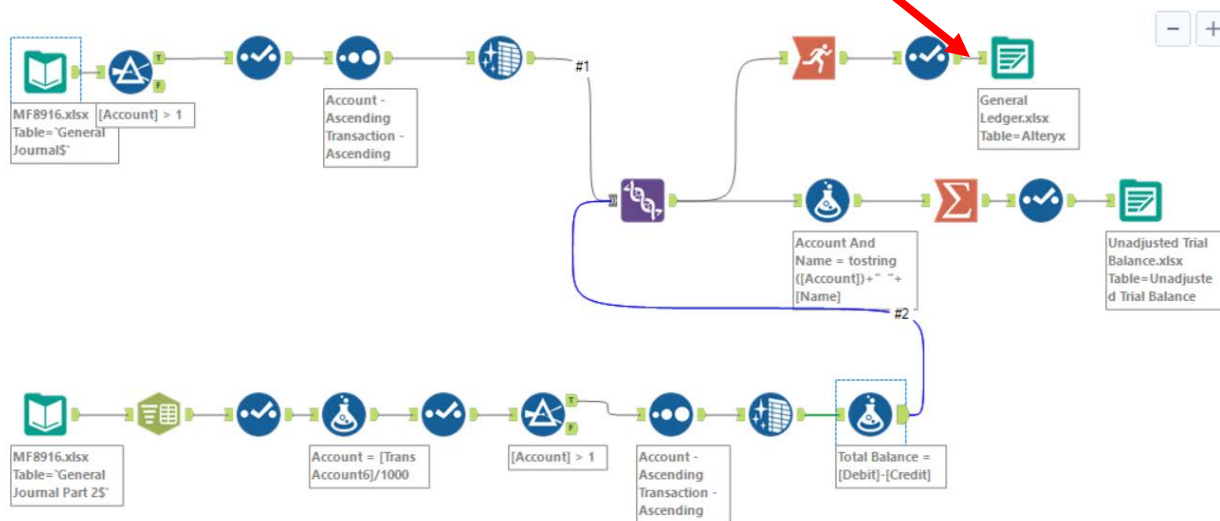


Change the Scale: (Decimal Places) to "2".



Select "Run".

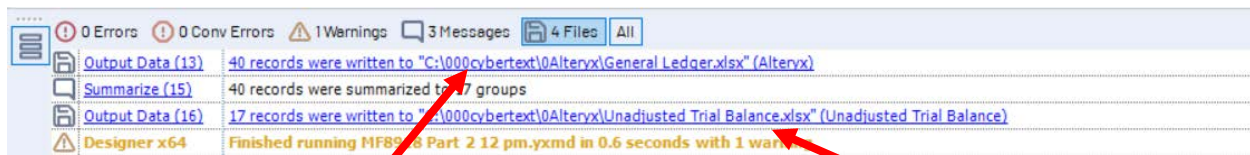
Select the input connector on the "Output Data Tool" for the General Ledger.



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 Lucas 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. Adams 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".



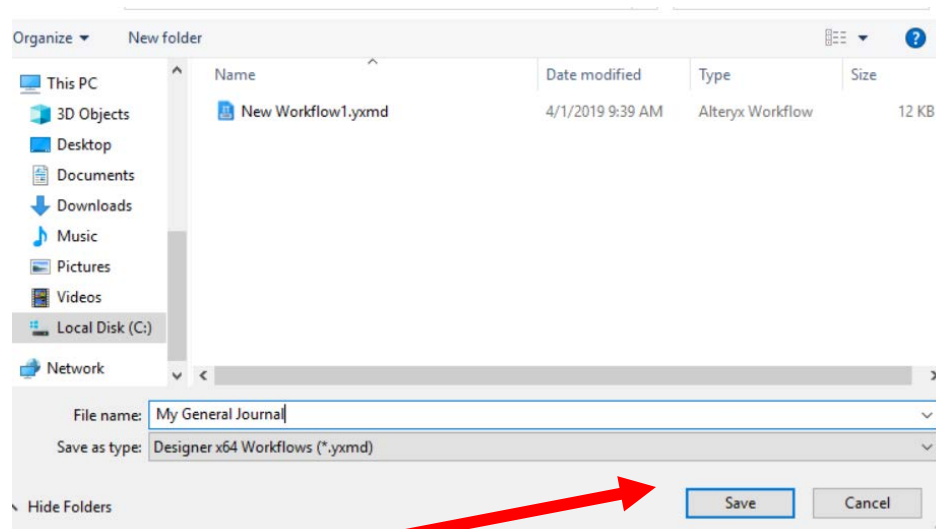
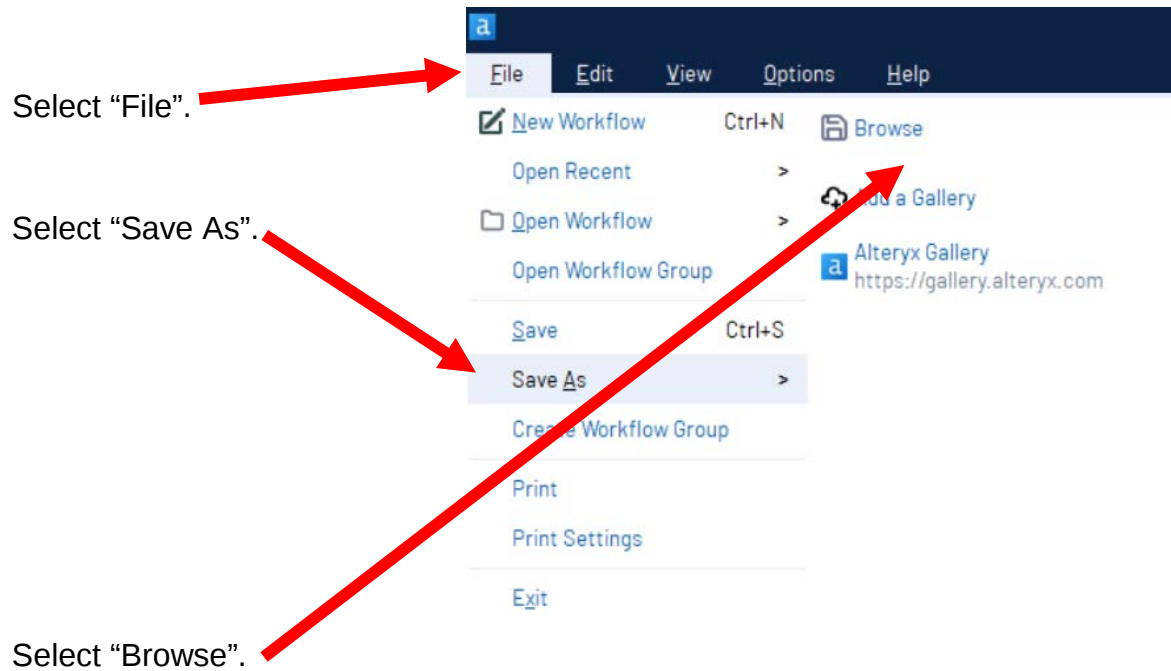
Click and open the Excel Ledger and the Excel Unadjusted Trial Balance.

General Ledger.xlsx...								
File Home Insert Page Layout Formulas Data Review View Developer								
A1								
Account								
A	B	C	D	E	F	G	H	I
Account	Name	Transacti	Date	Descriptio	Debit	Credit	Running Balance	
1110	Cash	1	2018-06-0	Investmer	28000	0	28000	
1110	Cash	3	2018-06-0	Hailey Cor	0	7000	21000	
1110	Cash	5	2018-06-0	Scanner, J	0	125	20875	
1110	Cash	7	2018-06-0	Pd A/p ck	0	640	20235	
1110	Cash	8	2018-06-1	Services pi	11000	0	31235	
1110	Cash	12	2018-06-1	To Payroll	0	1430.01	29805	
1110	Cash	13	2018-06-2	Receipt Ce	633	0	30438	
1110	Cash	14	2018-06-2	Monthly Ir	0	326	30112	
1110	Cash	15	2018-06-2	Maint Chk	0	190	29922	
1110	Cash	19	2018-06-2	Supplies Cl	0	124	29798	
1120	Accounts f	09	2018-06-1	G. Washin	633	0	633	
1120	Accounts f	13	2018-06-2	Receipt Ce	0	633	0	
1120	Accounts f	16	2018-06-2	J. Adans Ir	350	0	350	
1130	Inventory	10	2018-06-1	Invoice 17	0	161.025	-161.02	
1130	Inventory	17	2018-06-1	Invoice 17	0	147.84	-308.86	
1130	Inventory	18	2018-06-2	Purchased	3350	0	3041.14	
1211	Office Equ	2	2018-06-0	Hudson ec	4000	0	4000	
1211	Office Equ	5	2018-06-0	Scanner, J	125	0	4125	
1311	Computer	3	2018-06-0	Hailey Cor	7000	0	7000	
2101	Accounts f	2	2018-06-0	Hudson ec	0	4000	-4000	
2101	Accounts f	4	2018-06-0	Avery Rep	0	725	-4725	
2101	Accounts f	6	2018-06-0	Zac Adver	0	3380	-8105	
2101	Accounts f	7	2018-06-0	Pd A/p ck	640	0	-7465	
2101	Accounts f	18	2018-06-2	Purchased	0	3350	-10815	
2120	Payroll Lia	11	2018-06-1	Salary Exp	0	1430.01	-1430.01	
2120	Payroll Lia	12	2018-06-1	To Payroll	1430.01	0	0	
3100	Capital Stc	1	2018-06-0	Investmer	0	28000	-28000	
4100	Computer	8	2018-06-1	Services pi	0	11000	-11000	
4110	Equipmen	09	2018-06-1	G. Washin	0	285	-285	
4110	Equipmen	16	2018-06-2	J. Adans Ir	0	264	-549	
4130	Repair Ser	09	2018-06-1	G. Washin	0	348	-348	
4130	Repair Ser	16	2018-06-2	J. Adans Ir	0	86	-434	
5030	Advertisin	6	2018-06-0	Zac Adver	3380	0	3380	
5030	Insurance	14	2018-06-2	Monthly Ir	326	0	3706	
5040	Repairs &	4	2018-06-0	Avery Rep	725	0	725	
5080	Supplies	19	2018-06-2	Supplies Cl	124	0	124	
5090	Cost of Go	10	2018-06-1	Invoice 17	161.025	0	161.02	
5090	Cost of Go	17	2018-06-1	Invoice 17	147.84	0	308.86	
5220	Maintenai	15	2018-06-2	Maint Chk	190	0	190	
5380	Salary	11	2018-06-1	Salary Exp	1430.01	0	1430.01	

Unadjusted Trial Bal... Friedman, Mark E.

	A	B
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!