Part 1: Single Stream	1
Part 2: Append the Second Stream	38

# Using Alteryx

ETL software is used to automate the redundant manipulation of data. In this exercise you will use Alteryx to:

# Extract the Data file(s) from Excel

Transform the data

Load the transformed data into Excel

The sales data for *Cuddly Stuffed Animals* are stored in an Excel sheet titled January Sales Data. The column headings are in the ninth row, some rows have partial duplicate data and some rows are blank.

	Α	В	с	D	E	F	G	н	1	J	к
					Cudd	lly Stuffed Anim	als				
					Jai	nuary Sales Data	1				
	Sales Order #	Salesperson #	Salesperson	Title	Profit Margin	Region #	Region	State	Product	# of units	Sales
	33003	1304	wartin van bur	Sales Associate I	1,508.00	3	3000	IN	Starrea noise	744	3,108.00
				L	i				Stuffed Horse		3,168.00
	35006	1302	Grover Clevela	Senior Sales Associate	936.00	1	Midwest	NE	Stuffed Panda	72	1,656.00
									Stuffed Panda		1,656.00
	35009	1301	Thomas leffors	Sales Associate I	2,028.00	2	Northeast	PA	Stuffed Panda	156	3,588.00
,	33009	1301	momas seriers	coales Associate i	2,028.00	2	Northeast	PA	Stuffed Panda	150	5,568.00
					2.028.00				Stuffed Pallua		
	35011	1305		sales Associate i	1,500.00	1	widwest	IVIN	Sturred Panda	120	2,700.00
	00011	1505	George Washing	fource Associate 1	1,560.00	-	marcor		Stuffed Panda	120	2,700.00
					2,000100				otaricaranaa		
	35014	1303	Ulysses Grant	Senior Sales Associate	1,215.00	1	Midwest	MN	Stuffed Giraffe	108	2,268.00
3					1,215.00				Stuffed Giraffe		,
	35017	1305	George Washin	Sales Associate I	708.00	2	Northeast	RI	Stuffed Elephant	48	1,200.00
5			-		708.00				Stuffed Elephant		
	35025	1303	Ulysses Grant	Senior Sales Associate	1,272.00	2	Northeast	ME	Stuffed Horse	96	2,112.00
•									Stuffed Horse	96	
)											
1	35026	1301	Thomas Jeffers	Sales Associate I	1,716.00	4	West	WY	Stuffed Penguin	156	3,120.00
2									Stuffed Penguin		3,120.00
3											
4	35027	1301	Thomas Jeffers	Sales Associate I	1,215.00	4	West	CA	Stuffed Giraffe	108	2,268.00
5									Stuffed Giraffe		2,268.00
5											
7	35032	1303	Ulysses Grant	Senior Sales Associate	1,584.00	1	Midwest	NE	Stuffed Penguin	144	2,880.00
									Stuffed Penguin	144	
4	Interpretation	roduction Ja	nuary Sales Data	Products Salesp	erson Region	+					

### Sample Reports

Product	Units	Sales	Profit Margin	Salesperson	Units	Sales	Profit Margin
Stuffed Elephant	4,392	\$109,800.00	\$ 64,782.00	1301 - Thomas Jefferson	9,528	\$210,000.00	\$119,466.00
Stuffed Giraffe	8,052	\$169,092.00	\$ 90,585.00	1302 - Grover Cleveland	7,128	\$162,276.00	\$ 92,601.00
Stuffed Horse	12,120	\$266,640.00	\$160,590.00	1303 - Ulysses Grant	4,116	\$ 90,168.00	\$ 51,294.00
Stuffed Panda	7,488	\$172,224.00	\$ 97,344.00	1304 - Martin Van Buren	4,476	\$ 98,388.00	\$ 56,247.00
Stuffed Penguin	5,016	\$100,320.00	\$ 55,176.00	1305 - George Washington	10,452	\$232,536.00	\$133,557.00
Stuffed Unicorn	3,060	\$ 73,440.00	\$ 40,545.00	1306 - John Tyler	4,428	\$ 98,148.00	\$ 55,857.00
Total	40,128	\$891,516.00	\$509,022.00	Total	40,128	\$891,516.00	\$509,022.00

#### Start Alteryx

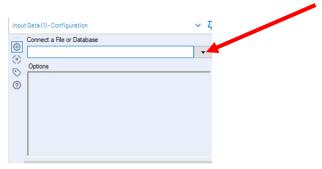
Note: You cannot extract data from an open Excel file so make sure that the Excel file is closed before starting to input the data.

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.

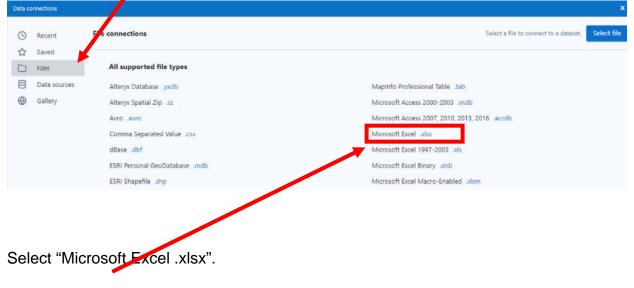
### Tool 1: Input Data Tool – Input Excel file

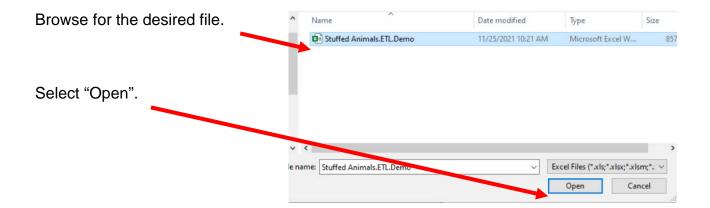
Drag the " <mark>Input Data Tool</mark> '		Tools Palette to the Canvas	Run
	rm in-Database Peporting Decumentation Especting Sectors		ctors 📜 Address 🔰 ⊙ 🗦
Input Deta(1)- Configuration v 其	New Workflow1* × +		» 🔊 🕨 Run
Configuration Configuration Refresh Refresh Refresh		CANVAS	-+
	Results - Input Data (1) - Output		✓ 及 Metadata   心・治・一・
	Call Viewer * 17 V	Results Window	

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



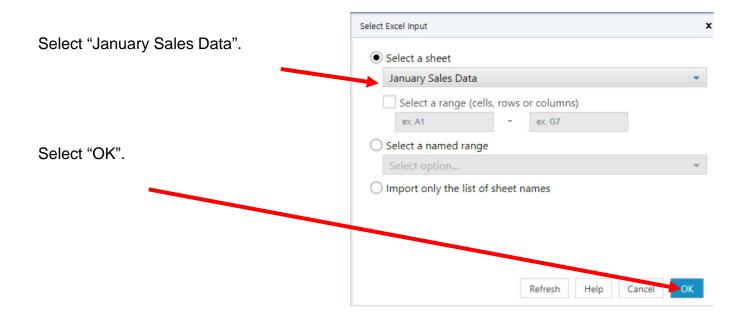
#### Select "File".



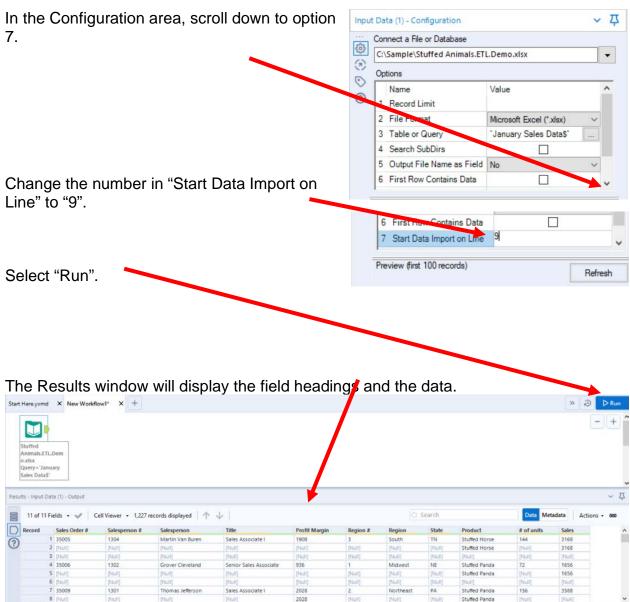


Alteryx CSA Single Stream

Select the drop-down.	Select Excel Input	×
	• Select a sheet	
	February-December Sales Data	*
	Select a range (cells, rows or columns)	
	ex. A1 – ex. G7	
	Select a named range	
	Select option	
	Import only the list of sheet names	
	Refresh Help Ca	ncel OK

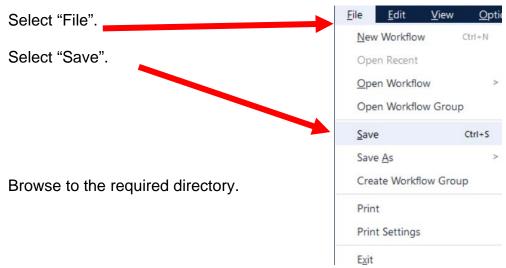


Remember that the field names are in the nineth row.

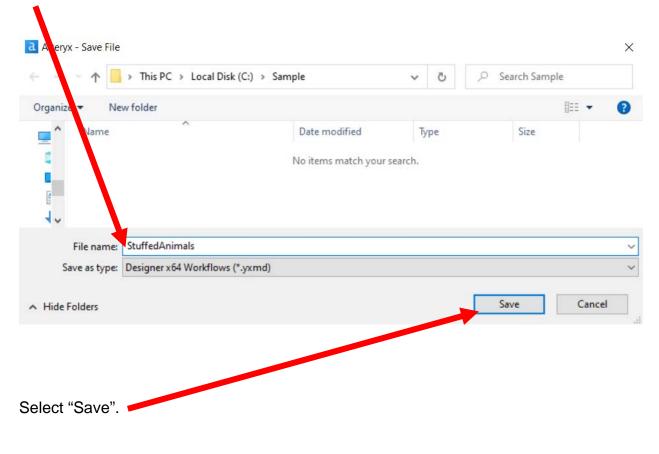


Alteryx CSA Single Stream

## The workflow must be saved.



Type in the name of the file that will be uploaded.



# Export the workflow and the related input files so that the project can be completed on another computer or uploaded to the web.

	Option	ns <u>H</u> elp ⊕	
	Run	Workflow	CtrI+R
	Sche	dule Workflow	
Select "Options".	View	/ Schedules	
	Run	Analytic Apps	
	Expo	ort Workflow	
	<u>M</u> ar	age Licenses	
Select "Export Workflow".	Man	age Connect Credentia	ls
	Add	Promote Connection	
	<u>U</u> ser	Settings	>
	Adv	anced Options	>
	Dow	nload Predictive Tools	
	Export Workflow Export Settings		x
	Workflow		
Verify the "Workflow".	StuffedAnimals.yxmd		Lock
	Package Location C:\Sample\StuffedAnimals.yxzp		Browse
Verify the "Package Location".			
	Group assets by tool		21 - E
	Croup asses by tool		Undo changes
	C:\Sample\Stuffed Anim	als.ETL.Demo.xlsx	Undo changes
		als.ETL.Demo.xlsx	Undo changes
Select "Save".		als.ETL.Demo.xlsx	Undo changes

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

There are several rows that do not contain an sales order 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.

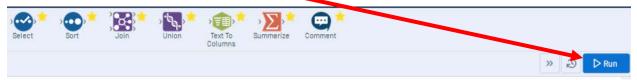
Drag the "**Filter Tool**" from the Tools Palette to the right of the "Input Data Tool" on the Canvas. The two will be connected automatically. The outflow from the tool on the left is the inflow to the one on the right.

📩 Favori	tes <	🛅 In/Out 🛛 🔵	Preparation	Join 🌔 Par	se 📜 Transform	📄 In-Detebase	Reporting	l 🔍 🔵 Docun	nentation	Spatial	🔶 Interface	🔍 Data ir	ivestigation	R
Browse	Input	Data Output Dat	ta Text Input	Data Cleansing	Filter Formula	s Semple	Select	Sort *	Join	Union *	Text To Columns	> De summerize	Comment	
0 ( ) ( ) ( )	_	Basic filte Select c Custom fi	r :o   ~ ilter	) =	tom Fi			o.xlsx	s.ETL.Do	em	F			

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

(B)	Se	lect Bas	ic o	r Cus	tom I	ilter	
õ	۲	Basic filter					
3		Sales Or	$\sim$	>	~	1	
	0	Custom filter					

To apply the latest change, select "Run".



We can view three different datasets in the Results window.

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

a 11	of 11 Fields 🔹 🥪	Cell Viewer + 409 rec	cords displayed 🛛 🛧 🚽						Search		Data Met
Rec	ord Sales Order #	Salesperson #	Salesperson	Title	Profit Margin	Region #	Region	State	Product	# of units	Sales
-	1 35005	1304	Martin Van Buren	Sales Associate I	1908	3	South	TN	Stuffed Horse	144	3168
	2 35006	1302	Grover Cleveland	Senior Sales Associate	936	1	Midwest	NE	Stuffed Panda	72	1656
EX	3 35009	1301	Thomas Jefferson	Sales Associate I	2028	2	Northeast	PA	Stuffed Panda	156	3588
2	4 35011	1305	George Washington	Sales Associate I	1560	1	Midwest	MN	Stuffed Panda	120	2760
?	5 35014	1303	Ulysses Grant	Senior Sales Associate	1215	1	Midwest	MN	Stuffed Giraffe	108	2268
-	6 35017	1305	George Washington	Sales Associate I	708	2	Northeast	RI	Stuffed Elephant	48	1200
	7 35025	1303	Ulysses Grant	Senior Sales Associate	1272	2	Northeast	ME	Stuffed Horse	96	2112
	8 35026	1301	Thomas Jefferson	Sales Associate I	1716	4	West	WY	Stuffed Penguin	156	3120
	9 35027	1301	Thomas Jefferson	Sales Associate I	1215	4	West	CA	Stuffed Giraffe	108	2268
	10 35032	1303	Ulysses Grant	Senior Sales Associate	1584	1	Midwest	NE	Stuffed Penguin	144	2880

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

吕 11 of	11 Fields 🔹 🖋 🛛 🗘	Cell Viewer 👻 818 rec	ords displayed	$\land \downarrow  $						Q Search	
Record	Sales Order #	Salesperson #	Salesperson	Title	Profit Margin	Region #	Region	State	Product	# of units	Sale
-	1 [Null]	[Null]	[Null]	[Null]	[Null]	[Null]	[Null]	[Null]	Stuffed Horse	[Null]	3168
T	2 [Null]	[Null]	[Null]	[Null]	[Null]	[Null]	[Null]	[Null]	[Null]	[Null]	[Null
E)	3 [Null]	[Null]	[Null]	[Null]	[Null]	[Null]	[Null]	[Null]	Stuffed Panda	[Null]	1656
	4 [Null]	[Null]	[Null]	[Null]	[Null]	[Null]	[Null]	[Null]	[Null]	[Null]	[Null
?)	5 [Null]	[Null]	[Null]	[Null]	2028	[Null]	[Null]	[Null]	Stuffed Panda	[Null]	[Null
-	6 [Null]	[Null]	[Null]	[Null]	[Null]	[Null]	[Null]	[Null]	[Null]	[Null]	[Null
	7 [Null]	[Null]	[Null]	[Null]	1560	[Null]	[Null]	[Null]	Stuffed Panda	[Null]	[Null
	8 [Null]	[Null]	[Null]	[Null]	[Null]	[Null]	[Null]	[Null]	[Null]	[Null]	[Null
	9 [Null]	[Null]	[Null]	[Núll]	1215	[Null]	[Null]	[Null]	Stuffed Giraffe	[Null]	[Null
	10 [Null]	[Null]	[Null]	[Null]	[Null]	[Null]	[Null]	[Null]	[Null]	[Null]	[Null

The data being filtered can also be displayed.

冒 11 of	11 Fields 🔹 🕪 🗍 C	ell Viewer 🔹 1,227 r	ecords displayed 🛛 🛧	4					Search		Data Meta
Recor	Sales Order #	Salesperson #	Salesperson	Title	Profit Margin	Region #	Region	State	Product	# of units	Sales
	1 35005	1304	Martin Van Buren	Sales Associate I	1908	3	South	TN	Stuffed Horse	144	3168
	2 [Null]	[044411]	(1460)	(Null)	(Neutr)	[NuN]	[Null]	[Noull]	Stuffed Horse	[NuH]	3168
E	3 [Null]	[NoII]	(Nuti)	(Nu0)	pion	(Null)	[Null]	[NuRI]	[[Null]	[Null]	(NoII)
2	4 35006	1302	Grover Cleveland	Senior Sales Associate	936	1	Midwest	NE	Stuffed Panda	72	1656
(?)	S [Null]	[Noul1]	[Null]	(NUU)	[1408]	[N60]	[Null]	[Null]	Stuffed Panda	[[Nu01]	1656
-	6 [Null]	[[Null]	(Null)	[Null]	[Null]	[Null]	[Nu0]	[Null]	(Null]	[Null]	[Null]
	7 35009	1301	Thomas Jefferson	Sales Associate I	2028	2	Northeast	PA	Stuffed Panda	156	3588
	8 [Null]	[Péuhi]	(1444)	(No)(F)	2028	(Null)	[Pduff]	(14061)	Stuffed Panda	[Péuli]	[[Pauel]
	9 [Null]	(Null)	(Null)	(Neuli)	(Null)	[Null]	[Null]	[Null]	[Null]	[Null]	(Null)
	10 35011	1305	George Washington	Sales Associate I	1560	1	Midwest	MN	Stuffed Panda	120	2760

# Tool 3: Select Tool – Remove fields that contain no data, from "\*Unknown"

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.

Favo	orites	<	In/Out	Preparation	-			rensform 📄 In-Detabase	
Browse			t Data Output Da			Data Cleansing		Formule	Seter Sort Join Union Text To Columns
5 0	Opti	ions		TIP: 1 Type	To re	order mi Size	ultiple rows: sel	ect, right-click and drag	
5	*			A CONTRACTOR OF THE OWNER OWNER OF THE OWNER		8	Hename	Description	
			Salesperson #		_	8			Stuffed [Sales Order #] >
			Salesperson	V_String		255			Animals.ETL.Dem 1
			Title	V_String	•	255			Query=`January
			Profit Margin	Double	٠	8			Sales Data\$`
			Region #	Double	•	8			
			Region	V_String	•	255			
		$\square$	State	V_String	•	255			
			Product	V_String	•	255			
		$\square$	# of units	Double	•	8			
		$\square$	Sales	Double	•	8			
		$\square$	*Unknown	Unknown		0		Dynamic or Unk	

Remove any extra fields by unchecking them.

	Select (4)	- Con	figuration					~ <b>ट्</b>
[	6400	tions	•   <b>↑</b> ↓		To rea			ect, right-click and drag
	3	_	Field	Туре	_	Size	Rename	Description
	0		Sales Order #	Double	•	8		
	0		Salesperson #		•	8		
			Salesperson	V_String	•	255		
		$\square$	Title	V_String	•	255		
		$\square$	Profit Margin	Double	•	8		
		$\square$	Region #	Double	-	8		
			Region	V_String	-	255		
		$\checkmark$	State	V_String	•	255		
			Product	V_String	-	255	2	
			# of units	Double	-	8		
			Sales	Double	•	-		(
			*Unknown	Unknown				Dynamic or Unk

Change the type of all numeric fields that will be used in calculations to "FixedDecimal". The "# of units should have zero decimal places and dollar values should have two decimal places.

op	tions	•  <b>↑</b> ↓	TIP: To re	eord	er mul
		Field	Туре		Size
•	$\square$	Sales Order #	Double	•	8
	$\checkmark$	Salesperson #	Double	•	8
	$\checkmark$	Salesperson	V_String	•	255
	$\checkmark$	Title	V_String	•	255
		Profit Margin	FixedDecimal	•	19.2
	$\checkmark$	Region #	Double	•	8
	$\checkmark$	Region	V_String	•	255
		State	V_String	•	255
	$\checkmark$	Product	V_String	•	255
	$\checkmark$	# of units	FixedDecimal	•	19.0
	$\checkmark$	Sales	FixedDecimal	•	19.2
		*Unknown	Unknown	•	0

## Before making changes:

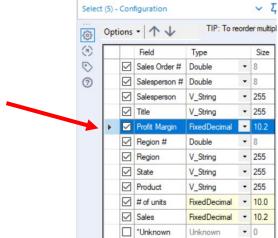
11 of 1	1 Fields 🔹 🕪	Cell Viewer 🝷 409 records displayed 🛛 1 🧄				0	Search	Data N	Data Metadata Actions -		
Record	)rder #	Salesperson #	Salesperson	Title	Profit Margin	Region #	Region	State	Product	# of units	Sales
	1	1304	Martin Van Buren	Sales Associate I	1908	3	South	TN	Stuffed Horse	144	3168
	2	1302	Grover Cleveland	Senior Sales Associate	936	1	Midwest	NE	Stuffed Panda	72	1656
	3	1301	Thomas Jefferson	Sales Associate I	2028	2	Northeast	PA	Stuffed Panda	156	3588
	4	1305	George Washington	Sales Associate I	1560	1	Midwest	MN	Stuffed Panda	120	2760
	5	1303	Ulysses Grant	Senior Sales Associate	1215	1	Midwest	MN	Stuffed Giraffe	108	2268
	6	1305	George Washington	Sales Associate I	708	2	Northeast	RI	Stuffed Elephant	48	1200
	7	1303	Ulysses Grant	Senior Sales Associate	1272	2	Northeast	ME	Stuffed Horse	96	2112
	8	1301	Thomas Jefferson	Sales Associate I	1716	4	West	WY	Stuffed Penguin	156	3120

## Select Run.

Select the output area of the Select tool.

tart H	lere.yxmd	× StuffedAnimals		+							» é	D D Ri - +
Ai Qi	uffed nimals.ETL.De xtsx uery="Januar ales Data\$"		r#] >									
	i - Select (5) - 1		Viewer • 409	9 records displayed	↑ J.			Search		Data M	fetadata Act	v
	11 of 11 Field	ds • 🛷   Cell		9 records displayed			-	) Search	00000	Data		ions - 000
	11 of 11 Field	ds • 🛷   Cell der# Salesp		Salesperson	Title	Profit Margin	Region #	Region	State	Product	# of units	ions - 000 Sales
	11 of 11 Field	ds • 🖋   Cell der # Salesp 1304	erson #	Salesperson Martin Van Buren	Title Sales Associate I	1908.00	-	Region South	TN	Product Stuffed Horse	# of units	ions - 000 Sales 3168.00
	11 of 11 Field	ds • 🖋 Cell der # Salesp 1304 1302	erson #	Salesperson Martin Van Buren Grover Cleveland	Title Sales Associate I Senior Sales Associate	1908.00 936.00	-	Region South Midwest	TN NE	Product Stuffed Horse Stuffed Panda	# of units 144 72	ions • 000 Sales 3168.00 1656.00
	11 of 11 Field	ds - 💉 Cell der # Salesp 1304 1302 1301	erson #	Salesperson Martin Van Buren Grover Cleveland Thomas Jefferson	Title Sales Associate I Senior Sales Associate Sales Associate I	1908.00 936.00 2028.00	-	Region South Midwest Northeast	TN NE PA	Product Stuffed Horse Stuffed Panda Stuffed Panda	# of units 144 72 156	ions - 00 Sales 3168.00 1656.00 3588.00
	11 of 11 Field	ds • V Cell der # Salesp 1304 1302 1301 1305	erson #	Salesperson Martin Van Buren Grover Cleveland Thomas Jefferson George Washington	Title Sales Associate I Senior Sales Associate Sales Associate I Sales Associate I	1908.00 936.00 2028.00 1560.00	-	Region South Midwest Northeast Midwest	TN NE PA MN	Product Stuffed Horse Stuffed Panda Stuffed Panda Stuffed Panda	# of units 144 72 156 120	ions - 000 Sales 3168.00 1656.00 3588.00 2760.00
	11 of 11 Field Record Dr 1 2 3 4 5	ds • V Cell der # Salesp 1304 1302 1301 1305 1303	erson #	Salesperson Martin Van Buren Grover Cleveland Thomas Jefferson George Washington Ulysses Grant	Title Sales Associate I Senior Sales Associate I Sales Associate I Sales Associate I Senior Sales Associate	1908.00 936.00 2028.00 1560.00 1215.00	-	Region South Midwest Northeast Midwest Midwest	TN NE PA MN MN	Product Stuffed Horse Stuffed Panda Stuffed Panda Stuffed Panda Stuffed Giraffe	# of units 144 72 156 120 108	ions - 000 Sales 3168.00 1656.00 2588.00 2760.00 2268.00
nnn	11 of 11 Field Record 7 1 2 3 4 5 6	ds • V Cell 1304 1304 1301 1305 1303 1305	erson #	Salesperson Martin Van Buren Grover Cleveland Thomas Jefferson George Washington Ulysses Grant George Washington	Title Sales Associate I Senior Sales Associate I Sales Associate I Senior Sales Associate I Sales Associate I	1908.00 936.00 2028.00 1560.00 1215.00 708.00	-	Region South Midwest Northeast Midwest Northeast	TN NE PA MN MN RI	Product Stuffed Horse Stuffed Panda Stuffed Panda Stuffed Panda Stuffed Giraffe Stuffed Elephant	# of units 144 72 156 120 108 48	ions - 000 Sales 3168.00 1656.00 3588.00 2760.00 2268.00 1200.00
	11 of 11 Field Record Dr 1 2 3 4 5	ds • V Cell der # Salesp 1304 1302 1301 1305 1303	erson #	Salesperson Martin Van Buren Grover Cleveland Thomas Jefferson George Washington Ulysses Grant	Title Sales Associate I Senior Sales Associate I Sales Associate I Sales Associate I Senior Sales Associate	1908.00 936.00 2028.00 1560.00 1215.00	-	Region South Midwest Northeast Midwest Midwest	TN NE PA MN MN	Product Stuffed Horse Stuffed Panda Stuffed Panda Stuffed Panda Stuffed Giraffe	# of units 144 72 156 120 108	ions • 00 Sales 3168.0 1656.0 3588.0 2760.0 2268.0

Change the order of the fields by moving "Profit Margin" to the end.



In the Configuration section select "Profit Margin".

Use the down arrow to move "Profit Margin" to the end of the 
</

) )} 0	ptions	-   1 +	TIP: To re	eord	er mul
		Fiel	Туре		Size
S		Sales Order #	Double	•	8
3		Salesperson #	Double	•	8
	$\checkmark$	Salesperson	V_String	•	255
	$\checkmark$	Title	V_String	•	255
	$\checkmark$	Region #	Double	•	8
	$\square$	Region	V_String	•	255
	$\checkmark$	State	V_String	•	255
	$\checkmark$	Product	V_String	•	255
	$\checkmark$	# of units	FixedDecimal	•	10.0
	$\checkmark$	Sales	FixedDecimal	•	10.2
		Profit Margin	FixedDecimal	•	10.2
		*Unknown	Unknown	-	0

Select Run.

11 of	11 Fields 🔹 🖋	Cell Viewer + 409 ree	cords displayed 🛛 🥎 🤘				Q Search		Data	Metadata	Actions - 000
Record	Sales Order #	Salesperson #	Salesperson	Title	Region #	Region	State	Product	# of units	Sales	Profit Margin
	1 35005	1304	Martin Van Buren	Sales Associate I	3	South	TN	Stuffed Horse	144	3168.00	1908.00
	2 35006	1302	Grover Cleveland	Senior Sales Associate	1	Midwest	NE	Stuffed Panda	72	1656.00	936.00
N N	3 35009	1301	Thomas Jefferson	Sales Associate I	2	Northeast	PA	Stuffed Panda	156	3588.00	2028.00
·	4 35011	1305	George Washington	Sales Associate I	1	Midwest	MN	Stuffed Panda	120	2760.00	1560.00
	5 35014	1303	Ulysses Grant	Senior Sales Associate	1	Midwest	MN	Stuffed Giraffe	108	2268.00	1215.00
	6 35017	1305	George Washington	Sales Associate I	2	Northeast	RI	Stuffed Elephant	48	1200.00	708.00
	7 35025	1303	Ulysses Grant	Senior Sales Associate	2	Northeast	ME	Stuffed Horse	96	2112.00	1272.00
	8 35026	1301	Thomas Jefferson	Sales Associate I	4	West	WY	Stuffed Penguin	156	3120.00	1716.00

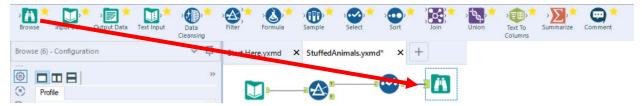
# Temporary Tool 4: Browse Tool – The Data in the Fields Must Conform to Predefined Rules.

In the original Excel file, The Cuddly Stuffed Animals company provided the only acceptable values for "Product", "Salesperson" and "Region". Sometime data is entered incorrectly into the data.

Product ID	Product	Code	Salesperson		Codo	Decien
101	Stuffed Penguin	1301	Thomas Jefferson		Code	Region
102	Stuffed Horse	1302	Grover Cleveland		1	Midwest
103	Stuffed Unicorn	1303	Ulysses Grant		2	Northeast
104	Stuffed Giraffe	1304	Martin Van Buren	-		
105	Stuffed Panda	-	George Washington		3	South
106	Stuffed Elephant	-	<u> </u>		4	West
	•	- 1306	John Tyler		-	

The "Product" field can only contain one of the six products. Browse the data in the "Product" field to verify that all the data is correct. Make any changes that are required.

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



Select Run.

In the Configuration section scroll down to "Product" and select "1 more".

A <sup>B</sup> c Product		Profile	
Stuffed Horse	125 -	Distinct Values	
Stuffed Giraffe	80	Stuffed Horse	125 -
Stuffed Panda	77	Stuffed Giraffe	80
Stuffed Elephant	49	Stuffed Panda	77
Stuffed Penguin	46	Stuffed Elephant	49
Stuffed Penguin	40	Stuffed Penguin	46
1 more >		Stuffed Unicorn	32 -

The data is clean, there are only six products listed.

The "Salesperson" field can only contain one of the six names. Browse the data in the "Salesperson" field to verify that all the data is correct. Make any changes that are required.

꾸

91

45 43

2

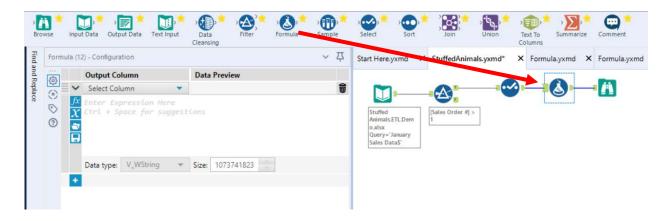
In the Configuration section scroll down to "Salesperson" and select "2 more".

₿				»»	69		
3	Profile				3		ofile
0	1 more >			-	0		← Salesperso
0	A <sup>B</sup> C Salesperson					·	
	George Washington	112	-				Distinct Values
	Thomas Jefferson	91	-				George Washin
	Grover Cleveland	74					Thomas Jeffers
	Martin Van Buren	45	-				Grover Clevelar
	John Tyler	43	•				Martin Van Bur
7	2 more >						John Tyler
	▲ <sup>B</sup> c Title						Ulvsses Grant
							Thomass Jeffer

"Thomass Jefferson" must be replaced with "Thomas Jefferson" for a total of 93 distinct values.

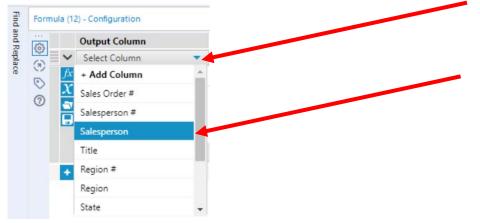
#### Tool 4: Formula Tool – The Data in the Fields Must Conform to Predefined Rules.

Drag the "Formula Tool" from the Tools Palette between the output of the "Select Tool" and the "Browse Tool" on the Canvas. The three will be connected automatically.



If the salesperson's name is "Thomass Jefferson" replace it with "Thomas Jefferson" otherwise leave the existing name in the field. Do not create a new field, put the output back into the "Salesperson" field.

In the configuration section select the field Salesperson from the pull-down list.



# Type in the formula.

nd a	ronhula (	11) - Configuration					~ 7
ndR	100	Output Column		Data	Preview		
Find and Replace		Salesperson	•	Marti	n Van Buren		
œ		if [Salesperson] = then "Thomas Jeff else [Salesperson endif	erson				
		Data type: V_String		Size:	255		
		1	Profile				
ele	ect the E	Browse step.	<b></b>	Salespe	rson		
			Dis	tinct Valu	es		
ele	ect Run.		Geo	orge Was	hington	112	-
			The	mas Jeff	erson	93	-
			Gro	ver Cleve	eland	74	-
				rtin Van I	Buren	45	•
				n Tyler		43	•
			Uly	sses Grar	nt	42	-

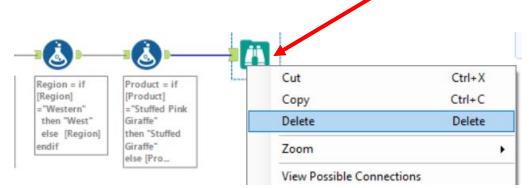
In the Configuration section scroll down to "Salesperson". There are only six salespersons and Thomas Jefferson has 93 distinct values.

While in the Browse step, verify the field "Region"

		_
South	126	-
Northeast	110	-
West	104	-
Midwest	69	

The data is clean, only the four regions are listed.

Right click on the Browse step and select delete.

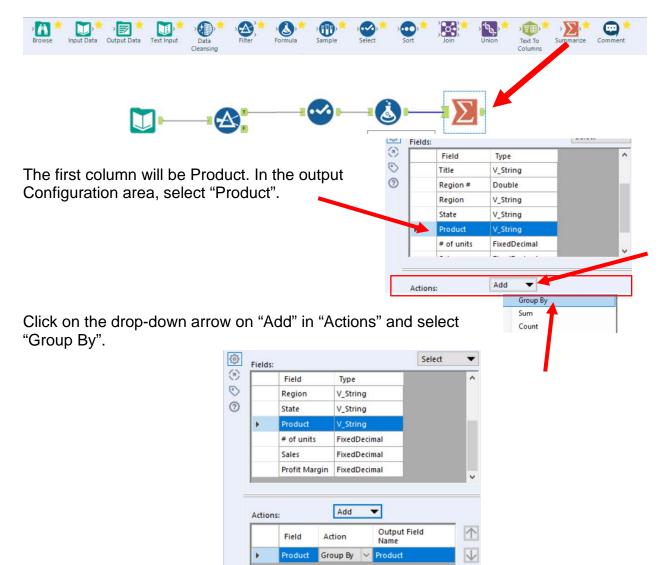


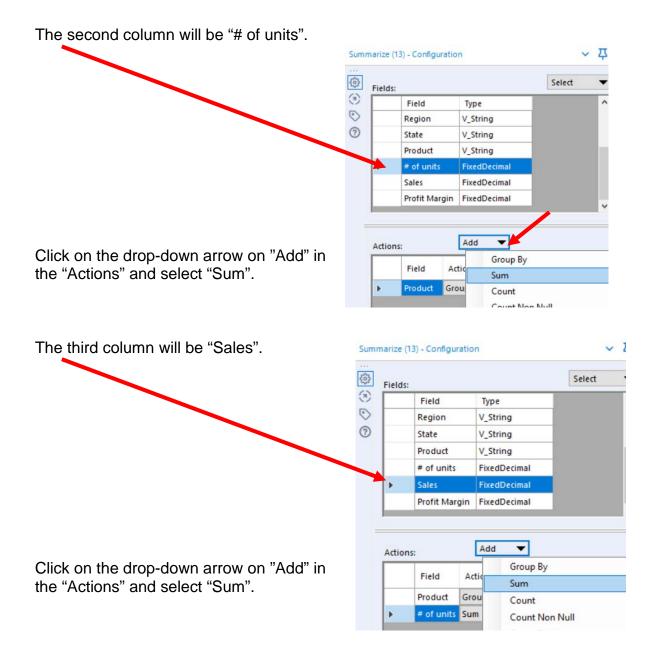
Tool 5: Select Tool Summary: We now want to create a report by product by first

summarizing on "# of units" by product.

Product	# of units	Sales	Profit Margin
Stuffed Frog	1,524	\$ 33,528	\$20,574
Stuffed Unicorr	408	8,160	4,692
Stuffed Panda	1,140	26,220	15,675
Stuffed Koala	624	14,976	8,112
Stuffed Elepha	4,044	84,924	49,539
Stuffed Bear	2,376	59,400	35,046
Total	10,116	\$227,208	\$133,638

Drag a "**Summary Tool**" **Tool**" to the right of the "**Formula 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.





The fourth column will be "Profit Margin".	Sumi	marize (1	13) - Configur	ation			~ 2
	 ©	Fields:				Select	•
	۲		Field	T)	pe		
	$\odot$		Region	V_	String		
	0		State	V_	String		
			Product	V_	String		
			# of units	Fip	edDecimal		
			Sales	Fib	edDecimal		
		P	Profit Marg	gin Fix	edDecimal		
Click on the drop-down arrow on "Add" in the "Actions" and select "Sum".	-	Action	Field Product # of units	Actic Grou Sum Sum	Id Group By Sum Count Count Non I Count Distin		

Select "Run".

The report is created.

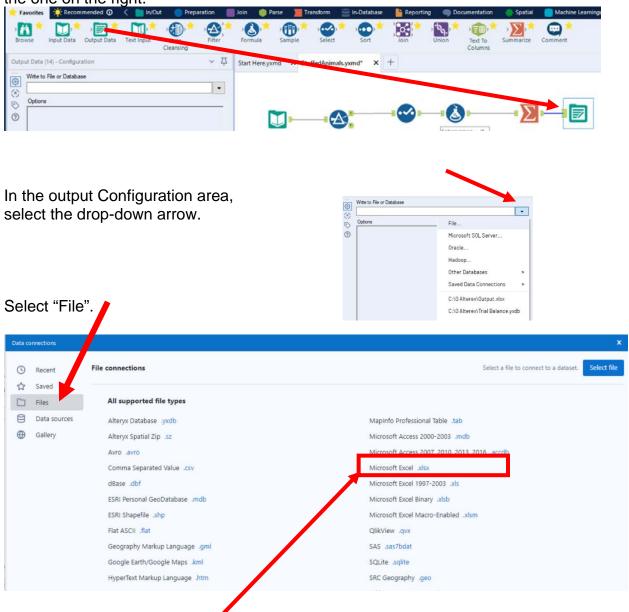
	Field	Action		Output Field Name	$\wedge$		4 of 4 Field	ls 🔸 🖌 🕴 Cell Vi	ewer 🝷 6 records dis	played 🛛 🛧 🗸	₽ I
•	Product	Group By	~	Product	V	$\Sigma$	Record	Product	Sum_# of units	Sum_Sales	Sum_Profit Margin
	# of units	Sum	~	Sum_#	Θ		1	Stuffed Elephant	4392	109800.00	64782.00
	Sales	Sum		Sum_S	0		2	Stuffed Giraffe	8052	169092.00	90585.00
	0.0002					?	3	Stuffed Horse	12120	266640.00	160590.00
	Profit Margin	Sum	~	Sum_Pr		0	4	Stuffed Panda	7488	172224.00	97344.00
							5	Stuffed Penguin	5016	100320.00	55176.00
Acti	on Properties						6	Stuffed Unicorn	3060	73440.00	40545.00

# Change the "Output Field Names" and select "Run"

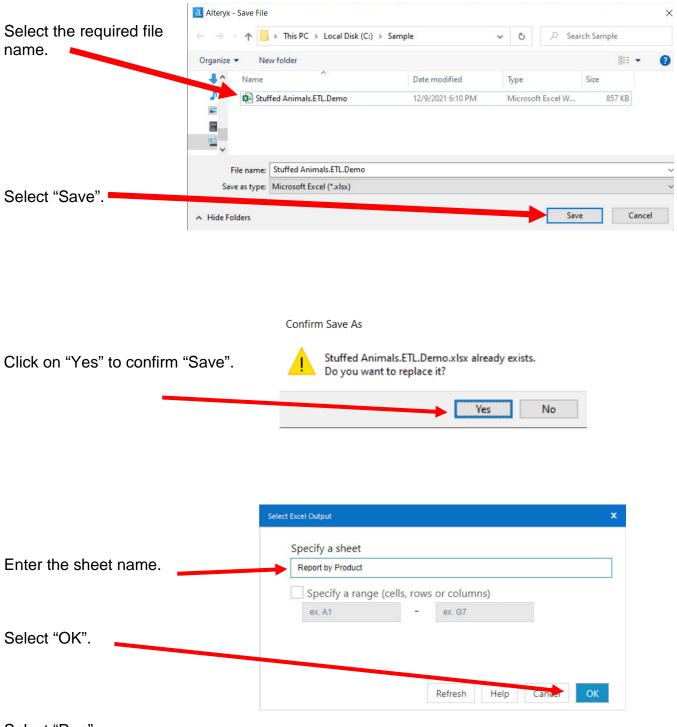
	Field	Action		Output Field Name	$\wedge$	000		ds 🔹 🖋 🕴 Cell V	iewer 🕶 6 re	cords displayed	$  \uparrow \downarrow  $
	Product	Group By	~	Product	$\checkmark$	Σ	Record	Product	Units	Sales	Profit Margin
	# of units	Sum	~	Units			1	Stuffed Elephant	4392	109800.00	64782.00
	Sales	Sum	~	Sales	Θ		2	Stuffed Giraffe	8052	169092.00	90585.00
	Profit Margin	Sum	~	Profit Margin		?	3	Stuffed Horse	12120	266640.00	160590.00
	rivitingin	2011	100	Troncingin		0	4	Stuffed Panda	7488	172224.00	97344.00
							5	Stuffed Penguin	5016	100320.00	55176.00
_					_		6	Stuffed Unicorn	3060	73440.00	40545.00

**Tool 6:** Select Tool Output Data Tool: We now want to export the cleaned and assembled Product Report to Excel.

Drag an "**Output Data 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.



Select "Microsoft Excel .xlsx"



Select "Run".

## Open the file in Excel.

	А	В	С	D	E	F	G	Н	I	J
1	Product	Units	Sales	Profit Mar	gin					
2	Stuffed Ele	4392	########	64782.00						
3	Stuffed Gir	8052	########	90585.00						
4	Stuffed Ho	12120	########	########						
5	Stuffed Pa	7488	########	97344.00						
6	Stuffed Pe	5016	########	55176.00						
7	Stuffed Un	3060	73440.00	40545.00						
8										
9										
	t → … [-	February-	December	Sales Data	Produ	cts   Sale	sperson	Region	Report by	/ Product

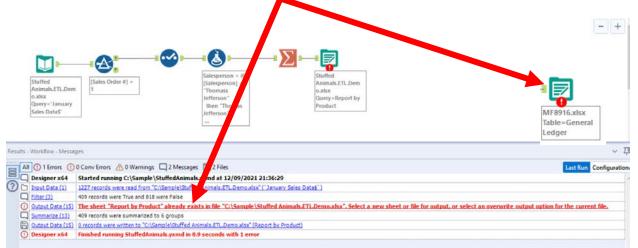
# Change the columns' widths and formats.

	А	В	С	D	Е	F	G	Н	I.
1	Product	Units	Sales	Profit Margin					
2	Stuffed Elephant	4,392	\$109,800.00	\$ 64,782.00					
3	Stuffed Giraffe	8,052	\$169,092.00	\$ 90,585.00					
4	Stuffed Horse	12,120	\$266,640.00	\$160,590.00					
5	Stuffed Panda	7,488	\$172,224.00	\$ 97,344.00					
6	Stuffed Penguin	5,016	\$100,320.00	\$ 55,176.00					
7	Stuffed Unicorn	3,060	\$ 73,440.00	\$ 40,545.00					
8	Total	40,128	\$891,516.00	\$509,022.00					
9									
	🔹 ト 📔 Febru	ary-Decemb	er Sales Data	Products	Salespers	on   Regi	on Rep	ort by Pro	duct

"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" number 3.

	Write to File or Database		
	C:\Sample\Stuffed Animals.ETL.Demo.xlsx   Repo	rt by Product	•
	Options		
	Name 1 Max Records Per File	Value	
	2 File Format	Microsoft Excel (* xlsx)	~
	3 Output Options	Create New Sheet	~
	4 Append Field Map	Append To Existing Sheet Overwrite Sheet or Range	
Select "Overwrite Sheet".	5 Skip Field Names	Overwrite File (Remove)	
	6 Preserve Formatting on Overwrite (Range Reg	uired) Create New Sheet	

Select "Run".

Open the Excel file.

	А	В	С	D	E	F	G	Н	I	J
1	Product	Units	Sales	Profit Mar	gin					
2	Stuffed Ele	4392	########	64782.00						
3	Stuffed Gir	8052	########	90585.00						
4	Stuffed Ho	12120	########	########						
5	Stuffed Pa	7488	########	97344.00						
6	Stuffed Pe	5016	########	55176.00						
7	Stuffed Un	3060	73440.00	40545.00						
8										
9										
	⊢ → … [	February-	December	Sales Data	Produ	icts   Sale	sperson	Region	Report by	/ Product

#### Alteryx CSA Single Stream

	А	В	С	D	Е	F	G	н	I
1	Product	Units	Sales	Profit Margin					
2	Stuffed Elephant	4,392	\$109,800.00	\$ 64,782.00					
3	Stuffed Giraffe	8,052	\$169,092.00	\$ 90,585.00					
4	Stuffed Horse	12,120	\$266,640.00	\$160,590.00					
5	Stuffed Panda	7,488	\$172,224.00	\$ 97,344.00					
6	Stuffed Penguin	5,016	\$100,320.00	\$ 55,176.00					
7	Stuffed Unicorn	3,060	\$ 73,440.00	\$ 40,545.00					
8	Total	40,128	\$891,516.00	\$509,022.00					
9									
10									
•	🛭 🕞   Febru	ary-Decemb	er Sales Data	Products	Salespers	on   Regi	on Jan I	Report by	Product

Reformat the Excel sheet and rename the formatted sheet "Jan Report by Product". When the Alteryx flow runs it will create a new unformatted sheet "Report by Product". The "Salesperson" report will summarize the data by "Salesperson #" with the salesperson's name attached for clarity. We now want to combine the fields with a space, a dash and another space between the two fields.

Salesperson	# of units	Sales	Profit Margin
1405 - James Polk	1,812	\$41,568	\$24,438
1425 - John Tyler	2,172	48,336	28,110
1541 - Ulysses Grant	756	17,112	10,062
1576 - James Madison	1,776	39,216	23,160
1588 - George Washingtor	1,584	35,784	21,168
1776 - James Monroe	2,016	45,192	26,700
Total	10,116	\$227,208	\$133,638

One field, "Salesperson #" is a numeric

field, while the other field, "Salesperson' is a string. It is easier to combine filed if they are both strings.

Select the third tool, the Select Tool from the flow.



In the configuration section select the pull down in the "Type" column for the "Salesperson #" field and select "String".

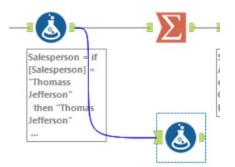
		Field	Туре		Size	(B)		1	Field	Tree		Size	Rena
	$\checkmark$	Sales Order #	Double	•	8					Туре			Rena
١		Salesperson #	Double	-	8	$\odot$	_		Sales Order #	Double	•	8	
		Salesperson	Bool			0	A		Salesperson #		•	10	
		Title	Byte Int16				I		Salesperson	V String	•	255	
		Region #	Int32 Int64										
		Region	FixedDecimal Float										
	$\checkmark$	State	Double										
	$\checkmark$	Product	Double: Forced String	1									
		# of units	WString V String										
		Calas	V WString										

**Tool 7: Select Tool Formula:** We can now want to combine the fields "Salesperson #" and "Salesperson".

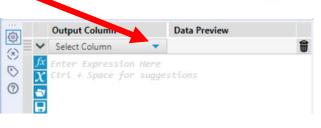
Drag a "Formula **Tool**" under the "Running Balance Tool" branching from the "Formula Tool" on the Canvas.

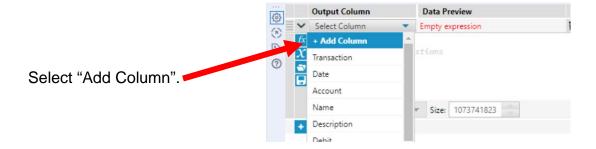


To connect the tools, drag from the outflow of the Tool 4, Formula Tool to the left inflow of the Tool 7, Formula tool.



In the output Configuration area, click on the drop-down arrow of "Select Column".







Type the following formula [Salesperson #]+" - "+[Salesperson]

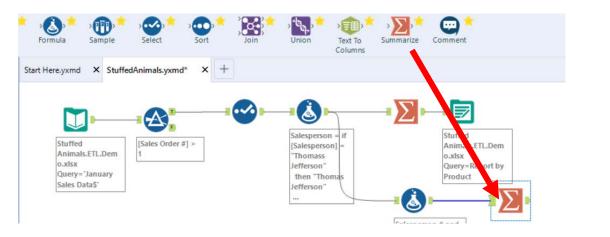
Output Column Data	Preview
<ul> <li>Salesperson # and Name (Null)</li> </ul>	

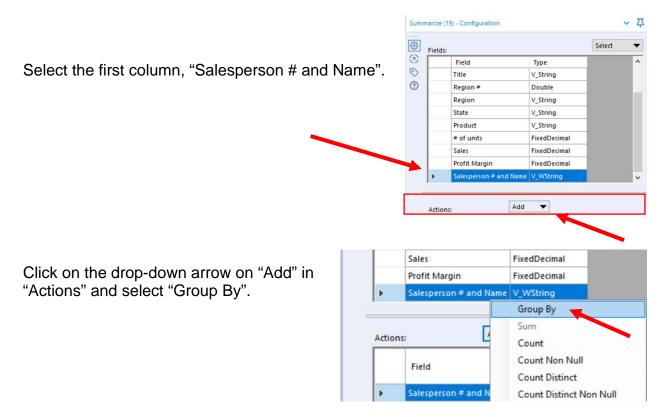
Select "Run".

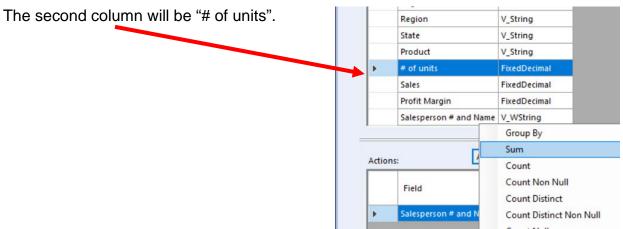
2	12 of 12 Fie	elds 👻 🖌 Cell Viewe	er + 409 record	ls displayed	$\wedge \downarrow$		Q Search			Data Metadata Actions - 0		
] R	Record	Title	Region #	Region	State	Product	# of units	Sales	Profit Margin	Salesperson # and Name		
-	1	Sales Associate I	3	South	TN	Stuffed Horse	144	3168.00	1908.00	1304 - Martin Van Buren		
	2	Senior Sales Associate	1	Midwest	NE	Stuffed Panda	72	1656.00	936.00	1302 - Grover Cleveland		
5	3	Sales Associate I	2	Northeast	PA	Stuffed Panda	156	3588.00	2028.00	1301 - Thomas Jefferson		
	4	Sales Associate I	1	Midwest	MN	Stuffed Panda	120	2760.00	1560.00	1305 - George Washington		
	5	Senior Sales Associate	1	Midwest	MN	Stuffed Giraffe	108	2268.00	1215.00	1303 - Ulysses Grant		
	6	Sales Associate I	2	Northeast	RI	Stuffed Elephant	48	1200.00	708.00	1305 - George Washington		
	7	Senior Sales Associate	2	Northeast	ME	Stuffed Horse	96	2112.00	1272.00	1303 - Ulysses Grant		
	8	Sales Associate I	4	West	WY	Stuffed Penguin	156	3120.00	1716.00	1301 - Thomas Jefferson		

Tool 8: Select Tool Summary: We now want to create a "Salesperson Report".

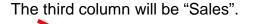
Drag a "**Summary Tool**" **\* Drag** to the right of the "**Formula Tool**" on the Canvas. The two will be connected automatically. The outflow from the tool on the left is the inflow to the one on the right.

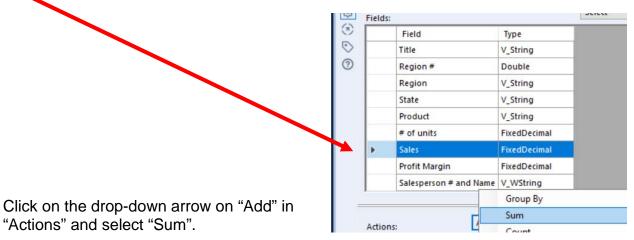






Click on the drop-down arrow on "Add" in "Actions" and select "Sum".





The fourth column will be "Profit Margin".	Fields	Field Title Region # Region State	Type V_String Double V_String V_String	Select
		Product	V_String	
		# of units	FixedDecimal	
		Sales	FixedDecimal	
	•	Profit Margin	FixedDecimal	
		Salesperson # and Name	V_WString	
			Group By	
			Sum	
Click on the drop-down arrow on "Add" in "Actions" and select "Sum".	Action		Count Count Non Null	

Select "Run".

And, the report is created, right click on the output arrow if nessacary.

	Field	Name		$\wedge$			lds 👻 🖌 Cell Viewer 🔹	6 records displayed	ホリー		
Þ.	Salesperson # a			4							
	# of units	Sum	~	Sum_# of units	- Inner tend	$\Sigma$	Record	Salesperson # and Name	Sum_# of units	Sum_Sales	Sum_Profit Margin
	Sales	Sum	~	Sum Sales	Θ			1 1301 - Thomas Jefferson	9528	210000.00	119466.00
				-	L.	0		2 1302 - Grover Cleveland	7128	162276.00	92601.00
	Profit Margin	Sum	~	Sum_Profit Mar				3 1303 - Ulysses Grant	4116	90168.00	51294.00
						0		4 1304 - Martin Van Buren	4476	98388.00	56247.00
								5 1305 - George Washington	10452	232536,00	133557.00
								6 1306 - John Tyler	4428	98148.00	55857.00

Change the "Output Field Names" and select "Run"

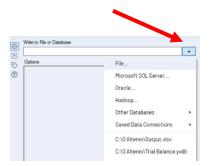
•	Field Salesperson # a			Output Field Name	10000		4 of 4 Field	ds 🔹 🥪 🕴 Cell Viewer 🗸	6 records dis	played	k 1
		Group By	~	Salesperson	$\checkmark$	8	4 of 4 field		o records dis	projeci	r
	# of units	Sum	~	Units		Σ	Record	Salesperson	Units	Sales	Profit Margin
	Sales	Sum	~	Sales	Θ		1	1301 - Thomas Jefferson	9528	210000.00	119466.00
					- Internal		2	1302 - Grover Cleveland	7128	162276.00	92601.00
_	Profit Margin	Sum	~	Profit Margin		Lines in the second sec	1303 - Ulysses Grant	4116	90168.00	51294.00	
						0	4	1304 - Martin Van Buren	4476	98388.00	56247.00
							5	1305 - George Washington	10452	232536.00	133557.00
							6	1306 - John Tyler	4428	98148.00	55857.00

**Tool 9: Select** Output Data Tool: We now want to export the cleaned and assembled Salesperson Report to Excel.

Drag an "**Output Data 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.

rowse Input Data Outp	edAnimals.yxmd*		Sample Select Sort	
Stuffed Animals.ETL.Dem o.xlsx Query=`January Sales Data\$`	[Sales Order #] > 1	Salesperson = if [Salesperson] = "Thomass Jefferson" then "Thomas Jefferson" 	Stuffed Animals.ETL o.xish Query=Repd Product	
			Salesperson # and Name = [Salesperson #]+" - "+[Salesperson]	

In the output Configuration area, select the drop-down arrow.



#### Alteryx CSA Single Stream

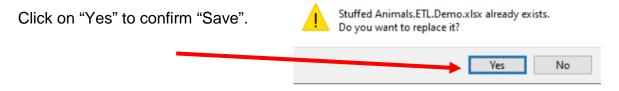
# Select "File".

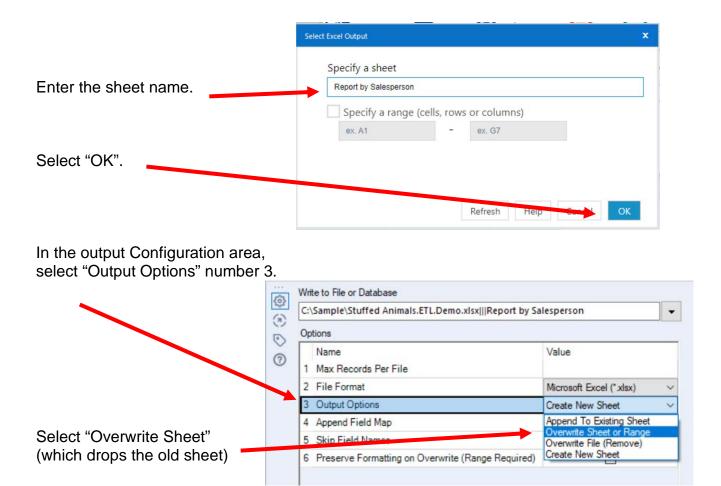
ata o	onnections		
0	Recent	File connections	Select a file to connect to a dataset. Select file
à	Saved		
כ	Files	All supported file types	
3	Data sources	Alteryx Database .yxdb	MapInfo Professional Table .tab
₽	Gallery	Alteryx Spatial Zip .sz	Microsoft Access 2000-2003 .mdb
		Avro .avro	Microsoft Access 2007, 2010, 2013, 2016, accelb
		Comma Separated Value .csv	Microsoft Excel _xlsx
		dBase .dbf	Microsoft Excel 1997-2003 .xls
		ESRI Personal GeoDatabase .mdb	Microsoft Excel Binary .xlsb
		ESRI Shapefile .shp	Microsoft Excel Macro-Enabled .xlsm
		Flat ASCII .flat	QlikView .qvx
		Geography Markup Language .gml	SAS .sas7bdat
		Google Earth/Google Maps .kml	SQLite .sqlite
		HyperText Markup Language .htm	SRC Geography .geo

# Select "Microsoft Excel .xlsx"

	a Alteryx - Save File				×			
Select the required file	← → ↑ → This PC → Local Disk (C:) → Sample ↓ ♥ Organize ▼ New folder							
name.								
	Name	Date modified	Туре	Size				
	Stuffed Animals.ETL.Demo	12/9/2021 6:10 PM	Microsoft	t Excel W 857 KB				
	*5							
	File name: Stuffed Animals.ETL.Demo				~			
Select "Save".	Save as type: Microsoft Excel (*.xlsx)				~			
Select Save .	∧ Hide Folders			Save	Cancel			

#### Confirm Save As





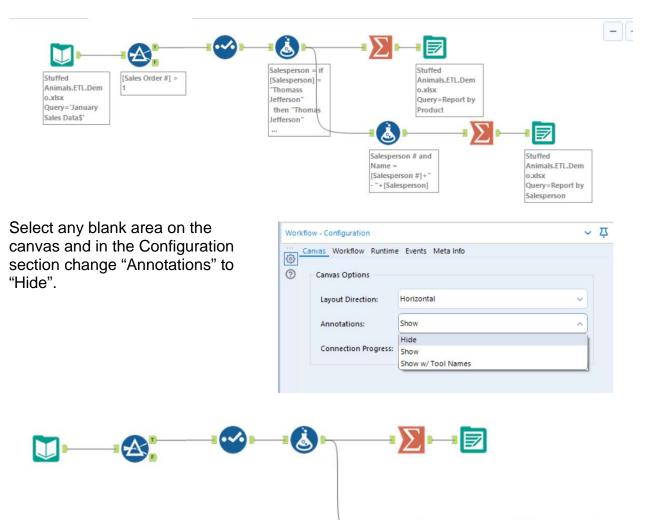
#### Select Run Open the Excel file

	А	В	С	D	Е	F	G	Н	1	
1	Salespersc	Units	Sales	Profit Mar	gin					
2	1301 - Tho	9528	########	########						
3	1302 - Gro	7128	########	92601.00						
4	1303 - Uly:	4116	90168.00	51294.00						
5	1304 - Mai	4476	98388.00	56247.00						
6	1305 - Geo	10452	########	########						
7	1306 - Joh	4428	98148.00	55857.00						
8										
9										
10										
•	( → …	Jan Repor	t by Produ	ict   Rep	ort by Prod	duct Re	port by Sa	lesperson	(+	
Rea	Ready Scroll Lock									

Change the format and rename the sheet so the format changes are not lost, save, close Excel and return to Alteryx.

	А	В	С	D	E	F	G
1	Salesperson	Units	Sales	Profit Margin			
2	1301 - Thomas Jefferson	9,528	\$210,000.00	\$119,466.00			
3	1302 - Grover Cleveland	7,128	\$162,276.00	\$ 92,601.00			
4	1303 - Ulysses Grant	4,116	\$ 90,168.00	\$ 51,294.00			
5	1304 - Martin Van Buren	4,476	\$ 98,388.00	\$ 56,247.00			
6	1305 - George Washington	10,452	\$232,536.00	\$133,557.00			
7	1306 - John Tyler	4,428	\$ 98,148.00	\$ 55,857.00			
8	Total	40,128	\$891,516.00	\$509,022.00			
9							
10							
	। → …   Jan Report by P	roduct	Report by Pi	roduct Jan	Report by	Salesperso	on 🕂
Rea	dy Scroll Lock 🐻						

The canvas is very busy looking because of the annotations.



لله

- 2

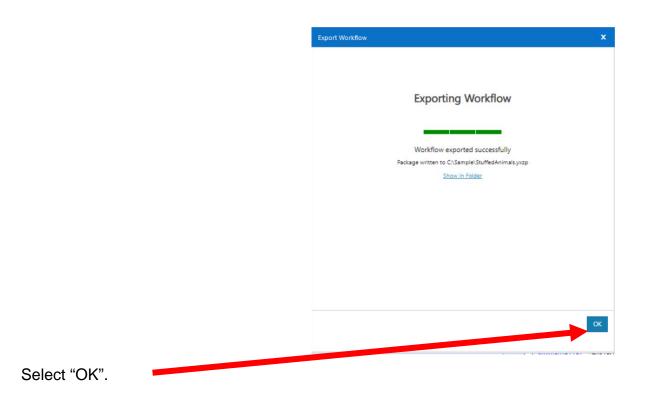
Alteryx CSA Single Stream

The workflow must be saved.	a	
	<u>File E</u> dit <u>V</u> i	iew <u>O</u> pti
	🗹 New Workflow	Ctrl+N
Select "File".	Open Recent	>
	Den Workflow	>
Select "Save".	Open Workflow Gro	oup
	<u>S</u> ave	Ctrl+S
	Save <u>A</u> s	>
	Create Workflow G	roup
	Print	
	Print Settings	
	E <u>x</u> it	

Export the workflow and the related input files so that the project can be completed on another computer or uploaded to the web.

	a <u>F</u> ile	Edit	V In/Out	Options Help Run Workflow	Ctrl+R
Select "Options".	Brow	vse Input	2010-002 002	₽ Schedule Workflow View Schedules	5
		ow - Configura Cenves World Cenves Optio		Run Analytic Apps Export Workflow	
Select "Export Workflow".	0	Layout Direc		<u>M</u> anage Licenses Manage Connect Credential: Add Promote Connection	5
		Connection	Progress:	User Settings Advanced Options Download Predictive Tools	>

	Export Settings	
	Workflow StuffedAnimals.yxmd	Lock
Verify the name of the "Workflow".	Package Location	LOCK
Verify the "Package Location".	C:\Sample\StuffedAnimals.yxzp	Browse
	Group assets by tool	Undo changes
	OUTPUT) C:\Sample\Stuffed Animals.ETL.Demo.xlsx	
Select "Save".	Save	Cancel Help



Close Alteryx

### Part 2

## Using Alteryx

## Append a Second Stream

The sales data for *Cuddly Stuffed Animals* are stored in an Excel sheet titled January Sales Data. The column headings are in the ninth row, some rows have partial duplicate data and some rows are blank.

	A	В	С	D	E	F	G	н	1	J	К
2											
3											
4											
5											
6											
7					Cudd	ly Stuffed Anima	als				
в					Jan	nuary Sales Data	1				
9	Sales Order #	Salesperson #	Salesperson	Title	Profit Margin	Region #	Region	State	Product	# of units	Sales
•	33003	1304	wartin van bur	Sales Associate I	1,508.00	3	South	IIN	starrea noise	744	3,108.00
11									Stuffed Horse		3,168.00
12											
13	35006	1302	Grover Clevela	Senior Sales Associate	936.00	1	Midwest	NE	Stuffed Panda	72	1,656.00
14									Stuffed Panda		1,656.00
15											
16	35009	1301	Thomas Jeffers	Sales Associate I	2,028.00	2	Northeast	PA	Stuffed Panda	156	3,588.00
17					2.028.00				Stuffed Panda		
8											
9	35011	1305	George wasnin	Sales Associate i	1,560.00	1	widwest	IVIN	Sturred Panda	120	2,760.00
20					1,560.00				Stuffed Panda		
21											
22	35014	1303	Ulysses Grant	Senior Sales Associate		1	Midwest	MN	Stuffed Giraffe	108	2,268.00
23					1,215.00				Stuffed Giraffe		
24											
25	35017	1305	George Washin	Sales Associate I	708.00	2	Northeast	RI	Stuffed Elephant	48	1,200.00
26					708.00				Stuffed Elephant		
27											
28	35025	1303	Ulysses Grant	Senior Sales Associate	1,272.00	2	Northeast	ME	Stuffed Horse	96	2,112.00
29									Stuffed Horse	96	
30											
31	35026	1301	Thomas Jeffers	Sales Associate I	1,716.00	4	West	WY	Stuffed Penguin	156	3,120.00
									Stuffed Penguin		3,120.00
32											
	35027	1301	Thomas Jeffers	Sales Associate I	1,215.00	4	West	CA	Stuffed Giraffe	108	2,268.00
32 33 34	35027								Stuffed Giraffe		2,268.00
33	35027										
33 34	35027										
33 34 35	35027	1303	Ulysses Grant	Senior Sales Associate	1,584.00	1	Midwest	NE	Stuffed Penguin	144	2,880.00

### Sample Reports

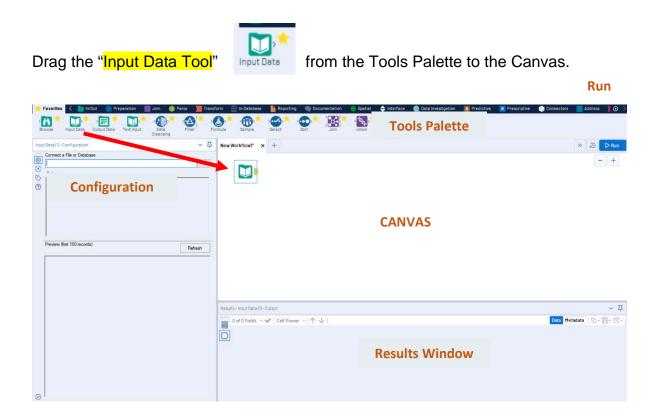
Product	Units	Sales	Profit Margin	Salesperson	Units	Sales	Profit M
Stuffed Elephant	4,392	\$109,800.00	\$ 64,782.00	1301 - Thomas Jefferson	9,528	\$210,000.00	\$119,46
Stuffed Giraffe	8,052	\$169,092.00	\$ 90,585.00	1302 - Grover Cleveland	7,128	\$162,276.00	\$ 92,60
Stuffed Horse	12,120	\$266,640.00	\$160,590.00	1303 - Ulysses Grant	4,116	\$ 90,168.00	\$ 51,29
Stuffed Panda	7,488	\$172,224.00	\$ 97,344.00	1304 - Martin Van Buren	4,476	\$ 98,388.00	\$ 56,24
Stuffed Penguin	5,016	\$100,320.00	\$ 55,176.00	1305 - George Washington	10,452	\$232,536.00	\$133,55
Stuffed Unicorn	3,060	\$ 73,440.00	\$ 40,545.00	1306 - John Tyler	4,428	\$ 98,148.00	\$ 55,85
Total	40,128	\$891,516.00	\$509,022.00	Total	40,128	\$891,516.00	\$509,02

### Start Alteryx

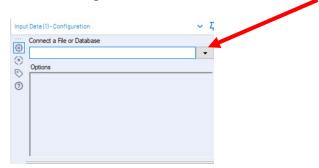
Note: You cannot extract data from an open Excel file so make sure that the Excel file is closed before starting to input the data.

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



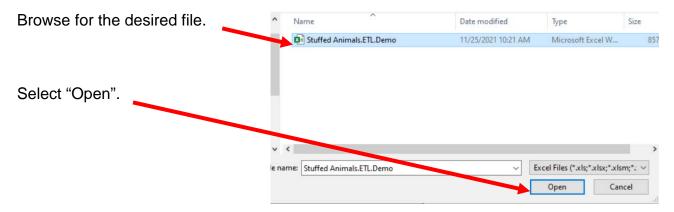
### In the Configuration area, select the "Connect a File or Database" drop-down arrow.



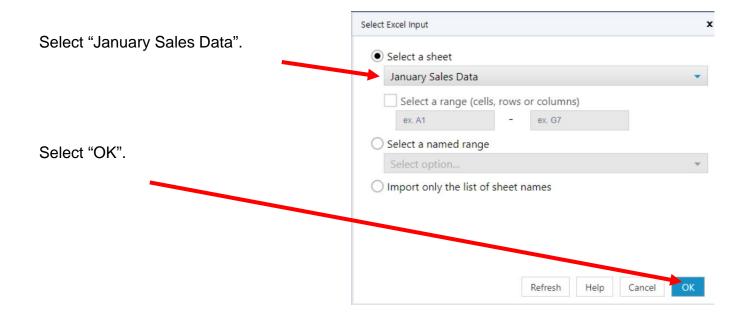
1

### Select "File".

0	Recent	le connections	Select a file to connect to a dataset. Select file
	Saved		
	Files	All supported file types	
8	Data sources	Alteryx Database .yxdb	Mapinfo Professional Table .tab
$\oplus$	Gallery	Alteryx Spatial Zip .sz	Microsoft Access 2000-2003 .mdb
		Avro avro	Microsoft Access 2007, 2010, 2013, 2016 accdb
		Comma Separated Value .csv	Microsoft Excel _xdsx
		dBase .dbf	Microsoft Excel 1997-2003 .xls
		ESRI Personal GeoDatabasemdb	Microsoft Excel Binary .xlsb
		ESRI Shapefile .shp	Microsoft Excel Macro-Enabled Uxlsm
: ol	oct "Min	crosoft Excel .xlsx".	

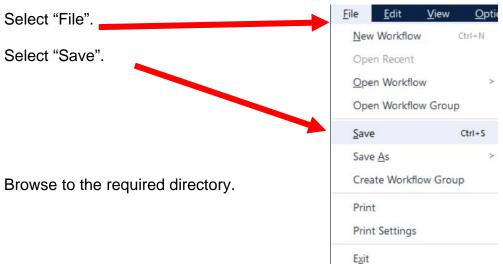


Select the drop-down.	Select Excel Input	x
	• Select a sheet	
	February-December Sales Data	
	Select a range (cells, rows or columns)	
	ex. A1 – ex. G7	
	Select a named range	
	Select option	
	O Import only the list of sheet names	
	Refresh Help Cancel	ОК
	hereon hereon	

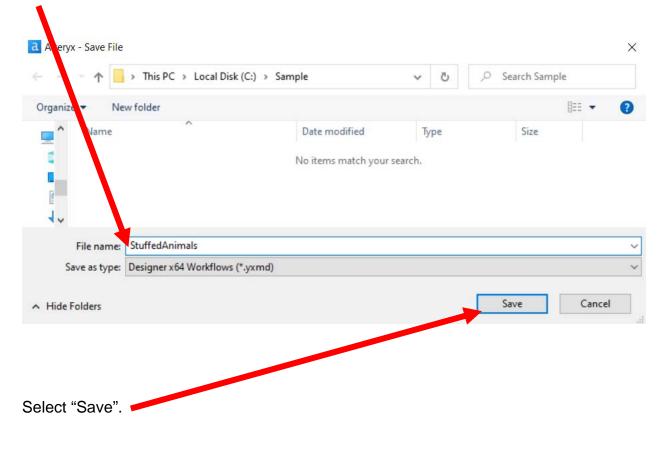


Remember that the field names are in the nineth row. In the Configuration area, scroll down to option ~ 卫 Input Data (1) - Configuration 7. Connect a File or Database C:\Sample\Stuffed Animals.ETL.Demo.xlsx • 3 Options 0 ^ Name Value 3 cord Limit 2 File Form Microsoft Excel (\*.xlsx) ~ 3 Table or Query January Sales Data\$' 4 Search SubDirs 5 Output File Name as Field No 6 First Row Contains Data Change the number in "Start Data Import on Line" to "9". 6 First New Contains Data 7 Start Data Import on Line 9 ~ Preview (first 100 records) Refresh Select "Run". The Results window will display the field heading and the data. Start Here.yxmd X New Workflow1\* X + C DR - + Stuffed Animals.ETL.Dem o.xlsx Query="January Sales Data\$" Results - Input Data (1) - Output ~ 4 🚆 11 of 11 Fields 🔹 🕜 🛛 Cell Viewer 🔹 1,227 records displayed 🛛 🛧 🤳 C Search Data Metadata Actions 000 Salesperson # Record Sales Order # Salesperson Title Profit Margin State Product # of u Sales Region # Region 35005 1304 Martin Van Buren Sales Associate I TN Stuffed Horse 144 3168 1908 3 South 3 2 Piuli Stuffed Horse 3168 72 [Null] [Null] Senior Sales Associate Stuffed Panda 4 35006 1302 Grover Cleveland 936 Midwest NE 1656 [Null] [Null] 2 5 (Null) Stuffed Panda 1656 2028 2028 Stuffed Panda 7 35009 1301 Thomas Jefferson Sales Associate 1 Northeast PA 156 3588 Stuffed Panda •

### The workflow must be saved.



Type in the name of the file that will be uploaded.



# Export the workflow and the related input files so that the project can be completed on another computer or uploaded to the web.

		Options	<u>H</u> elp ⊕	
		<u>R</u> un Wo	rkflow	Ctrl+R
		Schedu	e Workflow	
Select "Options".		View Sc	hedules	
		Run An	alytic Apps	
		Export	Norkflow	
		Manage	Licenses	
Select "Export Workflow".		Manage	Connect Creder	tials
		Add Pro	omote Connection	n
		User Se	ttings	>
		Advanc	ed Options	>
		Downlo	ad Predictive Too	ls
Verify the "Workflow".	Export Workflow Export Settings Workflow StuffedAnimals.yxmd Package Location			Lock
Verify the "Package Location".	C:\Sample\StuffedAni	mals.yxzp		Browse
	Group assets by	tool		Undo changes
	C:\Sample\St		TL-Demo.xlsx	
Select "Save".				Save Cancel Help

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

There are several rows that do not contain an sales order 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.

+ Favor	ites <	in/Out	Preparation	Join	🔵 Parse	Transform	in-Detabase	Reporting	Coci	umentation	Spatial	Interface	🔍 Data In	vestigation	RF
Browse	Input	Data Output		t Data Cleensing	Filter	)* Joinule	semple	Select	Sort *	Join	Union Vite	Text To Columns	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	Comment	
() () () () () () () () () () () () () (		lect   Basic fil	Basic	or C	usto	om Fi	lter –		Stuffe		-2	F			
0	0	Select Custom				<b>∨</b> ][			o.xlsx	=`Janua					

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

(3) (3)	Se	lect Bas	ic o	r Cus	stom F	ilter	
0	۲	Basic filter					
3		Sales Or	$\sim$	>	~	1	
	0	Custom filter					_

To apply the latest change, select "Run".



We can view three different datasets in the Results window.

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

= 11 of 1	1 Fields 🔹 👽 🛛 C	ell Viewer + 409 rec	ords displayed   🛧 🤟	- 1					Search		Data Met
Record	Sales Order #	Salesperson #	Salesperson	Title	Profit Margin	Region #	Region	State	Product	# of units	Sales
	1 35005	1304	Martin Van Buren	Sales Associate I	1908	3	South	TN	Stuffed Horse	144	3168
	2 35006	1302	Grover Cleveland	Senior Sales Associate	936	1	Midwest	NE	Stuffed Panda	72	1656
EX	3 35009	1301	Thomas Jefferson	Sales Associate I	2028	2	Northeast	PA	Stuffed Panda	156	3588
	4 35011	1305	George Washington	Sales Associate I	1560	1	Midwest	MN	Stuffed Panda	120	2760
?)	5 35014	1303	Ulysses Grant	Senior Sales Associate	1215	1	Midwest	MN	Stuffed Giraffe	108	2268
-	6 35017	1305	George Washington	Sales Associate I	708	2	Northeast	RI	Stuffed Elephant	48	1200
	7 35025	1303	Ulysses Grant	Senior Sales Associate	1272	2	Northeast	ME	Stuffed Horse	96	2112
	8 35026	1301	Thomas Jefferson	Sales Associate I	1716	4	West	WY	Stuffed Penguin	156	3120
	9 35027	1301	Thomas Jefferson	Sales Associate I	1215	4	West	CA	Stuffed Giraffe	108	2268
	10 35032	1303	Ulysses Grant	Senior Sales Associate	1584	1	Midwest	NE	Stuffed Penguin	144	2880

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

昌 11	11 of 11 Fields 🔹 💞 Cell Viewer 🔹 818 records displayed 1 🕂 🗸											
Reco	ord Sales Order #	Salesperson #	Salesperson	Title	Profit Margin	Region #	Region	State	Product	# of units	Sale	
-	1 [Null]	[Null]	[Null]	[Null]	[Null]	[Null]	[Null]	[Null]	Stuffed Horse	[Null]	316	
	2 [Null]	[Null]	[Null]	[Null]	[Null]	[Null]	[Null]	[Null]	[Null]	[Null]	[Nul	
E)	3 [Null]	[Null]	[Null]	[Null]	[Null]	[Null]	[Null]	[Null]	Stuffed Panda	[Null]	1656	
	4 [Null]	[Null]	[Null]	[Null]	[Null]	[Null]	[Null]	[Null]	[Null]	[Null]	[Nul	
3)	5 [Null]	[Null]	[Null]	[Null]	2028	[Null]	[Null]	[Null]	Stuffed Panda	[Null]	[Nul	
-	6 [Null]	[Null]	[Null]	[Null]	[Null]	[Null]	[Null]	[Null]	[Null]	[Null]	[Nul	
	7 [Null]	[Null]	[Null]	[Null]	1560	[Null]	[Null]	[Null]	Stuffed Panda	[Null]	[Nul	
	8 [Null]	[Null]	[Null]	[Null]	[Null]	[Null]	[Null]	[Null]	[Null]	[Null]	[Nul	
	9 [Null]	[Null]	[Null]	[Núll]	1215	[Null]	[Null]	[Null]	Stuffed Giraffe	[Null]	[Null	
	10 [Null]	[Null]	[Null]	[Null]	[Null]	[Null]	[Null]	[Null]	[Null]	[Null]	[Null	

The data being filtered can also be displayed.

冒 11 of 1	1 Fields 🔹 🕪 📔 C	ell Viewer 🔹 1,227 r	ecords displayed	$\downarrow$					Search		Data Met
Recor	Sales Order #	Salesperson #	Salesperson	Title	Profit Margin	Region #	Region	State	Product	# of units	Sales
-	1 35005	1304	Martin Van Buren	Sales Associate I	1908	3	South	TN	Stuffed Horse	144	3168
	2 [Null]	(164611)	(Moll)	(Null)	(Néutr)	[NuN]	[Null]	[Noull]	Stuffed Horse	[NuFI]	3168
F	3 [Null]	[NoII]	(Nuti)	[Nu0]	[NoII]	(Null)	[Null]	[NuRI]	[[Nu8]]	[thoult]	(NoII)
	4 35006	1302	Grover Cleveland	Senior Sales Associate	936	1	Midwest	NE	Stuffed Panda	72	1656
?	5 [Null]	(No.01)	[Null]	(Null)	[1408]	[N60]	[Null]	[Nu/ii]	Stuffed Panda	[[%640]]	1656
-	6 [Null]	[Null]	[Null]	(Null)	[Null]	[Null]	[Nu0]	[Null]	(Null]	[Null]	[Null]
	7 35009	1301	Thomas Jefferson	Sales Associate I	2028	2	Northeast	PA	Stuffed Panda	156	3588
	8 [Nutl]	[Pikuti]	(2408)	(No)()	2028	(Null)	[Pduff]	(14061)	Stuffed Panda	[Péuli]	[[Pault]]
	9 [Null]	(Null)	(Null)	[Neu83]	(Null)	[Null]	[Null]	[Null]	[Null]	[Null]	(Null)
	10 35011	1305	George Washington	Sales Associate I	1560	1	Midwest	MN	Stuffed Panda	120	2760

### Tool 3: Select Tool – Remove fields that contain no data, from "\*Unknown"

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.

50	Input	t Dete Output Det	a Text input		Dete	Filter	Formula Sample	Set Sort Join Union Tex To Summarize Commer
Op	tions	•  <b>↑</b> ↓	TIP: T		Cleansing order mu	ultiple rows: sel	ect, right-click and dra	
		Field	Туре		Size	Rename	Description	
		Sales Order #	Double		8			
		Salesperson #	Double	•	8			Stuffed [Sales Order #] >
		Salesperson	V_String	•	255			Animals.ETL.Dem 1
		Title	V_String	•	255			Query=`January
		Profit Margin	Double	•	8			Sales Data\$'
		Region #	Double	-	8			
	$\checkmark$	Region	V_String	•	255			
		State	V_String	•	255			
		Product	V_String	•	255			
		# of units	Double	•	8			
-		Sales	Double	-	8			
		*Unknown	Unknown		0		Dynamic or Unk	

Remove any extra fields by unchecking them.

	vse	Input Data C	Output Data	Т	ext Inpu	t Data Cleansir	Filter
Select	(4) - Con	figuration					~ 2
	Options	-   <b>^</b> \	TIP: T	o rec	order mu	ltiple rows: sele	ect, right-click and drag
3		Field	Туре		Size	Rename	Description
0		Sales Order #	Double	•	8		
0		Salesperson #	Double	•	8		
		Salesperson	V_String	•	255		
		Title	V_String	•	255		
		Profit Margin	Double	•	8		
		Region #	Double	•	8		
		Region	V_String	•	255		
		State	V_String	•	255		
		Product	V_String	•	255		
		# of units	Double	•	8		
		Sales	Double	•	8		-
		*Unknown	Unknown	-	0		Dynamic or Unk

.

Change the type of all numeric fields that will be used in calculations to "FixedDecimal". The "# of units should have zero decimal places and dollar values should have two decimal places.

Op	tions	◆   ↑ ↓ TIP: To reorde								
Г		Field	Туре	_	Size					
•	$\square$	Sales Order #	Double	•	8					
	$\checkmark$	Salesperson #	Double	•	8					
	$\checkmark$	Salesperson	V_String		255					
	$\checkmark$	Title	V_String	•	255					
	$\checkmark$	Profit Margin	FixedDecimal	•	19.2					
	$\checkmark$	Region #	Double	•	8					
	$\checkmark$	Region	V_String	•	255					
	$\checkmark$	State	V_String	•	255					
	$\checkmark$	Product	V_String	•	255					
	$\checkmark$	# of units	FixedDecimal	٠	19.0					
	$\checkmark$	Sales	FixedDecimal	•	19.2					
	$\checkmark$	*Unknown	Unknown	•	0					

### Before making changes:

nnn	11 of 11 Fields 🔹 🦦	Cell Viewer •	409 records displayed	$\wedge \downarrow$		0	Search		Data N	Acti	ions - 00
יו	Record )rder #	Salesperson #	Salesperson	Title	Profit Margin	Region #	Region	State	Product	# of units	Sales
	1	1304	Martin Van Buren	Sales Associate I	1908	3	South	TN	Stuffed Horse	144	3168
>	2	1302	Grover Cleveland	Senior Sales Associate	936	1	Midwest	NE	Stuffed Panda	72	1656
)	3	1301	Thomas Jefferson	Sales Associate I	2028	2	Northeast	PA	Stuffed Panda	156	3588
1	4	1305	George Washington	Sales Associate I	1560	1	Midwest	MN	Stuffed Panda	120	2760
	5	1303	Ulysses Grant	Senior Sales Associate	1215	1	Midwest	MN	Stuffed Giraffe	108	2268
	6	1305	George Washington	Sales Associate I	708	2	Northeast	RI	Stuffed Elephant	48	1200
	7	1303	Ulysses Grant	Senior Sales Associate	1272	2	Northeast	ME	Stuffed Horse	96	2112
	8	1301	Thomas Jefferson	Sales Associate I	1716	4	West	WY	Stuffed Penguin	156	3120

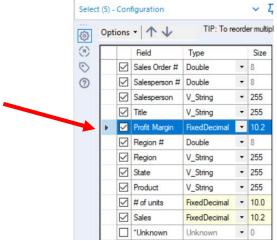
### Select Run.

Select the output area of the Select tool.

irt Here.ya		edAnimals.yxmd*	× +							>>	Ð ÞR	un R
o_xisx	s.ETL.Dem	Sales Order #] >										
Sales Di												
	ect (5) - Output	- care	***	ACCE I		12	Consta		Dur	Maria da Maria	~	
11 of	f 11 Fields 🔹 👽		409 records displayed			-	) Search	141.1		Metadata	Actions - 00	,
	f 11 Fields 🔹 👽	Salesperson #	Salesperson	Title	Profit Margin	C Region #	Region	State	Product	# of unit	Actions - 000	,
11 of Record	f 11 Fields 🔹 👽	Salesperson # 1304	Salesperson Martin Van Buren	Title Sales Associate I	1908.00	-	Region South	TN	Product Stuffed Horse	# of unit	Actions - 00 5 Sales 3168.00	,
11 of Record	f 11 Fields 🔹 👽	Salesperson # 1304 1302	Salesperson Martin Van Buren Grover Cleveland	Title Sales Associate I Senior Sales Associate	1908.00 936.00	-	Region South Midwest	TN NE	Product Stuffed Horse Stuffed Panda	# of unit 144 72	Actions - 000 s Sales 3168.00 1656.00	,
11 of Record	f 11 Fields 🔹 👽	Salesperson # 1304 1302 1301	Salesperson Martin Van Buren Grover Cleveland Thomas Jefferson	Title Sales Associate I Senior Sales Associate Sales Associate I	1908.00 936.00 2028.00	-	Region South Midwest Northeast	TN NE PA	Product Stuffed Horse Stuffed Panda Stuffed Panda	# of unit 144 72 156	Actions - 000 a Sales 3168.00 1656.00 3588.00	
11 of	f 11 Fields • 🖋 1 Jrder # 1 2 3 4	Salesperson # 1304 1302 1301 1305	Salesperson Martin Van Buren Grover Cleveland Thomas Jefferson George Washington	Title Sales Associate I Senior Sales Associate Sales Associate I Sales Associate I	1908.00 936.00 2028.00 1560.00	-	Region South Midwest Northeast Midwest	TN NE PA MN	Product Stuffed Horse Stuffed Panda Stuffed Panda Stuffed Panda	# of unit 144 72 156 120	Actions - 000 a Sales 3168.00 1656.00 3588.00 2760.00	
11 of Record	f 11 Fields 🔹 👽	Salesperson # 1304 1302 1301	Salesperson Martin Van Buren Grover Cleveland Thomas Jefferson George Washington Ulysses Grant	Title Sales Associate I Senior Sales Associate Sales Associate I	1908.00 936.00 2028.00	-	Region South Midwest Northeast	TN NE PA MN MN	Product Stuffed Horse Stuffed Panda Stuffed Panda Stuffed Panda Stuffed Giraffe	# of unit 144 72 156	Actions - 000 a Sales 3168.00 1656.00 3588.00	
11 of Record	f 11 Fields • 🖋 1 3rder # 1 2 3 4 5	Salesperson # 1304 1302 1301 1305 1303	Salesperson Martin Van Buren Grover Cleveland Thomas Jefferson George Washington	Title Sales Associate I Senior Sales Associate I Sales Associate I Sales Associate I Senior Sales Associate	1908.00 936.00 2028.00 1560.00 1215.00	-	Region South Midwest Northeast Midwest Midwest	TN NE PA MN	Product Stuffed Horse Stuffed Panda Stuffed Panda Stuffed Panda	# of unit 144 72 156 120 108	Actions - 000 5 Sales 3168.00 1656.00 3588.00 2760.00 2268.00	

Change the order of the fields by moving "Profit Margin" to the end.

In the Configuration section select "Profit Margin".



Use the down arrow to move "Profit Margin" to the end of the 
</

option	s •   ↑ ↓	TIP: To re	eord	er mul
	Field	Туре		Size
	Sales Order #	Double	•	8
	] Salesperson #	Double	•	8
	] Salesperson	V_String	•	255
	] Title	V_String	•	255
	Region #	Double	•	8
	Region	V_String	•	255
	] State	V_String	•	255
	Product	V_String	•	255
	# of units	FixedDecimal	•	10.0
	] Sales	FixedDecimal	•	10.2
	Profit Margin	FixedDecimal	-	10.2
	Unknown	Unknown	-	0

Select Run.

8 11	of 11 Fields 🔹 🖋 🛛 🕻	Cell Viewer 🔹 409 red	cords displayed 🛛 🐴 🚽				Q Search		Data	Metadata	Actions - 000
Reco	ord Sales Order #	Salesperson #	Salesperson	Title	Region #	Region	State	Product	# of units	Sales	Profit Margin
-	1 35005	1304	Martin Van Buren	Sales Associate I	3	South	TN	Stuffed Horse	144	3168.00	1908.00
	2 35006	1302	Grover Cleveland	Senior Sales Associate	1	Midwest	NE	Stuffed Panda	72	1656.00	936.00
2	3 35009	1301	Thomas Jefferson	Sales Associate I	2	Northeast	PA	Stuffed Panda	156	3588.00	2028.00
	4 35011	1305	George Washington	Sales Associate I	1	Midwest	MN	Stuffed Panda	120	2760.00	1560.00
	5 35014	1303	Ulysses Grant	Senior Sales Associate	1	Midwest	MN	Stuffed Giraffe	108	2268.00	1215.00
	6 35017	1305	George Washington	Sales Associate I	2	Northeast	RI	Stuffed Elephant	48	1200.00	708.00
	7 35025	1303	Ulysses Grant	Senior Sales Associate	2	Northeast	ME	Stuffed Horse	96	2112.00	1272.00
	8 35026	1301	Thomas Jefferson	Sales Associate I	4	West	WY	Stuffed Penguin	156	3120.00	1716.00

## Temporary Tool 4: Browse Tool – The Data in the Fields Must Conform to Predefined Rules.

In the original Excel file, The Cuddly Stuffed Animals company provided the only acceptable values for "Product", "Salesperson" and "Region". Sometime data is entered incorrectly into the data.

Product ID	Product	Code	Salesperson	T	Carla	Destaur
101	Stuffed Penguin	1301	Thomas Jefferson	Ļ	Code	Region
102	Stuffed Horse	1302	Grover Cleveland		1	Midwest
103	Stuffed Unicorn	1303	Ulysses Grant		2	Northeast
104	Stuffed Giraffe	1304	Martin Van Buren			
105	Stuffed Panda		George Washington		3	South
106	Stuffed Elephant	-	John Tyler		4	West

The "Product" field can only contain one of the six products. Browse the data in the "Product" field to verify that all the data is correct. Make any changes that are required.

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

Browse Input Output Data	-	Filter F	ormula	Sample	Select	Sort Sort	Join	ہ <mark>ہ کی</mark> Union	Text To Columns	> > > > > > > > > > > > > > > > > > >	Comment
Browse (6) - Configuration	~ 7	Stort Here.)	/xmd X	StuffedAr	imals.yxmd'	×	+				
<ul> <li>Profile</li> </ul>	>>				3	-					

Select Run.

In the Configuration section scroll down to "Product" and select "1 more".

AB <sub>C</sub> Product			Profi	e ← Product		
Stuffed Horse	125			Distinct Values		
Stuffed Giraffe	80			Stuffed Horse	125	-
Stuffed Panda	77	•		Stuffed Giraffe	80	
Stuffed Elephant	49	-		Stuffed Panda	77	-
	46	-		Stuffed Elephant	49	-
Stuffed Penguin	40	-		Stuffed Penguin	46	
1 more >				Stuffed Unicorn	32	

The data is clean, there are only six products listed.

The "Salesperson" field can only contain one of the six names. Browse the data in the "Salesperson" field to verify that all the data is correct. Make any changes that are required.

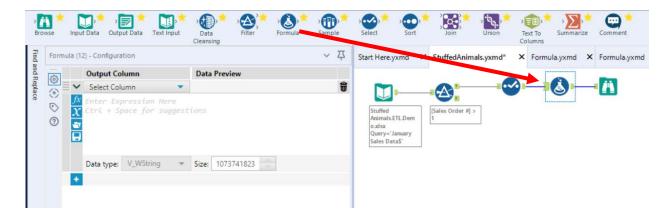
In the Configuration section scroll down to "Salesperson" and select "2 more".

<b>(3)</b>				>>	1				
$(\overline{\mathbf{r}})$	Profile						rofile		
0	1 more >			-		2	← Salesperson		
Ū	A <sup>B</sup> C Salesperson					~			
	George Washington	112 -	-				Distinct Values		
	Thomas Jefferson	91 -					George Washington	112	-
	Grover Cleveland	74 -	-				Thomas Jefferson	91	-
	Martin Van Buren	45 •	-				Grover Cleveland	74	
	John Tyler	43 •	-				Martin Van Buren	45	
	2 more >						John Tyler	43	
	A <sup>B</sup> c Title						Ulysses Grant	42	

"Thomass Jefferson" must be replaced with "Thomas Jefferson" for a total of 93 distinct values.

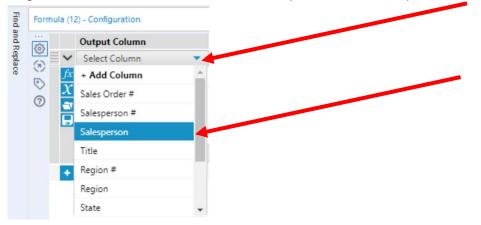
### Tool 4: Formula Tool – The Data in the Fields Must Conform to Predefined Rules.

Drag the "Formula Tool" from the Tools Palette between the output of the "Select Tool" and the "Browse Tool" on the Canvas. The three will be connected automatically.



If the salesperson's name is "Thomass Jefferson" replace it with "Thomas Jefferson" otherwise leave the existing name in the field. Do not create a new field, put the output back into the "Salesperson" field.

In the configuration section select the field Salesperson from the pull-down list.



### Type in the formula.

Find and Replace	122	Output Column		Data Preview	
Repla	@ •	<ul> <li>Salesperson</li> </ul>	•	Martin Van Buren	49
	0	then "Thomas Je else [Salespers endif			
				Size: 255	A.C.

	Profile	
Select the Browse step.	← Salesperson	
Select Run.	Distinct Values	
Select Run.	George Washington	112
	Thomas Jefferson	93
	Grover Cleveland	74 -
	Martin Van Buren	45
	John Tyler	43 •
	Ulysses Grant	42

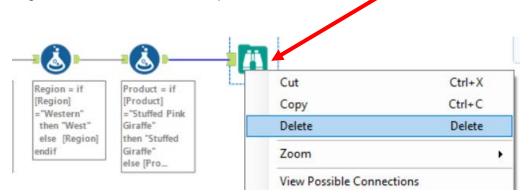
In the Configuration section scroll down to "Salesperson". There are only six salespersons and Thomas Jefferson has 93 distinct values.

While in the Browse step, verify the field "Region"

South	126
Northeast	110 -
West	104 -
Midwest	69

The data is clean, only the four regions are listed.

### Right click on the Browse step and select delete.

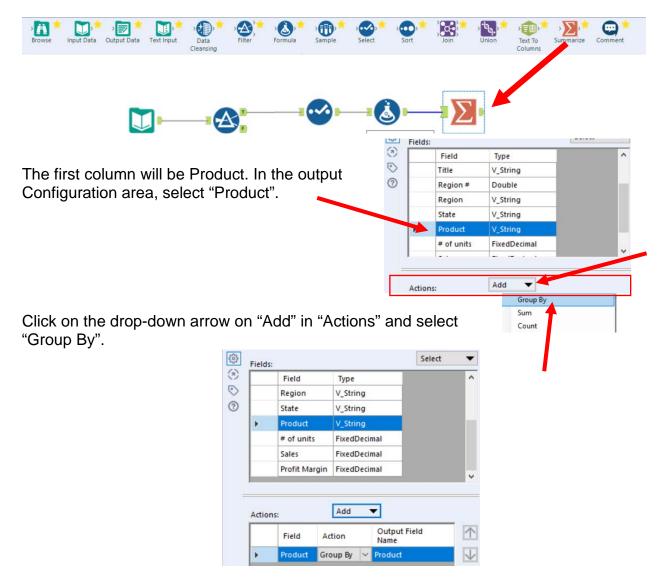


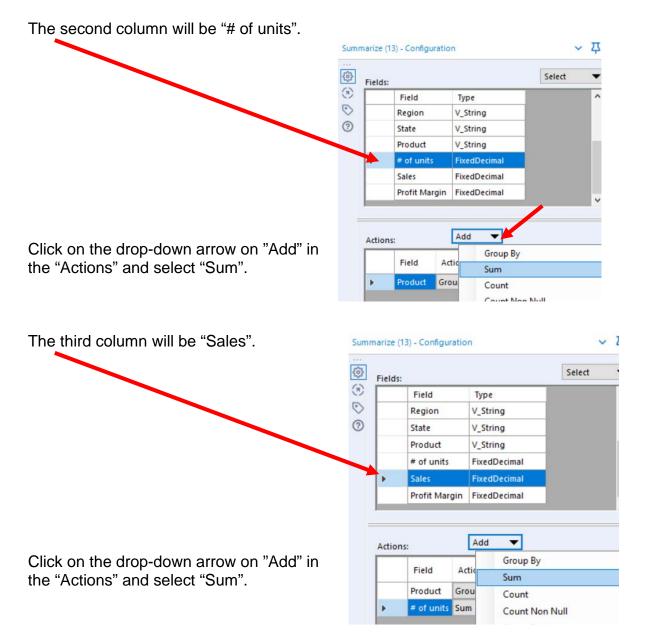
### **Tool 5:** Select Tool Summary: We now want to create a report by product by first

summarizing on "# of units" by product.

Product	# of units	Sales	Profit Margin
Stuffed Frog	1,524	\$ 33,528	\$20,574
Stuffed Unicorr	408	8,160	4,692
Stuffed Panda	1,140	26,220	15,675
Stuffed Koala	624	14,976	8,112
Stuffed Elepha	4,044	84,924	49,539
Stuffed Bear	2,376	59,400	35,046
Total	10,116	\$227,208	\$133,638

Drag a "**Summary Tool**" **\* 2** to the right of the "Formula 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.





The fourth column will be "Profit Margin".	Sumr	narize (	13) - Configu	ration	n i	~ 2
	(3) (3)	Fields				Select
	۲		Field		Туре	
	$\odot$		Region		V_String	
	(?)		State		V_String	
			Product		V_String	
			# of units		FixedDecimal	
			Sales		FixedDecimal	
		•	Profit Mar	gin	FixedDecimal	
Click on the drop-down arrow on "Add" in the "Actions" and select "Sum".	=	Action	Field Product	Act	Sum	
		+	# of units	Sum		Null
			Sales	Sum	-	In The Second

Select "Run".

The report is created.

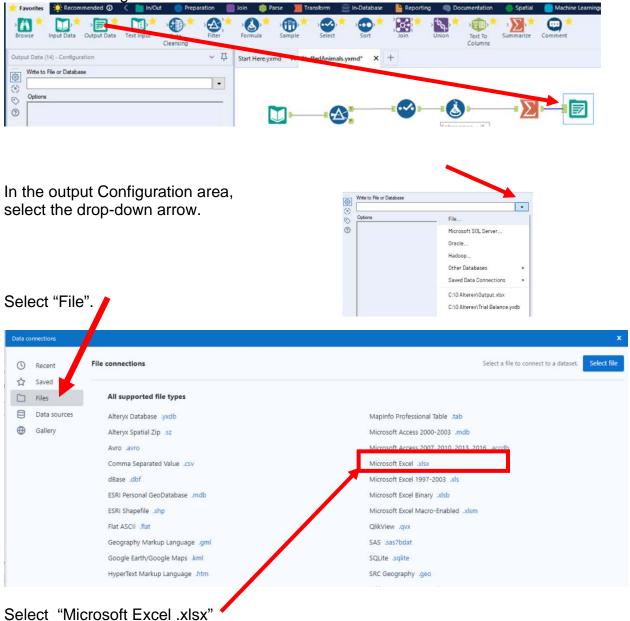
	Field	Action		Output Field Name	$\wedge$								
•	Product	Group By	~	Product	V	$\Sigma$	Record	Product	Sum_# of units	Sum_Sales	Sum_Profit Margin		
	# of units	Sum	~	Sum_#	Θ		1	Stuffed Elephant	4392	109800.00	64782.00		
	Sales	Sum	~		0		0	2	Stuffed Giraffe	8052	169092.00	90585.00	
								3	Stuffed Horse	12120	266640.00	160590.00	
	Profit Margin	Sum	~	Sum_Pr		0	4	Stuffed Panda	7488	172224.00	97344.00		
							5	Stuffed Penguin	5016	100320.00	55176.00		
Acti	on Properties						6	Stuffed Unicorn	3060	73440.00	40545.00		

### Change the "Output Field Names" and select "Run"

	Field	Action		Output Field Name	$\wedge$						
•	Product	Group By	~	Product	$\checkmark$	Σ	Record	Product	Units	Sales	Profit Margin
	# of units	Sum	~	Units			1	1 Stuffed Elephant	4392	109800.00	64782.00
	Sales	Sum	~	Sales	Θ	ΘD		2 Stuffed Giraffe	8052	169092.00	90585.00
	Profit Margin	rofit Margin Sum V Profit Margin		?	3	3 Stuffed Horse	12120	266640.00	160590.00		
	rionemargin	Jun		Troncinargin		0		4 Stuffed Panda	7488	172224.00	97344.00
								5 Stuffed Penguin	5016	100320.00	55176.00
								6 Stuffed Unicorn	3060	73440.00	40545.00

**Tool 6:** Select Tool Output Data Tool: We now want to export the cleaned and assembled Product Report to Excel.

Drag an "**Output Data 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.



#### Mark Friedman University of Miami

	a Alteryx - Save File						×
Select the required file	$\leftrightarrow \rightarrow \cdot \uparrow$	$\rightarrow~$ This PC $~\rightarrow~$ Local Disk (C:) $~\rightarrow~$	Sample	5 V	, Search Sar	mple	
name.	Organize 🔻 Ne	w folder				EE -	- 0
	Name	^	Date modified	Туре	Size		
	Stut	ffed Animals.ETL.Demo	12/9/2021 6:10 PM	Microsoft	Excel W	857 KB	
	File name: Save as type:	Stuffed Animals.ETL.Demo Microsoft Excel (*.xlsx)					~
Select "Save".	∧ Hide Folders				Save		ancel
Click on "Yes" to confirm		Do you want t	als.ETL.Demo.xlsx alreator replace it?		No		
		Select Excel Output				x	
		Specify a sheet				_	
Enter the sheet name.		Report by Product					
		Specify a range (o	cells, rows or columns)				
		ex. A1	- ex. G7				
Select "OK".							
			Refresh	Help Ca	OK		
Select "Run".							

### Open the file in Excel.

	А	В	С	D	Е	F	G	н	I.	J
1	Product	Units	Sales	Profit Mar	gin					
2	Stuffed Ele	4392	########	64782.00						
3	Stuffed Gir	8052	########	90585.00						
4	Stuffed Ho	12120	########	########						
5	Stuffed Pa	7488	########	97344.00						
6	Stuffed Pe	5016	########	55176.00						
7	Stuffed Un	3060	73440.00	40545.00						
8										
9										
	⊢ ▶ …	February-	December	Sales Data	Produ	icts   Sale	sperson	Region	Report by	y Product

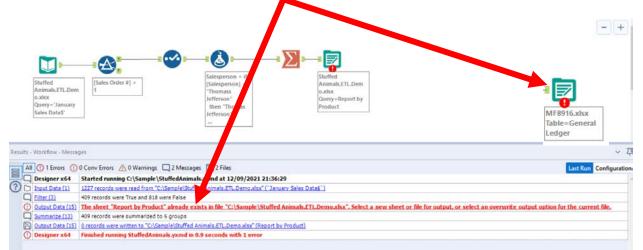
### Change the columns' widths and formats.

	А	В	С	D	E	F	G	Н	1
1	Product	Units	Sales	Profit Margin					
2	Stuffed Elephant	4,392	\$109,800.00	\$ 64,782.00					
3	Stuffed Giraffe	8,052	\$169,092.00	\$ 90,585.00					
4	Stuffed Horse	12,120	\$266,640.00	\$160,590.00					
5	Stuffed Panda	7,488	\$172,224.00	\$ 97,344.00					
6	Stuffed Penguin	5,016	\$100,320.00	\$ 55,176.00					
7	Stuffed Unicorn	3,060	\$ 73,440.00	\$ 40,545.00					
8	Total	40,128	\$891,516.00	\$509,022.00					
9									_
•	🔹 🕞   Febru	ary-Decemb	er Sales Data	Products	Salespers	on   Regi	on <b>Rep</b>	ort by Proc	duct

"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" number 3.

	Write to File or Database		
	C:\Sample\Stuffed Animals.ETL.Demo.xlsx   Report by R	Product	•
	Options		
	Name 1 Max Records Per File	Value	
	2 File Format	Microsoft Excel (* xlsx)	~
	3 Output Options	Create New Sheet	~
	4 Append Field Map	Append To Existing Sheet	
Select "Overwrite Sheet".	5 Skip Field Names	Overwrite Sheet or Range Overwrite File (Remove)	
	6 Preserve Formatting on Overwrite (Range Required)	Create New Sheet	

Select "Run".

Open the Excel file.

	А	В	С	D	E	F	G	н	I.	J
1	Product	Units	Sales	Profit Mar	gin					
2	Stuffed Ele	4392	########	64782.00						
3	Stuffed Gir	8052	########	90585.00						
4	Stuffed Ho	12120	########	########						
5	Stuffed Pa	7488	########	97344.00						
6	Stuffed Pe	5016	########	55176.00						
7	Stuffed Un	3060	73440.00	40545.00						
8										
9										
	( → …	February-	December	Sales Data	Produ	icts   Sale	sperson	Region	Report by	/ Product

	А	В	С	D	Е	F	G	н	I
1	Product	Units	Sales	Profit Margin					
2	Stuffed Elephant	4,392	\$109,800.00	\$ 64,782.00					
3	Stuffed Giraffe	8,052	\$169,092.00	\$ 90,585.00					
4	Stuffed Horse	12,120	\$266,640.00	\$160,590.00					
5	Stuffed Panda	7,488	\$172,224.00	\$ 97,344.00					
6	Stuffed Penguin	5,016	\$100,320.00	\$ 55,176.00					
7	Stuffed Unicorn	3,060	\$ 73,440.00	\$ 40,545.00					
8	Total	40,128	\$891,516.00	\$509,022.00					
9									
10									
•	🕞   Febru	ary-Decemb	er Sales Data	Products	Salespers	on   Regi	on Jan I	Report by	Product

Reformat the Excel sheet and rename the formatted sheet "Jan Report by Product". When the Alteryx flow runs it will create a new unformatted sheet "Report by Product". The "Salesperson" report will summarize the data by "Salesperson #" with the salesperson's name attached for clarity. We now want to combine the fields with a space, a dash and another space between the two fields.

Salesperson	# of units	Sales	Profit Margin
salesperson	# or units	Sales	Profit Margin
1405 - James Polk	1,812	\$41,568	\$24,438
1425 - John Tyler	2,172	48,336	28,110
1541 - Ulysses Grant	756	17,112	10,062
1576 - James Madison	1,776	39,216	23,160
1588 - George Washington	1,584	35,784	21,168
1776 - James Monroe	2,016	45,192	26,700
Total	10,116	\$227,208	\$133,638

One field, "Salesperson #" is a numeric

field, while the other field, "Salesperson' is a string. It is easier to combine filed if they are both strings.

Select the third tool, the Select Tool from the flow.

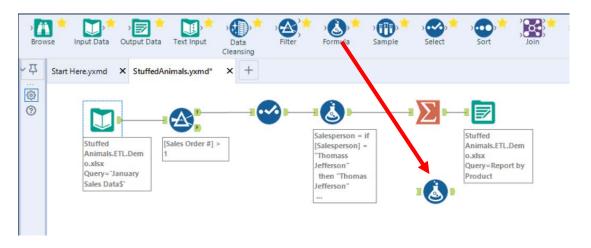


In the configuration section select the pull down in the "Type" column for the "Salesperson #" field and select "String".

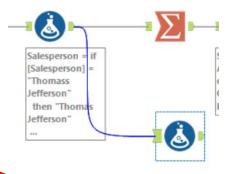
		Field	Туре		Size			-	Field	Туре		Size	Rena
	$\checkmark$	Sales Order #	Double	-	8	-	_				_	120	nen
1		Salesperson #	Double	-	8	0		$\leq$	Sales Order #	Double	•	8	
		Salesperson	Bool			3	.l			String	•	19	
			Byte		-				Salesperson	V String	-	255	
Ľ		Title	Int 16	nt 32									
	$\checkmark$	Region #	Int64										
	$\square$	Region	FixedDecimal Float										
	$\checkmark$	State	Double										
	$\square$	Product	Double: Forced String	t									
Ì		# of units	WString V_String										
		Calas	V WString										

**Tool 7: Select Tool Formula:** We can now want to combine the fields "Salesperson #" and "Salesperson".

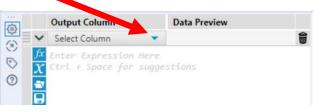
Drag a "Formula **Tool**" under the "Running Balance Tool" branching from the "Formula Tool" on the Canvas.

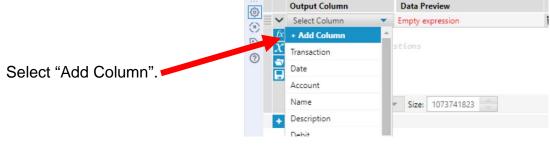


To connect the tools, drag from the outflow of the Tool 4, Formula Tool to the left inflow of the Tool 7, Formula tool.



In the output Configuration area, click on the drop-down arrow of "Select Column".







Type the following formula [Salesperson #]+" - "+[Salesperson]

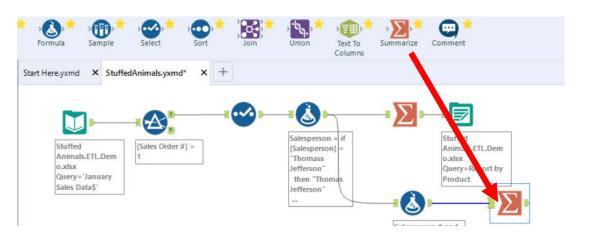
	Output Column	Data Preview
~	Salesperson # and Name 😣	[Null]

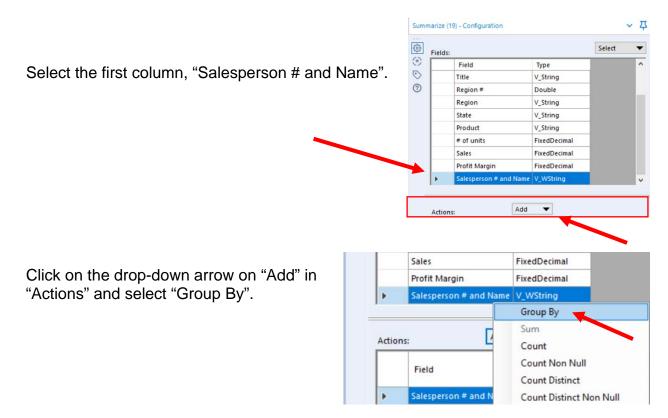
Select "Run".

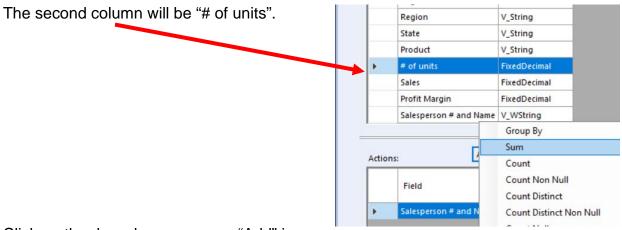
2										
]	Record	Title	Region #	Region	State	Product	# of units	Sales	Profit Margin	Salesperson # and Name
-	1	Sales Associate I	3	South	TN	Stuffed Horse	144	3168.00	1908.00	1304 - Martin Van Buren
	2	Senior Sales Associate	1	Midwest	NE	Stuffed Panda	72	1656.00	936.00	1302 - Grover Cleveland
1	3	Sales Associate I	2	Northeast	PA	Stuffed Panda	156	3588.00	2028.00	1301 - Thomas Jefferson
1	4	Sales Associate I	1	Midwest	MN	Stuffed Panda	120	2760.00	1560.00	1305 - George Washington
	5	Senior Sales Associate	1	Midwest	MN	Stuffed Giraffe	108	2268.00	1215.00	1303 - Ulysses Grant
	6	Sales Associate I	2	Northeast	RI	Stuffed Elephant	48	1200.00	708.00	1305 - George Washington
	7	Senior Sales Associate	2	Northeast	ME	Stuffed Horse	96	2112.00	1272.00	1303 - Ulysses Grant
	8	Sales Associate I	4	West	WY	Stuffed Penguin	156	3120.00	1716.00	1301 - Thomas Jefferson

Tool 8: Select Tool Summary: We now want to create a "Salesperson Report".

Drag a "**Summary Tool**" **\* Drag** to the right of the "**Formula 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.

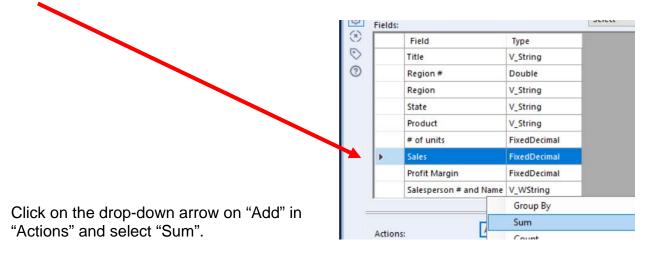






Click on the drop-down arrow on "Add" in "Actions" and select "Sum".

The third column will be "Sales".



The fourth column will be "Profit Margin"	Fields	Field	Туре	Select
	0	Title	V_String	
	3	-		-
		Region #	Double	-
		Region	V_String	
		State	V_String	
		Product	V_String	
		# of units	FixedDecimal	
		Sales	FixedDecimal	
		Profit Margin	FixedDecimal	
		Salesperson # and Name	V_WString	
			Group By	
			Sum	
Click on the drop-down arrow on "Add" in "Actions" and select "Sum".	Action	ns:	Count Count Non Null	

Select "Run".

And, the report is created, right click on the output arrow if nessacary.

	Field	Action		Output Field Name	$\wedge$		4 of 4 Field	te + M Cell Viewer +	δ records displayed	$\wedge \downarrow \downarrow$		
Þ.	Salesperson # a	Group By	~	Salesperson # a	$\checkmark$		4 of 4 field	cenviewer ·	o records displayed	1 1		
	# of units	Sum	~	Sum_# of units		Σ	Record	Salesperson # and Name	Sum_# of units	Sum_Sales	Sum_Profit Margin	
	Sales	Sum	~	Sum Sales	Θ		1	1301 - Thomas Jefferson	9528	210000.00	119466.00	
				-	lagrand	D	2	1302 - Grover Cleveland	7128	162276.00	92601.00	
_	Profit Margin	Sum	~	Sum_Profit Mar		0	?	3	1303 - Ulysses Grant	4116	90168.00	51294.00
						0	4	1304 - Martin Van Buren	4476	98388.00	56247.00	
							5	1305 - George Washington	10452	232536,00	133557.00	
							6	1306 - John Tyler	4428	98148.00	55857.00	

Change the "Output Field Names" and select "Run"

	Field	Action		Output Field Name	个	000		ds 🔹 🖌 🖉 Cell Viewer 🗸	6 records dist	played   1	k I		
•	Salesperson # a	Group By	~	Salesperson	$\checkmark$			an a landara		index ( )	er		
	# of units	Sum	~	Units		$\sum$	Record	Salesperson	Units	Sales	Profit Margin		
	Sales	Sum	~	Sales	Θ		1	1301 - Thomas Jefferson	9528	210000.00	119466.00		
					- Internal		1	1302 - Grover Cleveland	7128	162276.00	92601.00		
	Profit Margin	Sum	~	Profit Margin		?	0	0		1303 - Ulysses Grant	4116	90168.00	51294.00
						0	3	1304 - Martin Van Buren	4476	98388.00	56247.00		
							5	1305 - George Washington	10452	232536.00	133557.00		
							(	1306 - John Tyler	4428	98148.00	55857.00		

**Tool 9: Select** Output Data Tool: We now want to export the cleaned and assembled Salesperson Report to Excel.

Drag an "**Output Data 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.

	edAnimals.yxmd* X		nple Select Sort Join	Ū
Stuffed Animals.ETL.Dem o.xlsx Query='January Sales Data\$`	[Sales Order #] > 1	Salesperson = if [Salesperson] = "Thomass Jefferson" then "Thomas Jefferson" 	Stuffed Animals.ETL.Dem o.xlsx Query=Report of Product	
			Name = [Salesperson #]+" - "+[Salesperson]	

In the output Configuration area, select the drop-down arrow.

Write to File or Database	
Options	File
	Microsoft SQL Server
	Oracle
	Hadoop
	Other Databases
	Saved Data Connections
	C:\0 Alterex\0utput.xlsx
	C:\0 Alterex\Trial Balance.yxdb

Select "File".

ata co	nnections		
0	Recent	File connections	Select a file to connect to a dataset. Select fil
☆	Saved		
	Files	All supported file types	
9	Data sources	Alteryx Database .yxdb	MapInfo Professional Table .tab
⊕	Gallery	Alteryx Spatial Zip .sz	Microsoft Access 2000-2003 .mdb
		Avro .avro	Microsoft Access 2007, 2010, 2013, 2016, accel
		Comma Separated Value .csv	Microsoft Excel _xlsx
		dBase .dbf	Microsoft Excel 1997-2003 .xls
		ESRI Personal GeoDatabase .mdb	Microsoft Excel Binary .xlsb
		ESRI Shapefile .shp	Microsoft Excel Macro-Enabled .xlsm
		Flat ASCII .flat	QlikView .qvx
		Geography Markup Language .gml	SAS .sas7bdat
		Google Earth/Google Maps .kml	SQLite .sqlite
		HyperText Markup Language .htm	SRC Geography .geo

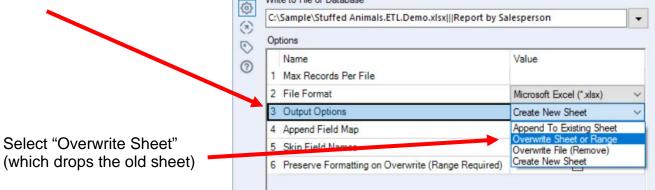
Select "Microsoft Excel .xlsx"

Soloct the required file	a Alteryx - Save File				×	
Select the required file	← → ✓ ↑ → This PC → Local Disk (C:) →	Sample	✓ Õ ,○ Se	, Search Sample		
name.	Organize 👻 New folder				0	
	Name ^	Date modified	Туре	Size		
	Stuffed Animals.ETL.Demo	12/9/2021 6:10 PM	Microsoft Excel W	857 KB		
	8					
	File name: Stuffed Animals.ETL.Demo				~	
Salaat "Sava"	Save as type: Microsoft Excel (*.xlsx)				~	
Select "Save".						
	∧ Hide Folders		Sa	ve Cancel		

#### Confirm Save As



nter the sheet name.	Specify a sheet Report by Salesperson
	Specify a range (cells, rows or columns)
	ex. A1 - ex. G7
elect "OK".	
	Refresh Heip Comp OK



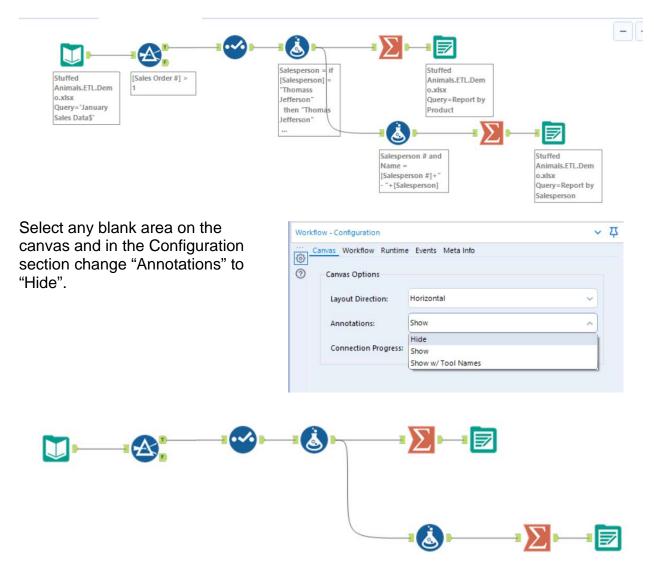
### Select Run Open the Excel file

	А	В	С	D	Е	F	G	Н	1	
1	Salespersc	Units	Sales	Profit Mar	gin					
2	1301 - Tho	9528	########	########						
3	1302 - Gro	7128	########	92601.00						
4	1303 - Uly	4116	90168.00	51294.00						
5	1304 - Ma	4476	98388.00	56247.00						
6	1305 - Geo	10452	########	########						
7	1306 - Joh	4428	98148.00	55857.00						
8										
9										
10										
▲ → …   Jan Report by Product   Report by Product   <b>Report by Salesperson</b> (+										
Ready Scroll Lock 🐻										

Change the format and rename the sheet so the format changes are not lost, save, close Excel and return to Alteryx.

	А	В	С	D	E	F	G
1	Salesperson	Units	Sales	Profit Margin			
2	1301 - Thomas Jefferson	9,528	\$210,000.00	\$119,466.00			
3	1302 - Grover Cleveland	7,128	\$162,276.00	\$ 92,601.00			
4	1303 - Ulysses Grant	4,116	\$ 90,168.00	\$ 51,294.00			
5	1304 - Martin Van Buren	4,476	\$ 98,388.00	\$ 56,247.00			
6	1305 - George Washington	10,452	\$232,536.00	\$133,557.00			
7	1306 - John Tyler	4,428	\$ 98,148.00	\$ 55,857.00			
8	Total	40,128	\$891,516.00	\$509,022.00			
9							
10							
	। → …   Jan Report by P	roduct	Report by Pi	roduct Jan	Report by	Salesperso	<b>n</b> (+)
Rea	dy Scroll Lock 🐻						

The canvas is very busy looking because of the annotations.

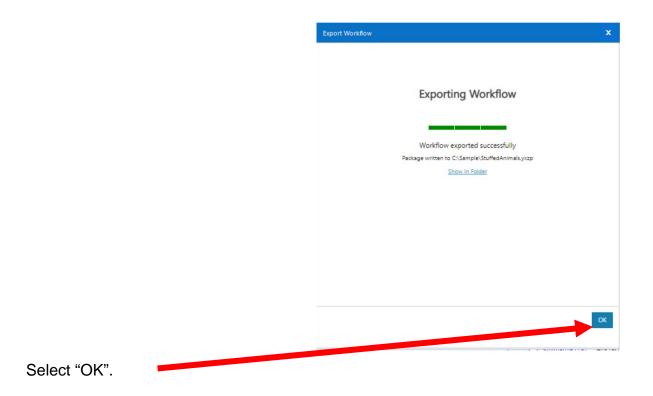




Export the workflow and the related input files so that the project can be completed on another computer or uploaded to the web.

	a <u>F</u> ile	Ē	dit	<u>V</u> iew	<u>Options</u> <u>H</u> elp	
	🔶 Ee		5	📄 In/Ou	▶ Run Workflow Ct	trl+R
	Brow		Input	Data O	D Schedule Workflow View Schedules	5
ct "Options".	Workfl				Run Analytic Apps	
	<u>چ</u>		Work was Optio	flow P	Export Workflow	
	Ŭ	Layo	out Dire	ction:	<u>M</u> anage Licenses	
ort Workflow".		Anne	otations	E	Manage Connect Credentials Add Promote Connection	
		Con	nection	Progress:	<u>U</u> ser Settings	>
					Advanced Options	>
					Download Predictive Tools	

	Export Settings	
	Workflow	
Verify the name of the "Workflow".	StuffedAnimals.yxmd	Lock
	Package Location	
	C:\Sample\StuffedAnimals.yxzp	Browse
Verify the "Package Location".		
	Group assets by tool	Undo changes
	OUTPUT) C:\Sample\Stuffed Animals.ETL.Demo.xlsx	
Select "Save".	Save	Cancel Help



# Part 2

The "February-December Sales Data" tab contains data that was created in a different system than the "January Sales Data". You cannot append two data sets unless the field names and field types are identical. The fields however, may be ordered differently.

#### January Sales Data

	А	В	с	D	E	F	G	н	1	L L	к
1			_		-		-			-	
2											
3											
4											
5											
6											
7					Cude	dly Stuffed Anim	als				
8					Ja	nuary Sales Dat	a				
9 Sal	les Order #	Salesperson #	Salesperson	Title	Profit Margin	Region #	Region	State	Product	# of units	Sales
0	35005	1304	Martin Van Bure	Sales Associate I	1,908.00	3	South	TN	Stuffed Horse	144	3,168.00
1									Stuffed Horse		3,168.00
12											
13	35006	1302	Grover Clevelar	Senior Sales Associate	936.00	1	Midwest	NE	Stuffed Panda	72	1,656.00

#### February-December Sales Data

	A	В		D	E	F	G	Н		
8					uddly Stuffe oruary-Dece	mber Sales				
4	Order #	SalesPerson	Title	<b>Region Name</b>	<b>Region Code</b>	"State"	Article	# of pieces sold	Selling Price Per Unit	Profit Margin
5	37060 13	03 : Ulysses Grant	Senior Sales Associate	South	3	TX	Stuffed Horse	120	22.00	1,590.00
6							Stuffed Horse			1,590.00
7										
8										
9	37064 13	01 : Thomas Jefferson	Sales Associate I	Northeast	2	CT	Stuffed Horse	144	22.00	1,908.00
10							Stuffed Horse			
1	. Introducti	on   January Sales Dat	a February-Decemb	er Sales Data	Products	Salesperson	Region 🕘	1 4		
Ready	13									

As you review the new sheet note the differences:

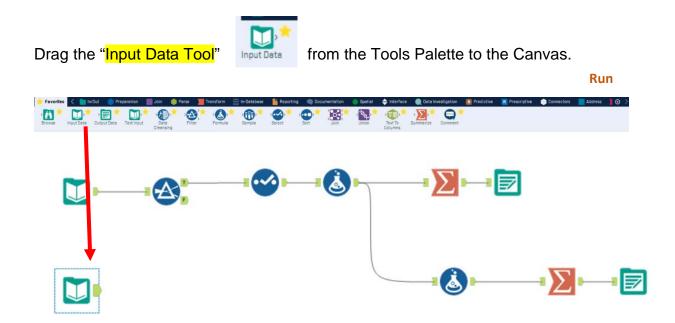
- The column headings are in row 4.
- The column headings are different.
- The columns are in a different order.
- Column B contains both the Salesperson's number and name.
- Selling Price Per Units has replaced Sales.

## Sample Reports

Product	# of units	Sales	Profit Margin
Stuffed Frog	1,524	\$ 33,528	\$20,574
Stuffed Unicorr	408	8,160	4,692
Stuffed Panda	1,140	26,220	15,675
Stuffed Koala	624	14,976	8,112
Stuffed Elepha	4,044	84,924	49,539
Stuffed Bear	2,376	59,400	35,046
Total	10,116	\$227,208	\$133,638

Salesperson	# of units	Sales	Profit Margin
1405 - James Polk	1,812	\$41,568	\$24,438
1425 - John Tyler	2,172	48,336	28,110
1541 - Ulysses Grant	756	17,112	10,062
1576 - James Madison	1,776	39,216	23,160
1588 - George Washington	1,584	35,784	21,168
1776 - James Monroe	2,016	45,192	26,700
Total	10,116	\$227,208	\$133,638

# Tool 10: Input Data Tool – Input Excel file



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

Inpu	t Dete (1) - Configuration	~ ξ		
	Connect a File or Database Options			

# Select "Recent connection".

Data co	onnections		×
0	Recent	Recent connections	Clear list
☆ □	Saved Files	C:\Sample Alteryx\Stuffed Animals.ETL.Demo.xlsx	
	Data sources Gallery		

Select "February-December Sales Data".

	Select Excel Input	x
	• Select a sheet	
	February-December Sales Data	•
	Select a range (cells, rows or columns)	
	ex. A1 – ex. G7	
	<ul> <li>Select a named range</li> </ul>	
	Select option	v
Select "OK".	<ul> <li>Import only the list of sheet names</li> </ul>	
	Refresh Help C	Cancel OK

Remember that the field names are in the fourth row. In the Configuration area, scroll down to option ~ 卫 Input Data (1) - Configuration 7. Connect a File or Database C:\Sample\Stuffed Animals.ETL.Demo.xlsx • 3 Options 0 ^ Name Value 3 cord Limit 2 File Form Microsoft Excel (\*.xlsx) 4 3 Table or Query January Sales Data\$' 4 Search SubDirs 5 Output File Name as Field No Change the number in "Start Data Import on 6 First Row Contains Data Line" to "4". First Row Contains Data 7 Start Data Import on Line 4 V Preview (first 100 records) Refresh Select "Run". The Results window will display the field heading and the data. Ø Results - Workflow - Messages V 10 of 10 Fields • V Cell Viewer • \* 11,728 of 19,323 records displayed(partial results) Q Search Data Metadata Actions - 000 Sales Order # SalesPerson State Article Selling Price Per Unit Record Title Reg Region # # of ur Senior Sales Associate Stuffed Horse ? 1 37060 1303 : Ulysses Grant South 3 TX 120 22 2 [Null] Stuffed Horse [Null] [Null] [Null] 3 [Null] 4 INull [Null] CT 1301 : Thomas Jefferson Stuffed Horse 5 37064 Sales Associate I Northeast 144 22 2 [Null] [Null] Stuffed Horse 6 [Null] [Null]

## Tool 11: Filter Tool – Exclude all rows that do not contain data

There are several rows that do not contain an sales order 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 "Sales Order" for those accounts greater than "1'.

(\$) (\$)	Select Basi	ic o	r Cus	tom I	ilter –
0	Basic filter				
1	Sales Or	$\sim$	>	~	1
	Custom filter				

To apply the latest change, select "Run".



We can view three different datasets in the Results window.

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

	s - Filter (25) - Out - True								~
	10 of 10 Fields 🔹 🐭	Cell Viewer 👻 4,608 records disp	ayed   🛧 🤟			Q Search		Data	Metadata Actions + 000
Re	ecord Sales Order #	SalesPerson	Title	Region	Region #	State	Article	# of units	Selling Price Per Unit
-	1 37060	1303 : Ulysses Grant	Senior Sales Associate	South	3	TX	Stuffed Horse	120	22
T	2 37064	1301 : Thomas Jefferson	Sales Associate I	Northeast	2	СТ	Stuffed Horse	144	22
F	3 37073	1303 : Ulysses Grant	Senior Sales Associate	Northeast	2	CT	Stuffed Horse	96	22
-	4 37079	1306 : John Tyler	Senior Sales Associate	South	3	FL	Stuffed Horse	60	22
?	5 37085	1303 : Ulysses Grant	Senior Sales Associate	Northeast	2	NJ	Stuffed Panda	120	23
-	6 37093	1305 : George Washington	Sales Associate I	Northeast	2	NY	Stuffed Horse	48	22
	7 37094	1303 : Ulysses Grant	Senior Sales Associate	South	3	MS	Stuffed Giraffe	60	21
	8 37098	1301 : Thomas Jefferson	Sales Associate I	Northeast	2	PA	Stuffed Giraffe	108	21
	9 37100	1306 : John Tyler	Senior Sales Associate	South	3	FL	Stuffed Penguin	156	20

# Tool 3: Select Tool – Remove fields that contain no data, from "\*Unknown"

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.

inites in	put Data	Output Data Text input	loin Parse	)**	ensform In-Detebase South Semple	Reporting Docum	entation Spatial	· (1)	Deta Investigation 💽 F
Opt	ions	•   ↑ ↓	TIP: To reord	der m					
		Options Sales Order #	Type Double	-	Size 8				
		SalesPerson	V_String	-	255				<b>I</b>
		Title	V_String	•	255				
		Region	V_String	•	255				
		Region #	Double	•	8				
		State	V_String	-	255				
	$\square$	Article	V_String	•	255				
		# of units	Double	•	8				
	$\square$	Selling Price Per Unit	Double	•	8			E .	
		Profit Margin	Double	•	8		-		L
		*Unknown	Unknown	-	0 F	esults - Workflow -	Messages		

Remove any extra fields by unchecking them.

$\odot$		Field	Туре		Size
$\odot$	$\checkmark$	Sales Order #	Double	•	8
0	$\checkmark$	SalesPerson	V_String	•	255
	$\checkmark$	Title	V_String	•	255
		Region	V_String	•	255
	$\checkmark$	Region #	Double	•	8
	$\checkmark$	State	V_String	•	255
	$\checkmark$	Article	V_String	•	255
	$\checkmark$	# of units	Double	•	8
N	$\checkmark$	Selling Price Per Unit	Double	•	8
		Profit Margin	Double	•	8
		*Unknown	Unknown	+	0

To apply the latest change, select "Run.

#### Transforming and cleaning the data

To append the sets of data the "Field Names" and "Types" of "February-December Sales Data" must be the same as those in the data set "January Sales Data". There are ten fields in the "February-December Sales Data" stream, and we will review them one by one making all necessary changes.

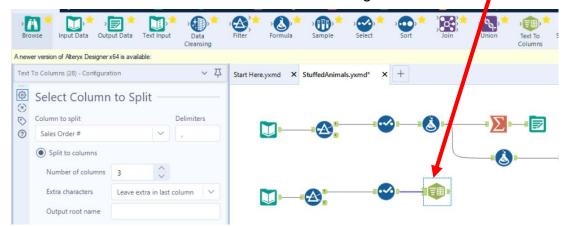
Field	Туре		Size	Renan		Field	Туре		Size	Rename
Sales Order #	Double	•	8			Sales Order #	Double	-	8	
SalesPerson	V_String	-	255			SalesPerson	V_String	•	255	
✓ Title	V_String	•	255		-	Title	V_String	•	255	
Region	V_String	•	255			Region	V_String	+	255	
Region #	Double	•	8			Region #	Double	•	8	
State	V_String	•	255			State	V_String	•	255	
Article	V_String	•	255			Article	V_String	-	255	
# of units	FixedDecimal	•	10.2			# of units	Double	•	8	
Selling Price Per Unit	FixedDecimal	•	10.2			Selling Price Per Unit	Double	•	8	
Profit Margin	FixedDecimal		10.2			Profit Margin	Double	-	8	

- 1) The field "Sales Order #" has no changes
- 2) The field "SalesPerson" contains two fields, "Salesperson #" (1303) and "Salesperson" (Ulysses Grant") separated by, ": ", a space, a colon and another space. The characters that separate two fields are referred to as delimiters. Common delimiters are commas, dashes, and semicolons.

We will convert one field into two fields. Click on the plus sign to the right of the "February-December Sales Data"".

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

Drag the "**Text To Columns Tool**" <sup>[IIII]</sup> 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.



» 🥹 ▷ Run

	Color	t Column to	Colit		
	Selec	t Column to	spiit —		
	Column	to split			
	Sales C	)rder #	^		
	Sales C				
	SalesPe	erson			
	Title				
	Region Region				
Select the field "SalesPerson".	State				
	Article				
	# of ur	nits			
	Selling	Price Per Unit			
	 ©	To Columns (30) - Configura Select Column			~ ۲
Enter "a space, a colon and another space" as the delimiter.				Delimite	
	 (3)	Select Column		Delimiter	
	:: (*) (*)	Select Column		Delimiter	
as the delimiter.	:: (*) (*)	Select Column Column to split SalesPerson		1	
as the delimiter.	:: (*) (*)	Select Column Column to split SalesPerson Split to columns	to Split –		
as the delimiter. Enter "3" as the number of columns.	:: (*) (*)	Select Column Column to split SalesPerson Split to columns Number of columns	to Split –		
as the delimiter. Enter "3" as the number of columns.	:: (*) (*)	Select Column Column to split SalesPerson Split to columns Number of columns Extra characters	to Split -		
as the delimiter. Enter "3" as the number of columns.	:: (*) (*)	Select Column Column to split SalesPerson Split to columns Number of columns Extra characters	to Split -		
	:: (*) (*)	Select Column Column to split SalesPerson Split to columns Number of columns Extra characters	to Split -		

Select

Sort

Join

Union

Text To Columns

·Σ,

Summarize

Comment

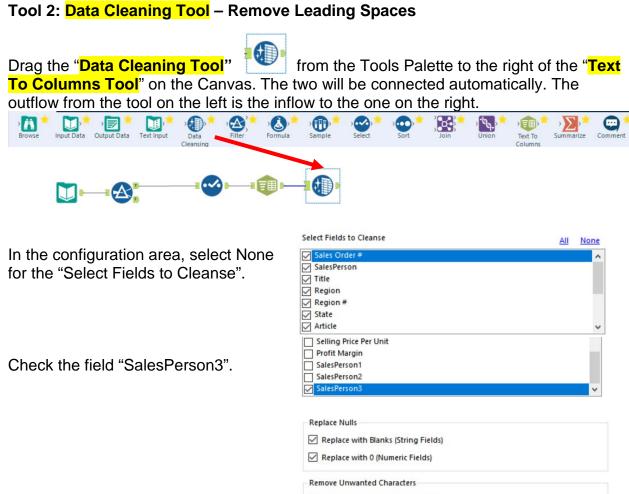
# Select the output connector on the "Text To Columns Tool".



	etadata Actions -	Data N	$\downarrow$			
	SalesPerson3	SalesPerson2	SalesPerson1	Profit Margin	of units Selling Price Per Unit	
•	Ulysses Grant		1303	1590.00	22.00	120.00
	Thomas Jefferson		1301	1908.00	22.00	144.00
	Ulysses Grant		1303	1272.00	22.00	96.00
g space	This cell has leading		1306	795.00	22.00	60.00
	Ulysses Grant		1303	1560.00	23.00	120.00
n 🎈	George Washington		1305	636.00	22.00	48.00
2	Ulysses Grant		1303	675.00	21.00	60.00
	Thomas Jefferson		1301	1215.00	21.00	108.00
	John Tyler		1306	1716.00	20.00	156.00
	Thomas Jefferson		1301	2226.00	22.00	168.00
	John Tyler		1306	2301.00	25.00	156.00

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

Three fields were created, SalesPerson1, SalesPerson2 and SalesPerson3 that has a leading space.



Leading and Trailing Whitespace

To apply the latest change, select "Run".

SalesPerson1	SalesPerson2	SalesPerson3
1303		Ulysses Grant
1301		Thomas Jefferson
1303		Ulysses Grant
1306		John Tyler
1303		Ulysses Grant
1305		George Washington
1303		Ulysses Grant
1301		Thomas Jefferson
1306		John Tyler
1301		Thomas Jefferson

## Tool 3: Select Tool – Change the names of fields and remove fields.

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



2 The original field "**SalesPerson**" must be removed.

			Field	Туре		Size	Rename
1 [		$\square$	Sales Order #	Double	-	8	
2	1		SalesPerson	V_String	-	255	
3		$\mathbf{\nabla}$	Title	V_String	-	255	
4		$\square$	Region	V_String	-	255	0
5		$\checkmark$	Region #	Double	-	8	
6		$\square$	State	V_String	-	255	
7		$\checkmark$	Article	V_String	•	255	
3			# of units	Double	-	8	
) (		$\checkmark$	Selling Price Per Unit	Double	-	8	
)		$\square$	Profit Margin	Double	-	8	
1		$\square$	SalesPerson1	V_String	-	255	
2		$\square$	SalesPerson2	V_String	-	255	
3		$\square$	SalesPerson3	V_String	-	255	

- 3 The field "**Title**" has no changes.
- 4 The field "**Region**" has no changes.
- 5 The field "**Region #**" has no changes.
- 6 The field "State" has no changes.
- 7 The field "Article" has to be renamed "Product".

🖌 🗹 Article	V_String	- 255	Product	
-------------	----------	-------	---------	--

8 The fields "# of units", Selling Price Per Unit and Profit Margin must be changed.

- 9
- 10

	# of units	FixedDecimal	•	10.0
$\checkmark$	Selling Price Per Unit	FixedDecimal	•	10.2
	Profit Margin	FixedDecimal	•	10.2

11 The field "**SalesPerson1**" has to be renamed "Salesperson #".

🥒 🗹 SalesPerson1	V_String	• 255	Salesperson #	ľ
------------------	----------	-------	---------------	---

- 12 The field "**SalesPerson2**" should be removed.
- 13 The field "SalesPerson3" must be renamed "Salesperson".

1	SalesPerson3	V_String	•	255	Salesperson
---	--------------	----------	---	-----	-------------

To apply the latest change, select "Run".

Sales Order #	Title	Region	Region #	State	Product	# of units	Selling Price Per Unit	Profit Margin	Salesperson #	Salesperson
1 37060	Senior Sales Associate	South	3	TX	Stuffed Horse	120.00	22.00	1590.00	1303	Ulysses Grant
2 37064	Sales Associate I	Northeast	2	CT	Stuffed Horse	144.00	22.00	1908.00	1301	Thomas Jefferson
3 37073	Senior Sales Associate	Northeast	2	CT	Stuffed Horse	96.00	22.00	1272.00	1303	Ulysses Grant
4 37079	Senior Sales Associate	South	3	FL.	Stuffed Horse	60.00	22.00	795.00	1306	John Tyler
5 37085	Senior Sales Associate	Northeast	2	NJ	Stuffed Panda	120.00	23.00	1560.00	1303	Ulysses Grant
5 37093	Sales Associate I	Northeast	2	NY	Stuffed Horse	48.00	22.00	636.00	1305	George Washingto
7 37094	Senior Sales Associate	South	3	MS	Stuffed Giraffe	60.00	21.00	675.00	1303	Ulysses Grant
5 37098	Sales Associate I	Northeast	2	PA	Stuffed Giraffe	108.00	21.00	1215.00	1301	Thomas Jefferson
9 37100	Senior Sales Associate	South	3	FL	Stuffed Penguin	156.00	20.00	1716.00	1306	John Tyler
37109	Sales Associate I	Midwest	1	WI	Stuffed Horse	168.00	22.00	2226.00	1301	Thomas Jefferson
1 37117	Senior Sales Associate	West	4	WY	Stuffed Elephant	156.00	25.00	2301.00	1306	John Tyler

# Temporary Tool 4: Browse Tool – The Data in the Fields Must Conform to Predefined Rules.

In the original Excel file, The Cuddly Stuffed Animals company provided the only acceptable values for "Product", "Salesperson" and "Region". Sometime data is entered incorrectly into the data.

Product ID	Product	Code	Salesperson	Γ	Carla	Destaur
101	Stuffed Penguin	1301	Thomas Jefferson	Ļ	Code	Region
102	Stuffed Horse	1302	Grover Cleveland		1	Midwest
103	Stuffed Unicorn	1303	Ulysses Grant		2	Northeast
104	Stuffed Giraffe	1304	Martin Van Buren			
105	Stuffed Panda		George Washington		3	South
106	Stuffed Elephant	-	John Tyler		4	West

The "Product" field can only contain one of the six products. Browse the data in the "Product" field to verify that all the data is correct. Make any changes that are required.

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



Select Run.

## In the Configuration section scroll down to "Region"

A <sup>B</sup> C Region	
South	1,420
Northeast	1,300
West	1,097
Midwest	791

The data is clean, there are only four Regions listed.

The "Salesperson" field can only contain one of the six names. Browse the data in the "Salesperson" field to verify that all the data is correct. Make any changes that are required.

In the Configuration section scroll down to "Salesperson" and select "2 more".

George Washington	1,267	-
Thomas Jefferson	1,138	-
Grover Cleveland	648	•
John Tyler	569	
Martin Van Buren	554	

← Salesperson		
Distinct Values		
George Washington	1,267	-
Thomas Jefferson	1,138	· •
Grover Cleveland	048	-
John Tyler	569	
Martin Van Buren	554	
Ulysses Grant	424	-
Thomass Jefferson	8	-

"Thomass Jefferson" must be replaced with "Thomas Jefferson" for a total of 1,146 distinct values.

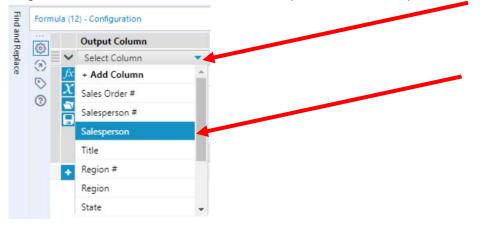
#### Tool 4: Formula Tool – The Data in the Fields Must Conform to Predefined Rules.

Drag the "Formula Tool" from the Tools Palette between the output of the "Select Tool" and the "Browse Tool" on the Canvas. The three will be connected automatically.



If the salesperson's name is "Thomass Jefferson" replace it with "Thomas Jefferson" otherwise leave the existing name in the field. Do not create a new field, put the output back into the "Salesperson" field.

In the configuration section select the field Salesperson from the pull-down list.



Type in the formula.

Find and Replace	Formula (11) - Configuration									ಧ
	@		Output Co	lumn		Data Preview				IJ
tepla	3	~	Salesperso	n	•	Marti	n Van Burer	n		8
ò	0		then "1	sperson] = Thomas Jefj Salesperson V_String	ferson					

Select Run.

Select the Browse step.

In the Configuration section scroll down to "Salesperson". There are only six salespersons and Thomas Jefferson has 1,146 distinct values.

← Salesperson		
Distinct Values		
George Washington	1,267	
Thomas Jefferson	1,146	-
Grover Cleveland	648	•
John Tyler	569	•
Martin Van Buren	554	
Ulysses Grant	424	-

While in the Browse step, verify the field "Product" and select "1 more".

AB Product		Profile	
Stuffed Horse	1,363	 ← Product	
Stuffed Giraffe	922	 Distinct Values	
Stuffed Panda	859	 Distinct values	
Stuffed Elephant	499	 Stuffed Horse	1,363 -
Stuffed Penguin	484	 Stuffed Giraffe	922
1 more >		Stuffed Panda	859 -
		Stuffed Elephant	499
		Stuffed Penguin	484
		Stuffed Unicorn	481

The data is clean, there are only six Products listed.

Right click on the Browse step and select delete.



The field "**Selling Price Per Unit**" does not exist in the "January Sales Data" stream of data. Instead, there is a field "Sales", the product of the "# of units" and the "Selling Price Per Unit".

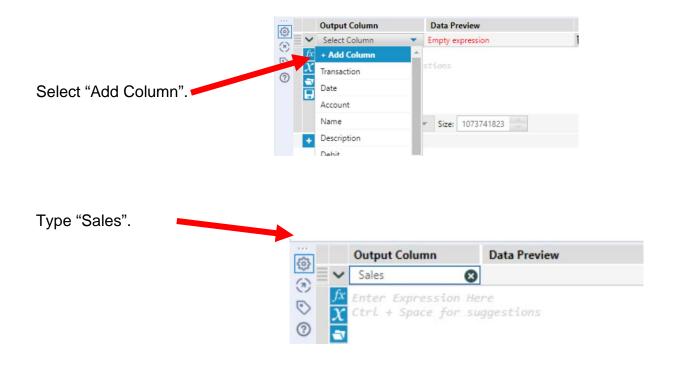
### Tool 4: Formula Tool – Calculate Sales

Drag the "**Formula Tool**" from the Tools Palette between the output of the "**Select Tool**" and the "Browse Tool" on the Canvas. The three will be connected automatica

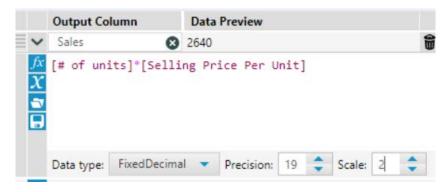


In the configuration section select the Add Column from the pull-down list.

In the output Configuration area, click on the drop-down arrow of "Select Column".



Type the following formula [# of units]\*[Selling Price Per unit].



Change the Data type to FixedDecimal with two decimal places.

Select "Run".

# of units	Selling Price Per Unit	Profit Margin	Salesperson #	Salesperson	Sales	1
120.00	22.00	1590.00	1303	Ulysses Grant	2640.00	
144.00	22.00	1908.00	1301	Thomas Jefferson	3168.00	
96.00	22.00	1272.00	1303	Ulysses Grant	2112.00	
60.00	22.00	795.00	1306	John Tyler	1320.00	
100.00	22.00	100000	1202	Illine Const	2760.00	

The "Field Names" and "Types" of "February-December Sales Data" must be the same as those in the data set "January Sales Data".

		Field	Туре		Size
•		Sales Order #	Double	•	8
		Salesperson #	String	•	19
	$\square$	Salesperson	V_String	•	255
	$\square$	Title	V_String	•	255
		Region #	Double	•	8
	$\square$	Region	V_String	•	255
	$\square$	State	V_String	•	255
	$\checkmark$	Product	V_String	•	255
	$\square$	# of units	FixedDecimal	•	10.0
	$\square$	Sales	FixedDecimal	•	10.2
		Profit Margin	FixedDecimal	•	10.2

# February-December Sales Data

		Field	Туре		Size
۲		Sales Order #	Double	•	8
		Title	V_String	•	255
		Region	V_String	-	255
		Region #	Double	•	8
	$\square$	State	V_String	•	255
		Product	V_String	•	255
		# of units	FixedDecimal	•	10.0
		Selling Price Per Unit	FixedDecimal	-	10.2
		Profit Margin	FixedDecimal	•	10.2
		Salesperson #	V_String	<ul> <li>*</li> <li>*&lt;</li></ul>	255
	$\square$	Salesperson	V_String	•	255
		Sales	FixedDecimal	•	19.2
		*Unknown	Unknown	•	0

Rearrange the February-December Data fields to match the January Sales Data.

#### Tool 3: Select Tool – Change the order of fields and remove fields.

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

Browse Input Dat	a Output Data Text Input Data Clear		ormula	Sample	, Select	* )	Sort Join	Union		t To umns	Summarize	Comment
			1.~~	)(				-	) -	3	١	• <b>©</b> •
					3	Option	s ▼	TIP: To reorder Type	mult	iple row: Size	s: se R	
0.1	1				$\odot$		] Sales Order #	Double	•	-		
Select "Sa	alesperson #"				0			V_String	*	200	-	
								V_String	-	255	_	
							-	Double		8	-	
Droop the	up orrow to mo	"Salaan	oroo	<i>с 4</i> "				V_String	•	255	_	
	up arrow to mov	ve Salesp	erso	n#				V_String FixedDecimal	•	255		
to the sec	ond field.								•	10.0	-	
							Selling Price Per Unit	FixedDecimal	*	10.2		
										0.55		
						22 July 1997	Salesperson #	V_String		255		
_	an an Ma			-		4		FixedDecimal		19.2		
	Field	Туре		Size	Renar	_	] *Unknown	Unknown	•	0		
	Sales Order #	Double	•	8		<u> </u>		GARAGARA	1950	5		
	Salesperson #	V_String	-	255								
		V China		255								

Change the type of the field "Salesperson #" to String with a size of 19.

Rearrange the February-December Data fields to match the January Sales Data and remove the Selling Price Per Unit field.

# January Sales Data

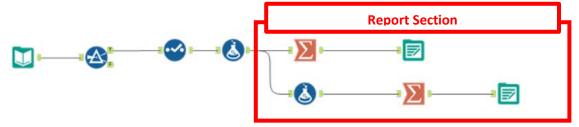
# February-December Sales Data

		Field	Туре		Size
•		Sales Order #	Double	•	8
		Salesperson #	String	•	19
	$\square$	Salesperson	V_String	•	255
	$\square$	Title	V_String	•	255
		Region #	Double	•	8
	$\square$	Region	V_String	•	255
		State	V_String	•	255
	$\checkmark$	Product	V_String	•	255
		# of units	FixedDecimal	•	10.0
		Sales	FixedDecimal	•	10.2
		Profit Margin	FixedDecimal	٠	10.2

	Field	Туре		Size	F
$\checkmark$	Sales Order #	Double	•	8	
$\checkmark$	Salesperson #	String	•	19	
	Salesperson	V_String	•	255	
$\checkmark$	Title	V_String	•	255	
	Region #	Double	•	8	
$\checkmark$	Region	V_String	•	255	
	State	V_String	•	255	
	Product	V_String	-	255	
	# of units	FixedDecimal	•	10.0	
	Selling Price Per Unit	FixedDecimal	•	10.2	
	Profit Margin	FixedDecimal	-	10.2	
$\checkmark$	Sales	FixedDecimal	-	19.2	

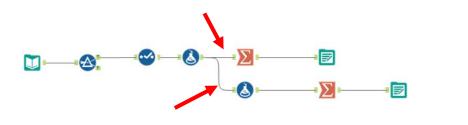
# Tool 4: Union Tool – Append Streams

Now that the data streams are the same, field names and types, we can append the second stream to the first stream. First separate the report section from stream one.

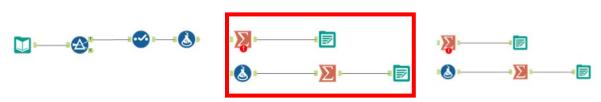


Right click between the Formula Tool and the Summarize Tool on the first stream and select "Delete Connection.

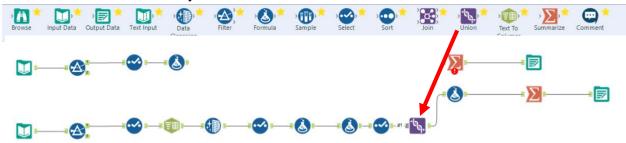
Right click between the Formula Tool and the Formula Tool on the first stream and select "Delete Connection.



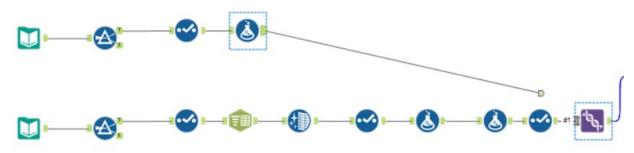
Drag the section to the right.



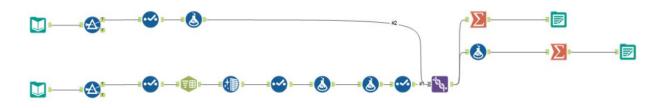
Drag the "**Union Tool**" from the Tools Palette to the output of the last "**Select Tool**" on the second stream Canvas and the Formula Tool from the report section. The three will be connected automatically.



Drag the output from the Formula Tool on the first stream to the Input of the Union Tool.



Drag the output from the Union Tool to the input of the first Summarize Tool in the report section.



Select Run.

The combined stream has 5,017 rows.

```
11 of 11 Fields 🔹 🖌 Cell Viewer 👻 5,017 records displayed 🔨 🥠
```

Save the file. Export the workflow. Close Alteryx. Open the Excel file to the Report by Product.

	А	В	С	D		
1	Product	Units	Sales	Profit Margin		
2	Stuffed Elephant	50508	1262700.00	744993.00		
3	Stuffed Giraffe	104772	2200212.00	1178685.00		
4	Stuffed Horse	150504	3311088.00	1994178.00		
5	Stuffed Panda	93924	2160252.00	1221012.00		
6	Stuffed Penguin	58752	1175040.00	646272.00		
7	Stuffed Unicorn	48900	1173600.00	647925.00		
8						
O Demost hu Dreduct Low Demost hu Colore						
Report by Product Jan Report by Sales:						

	А	В	С	D			
1	Product	Units	Sales	Profit Margin			
2	Stuffed Elephant	50,508	\$ 1,262,700.00	\$ 744,993.00			
3	Stuffed Giraffe	104,772	\$ 2,200,212.00	\$1,178,685.00			
4	Stuffed Horse	150,504	\$ 3,311,088.00	\$ 1,994,178.00			
5	Stuffed Panda	93,924	\$ 2,160,252.00	\$1,221,012.00			
6	Stuffed Penguin	58,752	\$ 1,175,040.00	\$ 646,272.00			
7	Stuffed Unicorn	48,900	\$ 1,173,600.00	\$ 647,925.00			
8	Total	507,360	\$11,282,892.00	\$6,433,065.00			
9							
10							
•	Annual Report by Product     Annual Report by Product						

#### Fix the format and rename the sheet.

## Select the Report by Salesperson.

	А	В	С	D	E		
1	Salespersc	Units	Sales	Profit Margin			
2	1301 - Tho	125508	2793660.00	1593147.00			
3	1302 - Gro	74280	1650192.00	936729.00			
4	1303 - Uly	47400	1050024.00	599241.00			
5	1304 - Mai	60228	1329636.00	759033.00			
6	1305 - Geo	138936	3099840.00	1769571.00			
7	1306 - Joh	61008	1359540.00	775344.00			
8							
9							
10							
Image: Product         Report by Salesperson							

# Fix the format and rename the sheet.

	А	В	С	D	Е	
1	Salesperson	Units	Sales	Profit Margin		
2	1301 - Thomas Jefferson	125,508	\$ 2,793,660.00	\$1,593,147.00		
3	1302 - Grover Cleveland	74,280	\$ 1,650,192.00	\$ 936,729.00		
4	1303 - Ulysses Grant	47,400	\$ 1,050,024.00	\$ 599,241.00		
5	1304 - Martin Van Buren	60,228	\$ 1,329,636.00	\$ 759,033.00		
6	1305 - George Washington	138,936	\$ 3,099,840.00	\$1,769,571.00		
7	1306 - John Tyler	61,008	\$ 1,359,540.00	\$ 775,344.00		
8	Total	507,360	\$11,282,892.00	\$6,433,065.00		
9						
10 Annual Depart hu Calemannan Annual Depart hu Calemannan C						
Annual Report by Salesperson						
	🗖					

Save and close Excel.