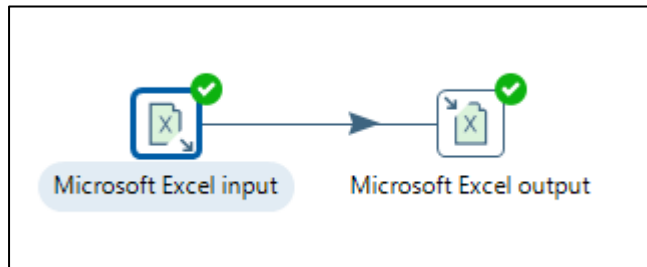


Practical 04

1) Copy data from Source (Table/Excel/ Oracle) and store it to Target



Microsoft Excel output

Step name: Microsoft Excel output

File Content Custom Fields

Filename: G:\pitu\MCA\ADBMS\Orders-With Nulls.xls Browse...

Create Parent folder: ☐

Do not create file at start: ☐

Extension: xls

Include stepnr in filename?: ☐

Include date in filename?: ☐

Include time in filename?: ☐

Specify Date time format: ☐

Date time format:

Show filename(s)...

Add filenames to result: ☒

Help OK Cancel

Microsoft Excel input

Step name: Microsoft Excel input

Add Field(s)

Files | Sheets | Content | Error Handling | Fields | Additional output fields

Spread sheet type (engine): Excel 2007/ XLSX (Apache POI)

File or directory: Add Browse...

Regular Expression:

Exclude Regular Expression:

Password:

Selected files:

#	File/Directory	Wildcard (RegExp)	Exclude wildcard	Require
1	G:\pitu\MCA\ADBMS\Orders-With Nulls.xls		N	

Accept filenames from previous steps: ☐

Accept filenames from previous step: ☐

Step to read filenames from:

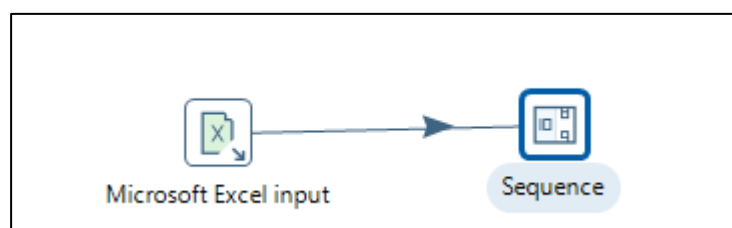
Field in the input to use as filename:

Show filename(s)...

Help OK Preview rows Cancel

First rows Last rows Off										
#	Order ID	Order Date	Order Quantity	Sales	Ship Mode	Profit	Unit Price	Customer Name	Customer Segment	Product Category
1	3.0	2010/10/13 00:00:00.000	6.0	261.54	Regular Air	-213.25	38.94	Muhammed MacIntyre	Small Business	Office Supplies
2	6.0	2012/02/20 00:00:00.000	2.0	6.93	Regular Air	-4.64	2.08	Ruben Dartt	Corporate	Office Supplies
3	32.0	2011/07/15 00:00:00.000	26.0	2808.08	Regular Air	1054.82	107.53	Liz Pelletier	Corporate	Furniture
4	32.0	2011/07/15 00:00:00.000	24.0	1761.4	Delivery Truck	-1748.56	70.89	Liz Pelletier	Corporate	Furniture
5	32.0	2011/07/15 00:00:00.000	23.0	160.2335	Regular Air	-85.129	7.99	Liz Pelletier	Corporate	Technology
6	32.0	2011/07/15 00:00:00.000	15.0	140.56	Regular Air	-128.38	8.46	Liz Pelletier	Corporate	Technology
7	35.0	2011/10/22 00:00:00.000	30.0	288.56	Regular Air	60.72	9.11	Julie Creighton	Corporate	Office Supplies
8	35.0	2011/10/22 00:00:00.000	14.0	1892.848	Regular Air	48.987	155.99	Julie Creighton	Corporate	Technology
9	36.0	2011/11/02 00:00:00.000	46.0	2484.7455	Regular Air	657.477	65.99	Sampra Company A	Home Office	Technology
10	65.0	2011/03/17 00:00:00.000	32.0	3812.73	Regular Air	1470.3	115.79	Tamara Dahlen	Corporate	Technology

2) sequence



Add sequence

Step name:

Name of value:

Use a database to generate the sequence

Use DB to get sequence? ☐

Connection:

Schema name:

Sequence name:

Use a transformation counter to generate the sequence

Use counter to calculate sequence? ☒

Counter name (optional):

Start at value:

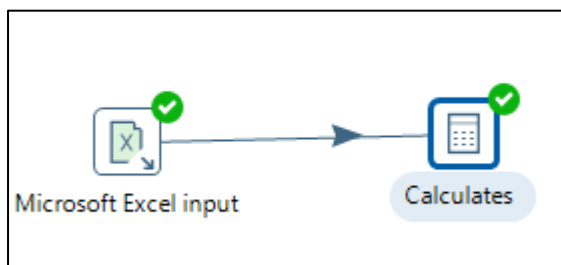
Increment by:

Maximum value:

3. Adding Calculator

☒ First rows ☐ Last rows ☐ Off

Order Date	Order Quantity	Sales	Ship Mode	Profit	Unit Price	Customer Name	Customer Segment	Product Category	Sequence
2010/10/13 00:00:00.000	6.0	261.54	Regular Air	-213.25	38.94	Muhammed MacIntyre	Small Business	Office Supplies	1
2012/02/20 00:00:00.000	2.0	6.93	Regular Air	-4.64	2.08	Ruben Dartt	Corporate	Office Supplies	2
2011/07/15 00:00:00.000	26.0	2808.08	Regular Air	1054.82	107.53	Liz Pelletier	Corporate	Furniture	3
2011/07/15 00:00:00.000	24.0	1761.4	Delivery Truck	-1748.56	70.89	Liz Pelletier	Corporate	Furniture	4
2011/07/15 00:00:00.000	23.0	160.2335	Regular Air	-85.129	7.99	Liz Pelletier	Corporate	Technology	5
2011/07/15 00:00:00.000	15.0	140.56	Regular Air	-128.38	8.46	Liz Pelletier	Corporate	Technology	6
2011/10/22 00:00:00.000	30.0	288.56	Regular Air	60.72	9.11	Julie Creighton	Corporate	Office Supplies	7
2011/10/22 00:00:00.000	14.0	1892.848	Regular Air	48.987	155.99	Julie Creighton	Corporate	Technology	8
2011/11/02 00:00:00.000	46.0	2484.7455	Regular Air	657.477	65.99	Sample Company A	Home Office	Technology	9



Calculator

Step name:

☒ Throw an error on non existing files

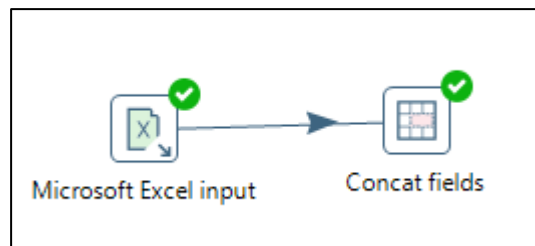
Fields:

#	New field	Calculation	Field A	Field B	Field C	Value type
1	Calculate	A * B	Unit Price	Profit		Number

☒ First rows ☐ Last rows ☐ Off

te	Order Quantity	Sales	Ship Mode	Profit	Unit Price	Customer Name	Customer Segment	Product Category	Calculate
13 00:00:00.000	6.0	261.54	Regular Air	-213.25	38.94	Muhammed MacIntyre	Small Business	Office Supplies	-8303.955
20 00:00:00.000	2.0	6.93	Regular Air	-4.64	2.08	Ruben Dartt	Corporate	Office Supplies	-9.6512
15 00:00:00.000	26.0	2808.08	Regular Air	1054.82	107.53	Liz Pelletier	Corporate	Furniture	113424.7946
15 00:00:00.000	24.0	1761.4	Delivery Truck	-1748.56	70.89	Liz Pelletier	Corporate	Furniture	-123955.4184
15 00:00:00.000	23.0	160.2335	Regular Air	-85.129	7.99	Liz Pelletier	Corporate	Technology	-680.18071
15 00:00:00.000	15.0	140.56	Regular Air	-128.38	8.46	Liz Pelletier	Corporate	Technology	-1086.0948
22 00:00:00.000	30.0	288.56	Regular Air	60.72	9.11	Julie Creighton	Corporate	Office Supplies	553.1592
22 00:00:00.000	14.0	1892.848	Regular Air	48.987	155.99	Julie Creighton	Corporate	Technology	7641.48213
02 00:00:00.000	46.0	2484.7455	Regular Air	657.477	65.99	Sample Company A	Home Office	Technology	43386.90723

4. Concatenation of two fields



Concat fields

Step name: Concat fields

Target Field Name: Conact

Length of Target Field: 0

Separator: :

Enclosure: "

Insert TAB

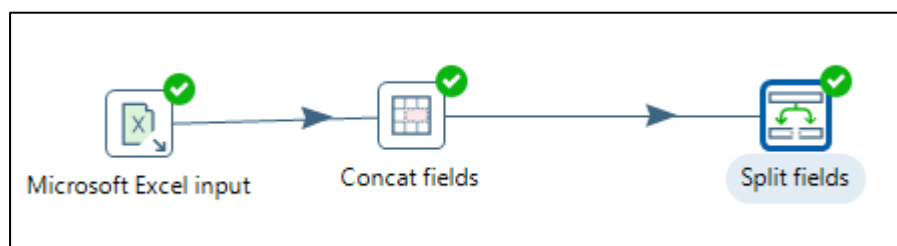
Fields

#	Name	Type	Format	Length	Precision	Currency	Decimal	Group	Trim Type
1	Customer Name	String							
2	Customer Segment	String							

☒ First rows ☐ Last rows ☐ Off

Order Quantity	Sales	Ship Mode	Profit	Unit Price	Customer Name	Customer Segment	Product Category	Conact
6.0	261.54	Regular Air	-213.25	38.94	Muhammed MacIntyre	Small Business	Office Supplies	Muhammed MacIntyre:Small Business
2.0	6.93	Regular Air	-4.64	2.08	Ruben Dartt	Corporate	Office Supplies	Ruben Dartt:Corporate
26.0	2808.08	Regular Air	1054.82	107.53	Liz Pelletier	Corporate	Furniture	Liz Pelletier:Corporate
24.0	1761.4	Delivery Truck	-1748.56	70.89	Liz Pelletier	Corporate	Furniture	Liz Pelletier:Corporate
23.0	160.2335	Regular Air	-85.129	7.99	Liz Pelletier	Corporate	Technology	Liz Pelletier:Corporate
15.0	140.56	Regular Air	-128.38	8.46	Liz Pelletier	Corporate	Technology	Liz Pelletier:Corporate
30.0	288.56	Regular Air	60.72	9.11	Julie Creighton	Corporate	Office Supplies	Julie Creighton:Corporate
14.0	1892.848	Regular Air	48.987	155.99	Julie Creighton	Corporate	Technology	Julie Creighton:Corporate
46.0	2484.7455	Regular Air	657.477	65.99	Sample Company A	Home Office	Technology	Sample Company A:Home Office

5. Splitting of two fields



Split fields

Step name: Split fields

Field to split: Customer Name

Delimiter: :

Enclosure: "

Fields

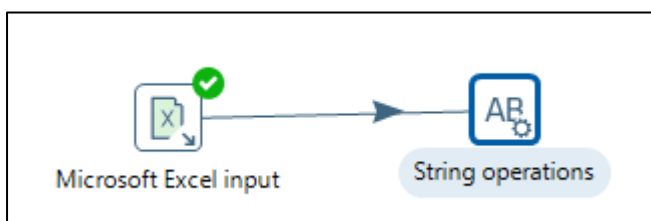
#	New field	ID	Remove ID?	Type	Length	Precision	Format	Group	Decimal	Currency	Nullif	Default	Trim type
1	Name			String									
2	segment			String									

Help OK Cancel

☒ First rows ☐ Last rows ☐ Off

Order Quantity	Sales	Ship Mode	Profit	Unit Price	Customer Name	Customer Segment	Product Category	Name	segment
6.0	261.54	Regular Air	-213.25	38.94	Muhammed MacIntyre	Small Business	Office Supplies	Muhammed MacIntyre	Small Business
2.0	6.93	Regular Air	-4.64	2.08	Ruben Dartt	Corporate	Office Supplies	Ruben Dartt	Corporate
26.0	2808.08	Regular Air	1054.82	107.53	Liz Pelletier	Corporate	Furniture	Liz Pelletier	Corporate
24.0	1761.4	Delivery Truck	-1748.56	70.89	Liz Pelletier	Corporate	Furniture	Liz Pelletier	Corporate
23.0	160.2335	Regular Air	-85.129	7.99	Liz Pelletier	Corporate	Technology	Liz Pelletier	Corporate
15.0	140.56	Regular Air	-128.38	8.46	Liz Pelletier	Corporate	Technology	Liz Pelletier	Corporate
30.0	288.56	Regular Air	60.72	9.11	Julie Creighton	Corporate	Office Supplies	Julie Creighton	Corporate
14.0	1892.848	Regular Air	48.987	155.99	Julie Creighton	Corporate	Technology	Julie Creighton	Corporate
46.0	2484.7455	Regular Air	657.477	65.99	Sample Company A	Home Office	Technology	Sample Company A	Home Office

6. String Operations



String operations

Step name: String operations

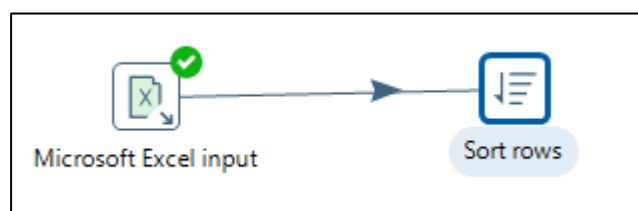
The fields to process:

#	In stream field	Out stream field	Trim type	Lower/Upper	Padding
1	Customer Name		right	upper	

☒ First rows ☐ Last rows ☐ Off

Order ID	Order Date	Order Quantity	Sales	Ship Mode	Profit	Unit Price	Customer Name	Customer Segment	Product Category
3.0	2010/10/13 00:00:00.000	6.0	261.54	Regular Air	-213.25	38.94	MUHAMMED MACINTYRE	Small Business	Office Supplies
6.0	2012/02/20 00:00:00.000	2.0	6.93	Regular Air	-4.64	2.08	RUBEN DARTT	Corporate	Office Supplies
32.0	2011/07/15 00:00:00.000	26.0	2808.08	Regular Air	1054.82	107.53	LIZ PELLETIER	Corporate	Furniture
32.0	2011/07/15 00:00:00.000	24.0	1761.4	Delivery Truck	-1748.56	70.89	LIZ PELLETIER	Corporate	Furniture
32.0	2011/07/15 00:00:00.000	23.0	160.2335	Regular Air	-85.129	7.99	LIZ PELLETIER	Corporate	Technology
32.0	2011/07/15 00:00:00.000	15.0	140.56	Regular Air	-128.38	8.46	LIZ PELLETIER	Corporate	Technology
35.0	2011/10/22 00:00:00.000	30.0	288.56	Regular Air	60.72	9.11	JULIE CREIGHTON	Corporate	Office Supplies
35.0	2011/10/22 00:00:00.000	14.0	1892.848	Regular Air	48.987	155.99	JULIE CREIGHTON	Corporate	Technology
36.0	2011/11/02 00:00:00.000	46.0	2484.7455	Regular Air	657.477	65.99	SAMPLE COMPANY A	Home Office	Technology

7. Sorting data



Sort rows

Step name: Sort rows

Sort directory: %java.io.tmpdir% Browse...

TMP-file prefix: out

Sort size (rows in memory): 1000000

Free memory threshold (in %):

Compress TMP Files? ☐

Only pass unique rows? (verifies keys only) ☐

Fields:

#	Fieldname	Ascending	Case sensitive compare?	Sort based on current locale?	Collator Strength	Presorted?
1	Customer Name	N	N	N	0	N
2	Order ID	Y	N	N	0	N

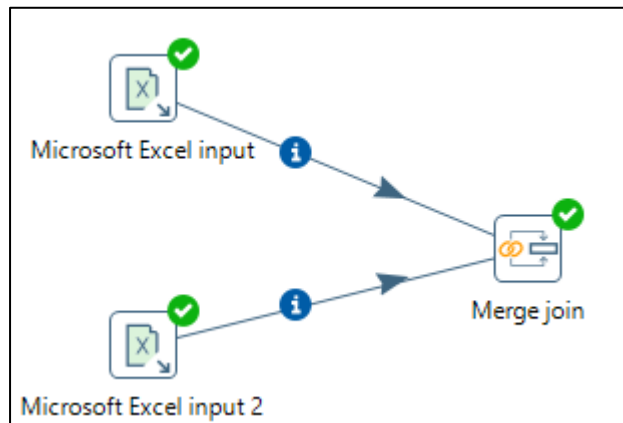
Execution Results

Logging Execution History Step Metrics Performance Graph Metrics Preview data

First rows Last rows Off

#	Order ID	Order Date	Order Quantity	Sales	Ship Mode	Profit	Unit Price	Customer Name	Customer Segment	Product Category
1	2882.0	2011/08/21 00:00:00.000	23.0	3872.87	Delivery Truck	565.34	160.98	Yoseph Carroll	Consumer	Furniture
2	2882.0	2011/08/21 00:00:00.000	9.0	356.72	Regular Air	12.61	40.98	Yoseph Carroll	Consumer	Technology
3	4514.0	2009/04/29 00:00:00.000	28.0	2841.4395	Regular Air	374.625	125.99	Yoseph Carroll	Consumer	Technology
4	4935.0	2010/05/24 00:00:00.000	30.0	106.64	Regular Air	-31.95	3.68	Xylona Price	Corporate	Office Supplies
5	5254.0	2012/07/25 00:00:00.000	31.0	1735.3515	Regular Air	258.624	65.99	William Brown	Corporate	Technology

8. Implement the merge join transformation on tables.



Merge join

Step name: Merge join

First Step: Microsoft Excel input

Second Step: Microsoft Excel input 2

Join Type: FULL OUTER

Keys for 1st step:

#	Key field
1	Name
2	Address

Keys for 2nd step:

#	Key field
1	id
2	name
3	salary
4	start_date
5	dept

First rows Last rows Off

#	Name	Address	id	name_1	salary	start_date	dept
1	<null>	<null>	1.0	Rick	623.3	2012-01-01	IT
2	<null>	<null>	2.0	Dan	515.2	2013-09-23	Operations
3	<null>	<null>	3.0	Michelle	611.0	2014-11-15	IT
4	<null>	<null>	4.0	Ryan	729.0	2014-05-11	HR
5	<null>	<null>	5.0	Gary	843.25	2015-03-27	Finance
6	<null>	<null>	6.0	Nina	578.0	2013-05-21	IT
7	<null>	<null>	7.0	Simon	632.8	2013-07-30	Operations
8	<null>	<null>	8.0	Guru	722.5	2014-06-17	Finance
9	Pritesh	Ratnagiri	<null>	<null>	<null>	<null>	<null>
10	Gaurav	Devrukh	<null>	<null>	<null>	<null>	<null>
11	Vivek	Mumbai	<null>	<null>	<null>	<null>	<null>