

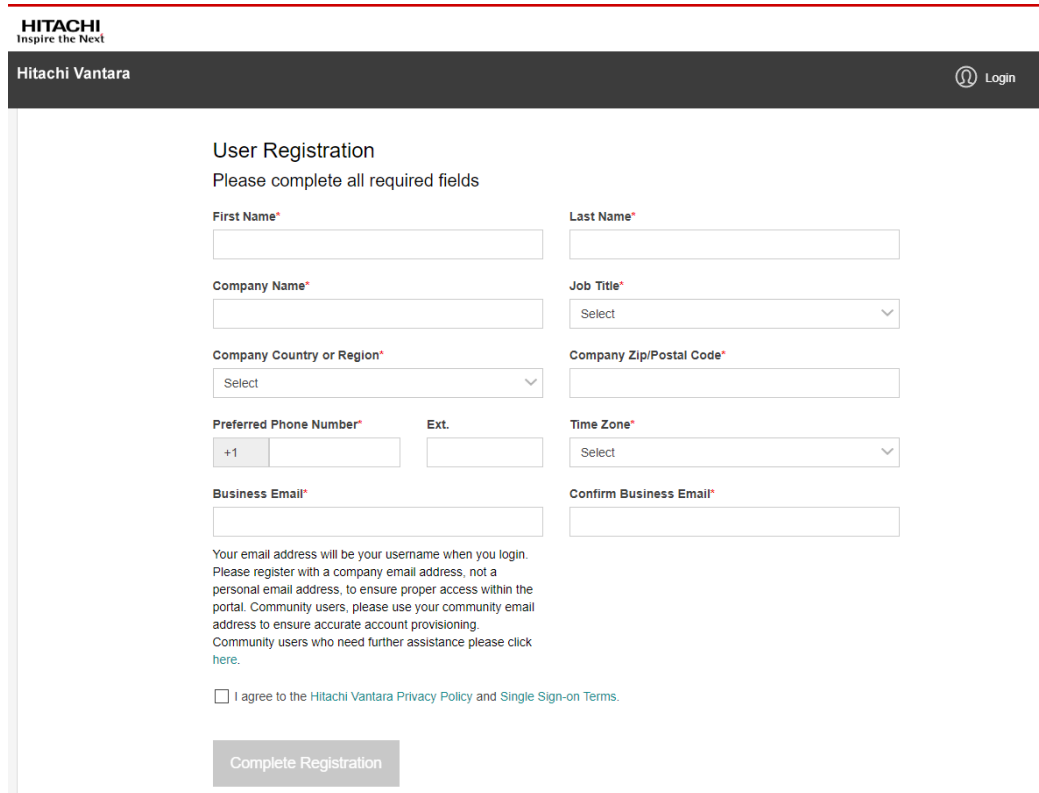
## Pentaho Tutorial

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191402128

### Installation :

#### 1. Registrasi Pentaho



**HITACHI**  
Inspire the Next

Hitachi Vantara Login

### User Registration

Please complete all required fields

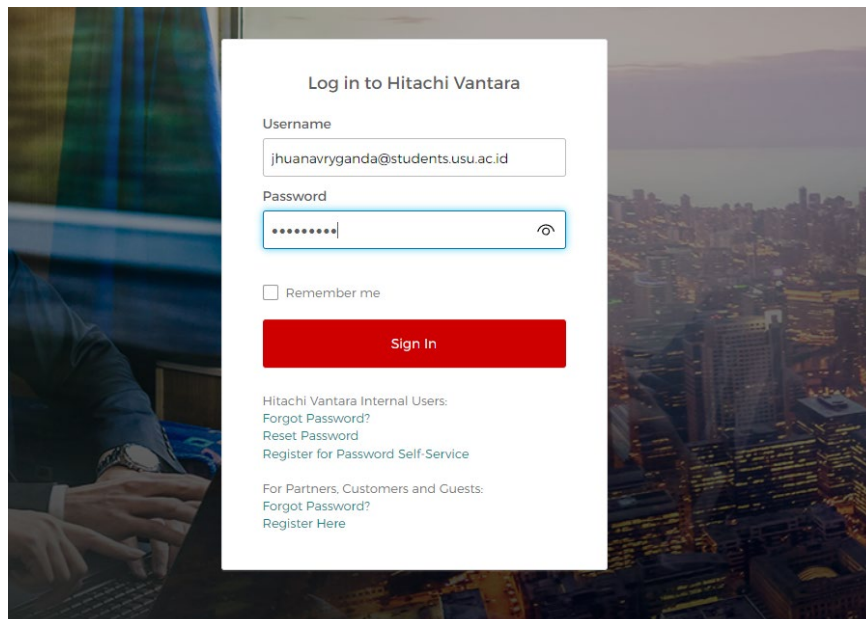
<b>First Name*</b>	<b>Last Name*</b>	
<input type="text"/>	<input type="text"/>	
<b>Company Name*</b>	<b>Job Title*</b>	
<input type="text"/>	<input type="text" value="Select"/>	
<b>Company Country or Region*</b>	<b>Company Zip/Postal Code*</b>	
<input type="text" value="Select"/>	<input type="text"/>	
<b>Preferred Phone Number*</b>	<b>Ext.</b>	<b>Time Zone*</b>
<input type="text" value="+1"/>	<input type="text"/>	<input type="text" value="Select"/>
<b>Business Email*</b>		<b>Confirm Business Email*</b>
<input type="text"/>		<input type="text"/>

Your email address will be your username when you login.  
Please register with a company email address, not a personal email address, to ensure proper access within the portal. Community users, please use your community email address to ensure accurate account provisioning.  
Community users who need further assistance please click [here](#).

☐ I agree to the [Hitachi Vantara Privacy Policy](#) and [Single Sign-on Terms](#).

**Complete Registration**


#### 2. Login



**Log in to Hitachi Vantara**

**Username**

**Password**



☐ Remember me

**Sign In**

Hitachi Vantara Internal Users:  
[Forgot Password?](#)  
[Reset Password](#)  
[Register for Password Self-Service](#)

For Partners, Customers and Guests:  
[Forgot Password?](#)  
[Register Here](#)

### 3. Download Pentaho (Pentaho Didownload dari SourceForge)

The screenshot shows the SourceForge download page for Pentaho from Hitachi Vantara. The page includes a navigation bar with 'Open Source Software', 'Business Software', and 'Resources'. The main content area features the Pentaho logo and the text 'End to end data integration and analytics platform'. Below this, there is a download button and a registration form for 'Data Fabric For Dummies'. The form includes fields for First Name, Last Name, Business Email Address, Role, Company, Job Title, Country/Region, State, and Phone. There is also a checkbox for 'Additional Information (optional)'.

### 4. Instal JDK dan JRE (Download di Web Java)

### 5. Isi Variabel Pentaho di Enviromental Variable

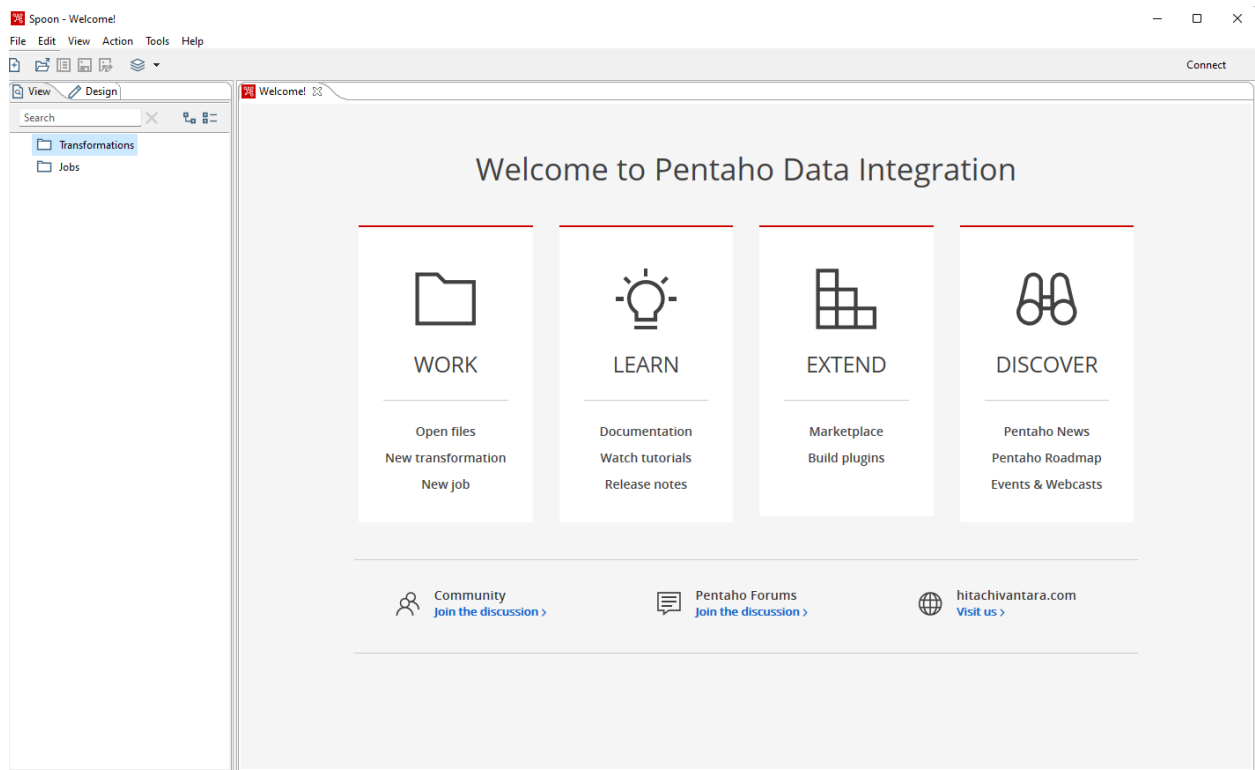
PENTAHO_JAVA	C:\Program Files\Java\jre1.8.0_333\bin\java.exe
PENTAHO_JAVA_HOME	C:\Program Files\Java\jre1.8.0_333
JAVA_HOME	C:\Program Files\Java\jdk-19

### 6. Jalankan Pentaho

The screenshot shows a Windows File Explorer window with the path 'Data (D:) > Pentaho > pdi-ce-9.3.0.0-428 > data-integration'. The window displays a list of files and folders. The file 'Spoon.bat' is highlighted with a red circle.

Name	Date modified	Type	Size
purge-utility.sn	4/12/2022 4:28 PM	Shell Script	2 KB
README.txt	4/12/2022 4:28 PM	Text Document	2 KB
README-spark-app-builder.txt	4/12/2022 4:28 PM	Text Document	3 KB
runSamples.bat	4/12/2022 4:28 PM	Windows Batch File	2 KB
runSamples.sh	4/12/2022 4:28 PM	Shell Script	2 KB
set-pentaho-env.bat	4/12/2022 4:28 PM	Windows Batch File	6 KB
set-pentaho-env.sh	4/12/2022 4:28 PM	Shell Script	5 KB
Spark-app-builder.bat	4/12/2022 4:28 PM	Windows Batch File	2 KB
spark-app-builder.sh	4/12/2022 4:28 PM	Shell Script	2 KB
Spoon.bat	4/12/2022 4:28 PM	Windows Batch File	6 KB

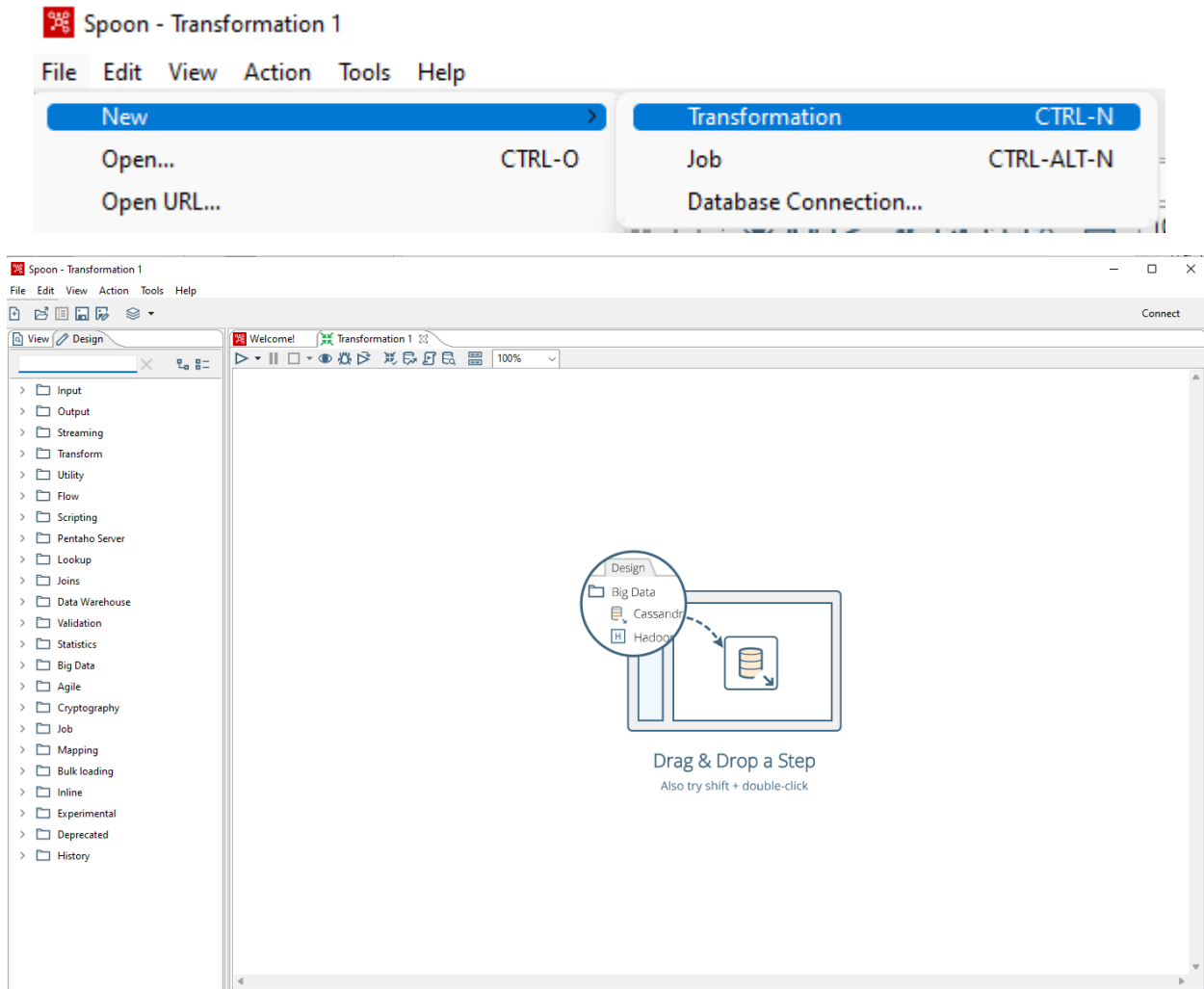
## Laman Tampilan Pentaho



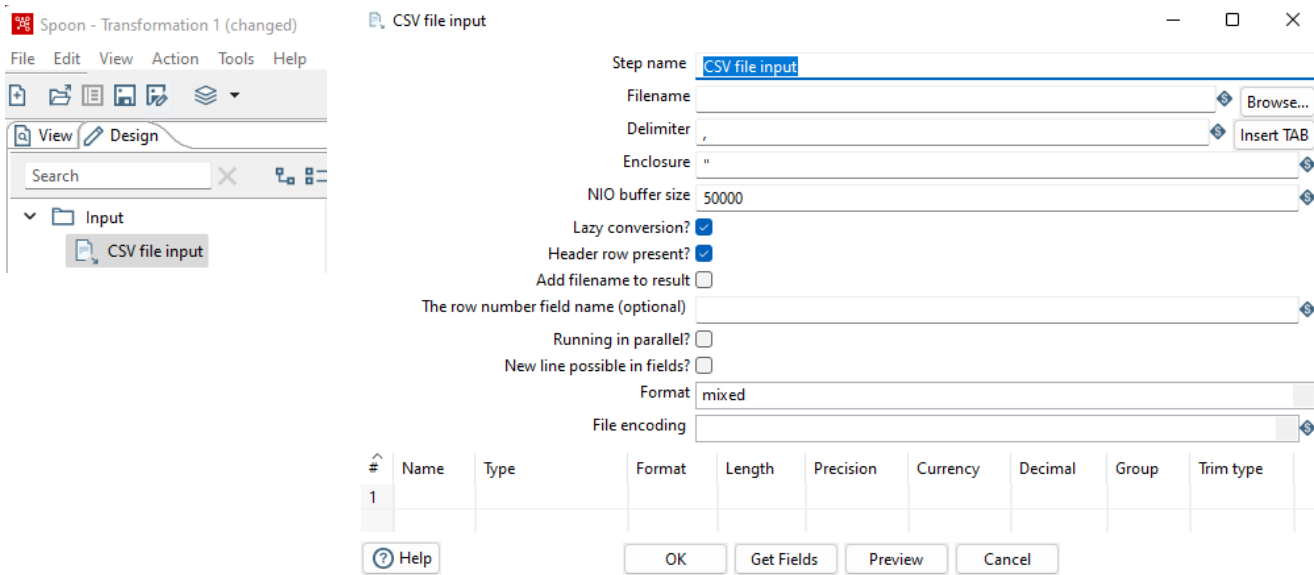
## Pentaho Data Integration Evaluation.

Pentaho Data Integration (PDI) adalah solusi dalam pengolahan serta perapian data sehingga data tersebut jauh lebih enak dipandang dan lebih mudah dipahami.

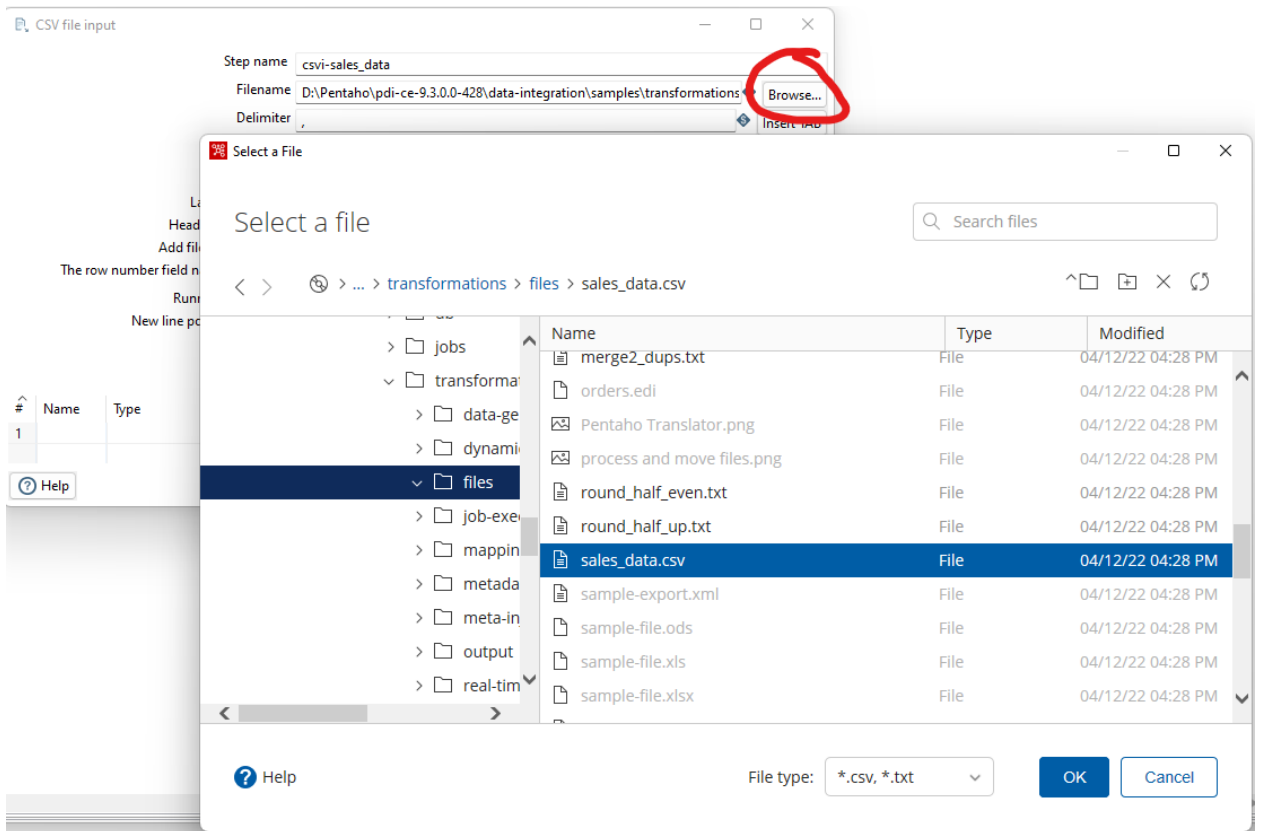
1. Buka Pentaho
2. Buat laman transformation baru



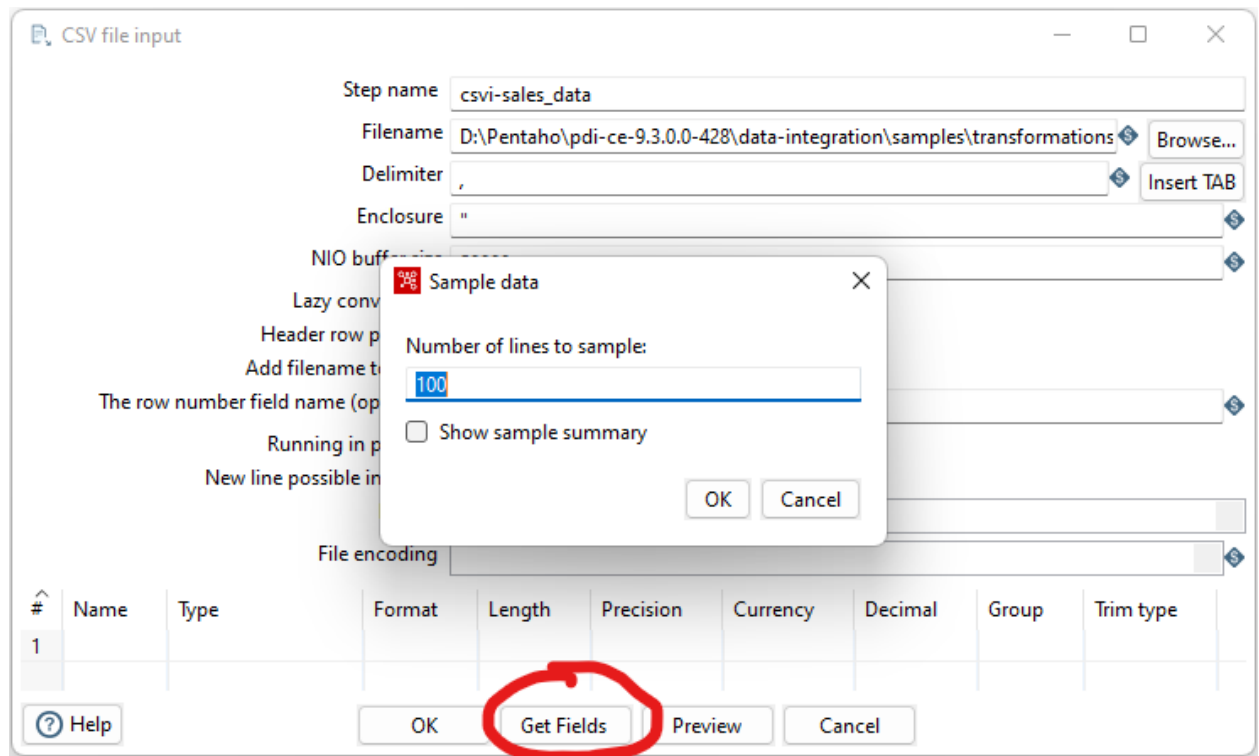
3. Input file CSV yang akan diolah (Drag and Drop, lalu double click).



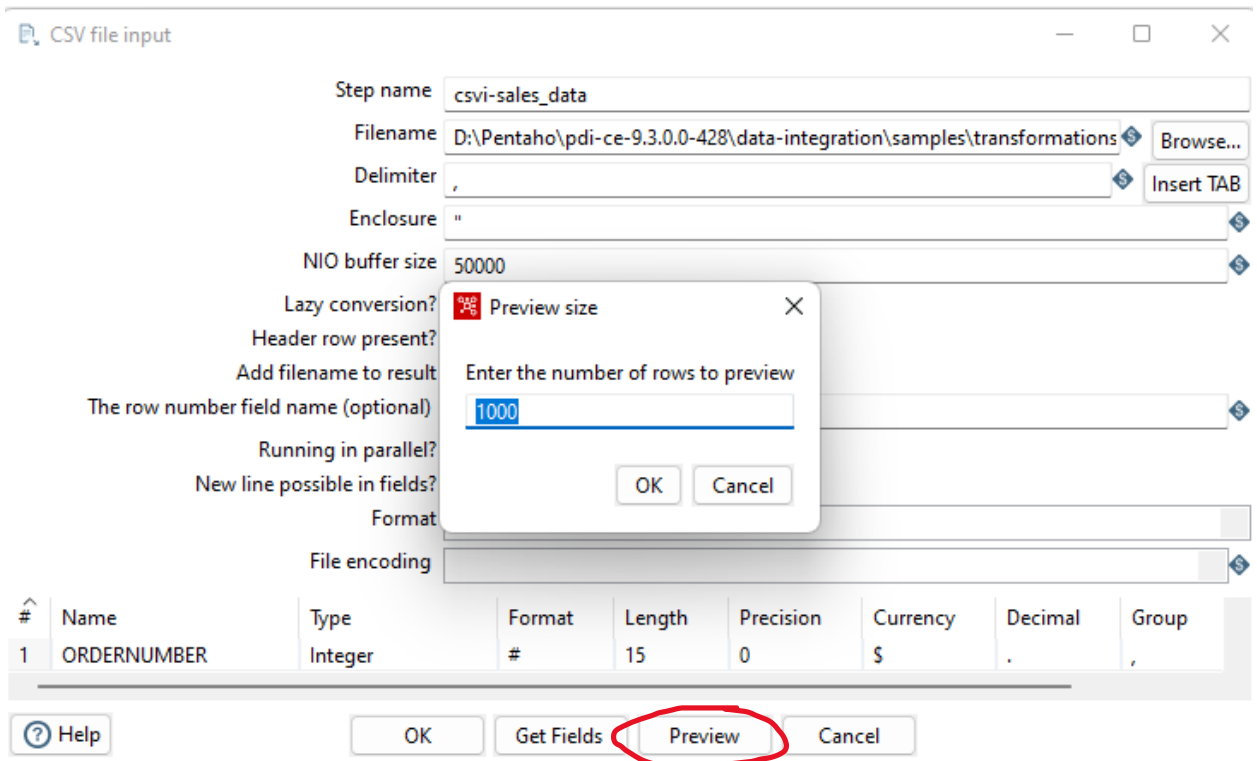
4. Buka file yang akan diolah



5. Ambil sample data, dan ambil 100 data dari sample yang ada



6. Lalu kita coba lihat review dari 1000 sample yang ada pada data



Examine preview data

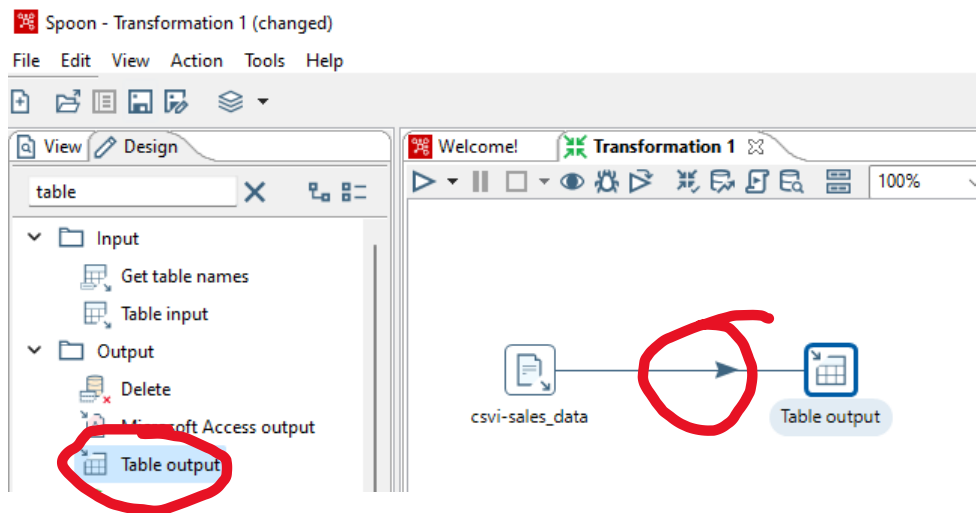
Rows of step: csvi-sales\_data (1000 rows)

#	ORDERNUMBER	QUANTITYORDERED	PRICEEACH	ORDERLINENUMBER	SALES	ORDERDATE	STATUS	QTR_ID	MONTH_ID	YEAR_ID	PRODUCTLINE	MSRP	PRODUCTCODE	CUSTOMERNAME	PHONE	ADDRESSLINE1
1	10107	30	95.7	2	2871	2/24/2003 0.00	Shipped	1	2	2003	Motorcycles	95	S10_1678	Land of Toys Inc.	2125557818	887 Long Airport Avenue
2	10121	34	81.3	5	2765.9	5/7/2003 0.00	Shipped	2	5	2003	Motorcycles	95	S10_1678	Reims Collectables	26.47.1555	59 rue de l'Abbaye
3	10134	41	94.7	2	3884.3	7/1/2003 0.00	Shipped	3	7	2003	Motorcycles	95	S10_1678	Lyon Souvenirs	+33 1 46 62 7555	27 rue du Colonel Pierre Avia
4	10145	45	83.3	6	3746.7	8/25/2003 0.00	Shipped	3	8	2003	Motorcycles	95	S10_1678	Toy&GrownUps.com	6265557265	78934 Hillside Dr.
5	10159	49	100	14	5205.3	10/10/2003 0.00	Shipped	4	10	2003	Motorcycles	95	S10_1678	Corporate Gift Ideas Co.	6505551986	7734 Strong St.
6	10168	36	96.7	1	3479.8	10/28/2003 0.00	Shipped	4	10	2003	Motorcycles	95	S10_1678	Technics Stores Inc.	6505556809	9408 Furth Circle
7	10180	29	86.1	9	2497.8	11/1/2003 0.00	Shipped	4	11	2003	Motorcycles	95	S10_1678	Daedalus Designs Imports	20.16.1555	184, chausse e de Tournai
8	10188	48	100	1	5512.3	11/18/2003 0.00	Shipped	4	11	2003	Motorcycles	95	S10_1678	Herkuu Gifts	+47 2267 3215	Drammen 121, PB 744 Sentrum
9	10201	22	98.6	2	2168.5	12/1/2003 0.00	Shipped	4	12	2003	Motorcycles	95	S10_1678	Mini Vileaks Co.	6505553787	5537 North Portland Street
10	10211	41	100	14	4708.4	1/15/2004 0.00	Shipped	1	1	2004	Motorcycles	95	S10_1678	Auto Canala- Petit	(1) 47.55.6555	25, rue Lauriston
11	10223	37	100	1	3965.7	2/20/2004 0.00	Shipped	1	2	2004	Motorcycles	95	S10_1678	Australian Collectors, Co.	03 9520 4555	636 St Kilda Road
12	10237	23	100	7	2333.1	4/5/2004 0.00	Shipped	2	4	2004	Motorcycles	95	S10_1678	Vitachrome Inc.	2125551500	2678 Kingston Rd.
13	10251	28	100	2	3188.6	5/18/2004 0.00	Shipped	2	5	2004	Motorcycles	95	S10_1678	Tekni Collectables Inc.	2035559350	7476 Moss Rd.
14	10263	34	100	2	3678.9	6/28/2004 0.00	Shipped	2	6	2004	Motorcycles	95	S10_1678	Gift Depot Inc.	2035553270	25593 South Bay Ln.
15	10275	45	92.8	1	4177.4	7/23/2004 0.00	Shipped	3	7	2004	Motorcycles	95	S10_1678	La Rochelle Gifts	40.67.8555	67, rue des Cinquante Otages
16	10285	36	100	6	4099.7	8/27/2004 0.00	Shipped	3	8	2004	Motorcycles	95	S10_1678	Marta's Replicas Co.	6175558555	39323 Spinnaker Dr.
17	10299	23	100	9	2597.4	9/30/2004 0.00	Shipped	3	9	2004	Motorcycles	95	S10_1678	Toys of Finland, Co.	90-224 8955	Keskuskatu 45
18	10309	100	100	5	4394.4	10/15/2004 0.00	Shipped	4	10	2004	Motorcycles	95	S10_1678	Buane Mini Imports	07-98 8955	Erling Stakers gate 78
19	10318	46	94.7	1	4258	11/2/2004 0.00	Shipped	4	11	2004	Motorcycles	95	S10_1678	Diecast Classics Inc.	2155551555	7286 Pompton St.
20	10329	42	100	1	4366.1	11/15/2004 0.00	Shipped	4	11	2004	Motorcycles	95	S10_1678	Land of Toys Inc.	2125557818	887 Long Airport Avenue
21	10341	41	100	9	7737.9	11/24/2004 0.00	Shipped	4	11	2004	Motorcycles	95	S10_1678	Salzburg Collectables	6562-9555	Geisweg 14
22	10361	20	72.5	13	1451	12/17/2004 0.00	Shipped	4	12	2004	Motorcycles	95	S10_1678	Souvenirs And Things Co.	+61 2 9489 8555	Monitor Money Building, 815 Pacific Hwy
23	10375	21	34.9	12	733.1	2/3/2005 0.00	Shipped	1	2	2005	Motorcycles	95	S10_1678	La Rochelle Gifts	40.67.8555	67, rue des Cinquante Otages
24	10388	42	76.4	4	3207.1	3/3/2005 0.00	Shipped	1	3	2005	Motorcycles	95	S10_1678	FunGiftIdeas.com	5085552555	1785 First Street
25	10403	24	100	7	2434.6	4/8/2005 0.00	Shipped	2	4	2005	Motorcycles	95	S10_1678	UK Collectables, Ltd.	(171) 555-2282	Berkeley Gardens 12, Brewery
26	10417	66	100	2	7516.1	5/13/2005 0.00	Disputed	2	5	2005	Motorcycles	95	S10_1678	Euro+ Shopping Channel	(91) 555 94 44	C/ Moraltzarai, 86
27	10103	26	100	11	5404.6	1/28/2003 0.00	Shipped	1	1	2003	Classic Cars	214	S10_1949	Buane Mini Imports	07-98 8955	Erling Stakers gate 78
28	10112	29	100	1	7209.1	3/24/2003 0.00	Shipped	1	3	2003	Classic Cars	214	S10_1949	Volvo Model Replicas, Co	0821-12 3555	Bergstr. 9
29	10126	38	100	11	7329.1	5/28/2003 0.00	Shipped	2	5	2003	Classic Cars	214	S10_1949	Corrida Auto Replicas, Ltd	(91) 555 22 82	C/ Arsequi, 67
30	10140	37	100	11	7374.1	7/24/2003 0.00	Shipped	3	7	2003	Classic Cars	214	S10_1949	Technics Stores Inc.	6505556809	9408 Furth Circle
31	10150	45	100	8	10993.3	9/19/2003 0.00	Shipped	3	9	2003	Classic Cars	214	S10_1949	Dragon Souvenirs, Ltd.	+85 221 7555	Bronz Sok, Bronz Apt. 3/6 Tesvikye
32	10163	21	100	1	4860.2	10/20/2003 0.00	Shipped	4	10	2003	Classic Cars	214	S10_1949	Classic Legends Inc.	2125558495	5905 Pompton St.

Close Show Log

Sample dari data yang akan diolah

7. Cari table output, lalu double-click table output. Table output akan langsung terintegrasi dengan data



8. Buka Table Output

Table output

Step name: to-sales\_data

Connection: sampledata [Edit... New... Wizard...]

Target schema: [Browse...]

Target table: DATA\_SALES [Browse...]

Commit size: 1000

Truncate table: ☐

Ignore insert errors: ☐

Specify database fields: ☐

Main options Database fields

Partition data over tables: ☐

Partitioning field: [ ]

Partition data per month: ☒

Partition data per day: ☐

Use batch update for inserts: ☒

Is the name of the table defined in a field? ☐

Field that contains name of table: [ ]

Store the tablename field: ☒

Return auto-generated key: ☐

Name of auto-generated key field: [ ]

Help OK Cancel SQL

9. Tambahkan Connection Baru (disini saya mengkonekkan dengan menggunakan Mysql).

Database Connection

General  
Advanced  
Options  
Pooling  
Clustering

Connection name:  
sampledata

Connection type:  
MySQL  
Native Mondrian  
Neoview  
Netezza  
Oracle  
Oracle RDB  
Palo MOLAP Server  
Pentaho Data Services  
PostgreSQL  
Redshift  
Remedy Action Request System  
SAP ERP System  
SQLite  
Snowflake  
SparkSQL  
Sybase  
SybaseIQ  
Teradata  
UniVerse database

Access:  
Native (JDBC)  
ODBC  
JNDI

Settings  
Host Name:  
localhost  
Database Name:  
sampledata  
Port Number:  
3306  
Username:  
root  
Password:  
☒ Use Result Streaming Cursor

Test Feature List Explore

OK Cancel

10. Tambahkan Target Table

Table output

Step name: to-sales\_data

Connection: sampledata Edit... New... Wizard...

Target schema: Browse...

Target table: DATA\_SALES Browse...

Commit size: 1000

Truncate table: ☐

Ignore insert errors: ☐

Specify database fields: ☐

Main options Database fields

Partition data over tables: ☐

Partitioning field:

Partition data per month: ☒

Partition data per day: ☐

Use batch update for inserts: ☒

Is the name of the table defined in a field?: ☐

Field that contains name of table:

Store the tablename field: ☒

Return auto-generated key: ☐

Name of auto-generated key field:

Help OK Cancel SQL



11. Lalu klik SQ dan execute tablenya

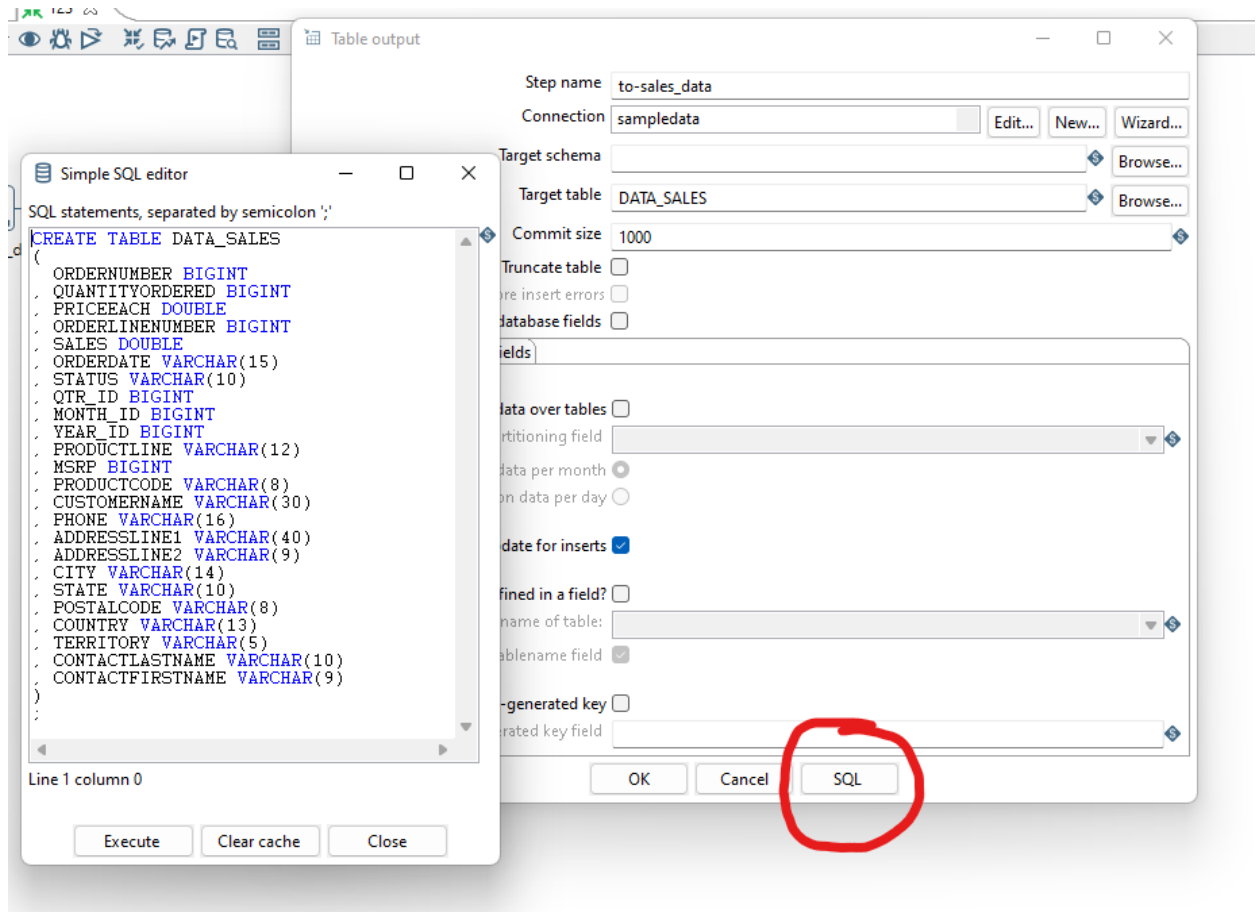
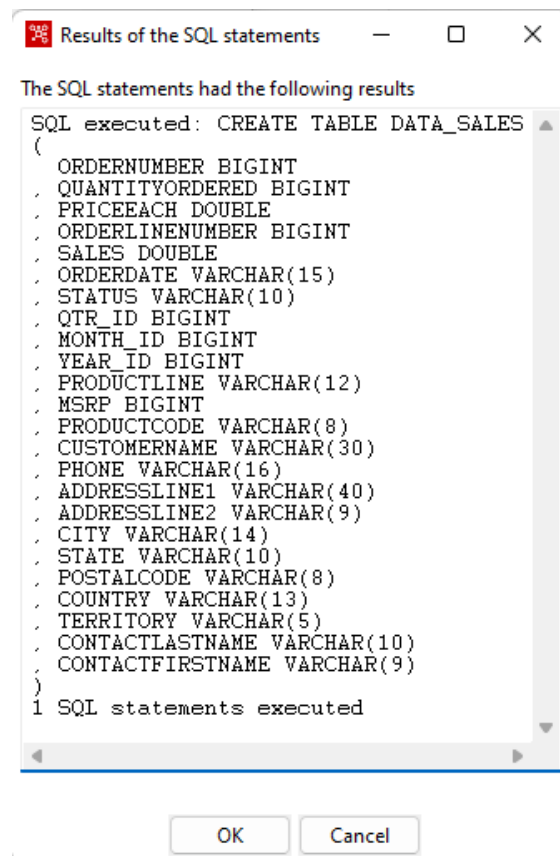
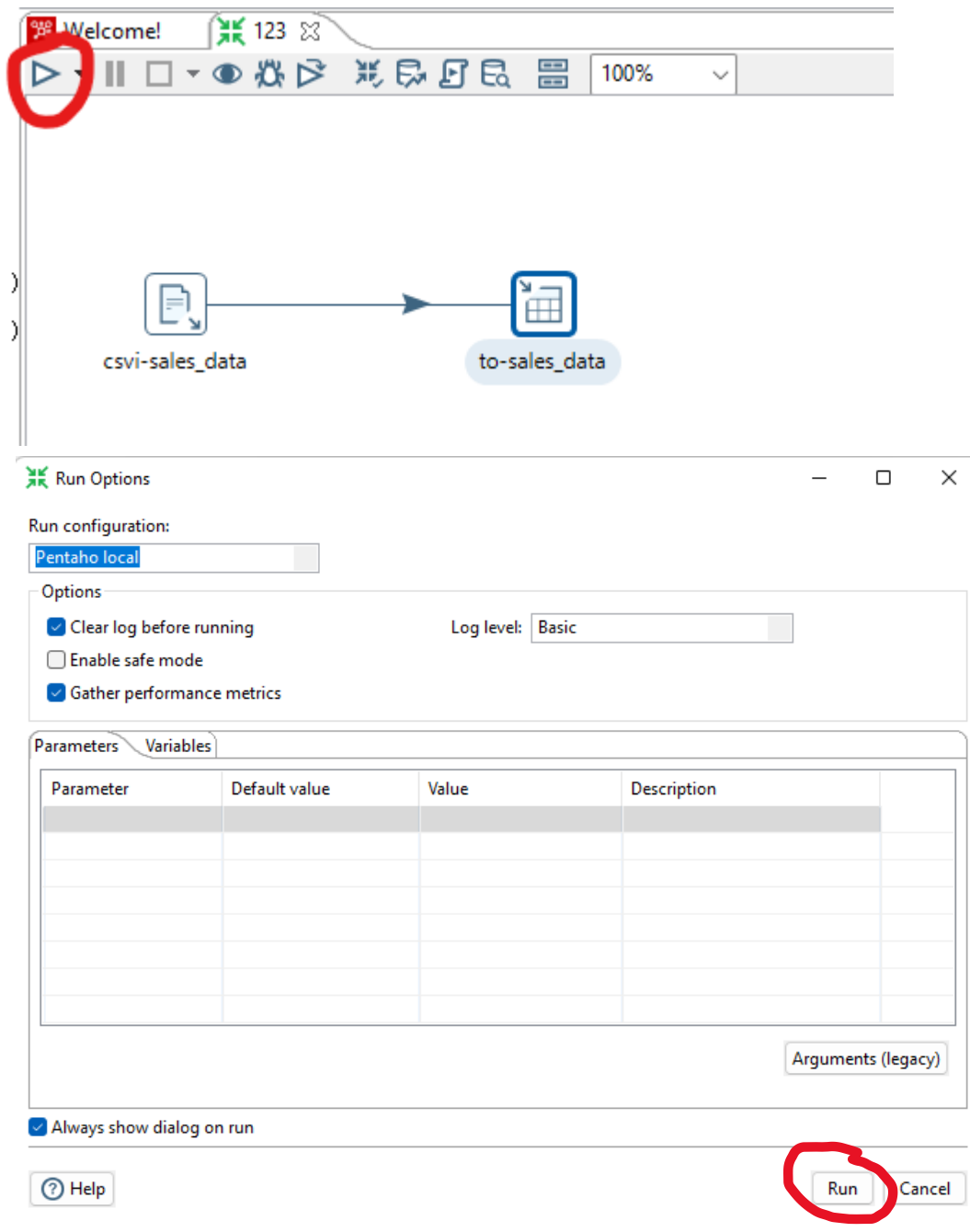


Table yang sudah di Execute :



12. Lalu jalankan PDI nya



### 13. Hasil PDI yang berjalan dengan baik

The screenshot displays the Kettle execution results for a transformation named 'load\_sales\_data'. The top section shows a visual representation of the data flow from 'csvi-sales\_data' to 'to-sales\_data', both marked with green checkmarks indicating successful execution.

**Execution Results**

Logging | Execution History | Step Metrics | Performance Graph | Metrics | Preview data

#	Stepname	Copynr	Read	Written	Input	Output	Updated	Rejected	Errors	Active	Time	Speed (r/s)	input/output
1	csvi-sales_data	0	0	2823	2824	0	0	0	0	Finished	0.0s	313,778	-
2	to-sales_data	0	2823	2823	0	2823	0	0	0	Finished	0.4s	6,988	-

**Execution Results**

Logging | Execution History | Step Metrics | Performance Graph | Metrics | Preview data

2022/10/11 22:28:35 - Spoon - Running transformation using the Kettle execution engine  
2022/10/11 22:28:35 - Spoon - Transformation opened.  
2022/10/11 22:28:35 - Spoon - Launching transformation [load\_sales\_data]...  
2022/10/11 22:28:35 - Spoon - Started the transformation execution.  
2022/10/11 22:28:35 - load\_sales\_data - Dispatching started for transformation [load\_sales\_data]  
2022/10/11 22:28:35 - to-sales\_data.0 - Connected to database [sampledata] (commit=1000)  
2022/10/11 22:28:35 - csvi-sales\_data.0 - Header row skipped in file 'D:\Pentaho\pdi-ce-9.3.0.0-428\data-integration\samples\transformations\files\sales\_data.csv'  
2022/10/11 22:28:35 - csvi-sales\_data.0 - Finished processing (I=2824, O=0, R=0, W=2823, U=0, E=0)  
2022/10/11 22:28:35 - to-sales\_data.0 - WARNING: Couldn't insert row into table: [10108], [33], [100], [6], [5265.1], [3/3/2003 0:00], [Shipped], [1], [3], [2003], [Classic Cars], [194], [S12\_1099], [Cruz & Sons Co.], [+63 2 5  
2022/10/11 22:28:35 - to-sales\_data.0 - Error inserting/updating row  
2022/10/11 22:28:35 - to-sales\_data.0 - Data truncation: Data too long for column 'ADDRESSLINE1' at row 1  
2022/10/11 22:28:35 - to-sales\_data.0 - WARNING: Couldn't insert row into table: [10300], [33], [100], [5], [5521.9], [10/4/2003 0:00], [Shipped], [4], [10], [2003], [Classic Cars], [194], [S12\_1099], [Blauer See Auto, Co.], [-