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Generate rows

Step name: Generate rows

Limit: 1025

Never stop generating rows: ☐

Interval in ms (delay): 3000

Current row time field name: row

Previous row time field name: FirstSecondsAgo

#	Name	Type	Format	Length	Precision	Currency	Decimal	Group	Value	Set em
1	CurrentDate	Date	dd-MM-yyyy						01-01-2003	N

Buttons: Help, OK, Preview, Cancel

Add sequence

Step name: Add sequence

Name of value: IncrementDay

Use a database to generate the sequence

Use DB to get sequence? ☐

Connection: conn_dw_destination

Schema name:

Sequence name: SEQ

Use a transformation counter to generate the sequence

Use counter to calculate sequence? ☒

Counter name (optional):

Start at value: 0

Increment by: 1

Maximum value: 999999999

Buttons: Help, OK, Cancel

Calculator

Step name:

☒ Show an error on non-existing files

#	New field	Calculation	Field A	Field B	Field C	Value type	Length	Precision	Remove	Conversion mask	Decimal symbol	Grouping symbol
1	StreamDate	Date A - 8 Days	CurrentDate	IncrementDay		None			<input checked="" type="checkbox"/>			
2	StreamYear	Year of date A	StreamDate			None			<input checked="" type="checkbox"/>			
3	StreamMonth	Month of date A	StreamDate			None			<input checked="" type="checkbox"/>			
4	StreamDay	Day of week of date A	StreamDate			None			<input checked="" type="checkbox"/>			

Select values

Step name:

Select & Alter Remove Meta-data

Fields to remove:

#	Fieldname
1	CurrentDate
2	IncrementDay

Database lookup

Step name:

Connection:

Lookup schema:

Lookup table:

☐ Enable cache!

Cache size in rows (0=No cache):

☐ Load all data from table

The key(s) to look up the value(s):

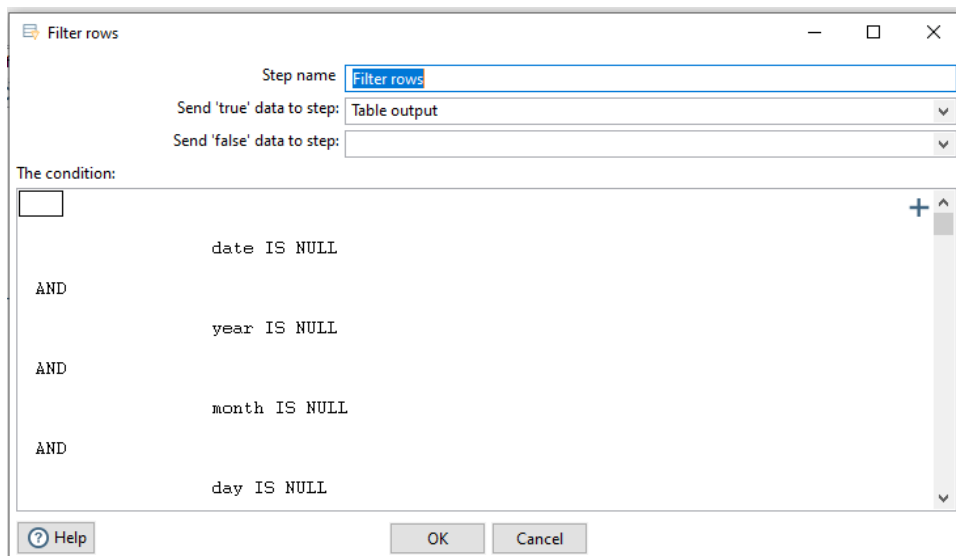
#	Table field	Comparator	Field1	Field2
1	date	=	StreamDate	
2	year	=	StreamYear	
3	month	=	StreamMonth	
4	day	=	StreamDay	

Values to return from the lookup table:

#	Field	New name	Default	Type
1	date			None
2	year			None
3	month			None
4	day			None

☐ Do not return the row if the lookup fails

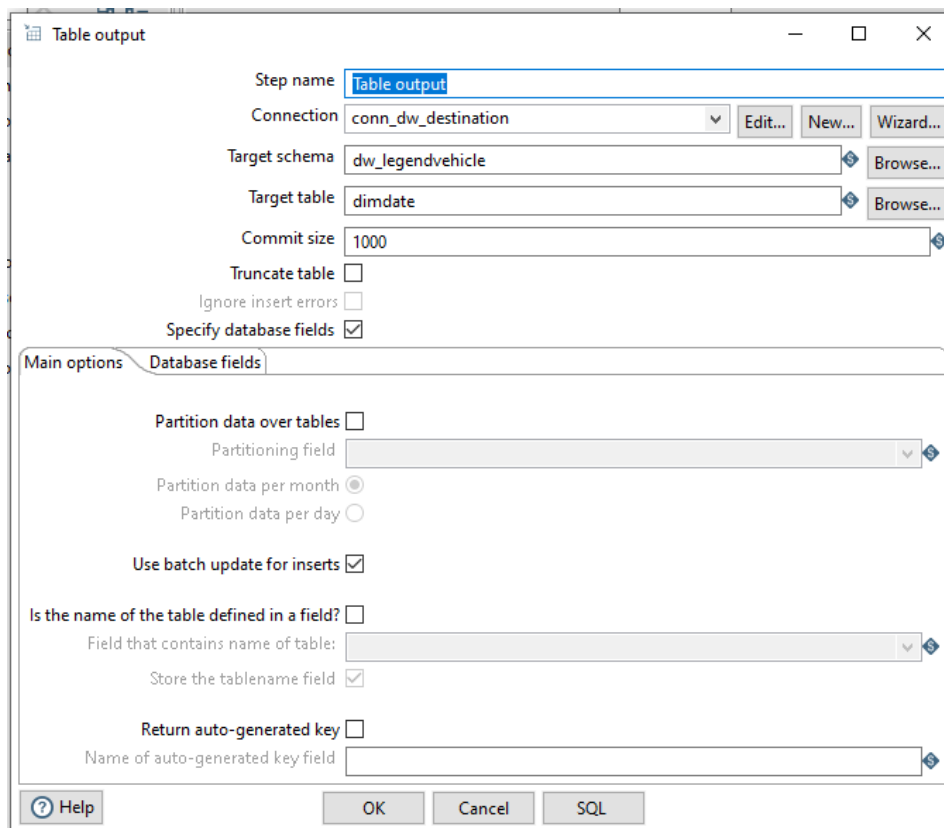
Filter rows



The dialog box titled "Filter rows" contains the following fields and controls:

- Step name:** A text field containing "Filter rows".
- Send 'true' data to step:** A dropdown menu showing "Table output".
- Send 'false' data to step:** An empty dropdown menu.
- The condition:** A list box containing the following conditions:
 - ☐ date IS NULL
 - AND
 - ☐ year IS NULL
 - AND
 - ☐ month IS NULL
 - AND
 - ☐ day IS NULL
- Buttons:** "Help" (with a question mark icon), "OK", and "Cancel".

Table output



The dialog box titled "Table output" contains the following fields and controls:

- Step name:** A text field containing "Table output".
- Connection:** A dropdown menu showing "conn_dw_destination", with buttons "Edit...", "New...", and "Wizard..." to its right.
- Target schema:** A text field containing "dw_legendvehicle", with a "Browse..." button to its right.
- Target table:** A text field containing "dimdate", with a "Browse..." button to its right.
- Commit size:** A text field containing "1000".
- Truncate table:** An unchecked checkbox.
- Ignore insert errors:** An unchecked checkbox.
- Specify database fields:** A checked checkbox.
- Main options / Database fields tab:**
 - Partition data over tables:** An unchecked checkbox.
 - Partitioning field:** A dropdown menu.
 - Partition data per month:** A selected radio button.
 - Partition data per day:** An unselected radio button.
 - Use batch update for inserts:** A checked checkbox.
 - Is the name of the table defined in a field?:** An unchecked checkbox.
 - Field that contains name of table:** A dropdown menu.
 - Store the tablename field:** A checked checkbox.
 - Return auto-generated key:** An unchecked checkbox.
 - Name of auto-generated key field:** A text field.
- Buttons:** "Help" (with a question mark icon), "OK", "Cancel", and "SQL".

Tugas 1

1. Buka preview tab pada execution result area di setiap proses object. amati input dan output data yang ada. bandingkan di setiap prosesnya. jelaskan perbedaan di setiap prosesnya.

Proses Objek	SS data input	SS data output	Keterangan
Generate rows	0	1825	Membuat 1825 baris data
Add Sequences	1825	1825	menambahkan urutan (sequence) pada 1825 baris
Calculator	1825	1825	melakukan operasi kalkulasi pada 1825 baris
Select values	1825	1825	memilih kolom tertentu dari data
Database lookup	1825	1825	mencari informasi tambahan di database
Filter rows	1825	1825	menyaring data, semua 1825 baris tetap diproses
Table Output	1825	1825	memasukkan 1825 baris data ke database

TUGAS 2

Tabel input

Table input

Step name: Table input

Connection: conn_oltp_resources

Buttons: Edit..., New..., Wizard..., Get SQL select statement...

SQL:

```
select * from employees e
left join employees r
ON e.reportsTo=r.employeeNumber;
```

Select values

Select values

Step name: Select values

Select & Alter Remove Meta-data

Fields:

#	Fieldname	Rename to	Length	Precision
1	employeeNumber	StreamEmployeeNumber		
2	lastName	StreamLastname		
3	firstName	StreamFirstname		
4	extension			
5	email			
6	officeCode			
7	reportsTo			
8	jobTitle	StreamJobtitle		
9	employeeNumber_1			
10	lastName_1	StreamLastnameBoss		
11	firstName_1	StreamFirstnameBoss		
12	extension_1			
13	email_1			
14	officeCode_1			
15	reportsTo_1			
16	jobTitle_1			

Get fields to select

Edit Mapping

Database lookup

Database lookup

Step name: Database lookup

Connection: conn_dw_destination Edit... New... Wizard...

Lookup schema: dw_legendvehicle Browse...

Lookup table: dimemployees Browse...

Enable cache? ☐

Cache size in rows (0=cache): 0

Load all data from table ☐

The key(s) to look up the value(s):

#	Table field	Comparator	Field1	Field2
1	employeenumber	=	StreamEmployeeNumber	
2	firstname	=	StreamFirstname	
3	lastName	=	StreamLastname	
4	jobTitle	=	StreamJobtitle	
5	boss_firstname	=	StreamFirstnameBoss	
6	boss_lastname	=	StreamLastnameBoss	

Values to return from the lookup table:

#	Field	New name	Default	Type
1	employeeNumber			Integer
2	firstName			String
3	lastname			String
4	jobtitle			String
5	boss_firstname			String
6	boss_lastname			String

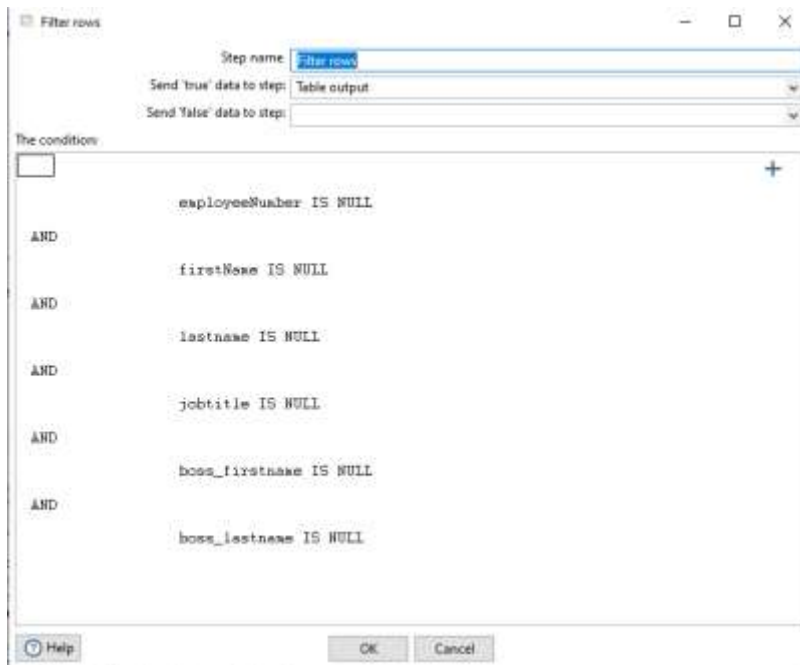
Do not pass the row if the lookup fails ☐

Fail on multiple results? ☐

Order by:

Help OK Cancel Get Fields Get lookup fields

Filter rows



The Filter rows dialog box is used to define a step name and a condition for filtering data. The step name is "filter rows". The condition is a logical expression: employeeNumber IS NULL AND firstName IS NULL AND lastname IS NULL AND jobtitle IS NULL AND boss_firstname IS NULL AND boss_lastname IS NULL.

Step name:

Send 'true' data to step:

Send 'false' data to step:

The condition:

☐ +

employeeNumber IS NULL

AND

firstName IS NULL

AND

lastname IS NULL

AND

jobtitle IS NULL

AND

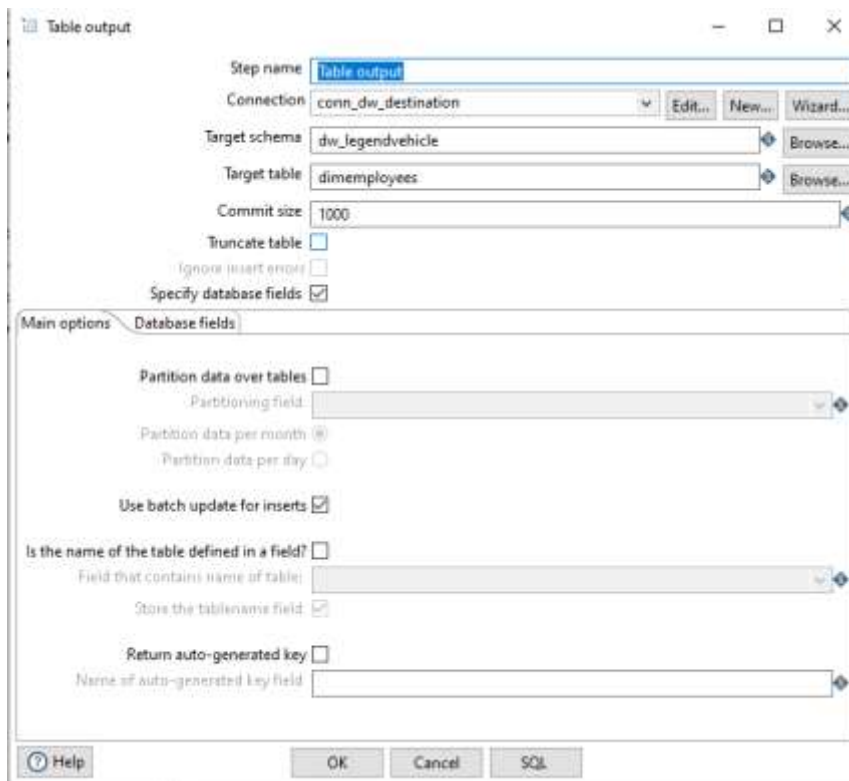
boss_firstname IS NULL

AND

boss_lastname IS NULL

Help OK Cancel

Table output



The Table output dialog box is used to define a step name and a table output. The step name is "table output". The connection is "conn_dw_destination". The target schema is "dw_legendvehicle". The target table is "dimemployees". The commit size is 1000. The truncate table checkbox is unchecked. The ignore insert errors checkbox is unchecked. The specify database fields checkbox is checked. The main options tab is selected. The partition data over tables checkbox is unchecked. The partitioning field is empty. The partition data per month radio button is selected. The partition data per day radio button is unselected. The use batch update for inserts checkbox is checked. The is the name of the table defined in a field? checkbox is unchecked. The field that contains name of table is empty. The store the tablename field checkbox is checked. The return auto-generated key checkbox is unchecked. The name of auto-generated key field is empty.

Step name:

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

Target schema: Browse...

Target table: Browse...

Commit size:

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

1. Buka preview tab pada execution result area di setiap proses object. amati input dan output data yang ada. bandingkan di setiap prosesnya. jelaskan perbedaan disetiap prosesnya.

Proses Objek	SS data input	SS data output	Keterangan
Table Input	23	0	Menginput data dan melanjutkan data ke proses select values
Select values	23	23	Mengubah nama field tertentu
Database lookup	23	23	Mencari informasi tambahan pda database
Filter rows	23	23	Menyaring data dengan kondisi tertentu
Table Output	23	23	Memasukkan data pada database

2. Jika proses itu di ulangi (di run kembali) apakah data akan redundant?
- Tidak ada data redundant.
3. Tambahkan nama anda pada table employee di OLTP. jalankan kembali transformasi ini. Amati hasilnya, apa yang terjadi?

<input type="checkbox"/>				4	1088	William	Patterson	Sales Manager (APAC)	Mary	Patterson	2025-03-12
<input type="checkbox"/>				5	1102	Gerard	Bondur	Sale Manager (EMEA)	Mary	Patterson	2025-03-12
<input type="checkbox"/>				6	1143	Anthony	Bow	Sales Manager (NA)	Mary	Patterson	2025-03-12
<input type="checkbox"/>				7	1165	Leslie	Jennings	Sales Rep	Anthony	Bow	2025-03-12
<input type="checkbox"/>				8	1166	Leslie	Thompson	Sales Rep	Anthony	Bow	2025-03-12
<input type="checkbox"/>				9	1188	Julie	Finelli	Sales Rep	Anthony	Bow	2025-03-12
<input type="checkbox"/>				10	1216	Steve	Patterson	Sales Rep	Anthony	Bow	2025-03-12
<input type="checkbox"/>				11	1286	Foon Yue	Tseng	Sales Rep	Anthony	Bow	2025-03-12
<input type="checkbox"/>				12	1323	George	Vanauf	Sales Rep	Anthony	Bow	2025-03-12
<input type="checkbox"/>				13	1337	Loul	Bondur	Sales Rep	Gerard	Bondur	2025-03-12
<input type="checkbox"/>				14	1370	Gerard	Hernandez	Sales Rep	Gerard	Bondur	2025-03-12
<input type="checkbox"/>				15	1401	Pamela	Castillo	Sales Rep	Gerard	Bondur	2025-03-12
<input type="checkbox"/>				16	1501	Larry	Bott	Sales Rep	Gerard	Bondur	2025-03-12
<input type="checkbox"/>				17	1504	Barry	Jones	Sales Rep	Gerard	Bondur	2025-03-12
<input type="checkbox"/>				18	1611	Andy	Fixter	Sales Rep	William	Patterson	2025-03-12
<input type="checkbox"/>				19	1612	Peter	Marsh	Sales Rep	William	Patterson	2025-03-12
<input type="checkbox"/>				20	1619	Tom	King	Sales Rep	William	Patterson	2025-03-12
<input type="checkbox"/>				21	1621	Mami	Nishi	Sales Rep	Mary	Patterson	2025-03-12
<input type="checkbox"/>				22	1625	Yoshimi	Kato	Sales Rep	Mami	Nishi	2025-03-12
<input type="checkbox"/>				23	1702	Martin	Gerard	Sales Rep	Gerard	Bondur	2025-03-12
<input type="checkbox"/>				24	1002	Diane	Murphy	President	NULL	NULL	2025-03-12
<input type="checkbox"/>				25	1000	Fairuz	Daffa	Sales Manager (NA)	Diane	Murphy	2025-03-12