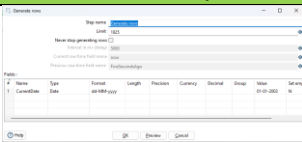
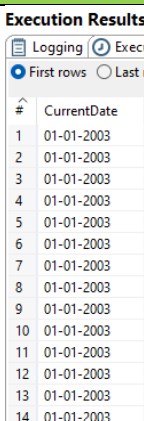
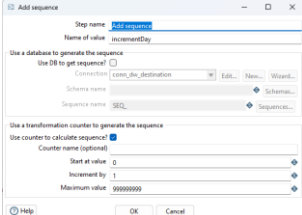
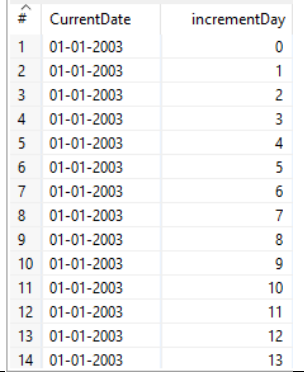
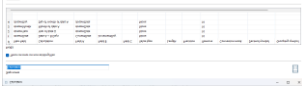
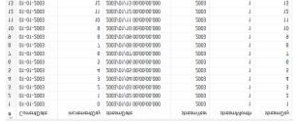
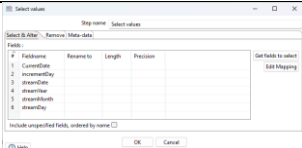
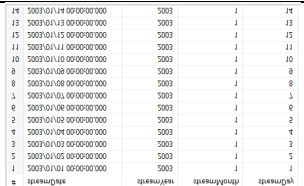


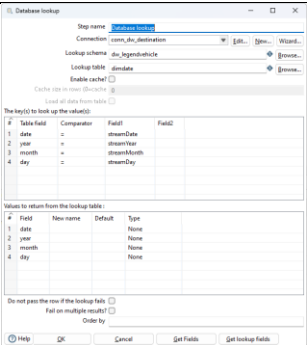
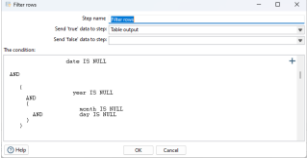
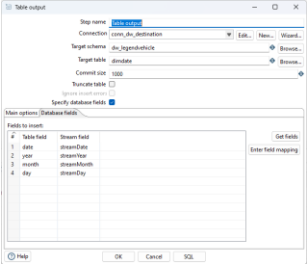
Jobsheet 3 Data Warehouse









































































Sufyan Dwi Bagaskara / SIB 2B / 23

Tugas A

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.

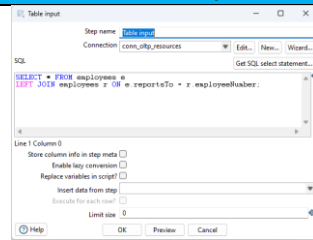
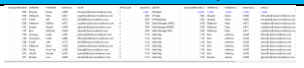
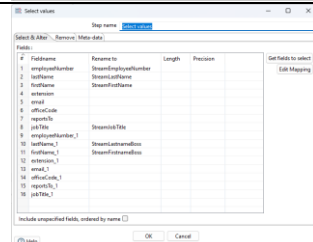

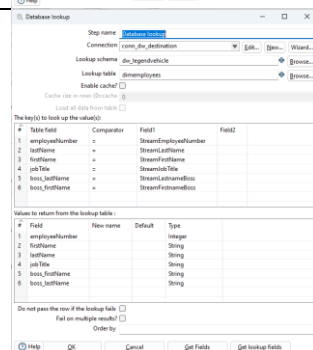
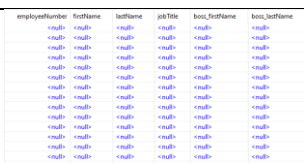
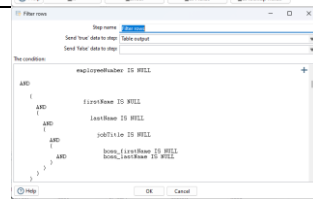
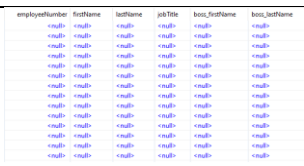
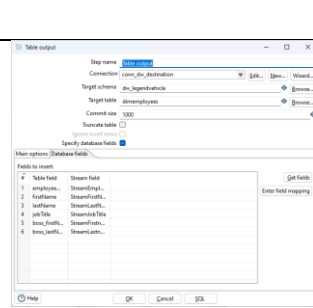
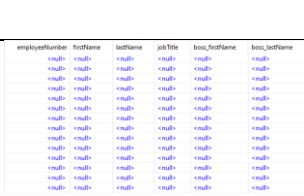
Proses Objek	SS Data Input	SS Data Output	Keterangan
Generate Rows			Membuat Field baru bernama CurrentDate dan mengisinya sebanyak 1825 data dengan value yang sama “01-01-2003”
Add Sequences			Membuat data nomor berurutan yang dimulai dari 0 hingga baris terakhir
Calculator			Memecah tanggal menjadi komponen-komponennya (tahun, bulan, hari) untuk analisis atau pemrosesan lebih lanjut.
Select values			Menghapus kolom yang tidak perlu seperti currentDate dan incrementDay

Database lookup		<table><tr><th>date</th><th>year</th><th>month</th><th>day</th></tr><tr><td><null></td><td><null></td><td><null></td><td><null></td></tr><tr><td><null></td><td><null></td><td><null></td><td><null></td></tr><tr><td><null></td><td><null></td><td><null></td><td><null></td></tr><tr><td><null></td><td><null></td><td><null></td><td><null></td></tr><tr><td><null></td><td><null></td><td><null></td><td><null></td></tr><tr><td><null></td><td><null></td><td><null></td><td><null></td></tr><tr><td><null></td><td><null></td><td><null></td><td><null></td></tr><tr><td><null></td><td><null></td><td><null></td><td><null></td></tr><tr><td><null></td><td><null></td><td><null></td><td><null></td></tr><tr><td><null></td><td><null></td><td><null></td><td><null></td></tr><tr><td><null></td><td><null></td><td><null></td><td><null></td></tr><tr><td><null></td><td><null></td><td><null></td><td><null></td></tr><tr><td><null></td><td><null></td><td><null></td><td><null></td></tr><tr><td><null></td><td><null></td><td><null></td><td><null></td></tr><tr><td><null></td><td><null></td><td><null></td><td><null></td></tr><tr><td><null></td><td><null></td><td><null></td><td><null></td></tr><tr><td><null></td><td><null></td><td><null></td><td><null></td></tr><tr><td><null></td><td><null></td><td><null></td><td><null></td></tr><tr><td><null></td><td><null></td><td><null></td><td><null></td></tr><tr><td><null></td><td><null></td><td><null></td><td><null></td></tr></table>	date	year	month	day	<null>	<null>	<null>	<null>	<null>	<null>	<null>	<null>	<null>	<null>	<null>	<null>	<null>	<null>	<null>	<null>	<null>	<null>	<null>	<null>	<null>	<null>	<null>	<null>	<null>	<null>	<null>	<null>	<null>	<null>	<null>	<null>	<null>	<null>	<null>	<null>	<null>	<null>	<null>	<null>	<null>	<null>	<null>	<null>	<null>	<null>	<null>	<null>	<null>	<null>	<null>	<null>	<null>	<null>	<null>	<null>	<null>	<null>	<null>	<null>	<null>	<null>	<null>	<null>	<null>	<null>	<null>	<null>	<null>	<null>	<null>	<null>	<null>	<null>	<null>	<null>	<null>	<null>	<null>	<null>	memperkaya data dengan menambahkan informasi dari tabel dimdate berdasarkan tanggal yang telah diolah sebelumnya
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  	2	2003-01-02	2003	1	2
  	3	2003-01-03	2003	1	3
  	4	2003-01-04	2003	1	4
  	5	2003-01-05	2003	1	5
  	6	2003-01-06	2003	1	6
  	7	2003-01-07	2003	1	7
  	8	2003-01-08	2003	1	8
  	9	2003-01-09	2003	1	9
  	10	2003-01-10	2003	1	10
  	11	2003-01-11	2003	1	11
  	12	2003-01-12	2003	1	12
  	13	2003-01-13	2003	1	13
  	14	2003-01-14	2003	1	14
  	15	2003-01-15	2003	1	15
  	16	2003-01-16	2003	1	16
  	17	2003-01-17	2003	1	17
  	18	2003-01-18	2003	1	18
  	19	2003-01-19	2003	1	19
  	20	2003-01-20	2003	1	20
  	21	2003-01-21	2003	1	21
  	22	2003-01-22	2003	1	22
  	23	2003-01-23	2003	1	23
  	24	2003-01-24	2003	1	24

Tugas B

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			Mengambil data mentah untuk diolah nanti
Select values			Menyaring Field yang penting saja untuk diolah
Database lookup			Mencari dan mengambil data dari tabel dimemployees di database berdasarkan kunci pencarian yang ditentukan.
Filter rows			Menyaring baris data berdasarkan kondisi yang ditentukan dan mengarahkan baris yang lolos filter ke table output
Table Output			Menulis data yang masuk dari aliran data (stream) ke dalam tabel dimemployees di database "conn_dw_destination" dan skema "dw_legendvehicle".

<div><div><div></div></div></div>		id_dimEmployees	employeeNumber	firstName	lastName	jobTitle	boss_firstName	boss_lastName	updated	
<div><div><div></div></div><div><div><div></div></div><div><div></div></div><div><div></div></div></div></div>	<div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div></div>		1	1002	Diane	Murphy	President	NULL	NULL	2025-03-12
<div><div><div></div></div><div><div><div></div></div><div><div></div></div><div><div></div></div></div></div>	<div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div></div>		2	1056	Mary	Patterson	VP Sales	Diane	Murphy	2025-03-12
<div><div><div></div></div><div><div><div></div></div><div><div></div></div><div><div></div></div></div></div>	<div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div></div>		3	1076	Jeff	Firrelli	VP Marketing	Diane	Murphy	2025-03-12
<div><div><div></div></div><div><div><div></div></div><div><div></div></div><div><div></div></div></div></div>	<div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div></div>		4	1088	William	Patterson	Sales Manager (APAC)	Mary	Patterson	2025-03-12
<div><div><div></div></div><div><div><div></div></div><div><div></div></div><div><div></div></div></div></div>	<div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div></div>		5	1102	Gerard	Bondur	Sale Manager (EMEA)	Mary	Patterson	2025-03-12
<div><div><div></div></div><div><div><div></div></div><div><div></div></div><div><div></div></div></div></div>	<div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div></div>		6	1143	Anthony	Bow	Sales Manager (NA)	Mary	Patterson	2025-03-12
<div><div><div></div></div><div><div><div></div></div><div><div></div></div><div><div></div></div></div></div>	<div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div></div>		7	1165	Leslie	Jennings	Sales Rep	Anthony	Bow	2025-03-12
<div><div><div></div></div><div><div><div></div></div><div><div></div></div><div><div></div></div></div></div>	<div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div></div>		8	1166	Leslie	Thompson	Sales Rep	Anthony	Bow	2025-03-12
<div><div><div></div></div><div><div><div></div></div><div><div></div></div><div><div></div></div></div></div>	<div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div></div>		9	1188	Julie	Firrelli	Sales Rep	Anthony	Bow	2025-03-12
<div><div><div></div></div><div><div><div></div></div><div><div></div></div><div><div></div></div></div></div>	<div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div></div>		10	1216	Steve	Patterson	Sales Rep	Anthony	Bow	2025-03-12
<div><div><div></div></div><div><div><div></div></div><div><div></div></div><div><div></div></div></div></div>	<div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div></div>		11	1286	Foon Yue	Tseng	Sales Rep	Anthony	Bow	2025-03-12
<div><div><div></div></div><div><div><div></div></div><div><div></div></div><div><div></div></div></div></div>	<div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div></div>		12	1323	George	Vanauf	Sales Rep	Anthony	Bow	2025-03-12
<div><div><div></div></div><div><div><div></div></div><div><div></div></div><div><div></div></div></div></div>	<div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div></div>		13	1337	Loui	Bondur	Sales Rep	Gerard	Bondur	2025-03-12
<div><div><div></div></div><div><div><div></div></div><div><div></div></div><div><div></div></div></div></div>	<div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div></div>		14	1370	Gerard	Hernandez	Sales Rep	Gerard	Bondur	2025-03-12
<div><div><div></div></div><div><div><div></div></div><div><div></div></div><div><div></div></div></div></div>	<div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div></div>		15	1401	Pamela	Castillo	Sales Rep	Gerard	Bondur	2025-03-12
<div><div><div></div></div><div><div><div></div></div><div><div></div></div><div><div></div></div></div></div>	<div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div></div>		16	1501	Larry	Bott	Sales Rep	Gerard	Bondur	2025-03-12
<div><div><div></div></div><div><div><div></div></div><div><div></div></div><div><div></div></div></div></div>	<div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div></div>		17	1504	Barry	Jones	Sales Rep	Gerard	Bondur	2025-03-12
<div><div><div></div></div><div><div><div></div></div><div><div></div></div><div><div></div></div></div></div>	<div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div></div>		18	1611	Andy	Fixter	Sales Rep	William	Patterson	2025-03-12
<div><div><div></div></div><div><div><div></div></div><div><div></div></div><div><div></div></div></div></div>	<div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div></div>		19	1612	Peter	Marsh	Sales Rep	William	Patterson	2025-03-12
<div><div><div></div></div><div><div><div></div></div><div><div></div></div><div><div></div></div></div></div>	<div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div></div>		20	1619	Tom	King	Sales Rep	William	Patterson	2025-03-12
<div><div><div></div></div><div><div><div></div></div><div><div></div></div><div><div></div></div></div></div>	<div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div></div>		21	1621	Mami	Nishi	Sales Rep	Mary	Patterson	2025-03-12
<div><div><div></div></div><div><div><div></div></div><div><div></div></div><div><div></div></div></div></div>	<div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div></div>		22	1625	Yoshimi	Kato	Sales Rep	Mami	Nishi	2025-03-12
<div><div><div></div></div><div><div><div></div></div><div><div></div></div><div><div></div></div></div></div>	<div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div></div>		23	1702	Martin	Gerard	Sales Rep	Gerard	Bondur	2025-03-12

2. Jika proses itu di ulangi (di run kembali) apakah data akan redudant?

Ya, ada potensi terjadinya redundansi data jika proses ETL (Extract, Transform, Load) dijalankan kembali, terutama jika tidak ada mekanisme pencegahan yang tepat.

Penting untuk merancang alur kerja ETL dengan hati-hati untuk mencegah redundansi data.

3. Tambahkan nama anda pada table employee di OLTP. jalankan kembali transformasi ini. Amati hasilnya, apa yang terjadi?

OLTP Insert

```

1 row inserted.

INSERT INTO `employees` (`employeeNumber`, `lastName`, `firstName`, `extension`, `email`, `officeCode`, `reportsTo`, `jobTitle`) VALUES ('1705', 'Bagaskara', 'Sufyan Dwi', '2080', 'blabla@gmail.com', '3', '1002', 'Sales Rep');
[ Edit inline ] [ Edit ] [ Create PHP code ]

```

DW dimeployees

<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	1705	Sufyan Dwi	Bagaskara	Sales Rep	Diane	Murphy	2025-03-12

Data baru yang di insert di Database OLTP berhasil masuk ke Database DW