Nama: **Adam Zannuba** **NIM:** **065001900022**		**MODUL 7** **Nama Dosen:** **Ir. Teddy Siswanto, MMSi**
Hari/Tanggal: **23 May 2022**	**Praktikum Data Warehouse**	**Nama Asisten Labratorium:** **1. Azhar Rizki Zulma** **065001900001** **2. Nadiya Amanda Rizkania** **064001900003**

Persiapan Proyek Akhir 1

1. Teori Singkat

Data warehouse adalah jenis sistem manajemen data yang dirancang untuk memungkinkan dan mendukung kegiatan business intelligence (BI), terutama analitik. Gudang data semata-mata dimaksudkan untuk melakukan kueri dan analisis dan sering berisi sejumlah besar data historis. Data dalam gudang data biasanya berasal dari berbagai sumber seperti file log aplikasi dan aplikasi transaksi. Gudang data memusatkan dan mengkonsolidasikan sejumlah besar data dari berbagai sumber. Kemampuan analitisnya memungkinkan organisasi untuk memperoleh wawasan bisnis yang berharga dari data mereka untuk meningkatkan pengambilan keputusan. Seiring waktu, ia membangun catatan sejarah yang dapat sangat berharga bagi para ilmuwan data dan analis bisnis. Karena kemampuan ini, gudang data dapat dianggap sebagai "sumber kebenaran tunggal" organisasi.

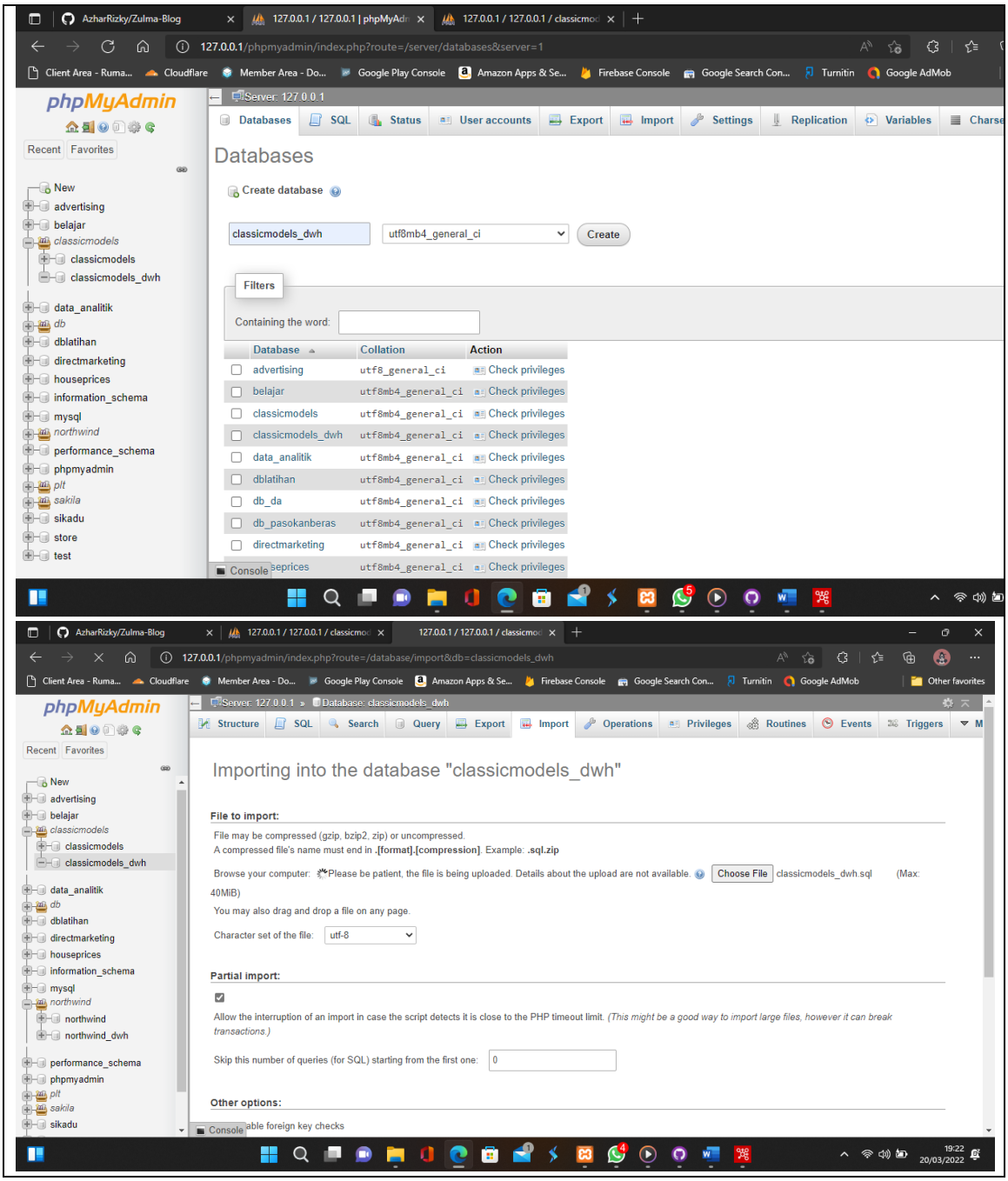
2. Alat dan Bahan

Hardware : Laptop/PC
Software : Spoon Pentaho from Hitachi Vantara

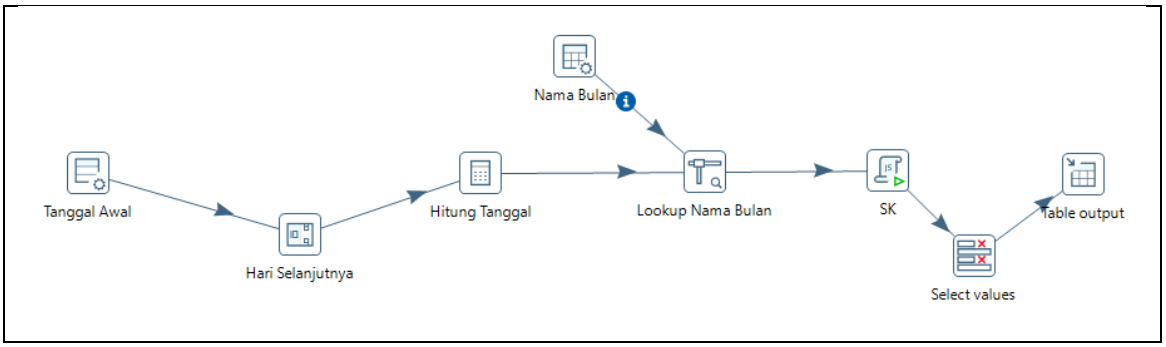
3. Elemen Kompetensi

a. Latihan pertama – Dim Date Transformation

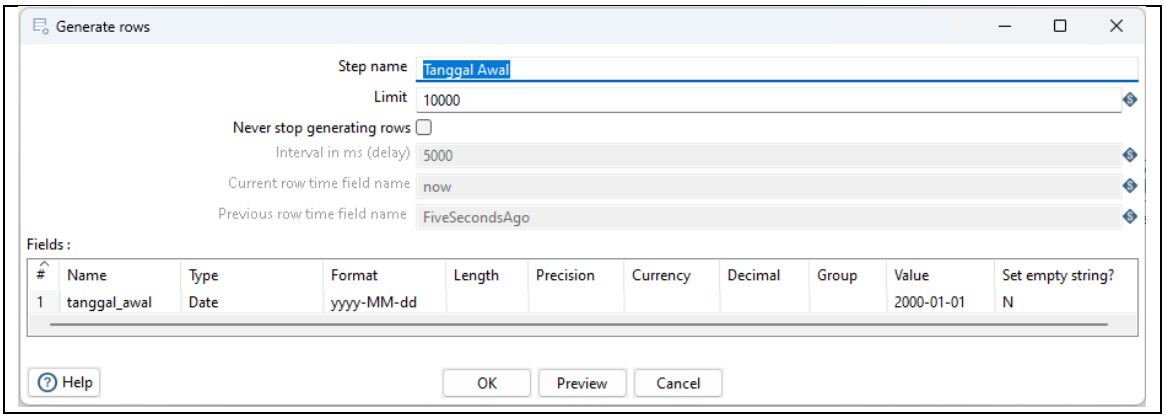
1. Buka XAMPP dan Nyalakan Apache serta MySQL lalu buka 127.0.0.1/phpMyAdmin pada browser anda dan buat database baru bernama classicmodels_dwh lalu import data SQL yang diberikan Asisten Laboratorium.



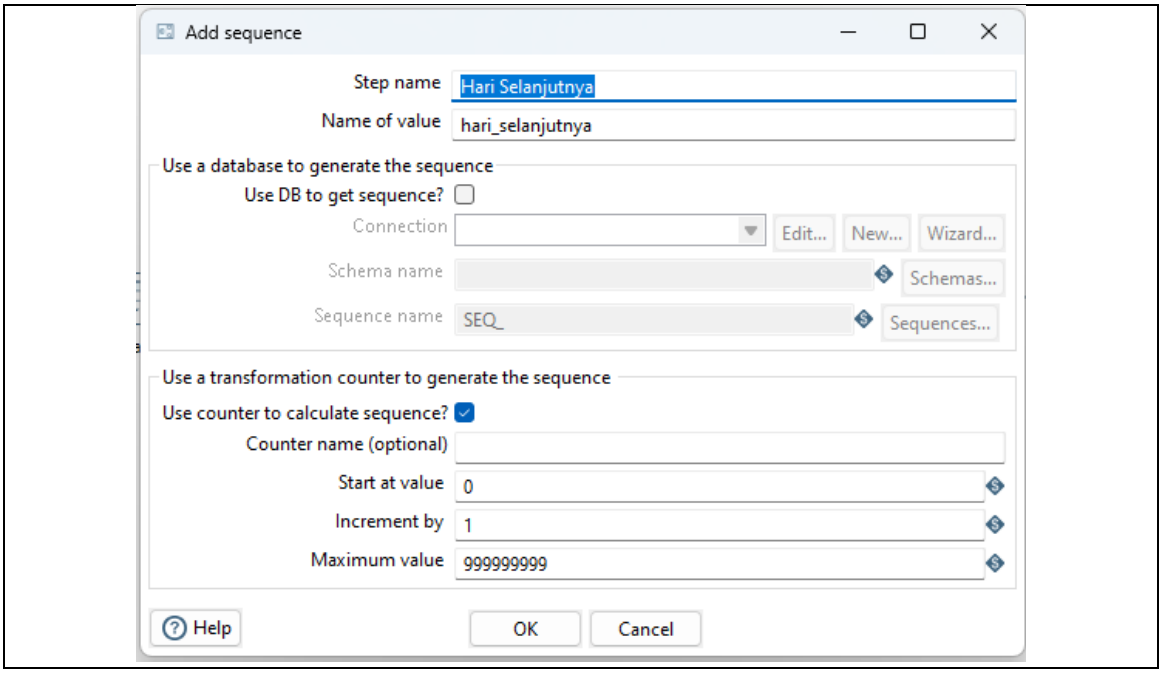
2. Struktur Dim Date



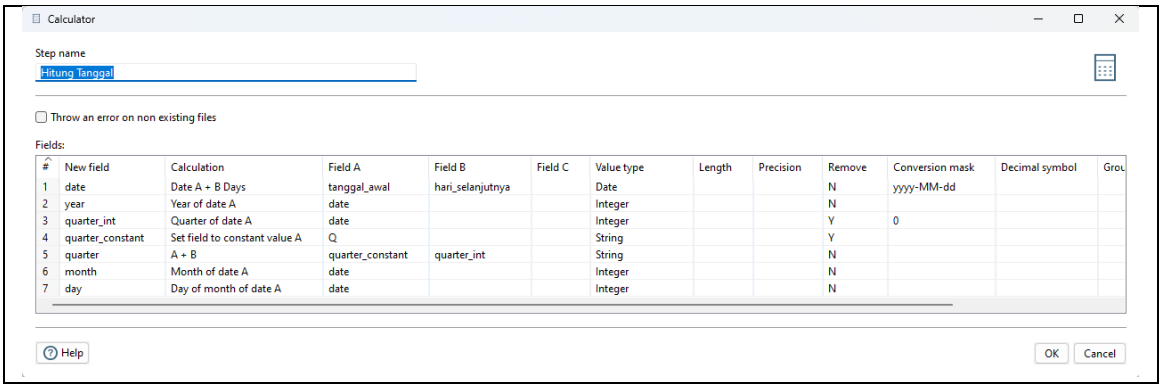
3. Tanggal Awal – Generate Rows



4. Hari Selanjutnya – Add sequence.

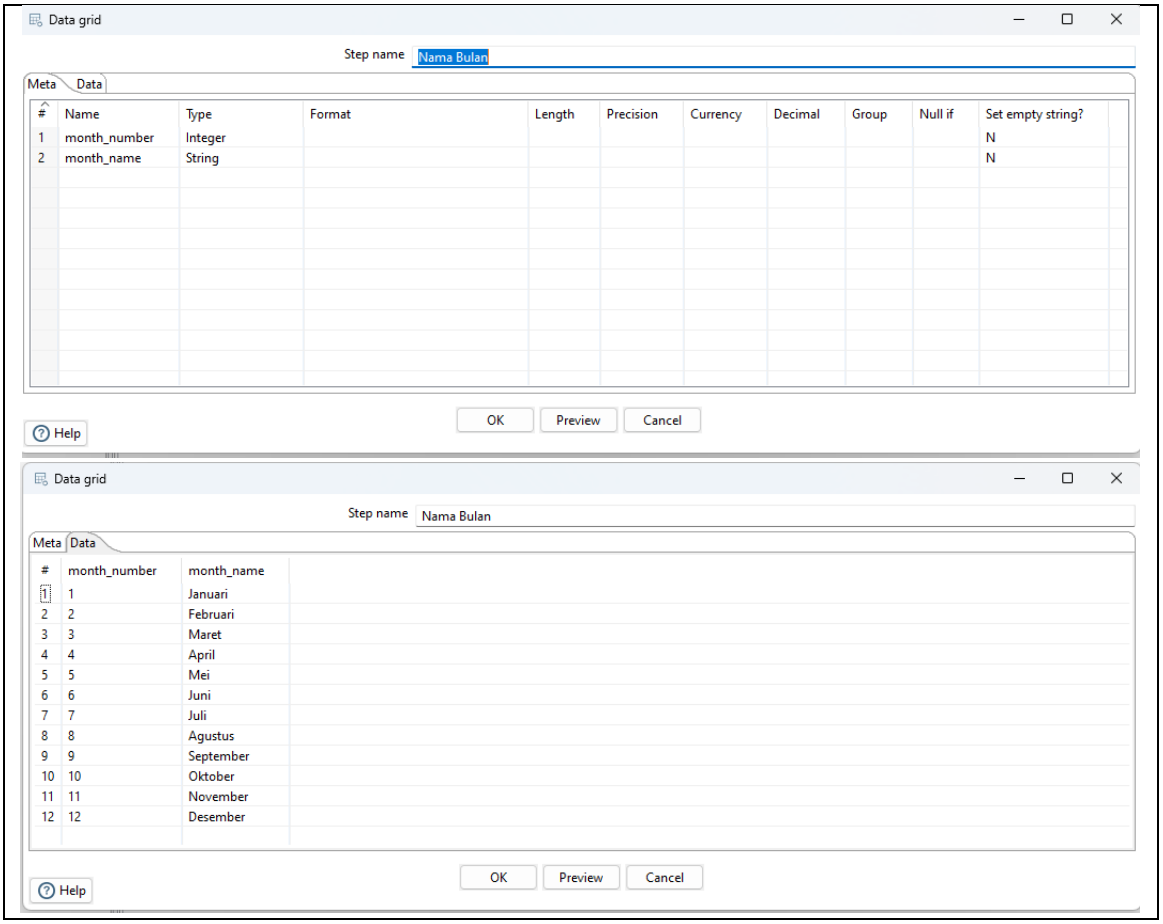


5. Hitung Tanggal – Calculator.



#	New field	Calculation	Field A	Field B	Field C	Value type	Length	Precision	Remove	Conversion mask	Decimal symbol	Grou
1	date	Date A + B Days	tanggal_awal	hari_selanjutnya		Date			N	yyyy-MM-dd		
2	year	Year of date A	date			Integer			N			
3	quarter_int	Quarter of date A	date			Integer			Y	0		
4	quarter_constant	Set field to constant value A	Q			String			Y			
5	quarter	A + B	quarter_constant	quarter_int		String			N			
6	month	Month of date A	date			Integer			N			
7	day	Day of month of date A	date			Integer			N			

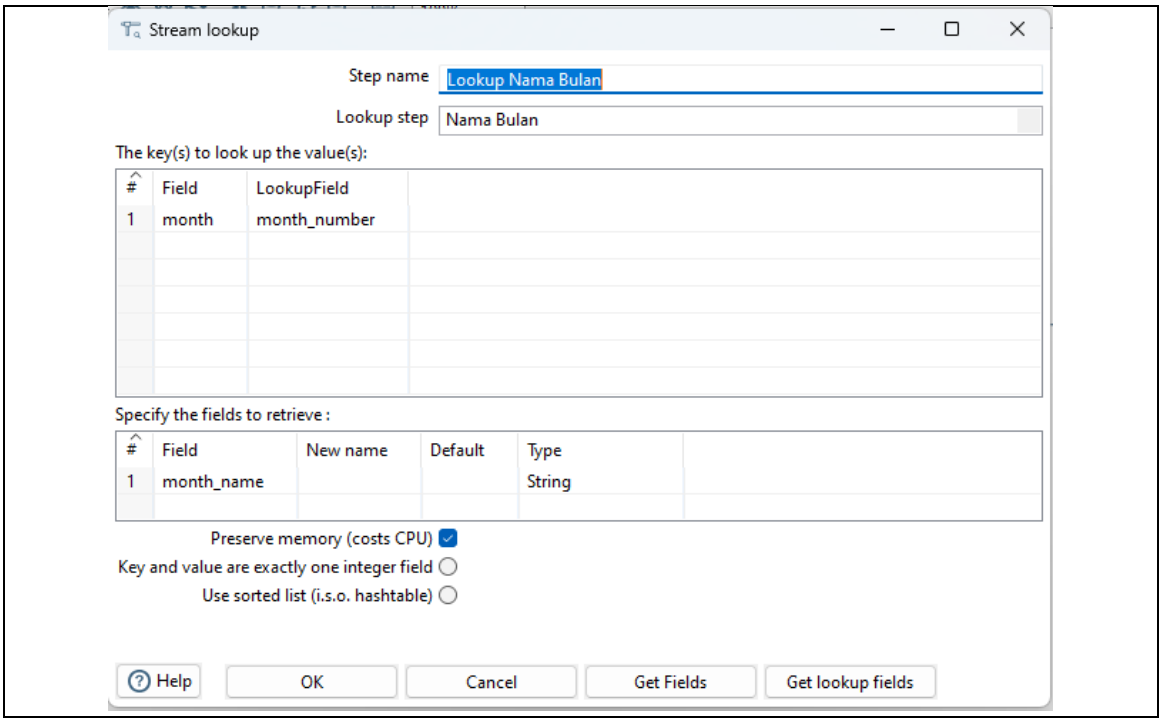
6. Nama Bulan – Data Grid.



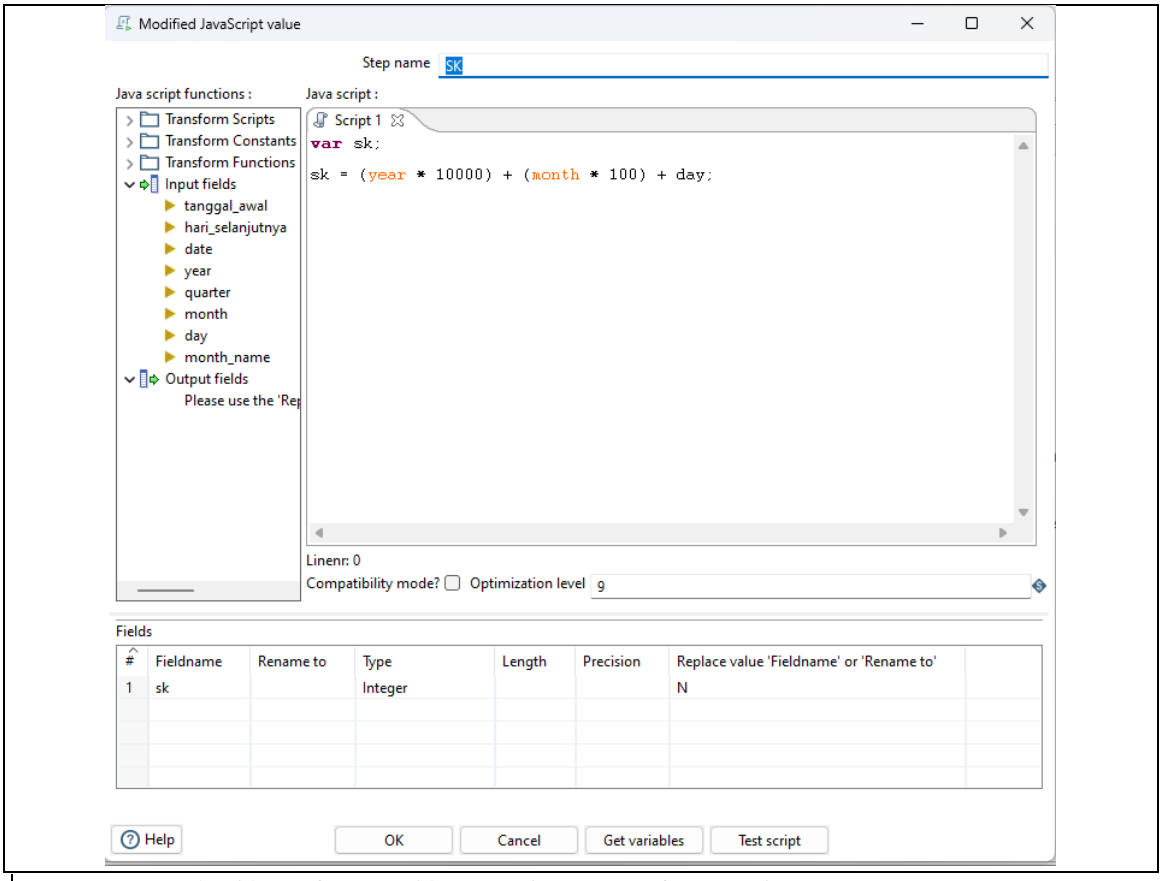
#	Name	Type	Format	Length	Precision	Currency	Decimal	Group	Null if	Set empty string?
1	month_number	Integer								N
2	month_name	String								N

#	month_number	month_name
1	1	Januari
2	2	Februari
3	3	Maret
4	4	April
5	5	Mei
6	6	Juni
7	7	Juli
8	8	Agustus
9	9	September
10	10	Oktober
11	11	November
12	12	Desember

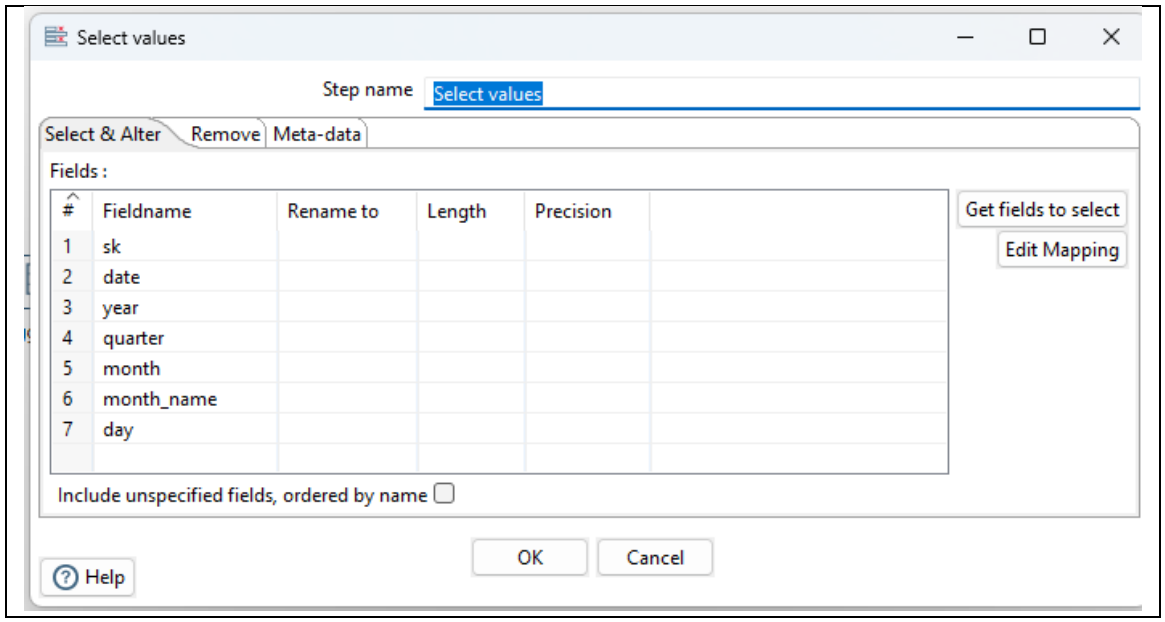
7. Lookup Nama Bulan – Stream lookup.



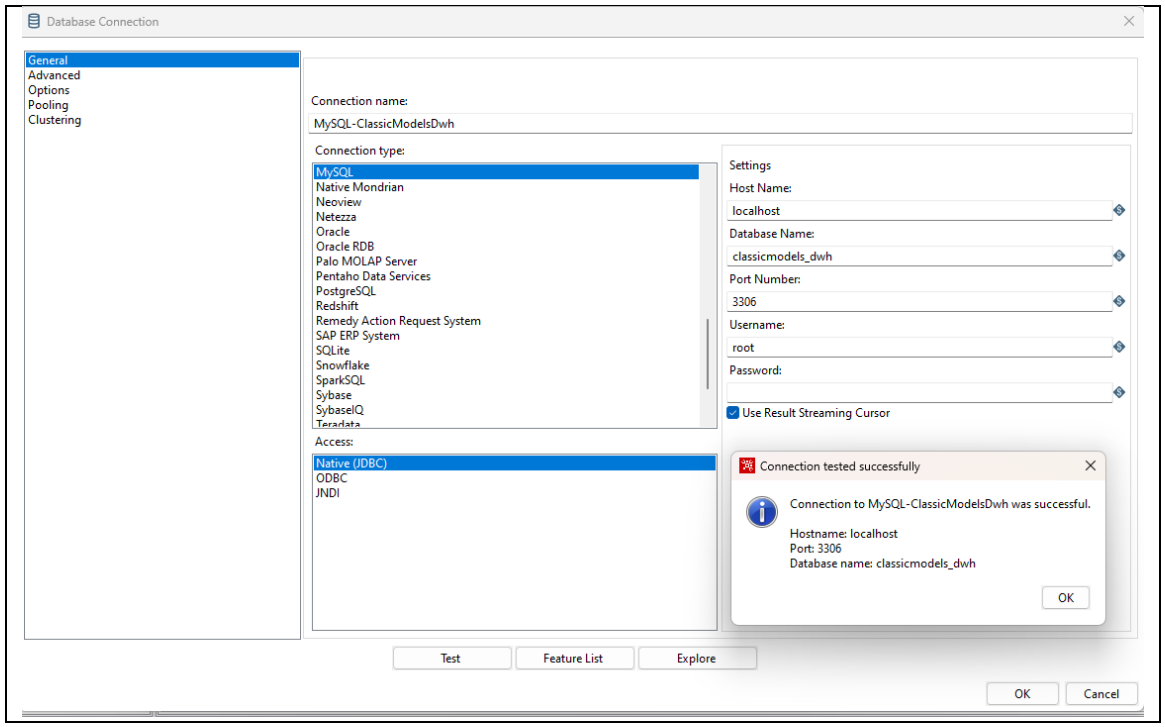
8. SK – Modiefied JavaScript value.

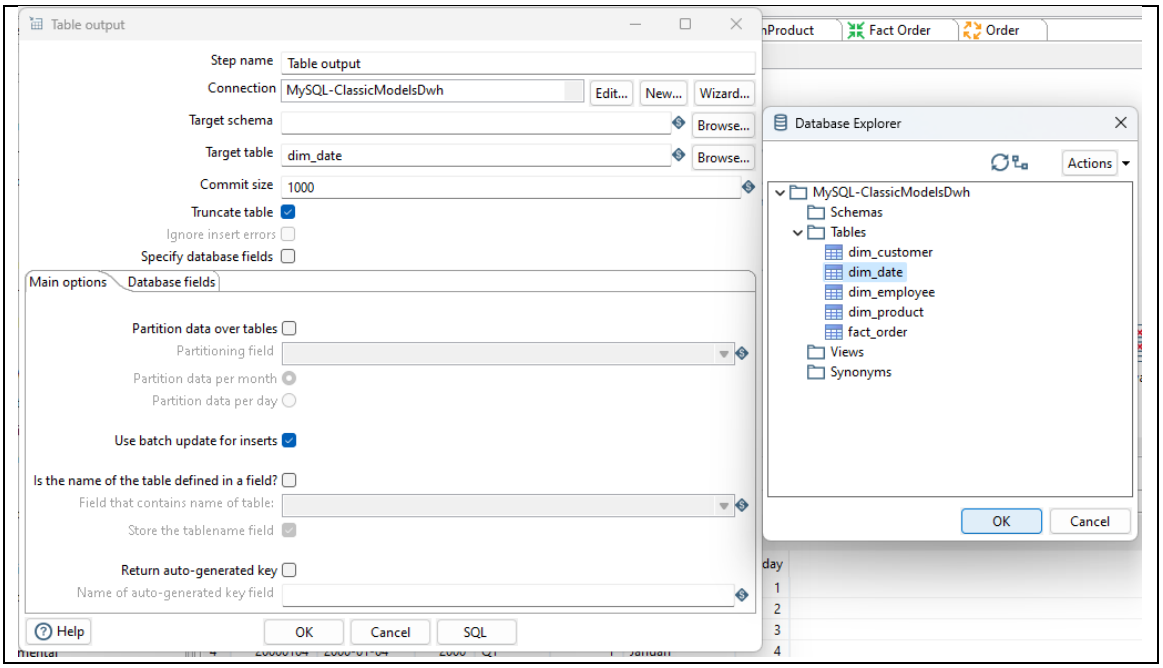


9. Select values

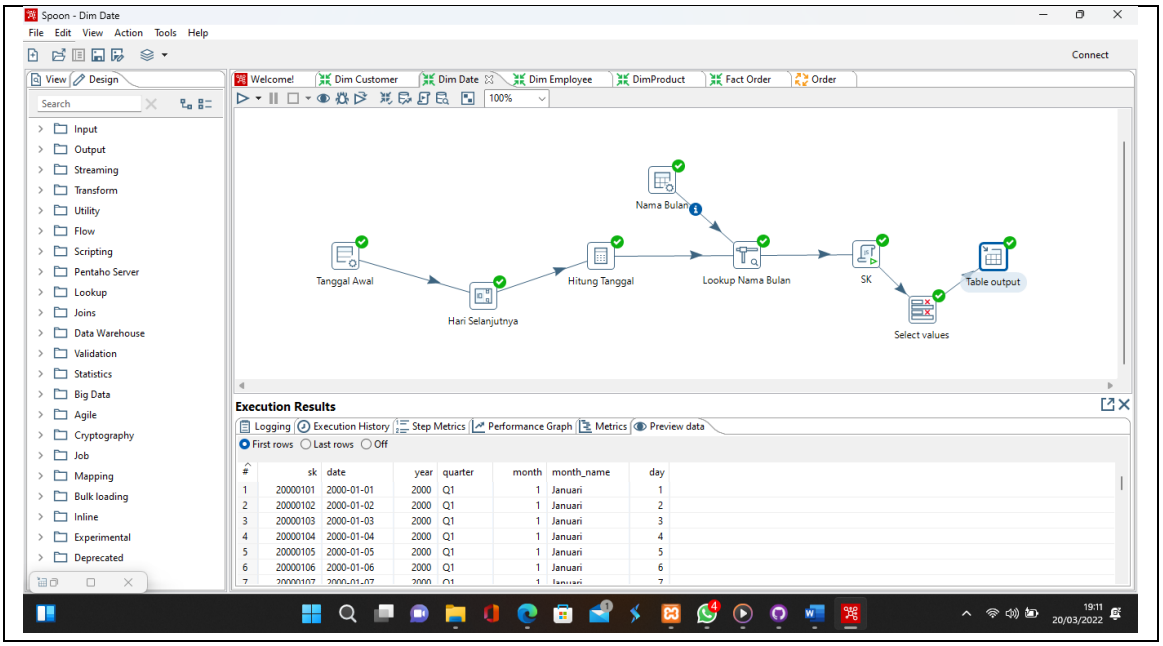


10. Table output



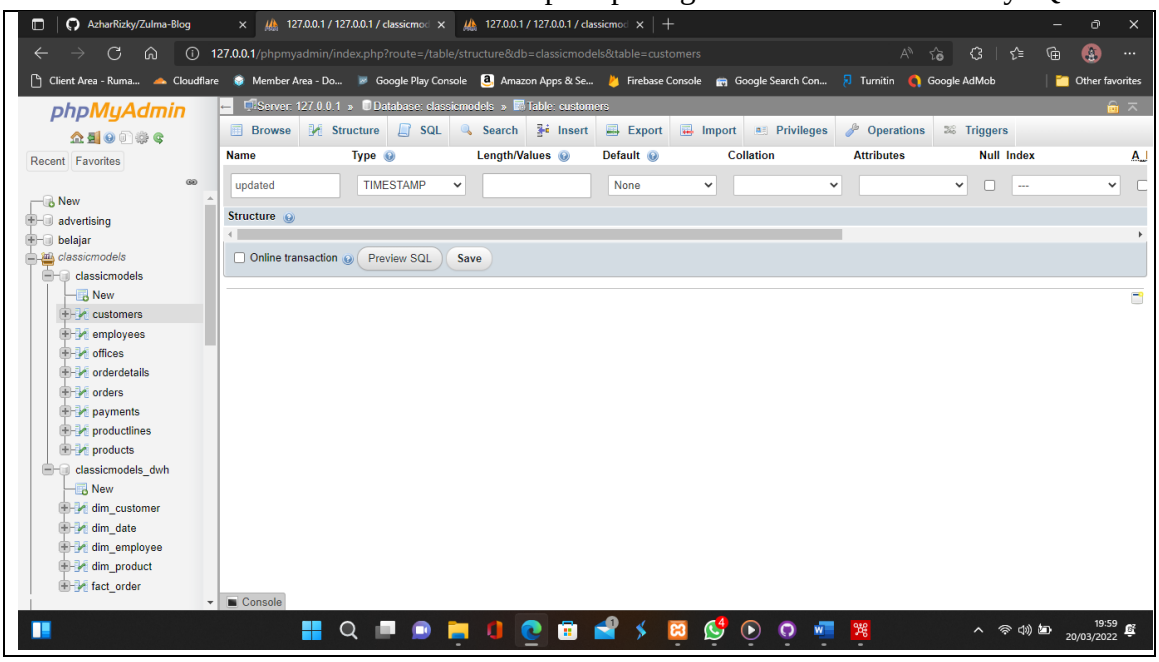


11. Ketika berhasil di Jalankan/Running

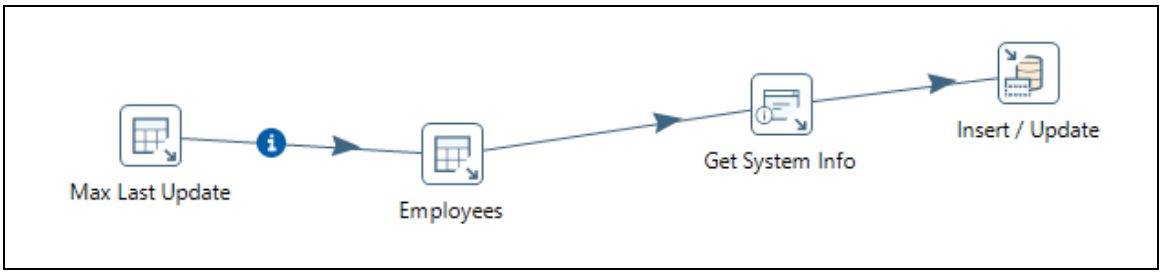


b. Latihan Kedua – Dim Customer Transformation

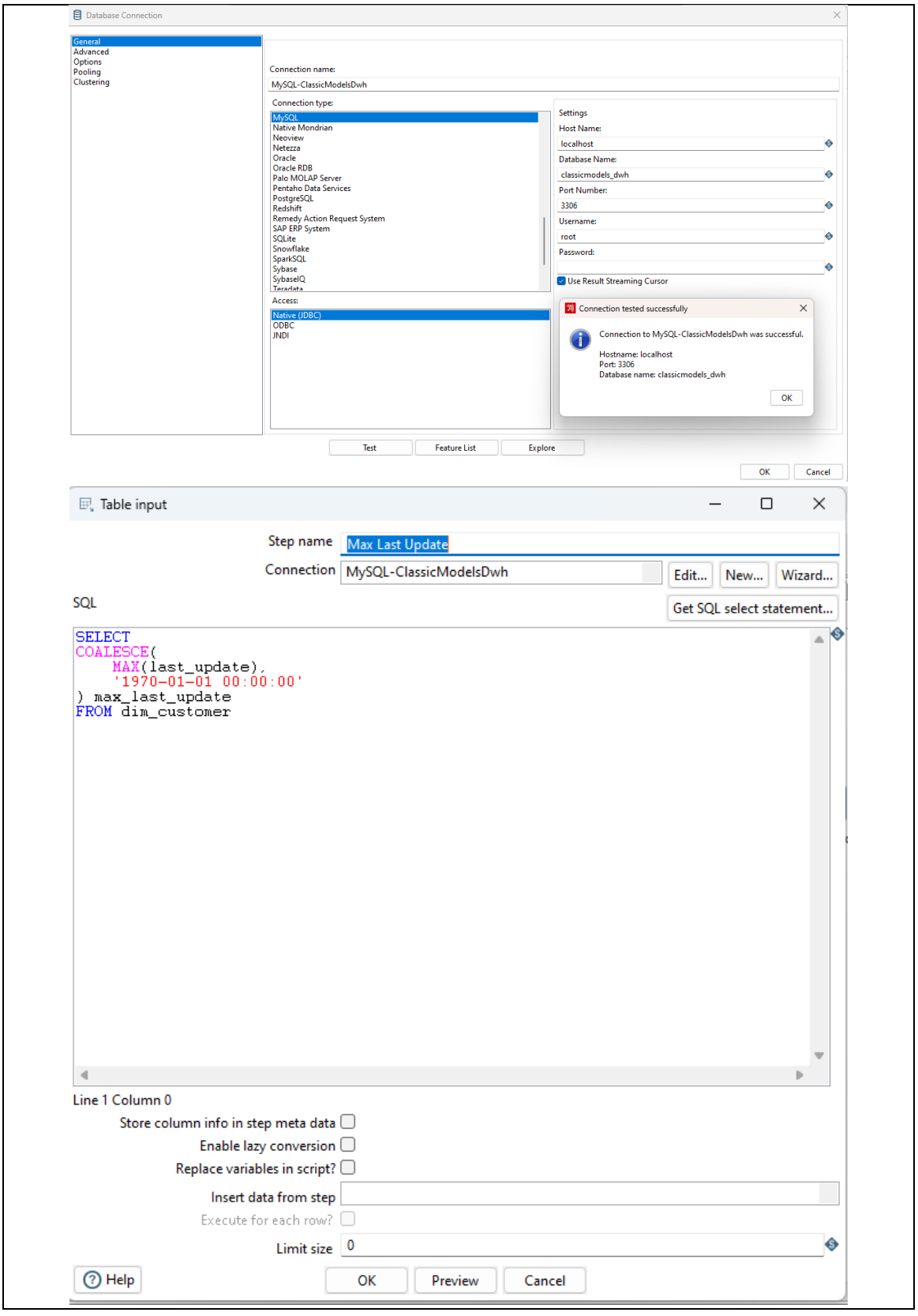
1. Tambahkan kolom baru bernama updated dengan tipe data timestamp pada tabel customer dalam database classicmodels seperti pada gambar dibawah ini di MySQL.



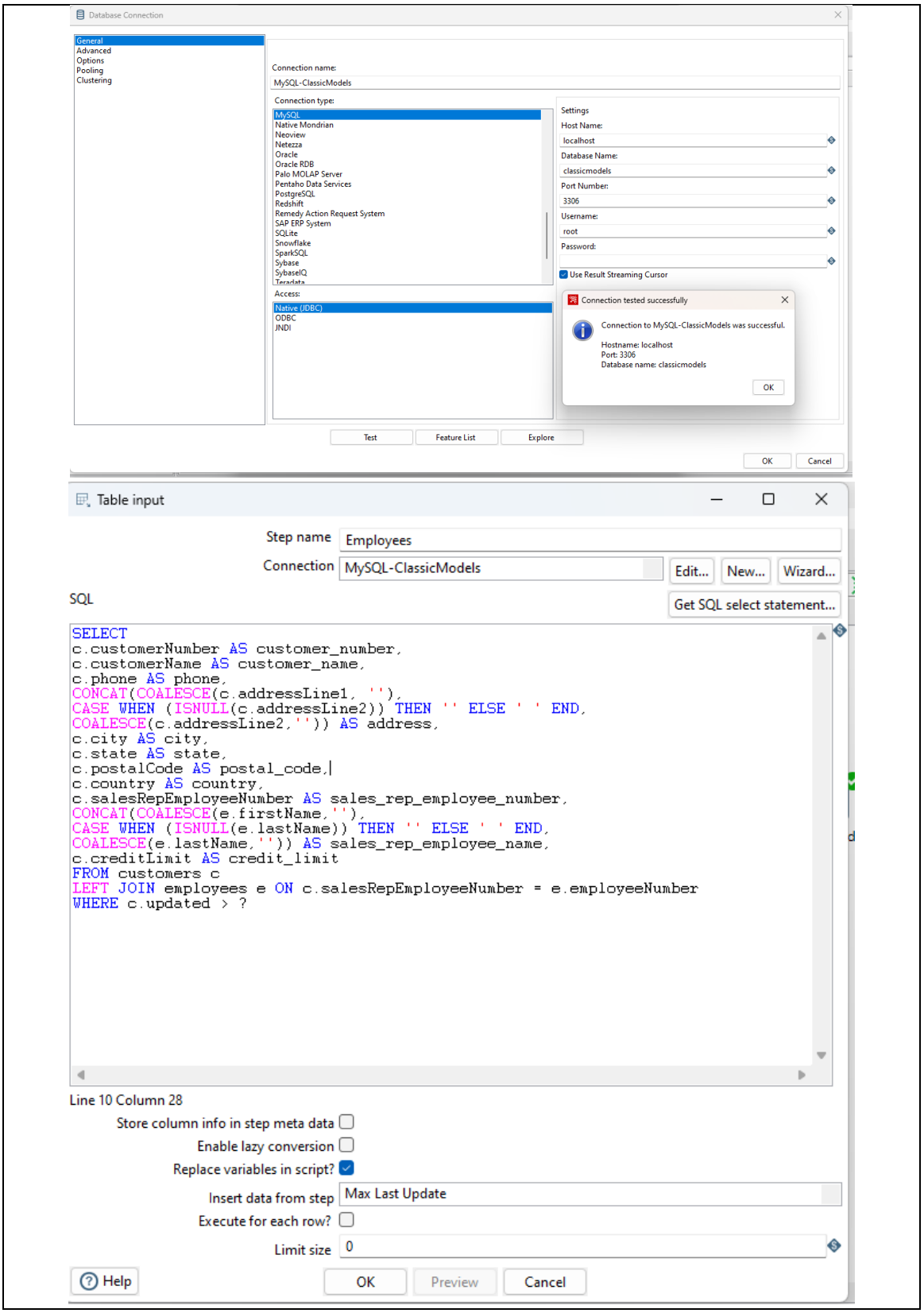
2. Struktur Dim Customer



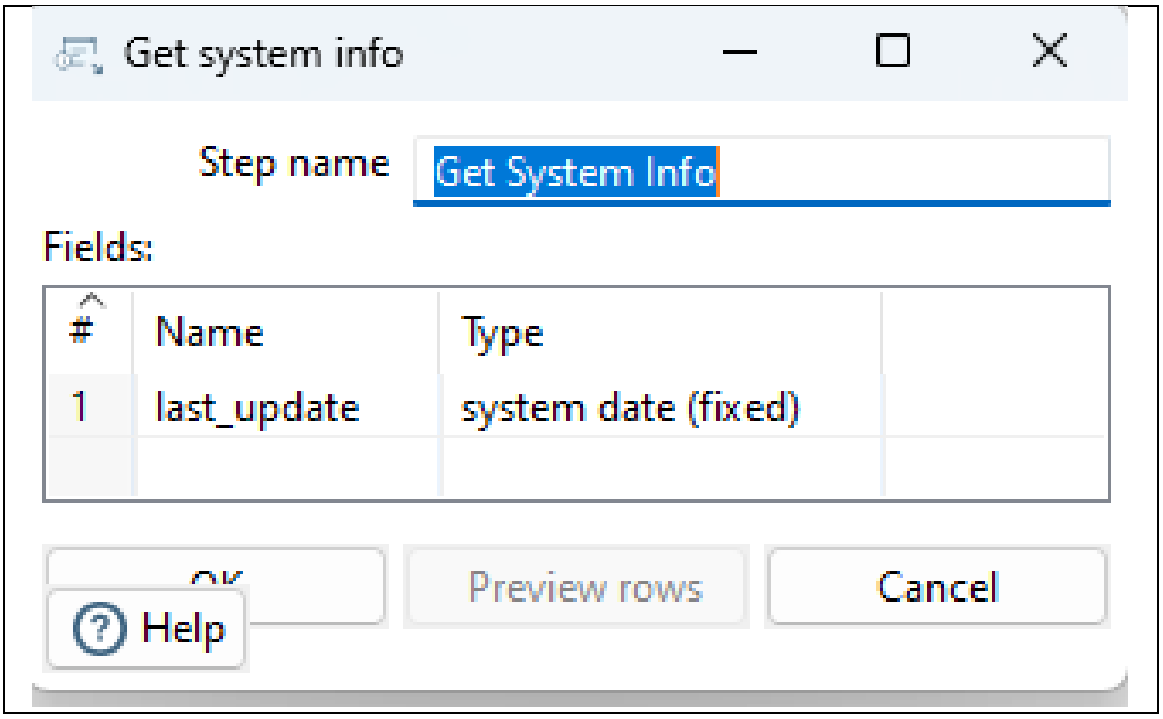
3. Max Last Update – Table input.



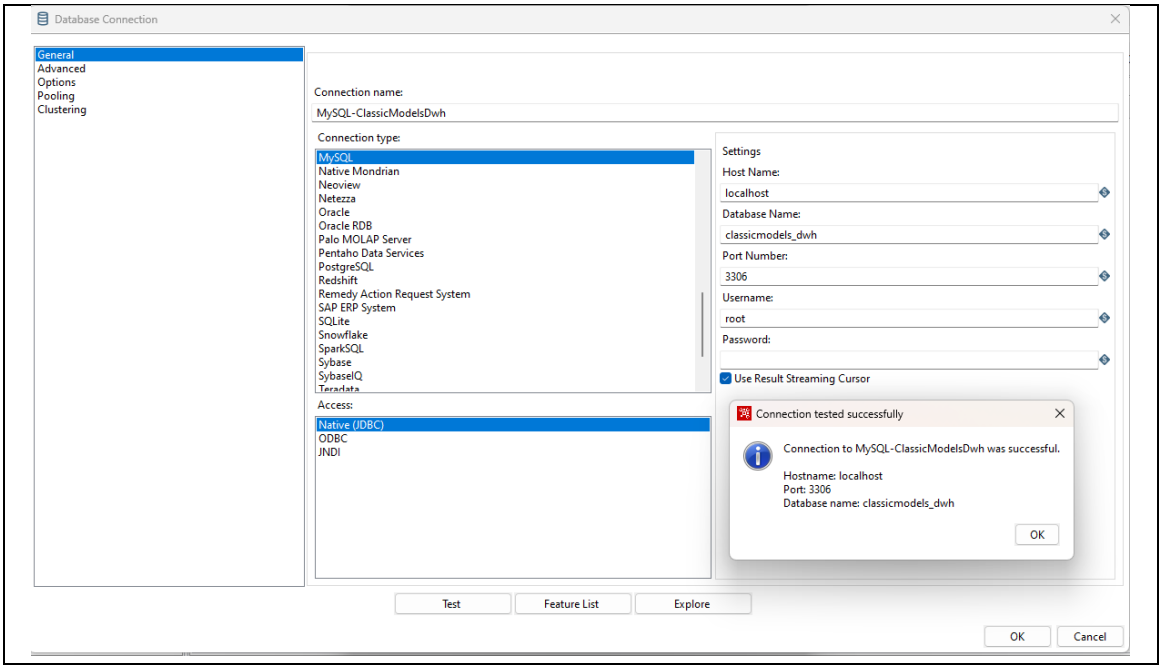
4. Employees – Table input.

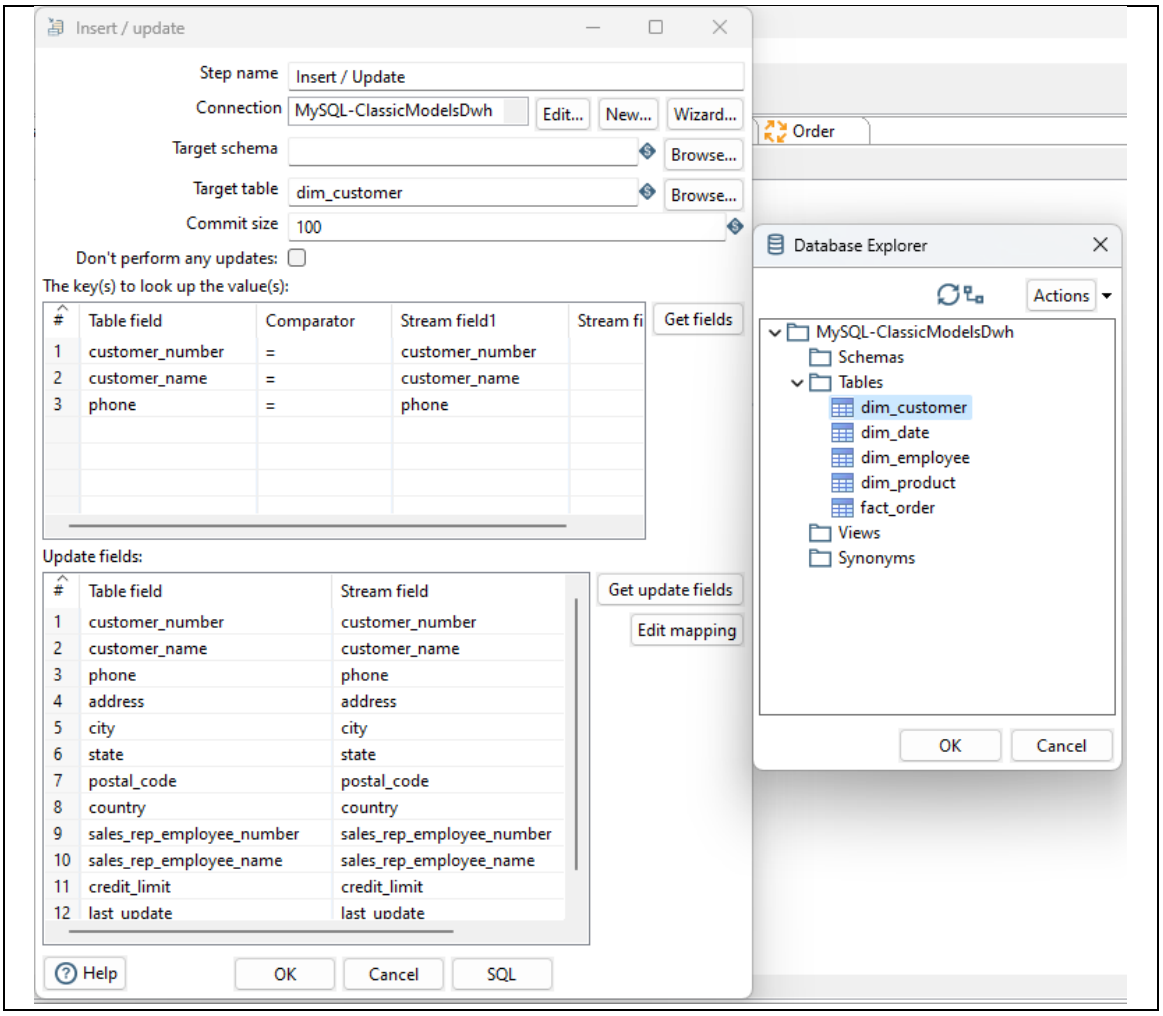


5. Get System Info

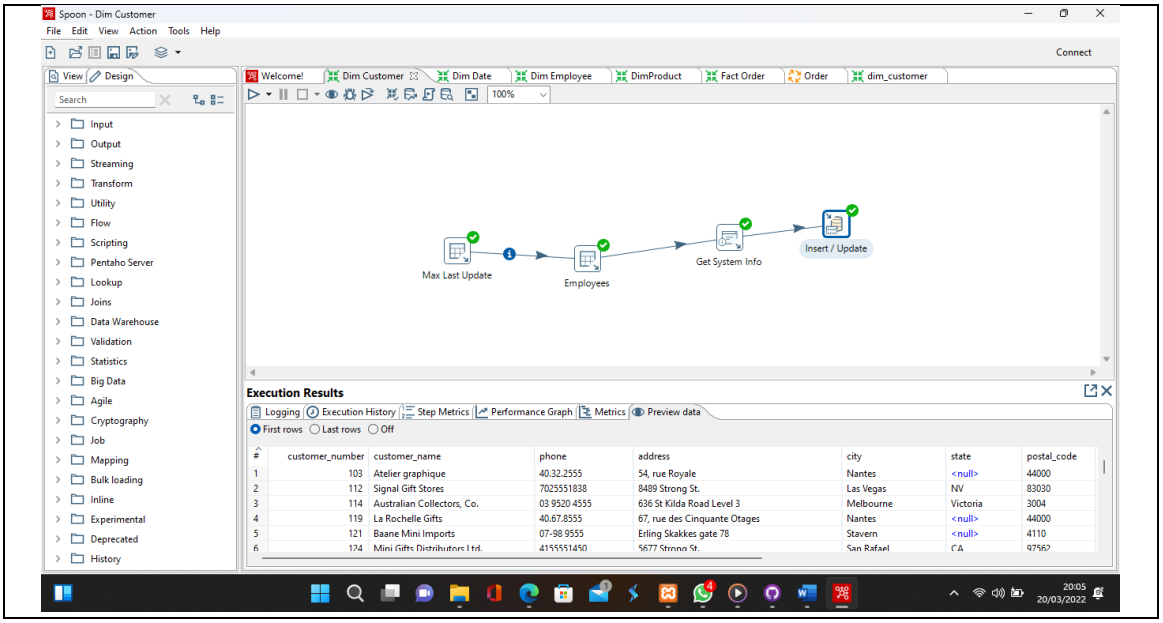


6. Insert / Update.



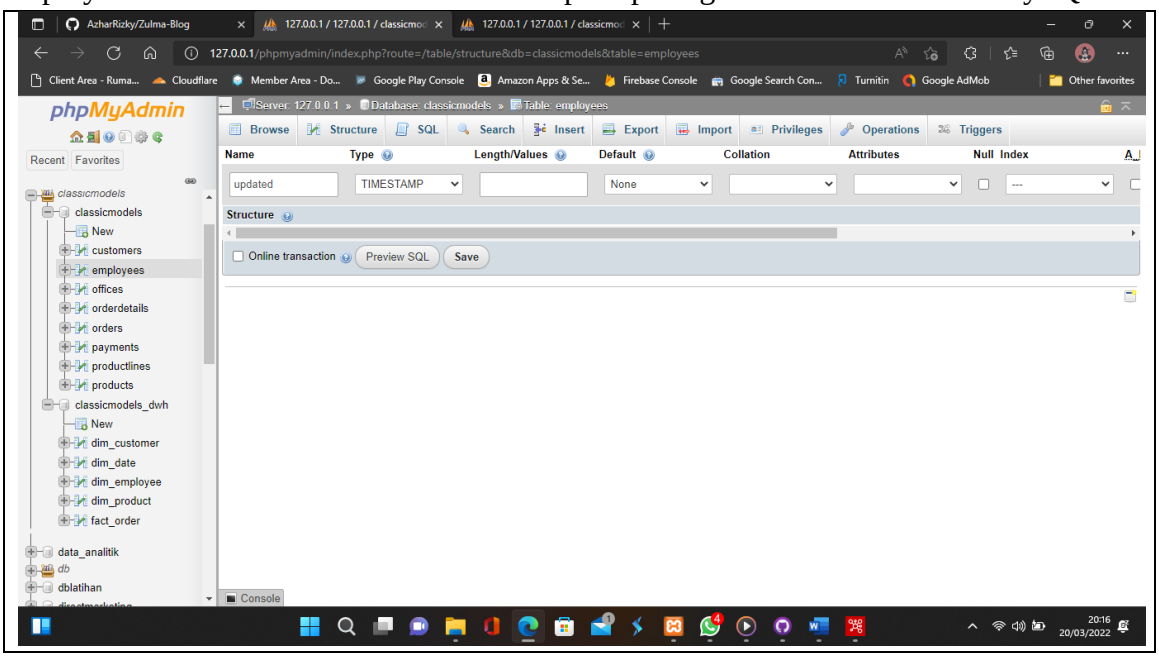


7. Lalu Jalankan maka hasilnya akan seperti ini.

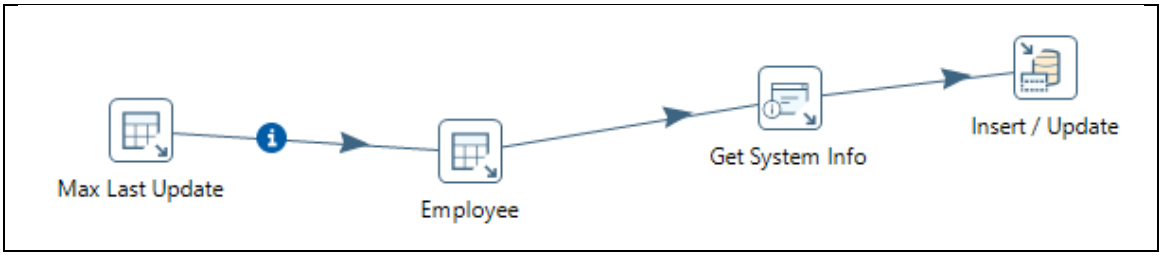


c. Latihan Ketiga – Dim Employee Transformation

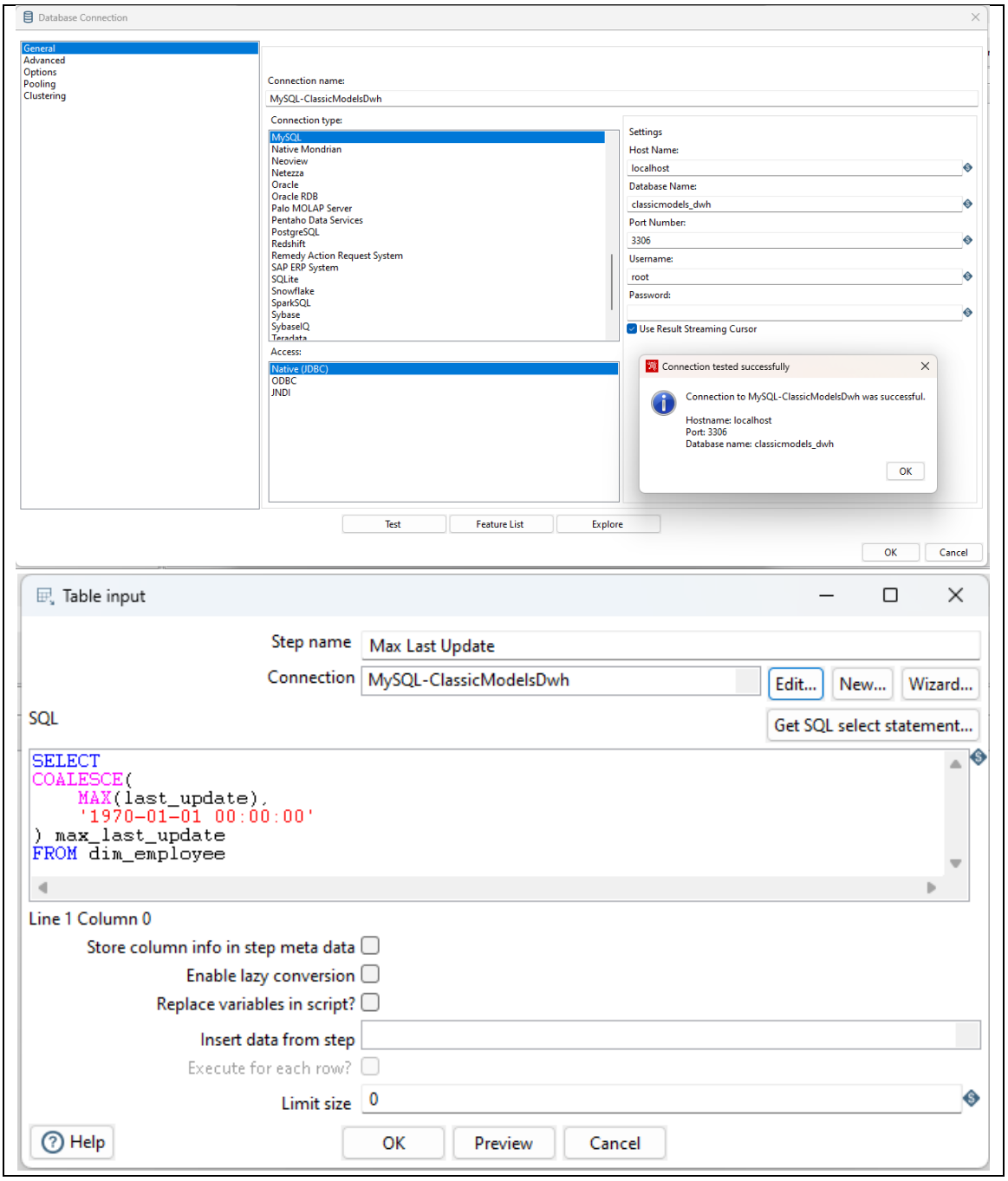
1. Tambahkan kolom baru bernama updated dengan tipe data timestamp pada tabel employees dalam database classicmodels seperti pada gambar dibawah ini di MySQL.



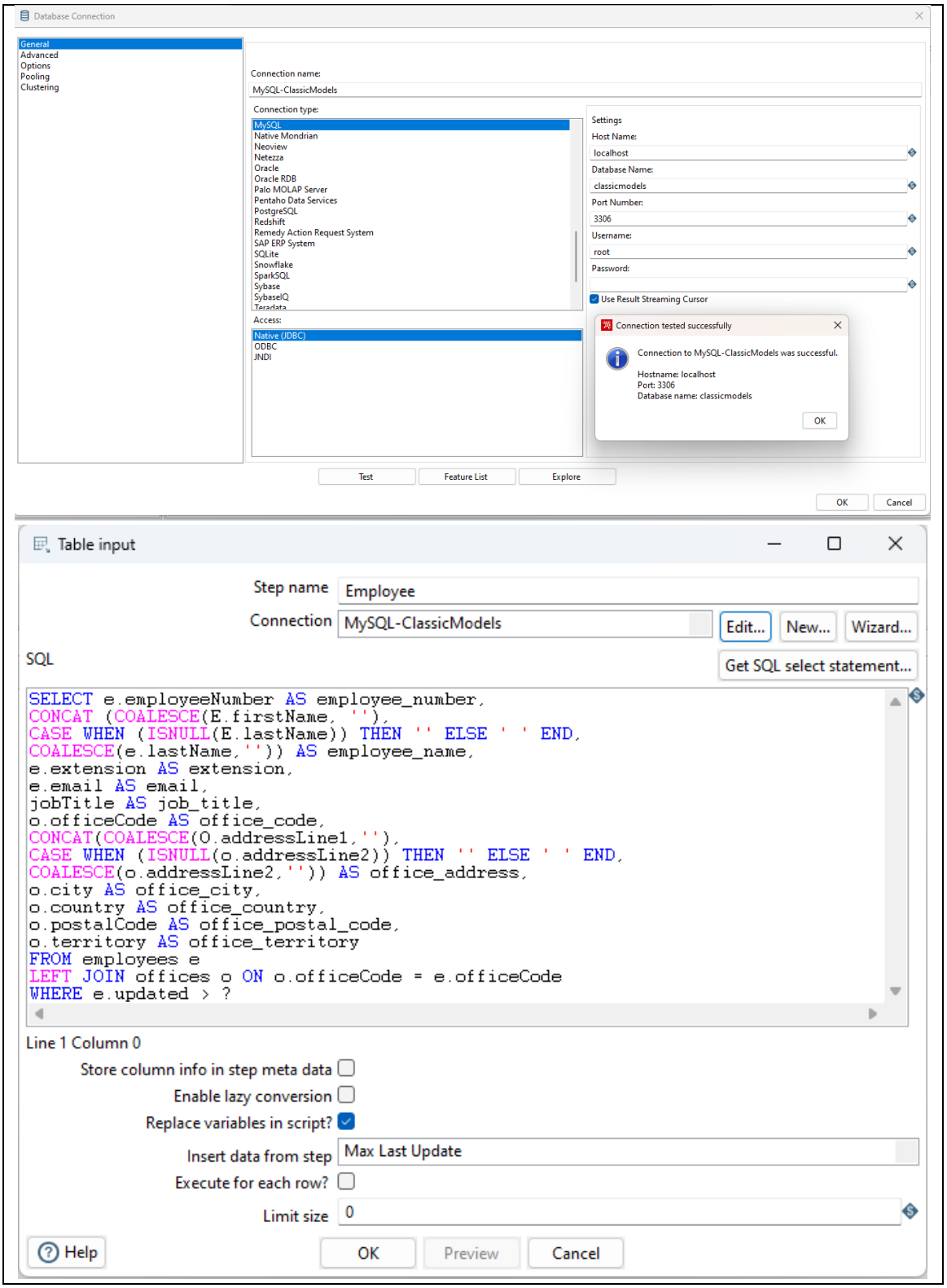
2. Struktur Dim Employee



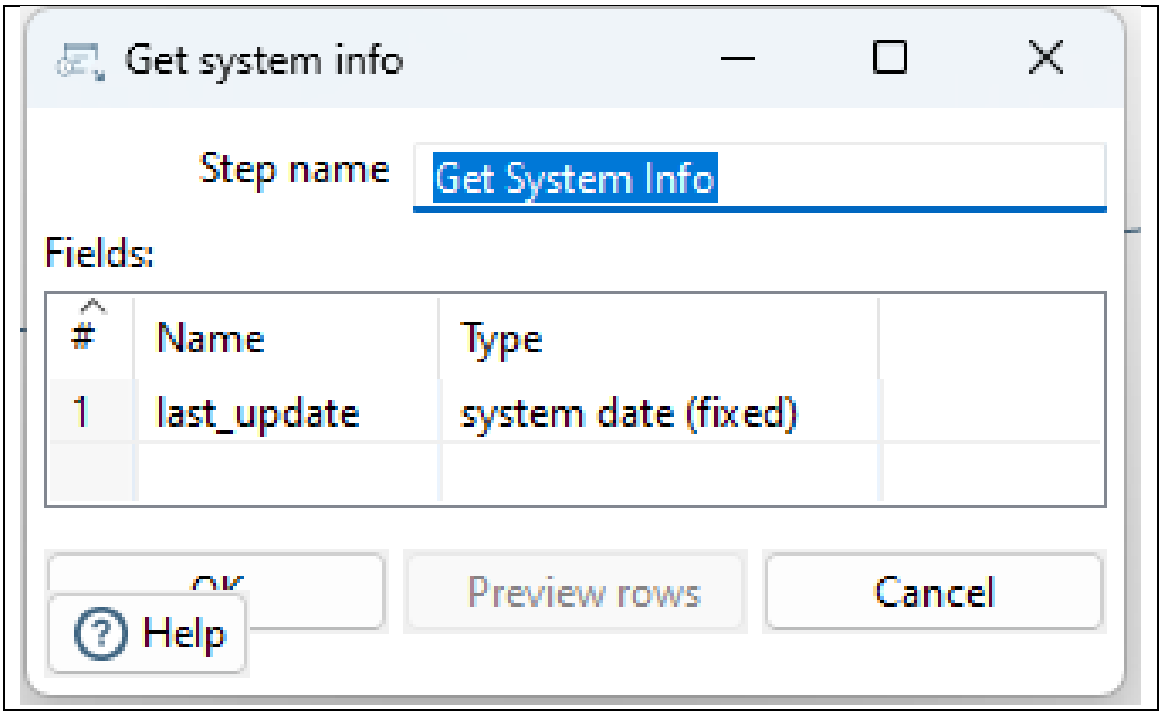
3. Max Last Update – Table input.



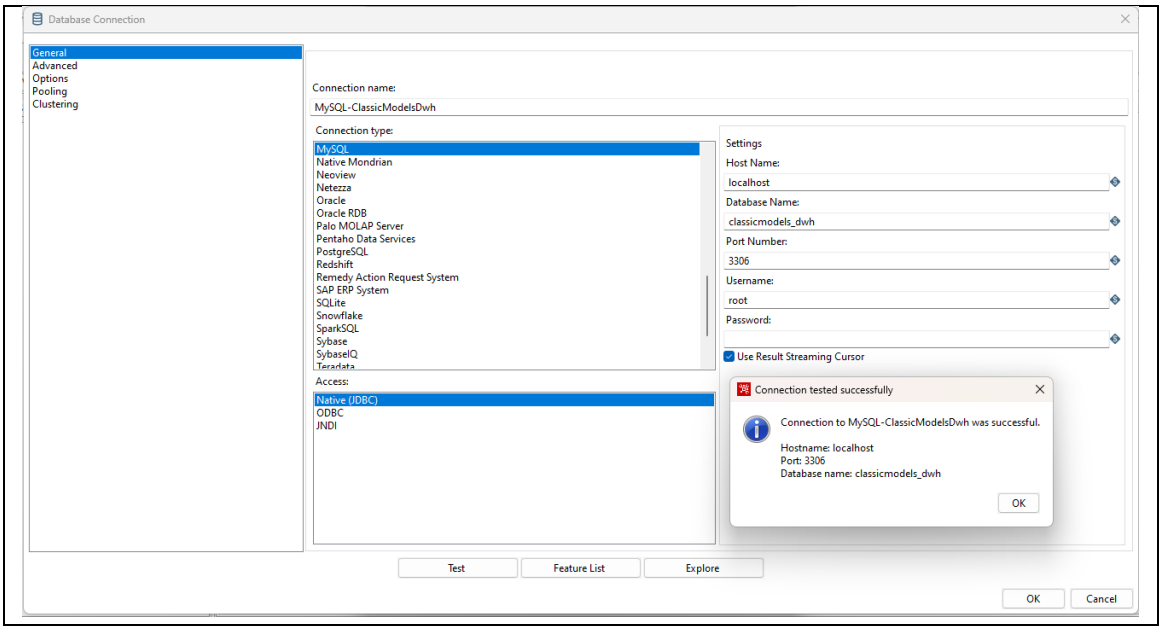
4. Employee – Table input.

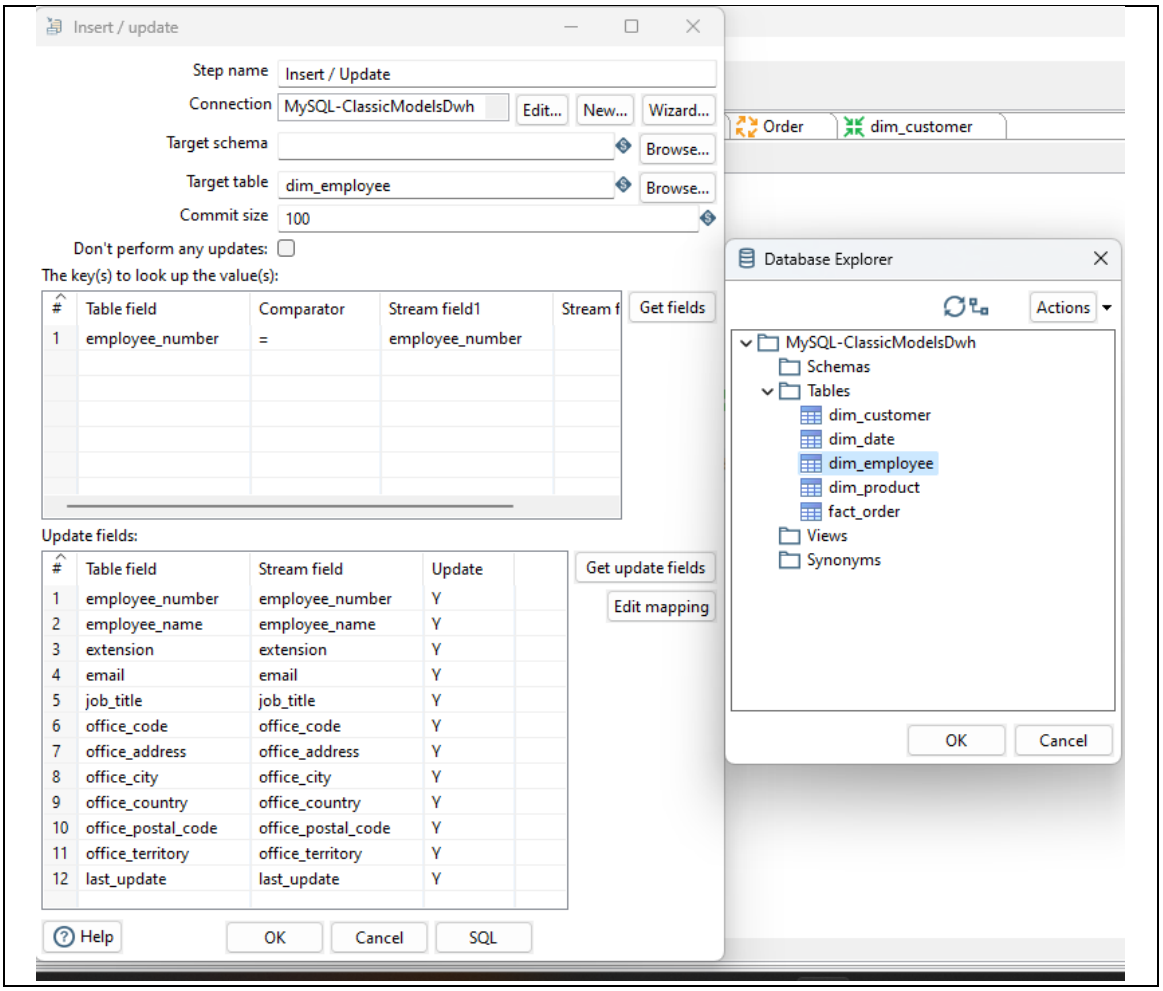


5. Get System Info

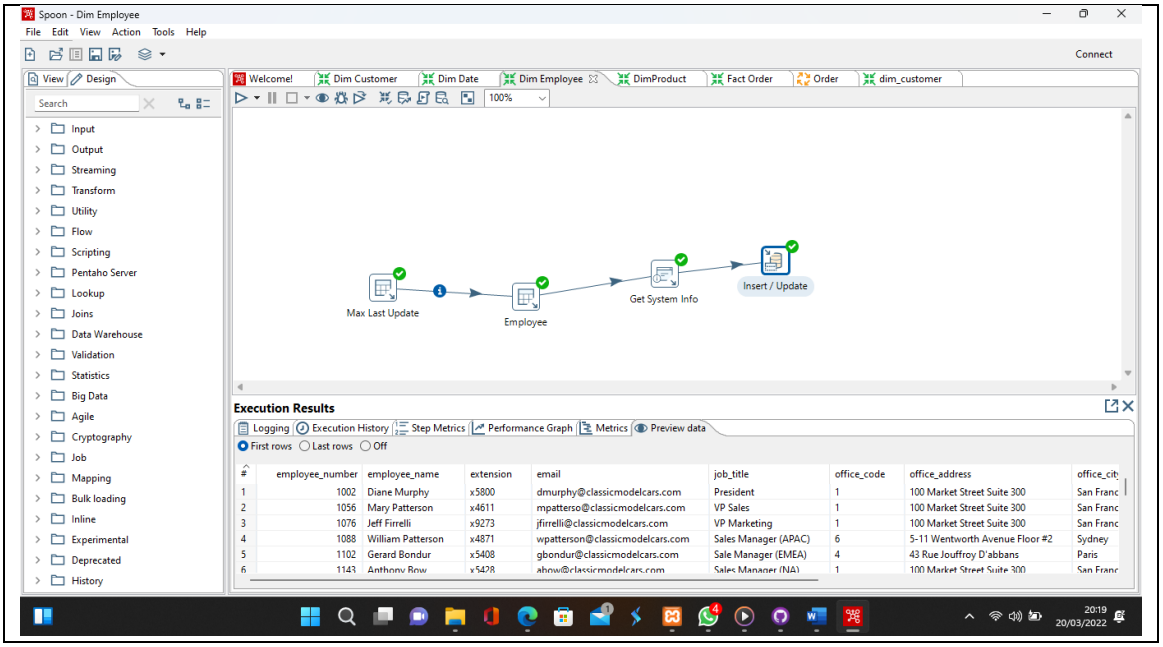


6. Insert / Update





7. Output ketika di Running dan Dijalankan



4. File Praktikum

Github Repository:

5. Soal Latihan

Soal:

1. Apa yang dimaksud dengan Dimensi dalam Data Warehouse?
2. Apa yang dimaksud dengan Skema dalam Data Warehouse?

Jawaban:

1.
2.

6. Kesimpulan

a. Dalam pengerjaan praktikum Data Warehouse, kita harus benar-benar teliti dalam menginputkan suatu fungsi untuk menampilkan suatu keluaran pada layar dengan sesuai.
b. Kita dapat mengetahui…

7. Cek List (✓)

No	Elemen Kompetensi	Penyelesaian	
		Selesai	**Tidak Selesai**
1.	Latihan Pertama	**…**	
2.	Latihan Kedua	**…**	
3.	Latihan Ketiga	**…**	

8. Formulir Umpan Balik

No	Elemen Kompetensi	Waktu Pengerjaan	Kriteria
1.	Latihan Pertama	… Menit	…
2.	Latihan Kedua	… Menit	…
3.	Latihan Ketiga	… Menit	…

Keterangan:

1. Menarik
2. Baik
3. Cukup
4. Kurang