Koneksi Pentaho Ke Database MyQL

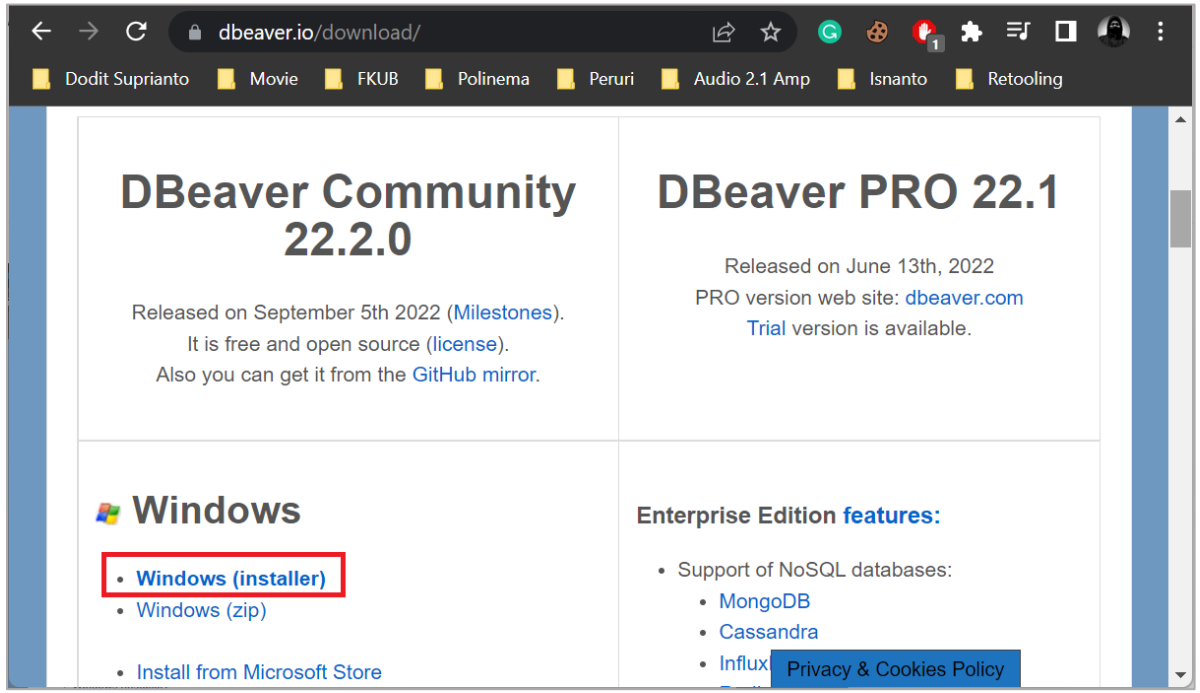
Tujuan

- Mentransformasikan file CSV ke database MySQL

- Menarik data yang bersumber dari database MySQL.
- Pentaho membutuhkan driver connection agar Pentaho dapat berkomunikasi dengan database MySQL.
- Membuat file transformasi data dari MySQL ke versi Pentaho.

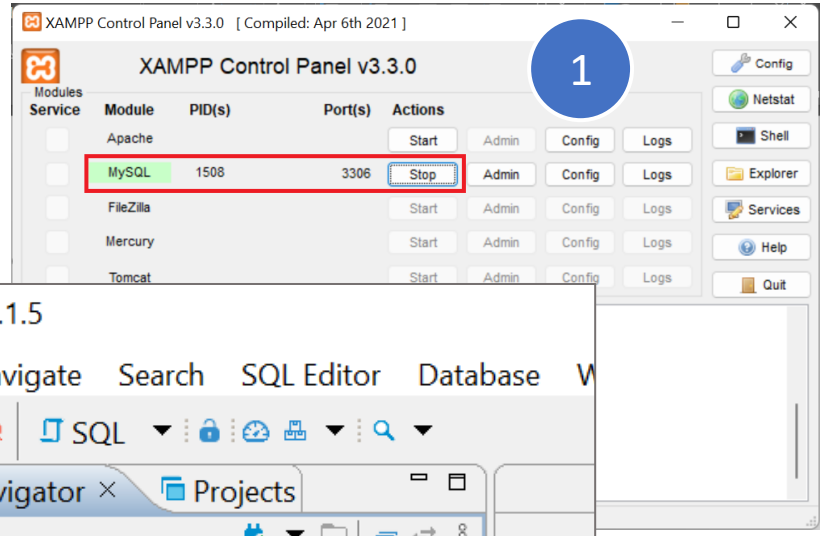
MySQL Database + Tools DBeaver

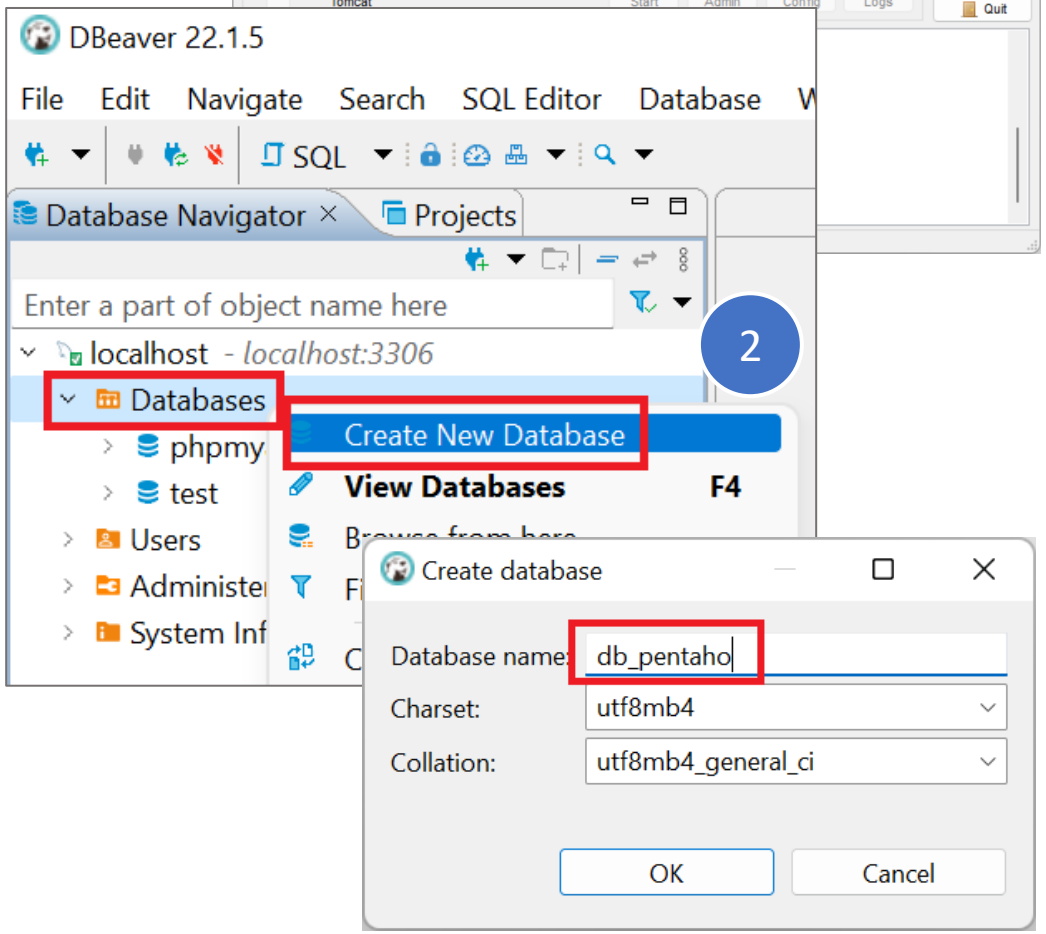
- Pastikan computer telah terinstall MySQL Server dan Service Running (bisa menggunakan XAMPP)
- Gunakan database tool management software seperti DBeaver atau lainnya (https://dbeaver.io/files/dbeaver-ce-latest-x86_64-setup.exe)

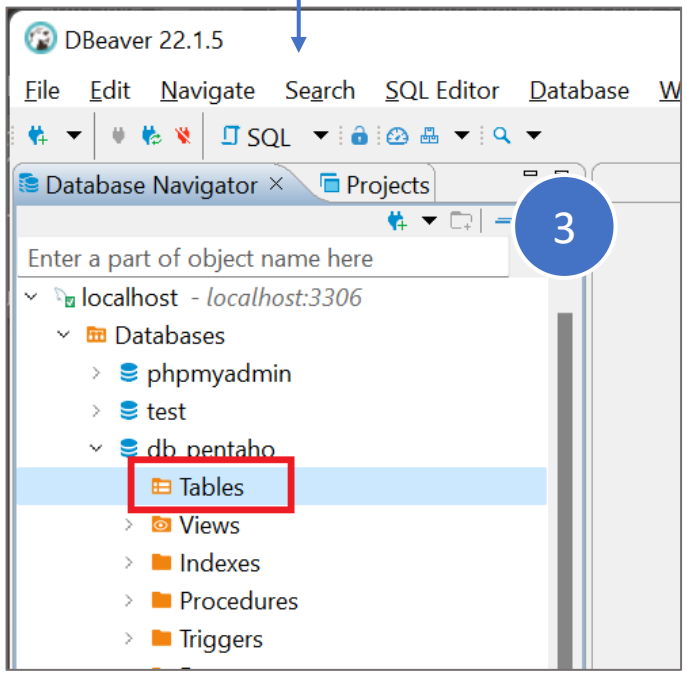


Create Database

- Aktifkan service DB MySQL
- Buat database '**db_pentaho**' dengan Dbeaver.
- Biarkan **table** kosong karena akan diimport dari file CSV luar.

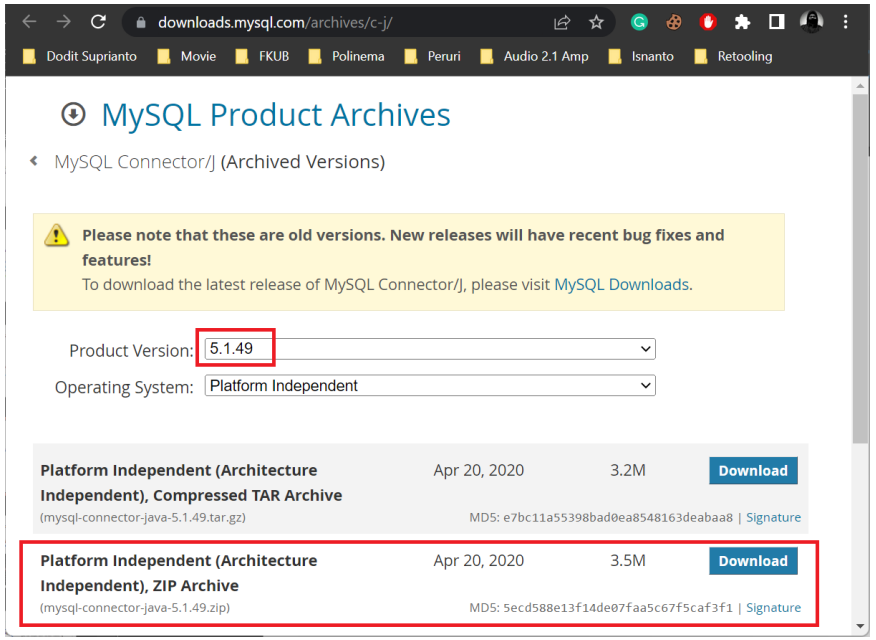


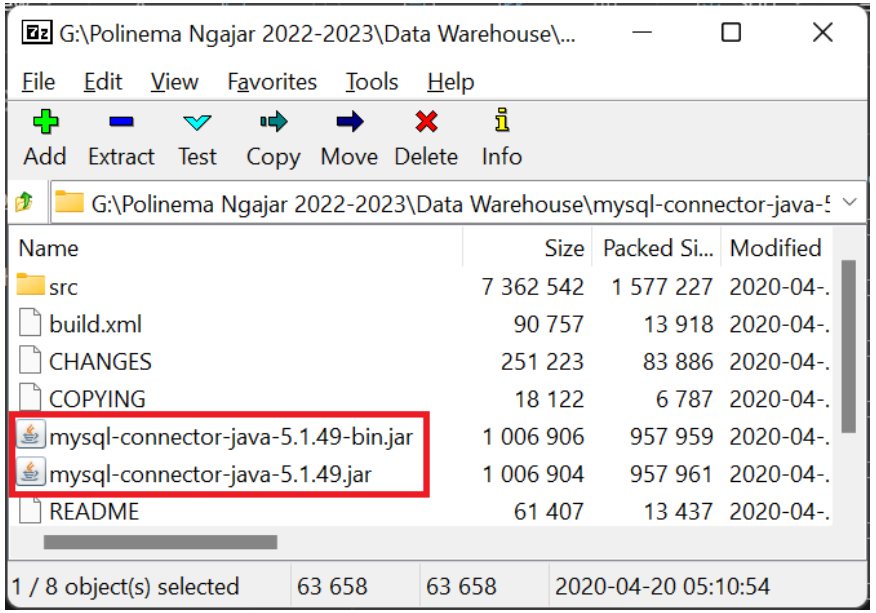




MySQL Connector

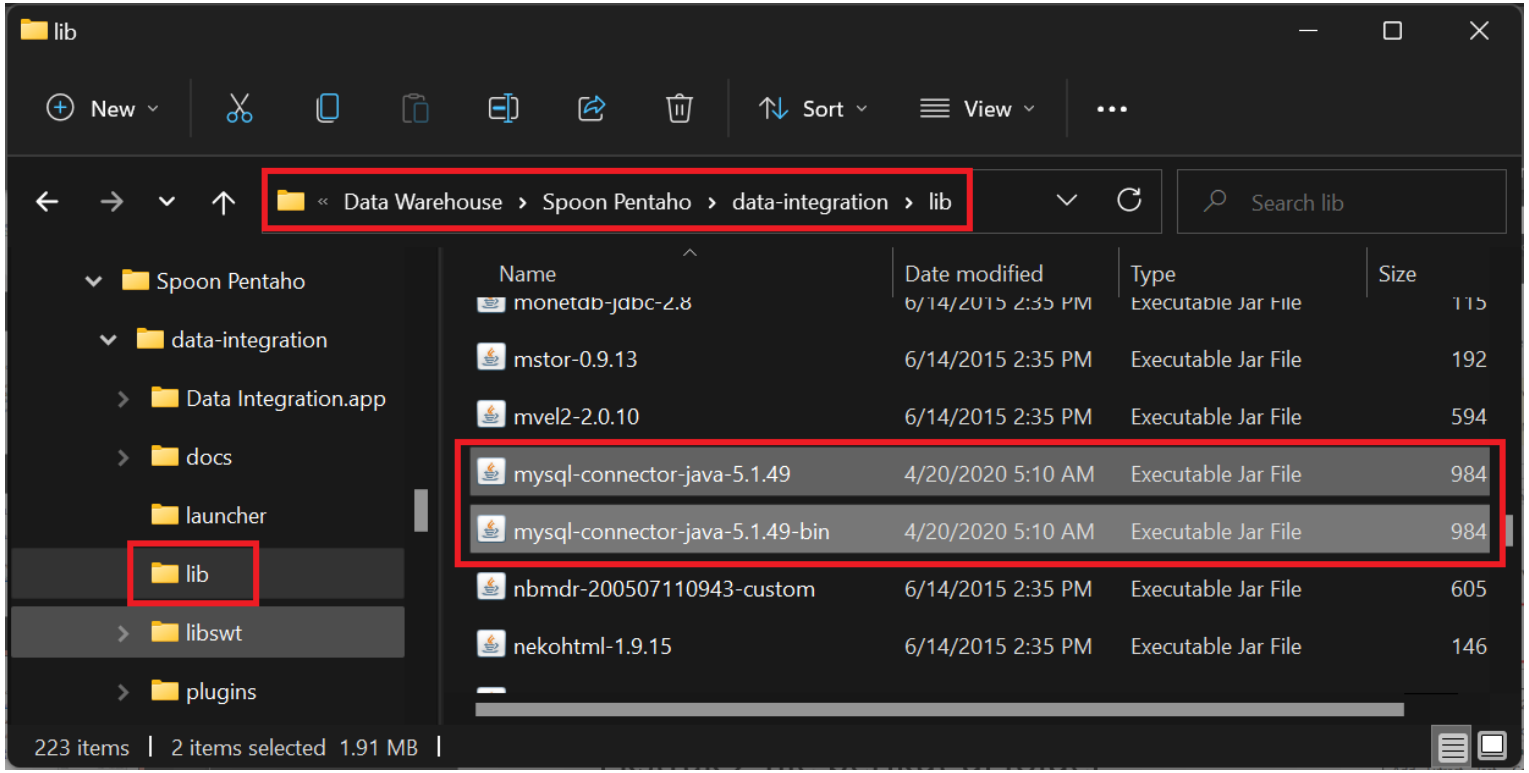
- Download MySQL Connector Versi 5.1.49 for Java (https://downloads.mysql.com/archives/c-j/)
- Unzip **mysql-connector-java-5.1.49.zip**





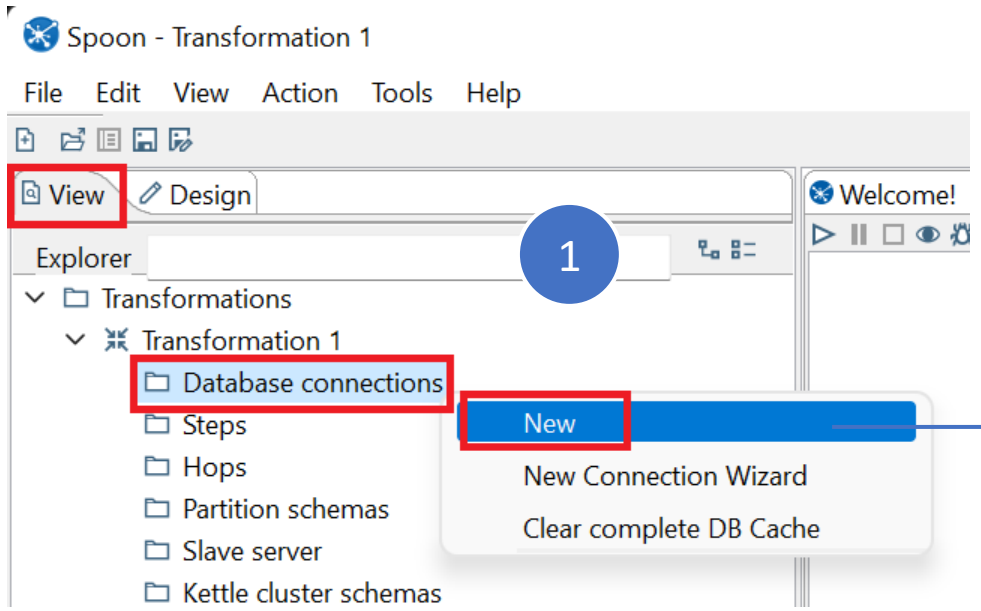
MySQL Connector

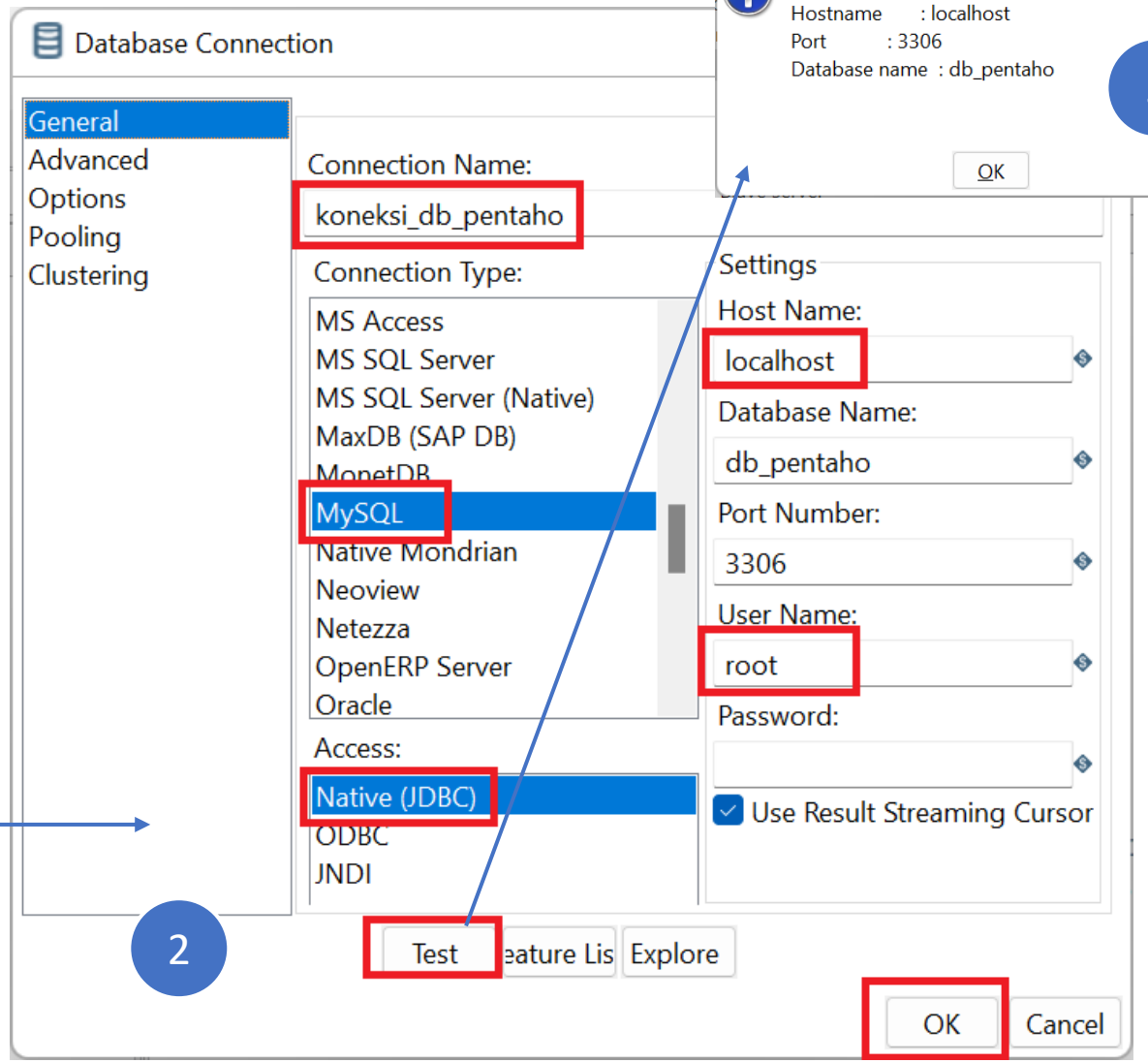
- Ekstrak 2 file berikut di folder '**\data-integration\lib**':
  - **mysql-connector-java-5.1.49.zip**
  - **mysql-connector-java-5.1.49-bin.zip**



Membuat Koneksi Pentaho & MySQL

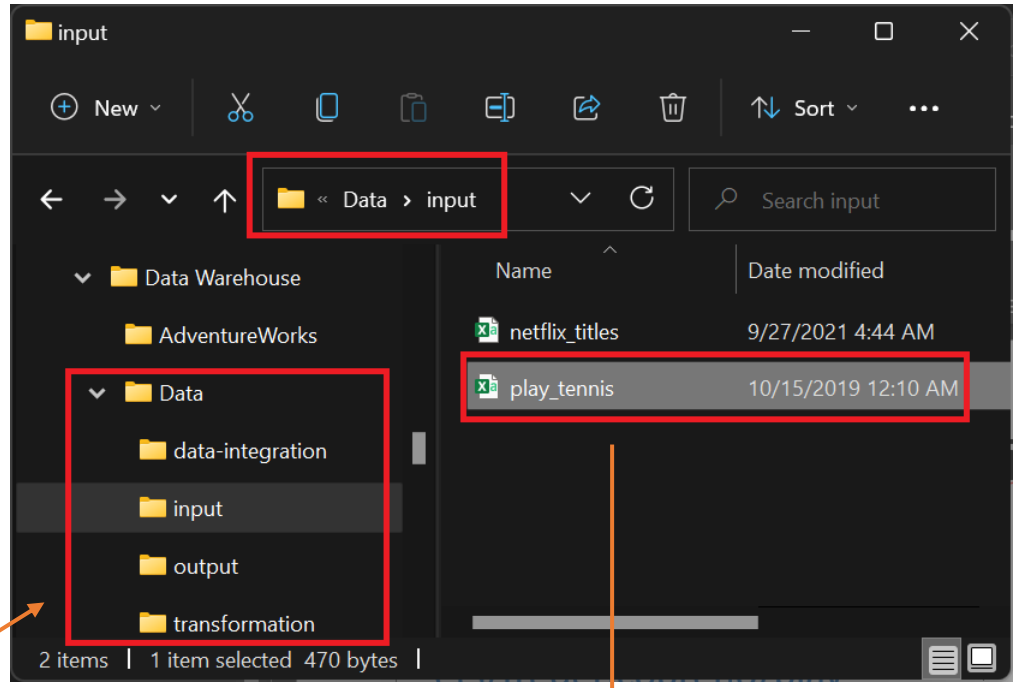
- Buka menu **File > new > Transformation**
- Pilih tab **View > Database Connections > New**.
- Jika ERROR, uninstall JDK11 dan install JDK8

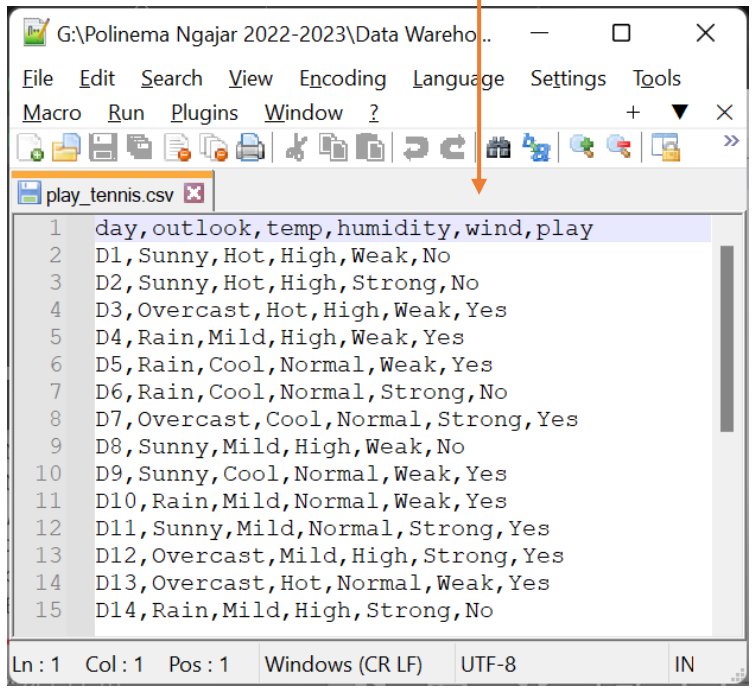




File Sumber CSV

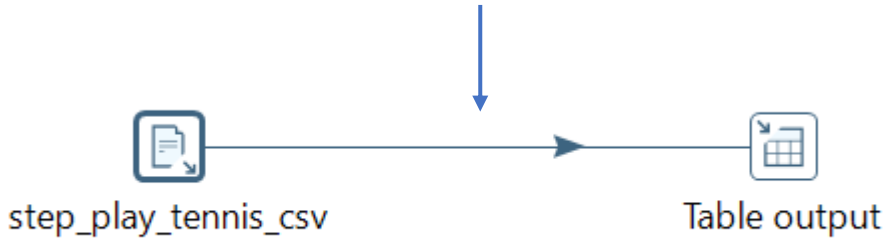
- Download file CSV di https://www.kaggle.com/datasets/fredericobreno/play-tennis/download?datasetVersionNumber=1
- Uraikan filenya ‘archive’ > ‘**play_tennis**’ dan letakkan di folder ‘**Data\input**’ seperti project sebelumnya.

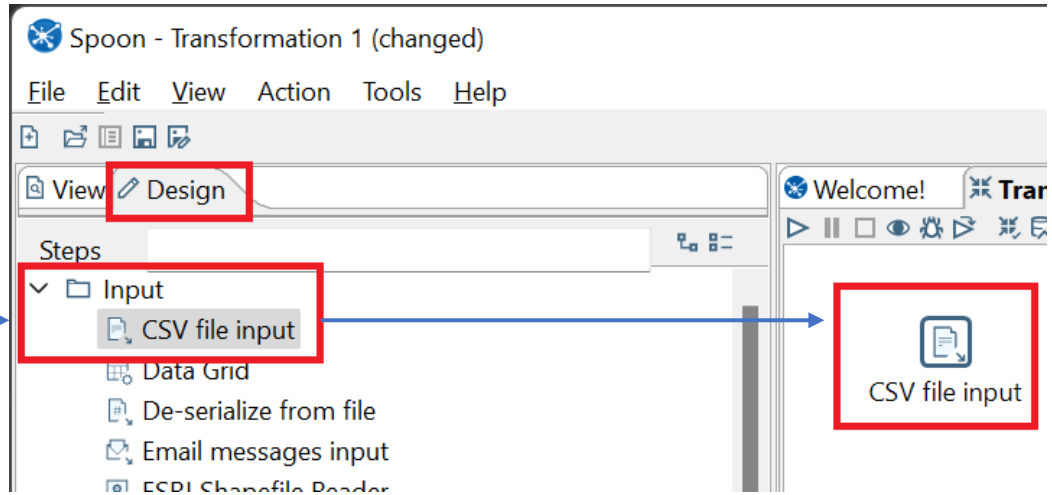


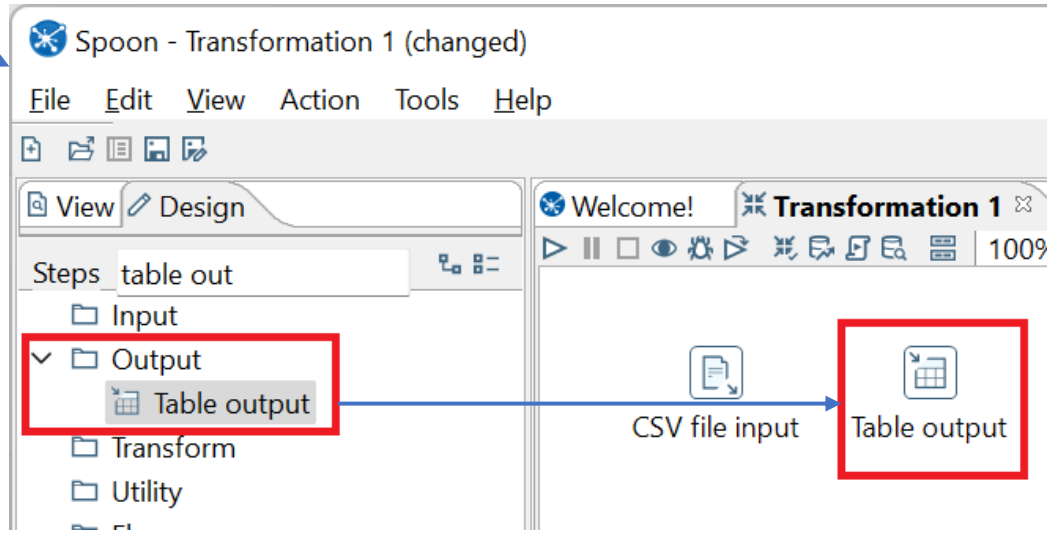


Transformation

- Buka menu **Design > Input > CSV file input** dan drag-drop ke kanan.
- Buka menu **Design > Input > CSV file input** dan drag-drop ke kanan
- Buat hubungan antara 2 step tersebut dengan garis hop.

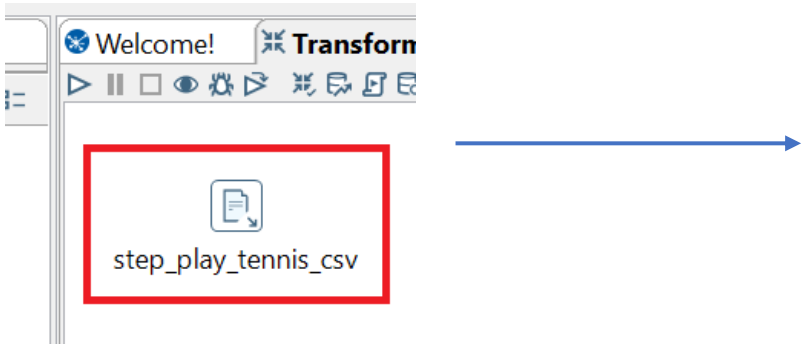


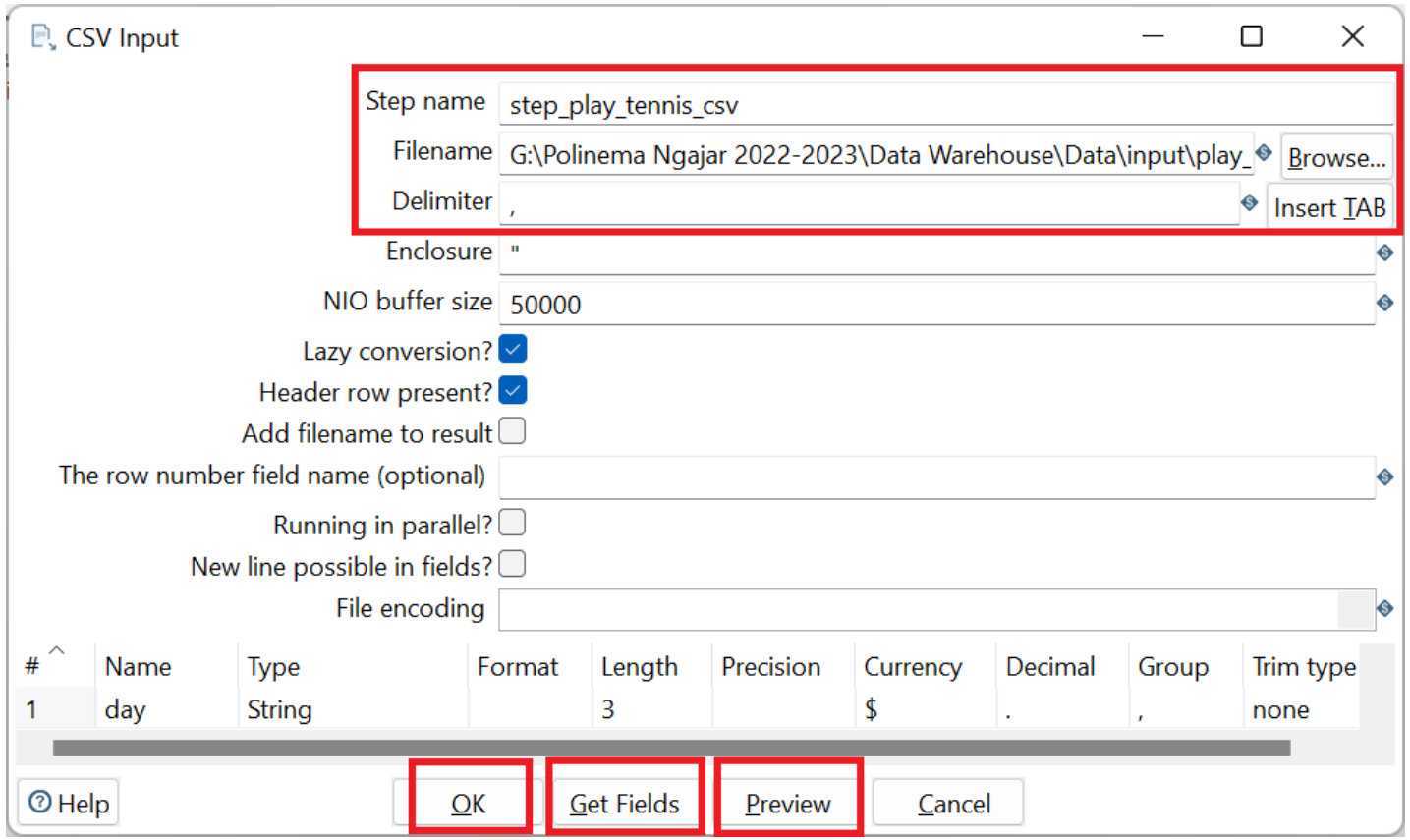




Transformation

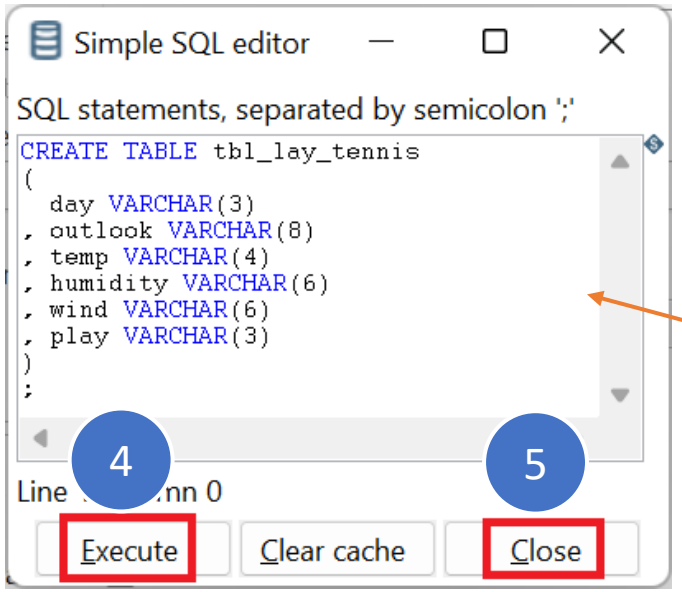
- Konfigurasi **CSV file input**

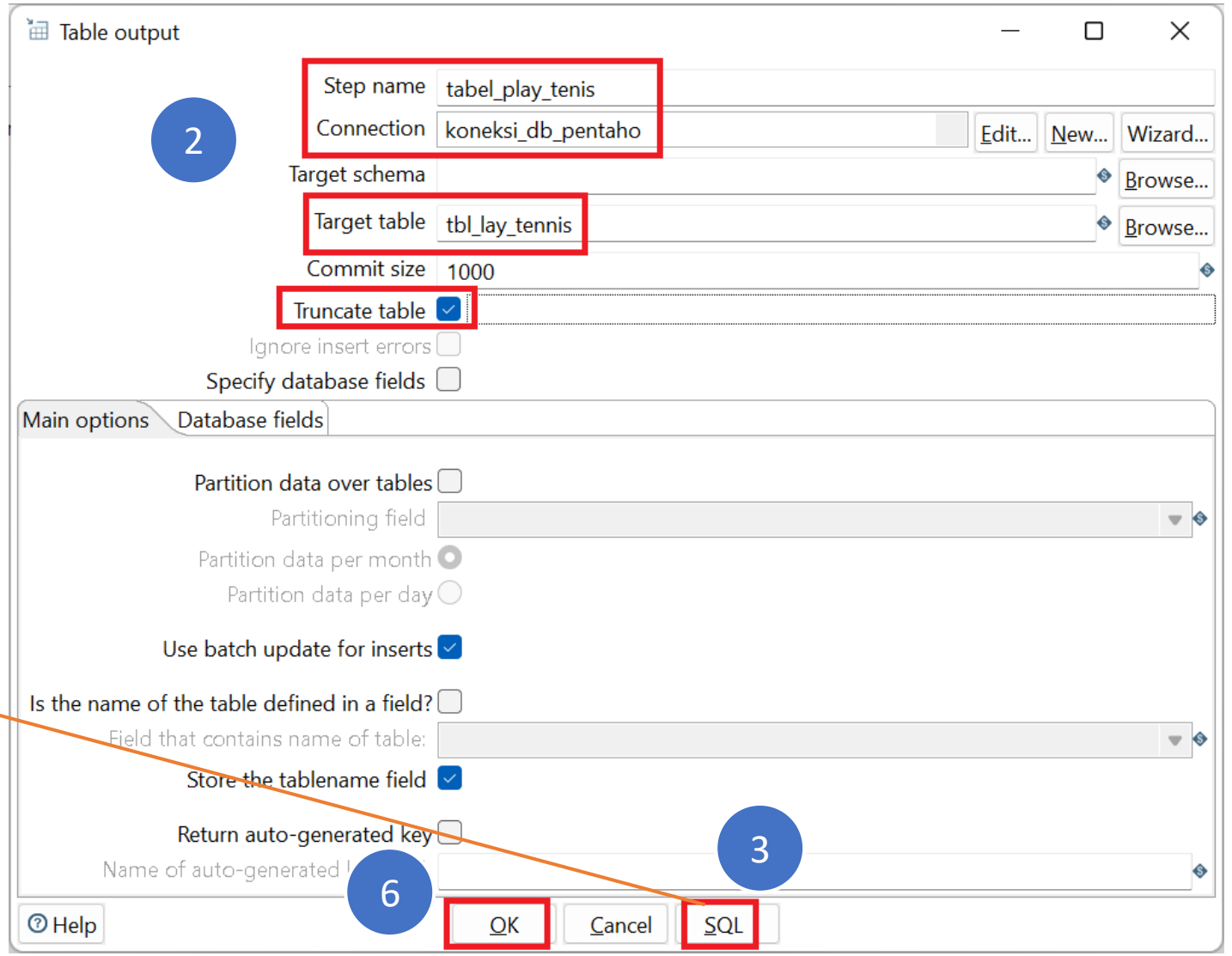




Transformation

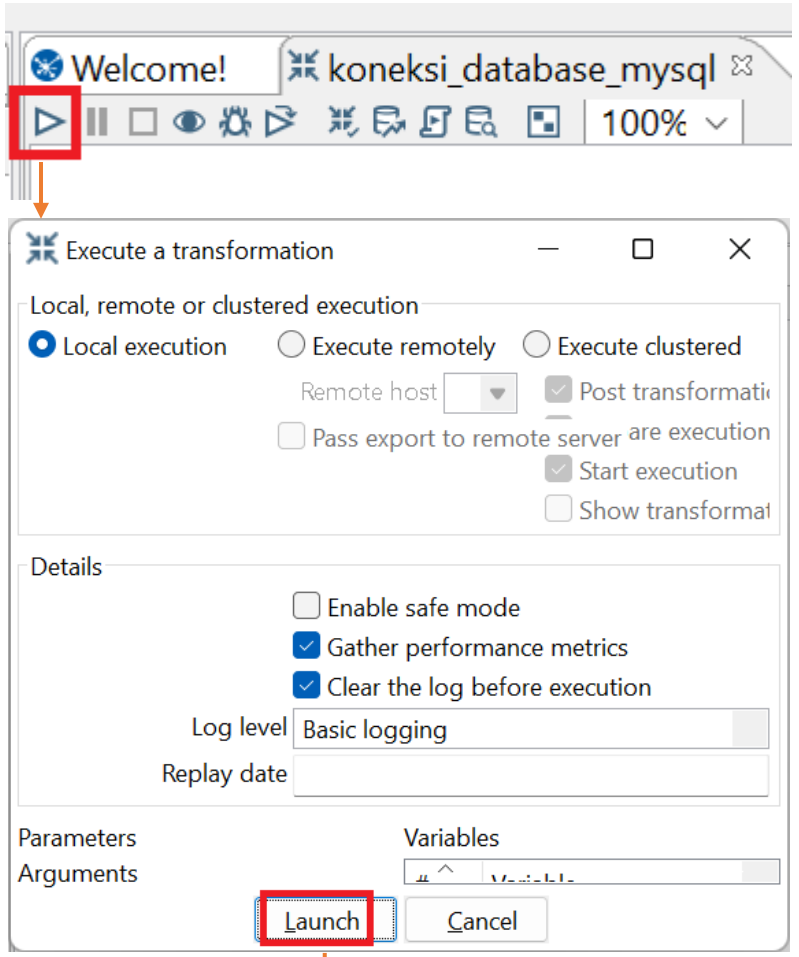
- Konfigurasi **Table Output**





Transformation

- Simpan file transformation dengan nama “**koneksi_database_mysql**” di foler ‘transformation’ yang telah kita buat sebelumnya.
- Jalankan tombol **Run** dan **Launch**



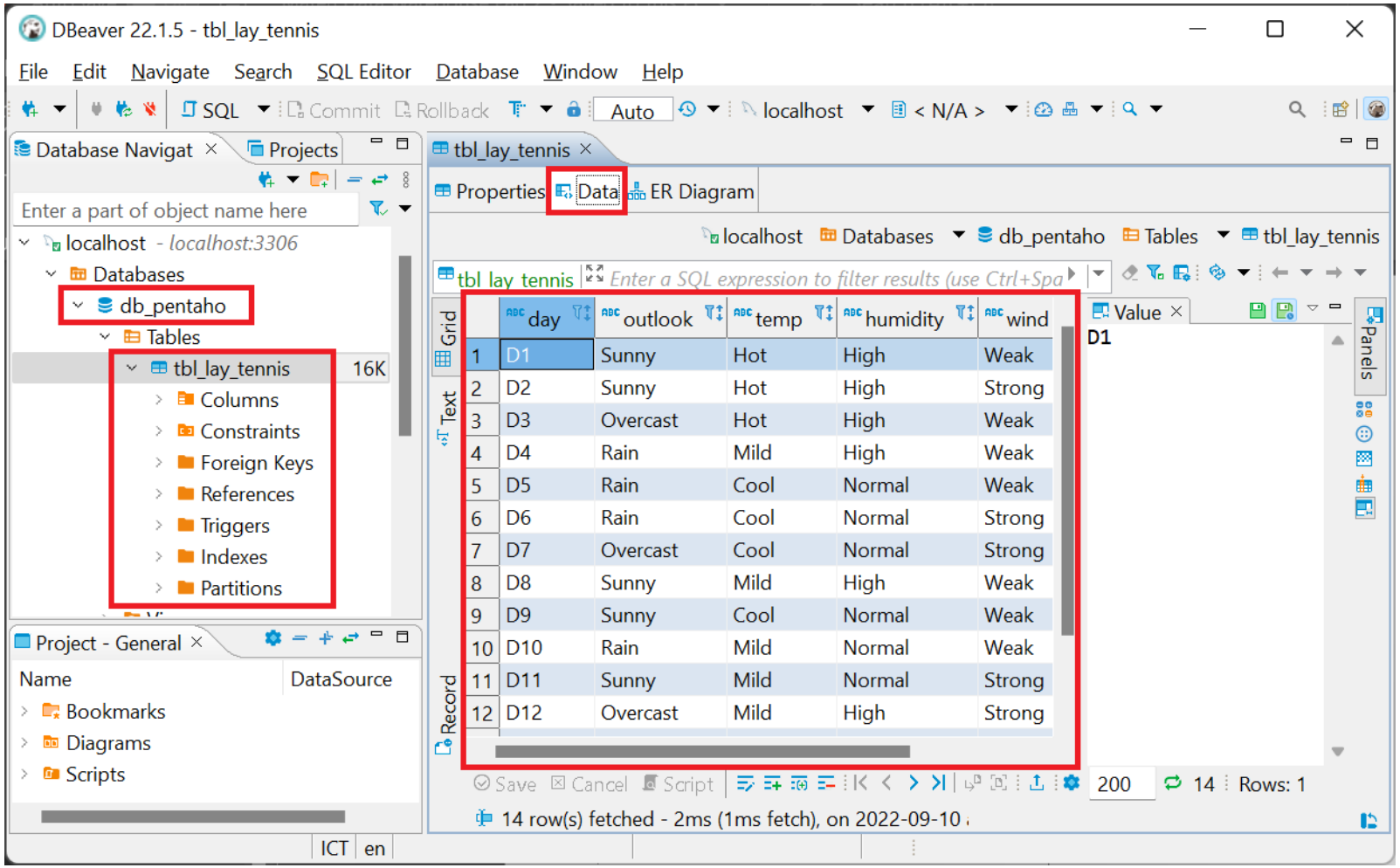
Execution Results

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

#	Stepname	Copynr	Read	Written	Input	Output	Updated	Rejected	Errors	Active	Time	Speed (r/s)	input/output
1	step_play_tennis_csv	0	0	14	15	0	0	0	0	Finished	0.0s	7,500	-
2	tabel_play_tenis	0	14	14	0	14	0	0	0	Finished	0.1s	250	-

Transformation

- Buka hasil transformasi di DB MySQL dengan DBeaver.
- Refresh terlebih dahulu database '**db_pentaho**'.
- Perhatikan jumlah baris/record antara MySQL dan CSV apakah sama?



Tugas

Tugas

1. Buat transformasi dari CSV ke DB MySQL
2. Buat transofrmasi dari JSON ke DB MySQl
3. Buat transformasi dari XML ke DB MySQL

Catatan:

- Poin 1, database MySQL sumbernya bebas silahkan dicari.
- Poin 2 & 3, file JSON dan XML dapat diperoleh dari dataset Kaggle (bebas).
- Kumpulkan di LMS