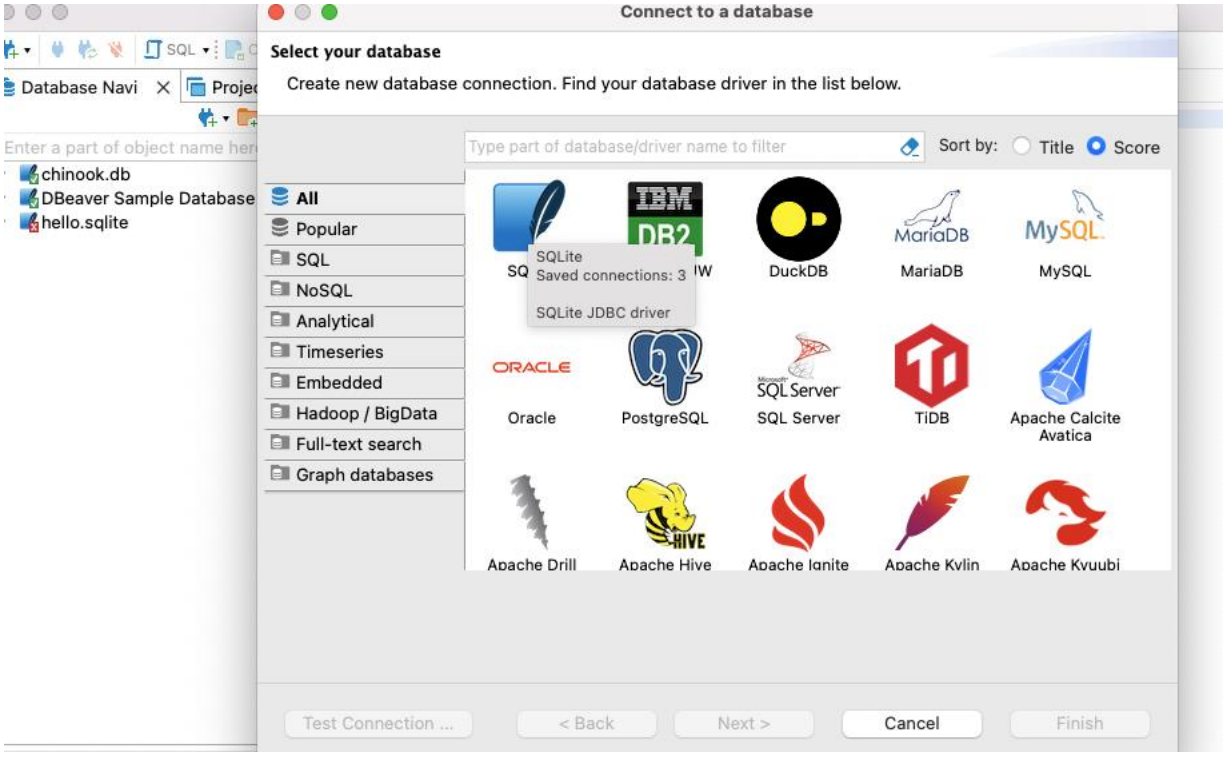
Setting Up for the Final Project:

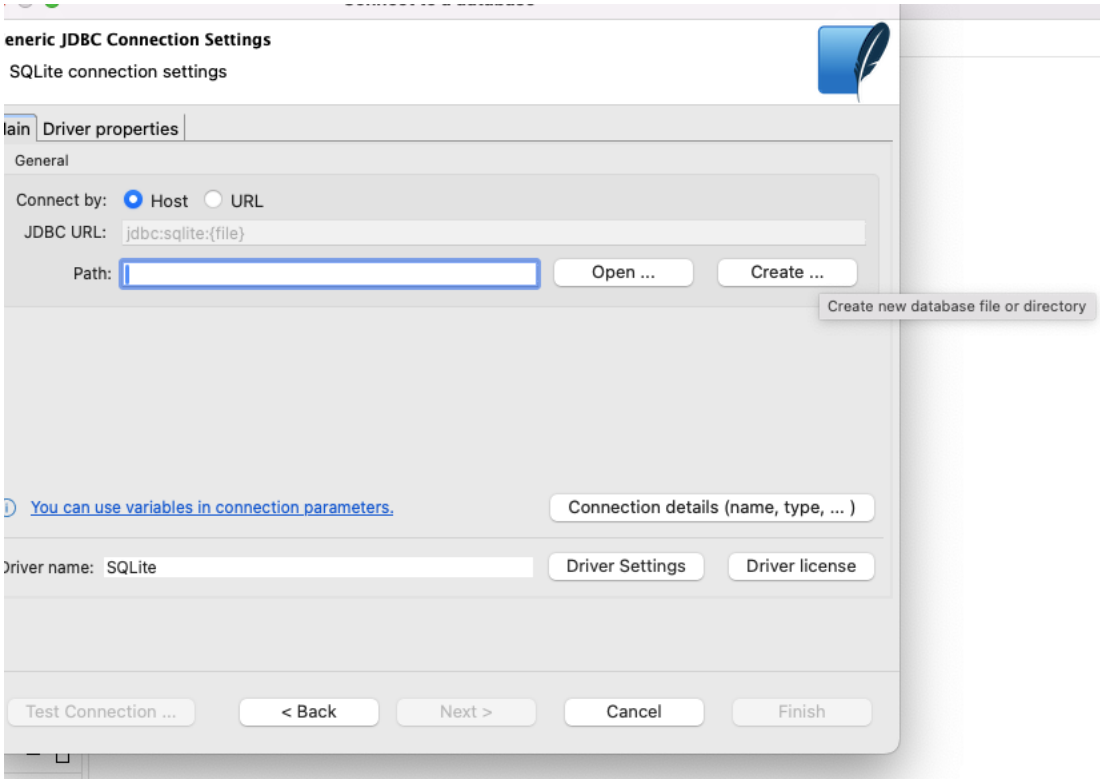
1. Make sure SQLite is installed on your computer: SQLite Installation

   Resources:
   a. SQLite Tutorial
   b. For basics of command prompt, I recommend this (For cd and all): https://www.digitalcitizen.life/command-prompt-how-use-basic-commands/
   c. https://www.youtube.com/watch?v=4MJSZi4qvIE

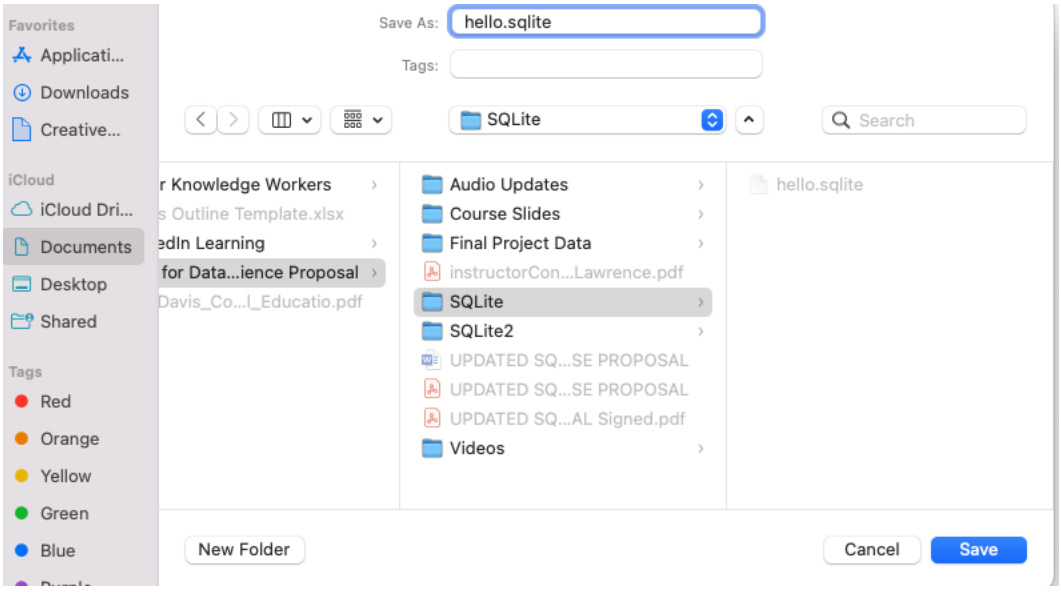
2. Download a SQL editor: I recommend DBeaver: (https://dbeaver.io/)
3. Download the datasets you will use to populate your tables from the Final Project Instructions in Module 4.
   CSV data files may download as a ZIP file, please extract them to a new folder.
4. Open DBeaver and Connect to SQLite Database: Make sure you're connected to the SQLite database where you want to upload the CSV:
   a. Select a new database connection (the plugin sign with the +)
   b. Select SQLite



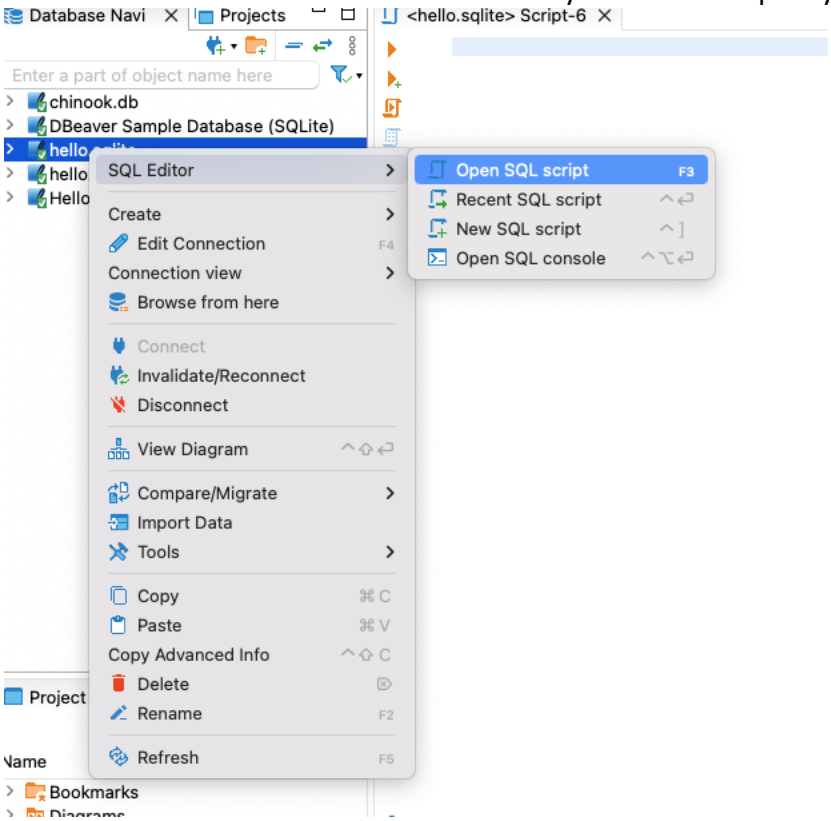
   c. Then add select “create”



d. Select a folder you want your database to be in and name it whatever you want, this could be, “hello.sqlite”

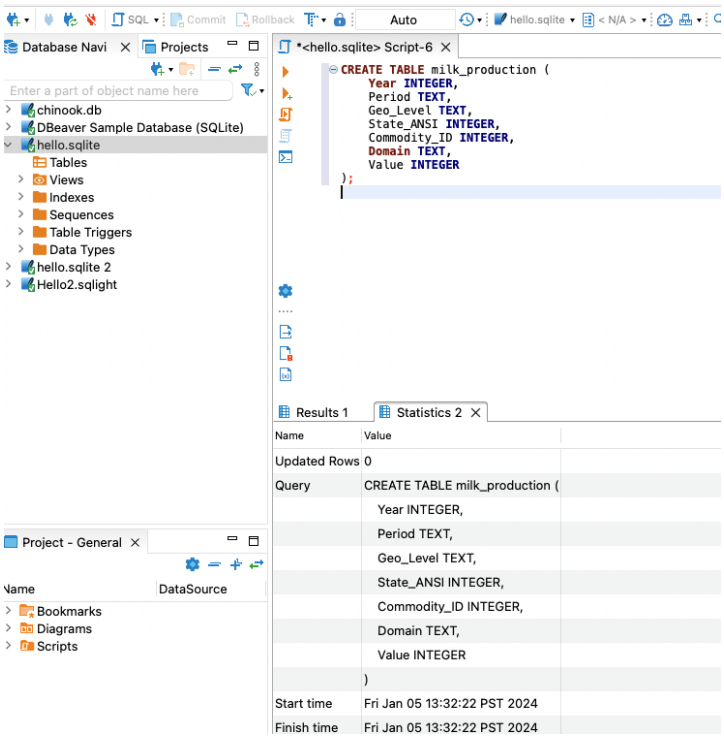


e. Navigate to the new database you created: In the left sidebar, expand the connection and locate the database where you want to import your CSV file.



f. Additionally, this video may be helpful: https://www.youtube.com/watch?v=fmq6-wvbxyA

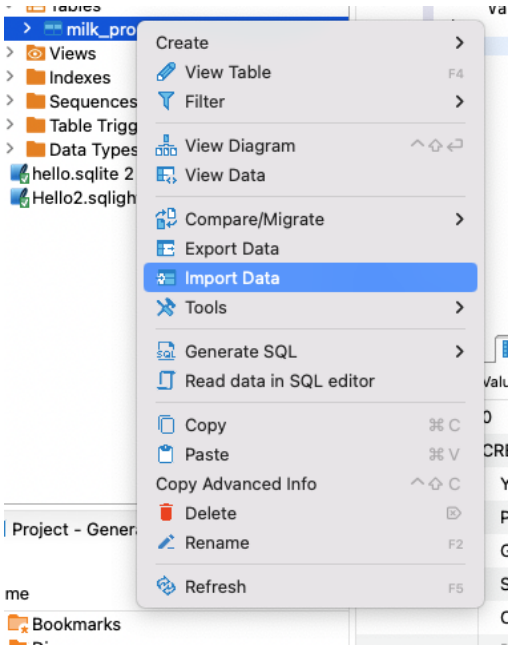
5. Create a New Table: Create the following new tables to add the csv files too. Please see the script to create the tables below. (Note: you must create individual tables using the scripts before importing the datasets. Do not change the names of the tables you create, otherwise the sample scripts will not run.)



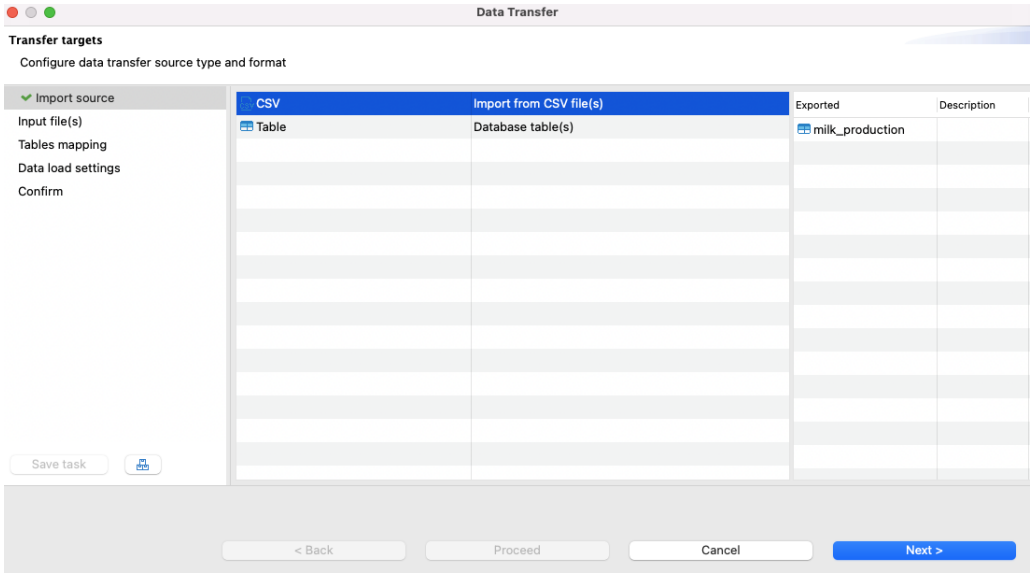
Windows/macOS:
Follow this tutorial to create new tables on DBeaver, this is done on macOS in the video but options should be the same for Windows:
https://www.youtube.com/watch?v=ch4h-y_-9u4

6. Right-click on the Table: Once you have your table set up, right-click on it and then choose `Import Data`
    a. You may need to “refresh” the database so you can see the table.

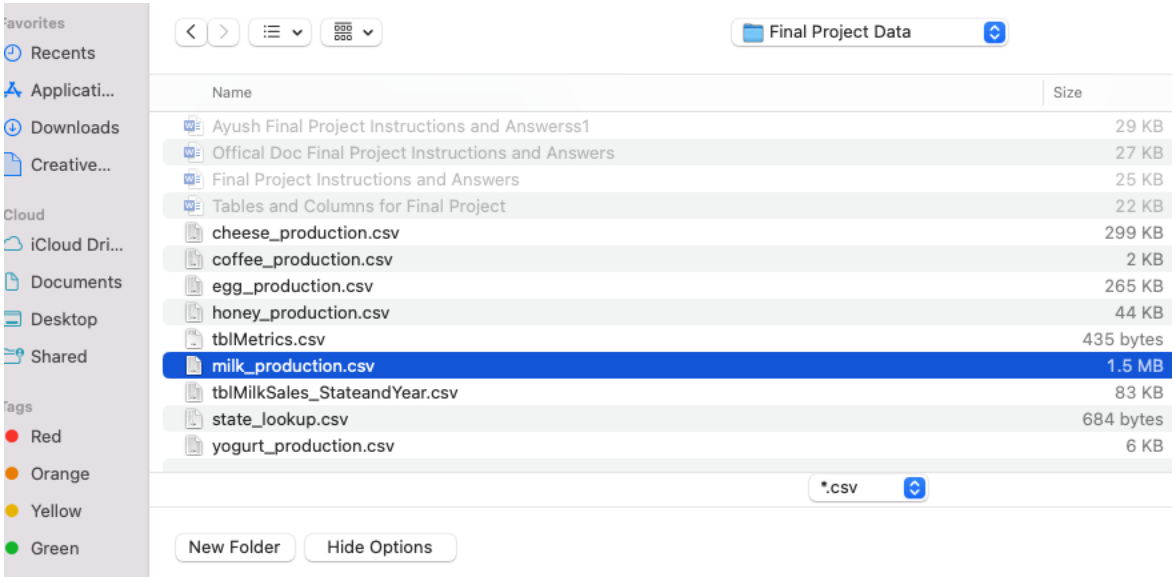
    b. Then right click on the “import data”



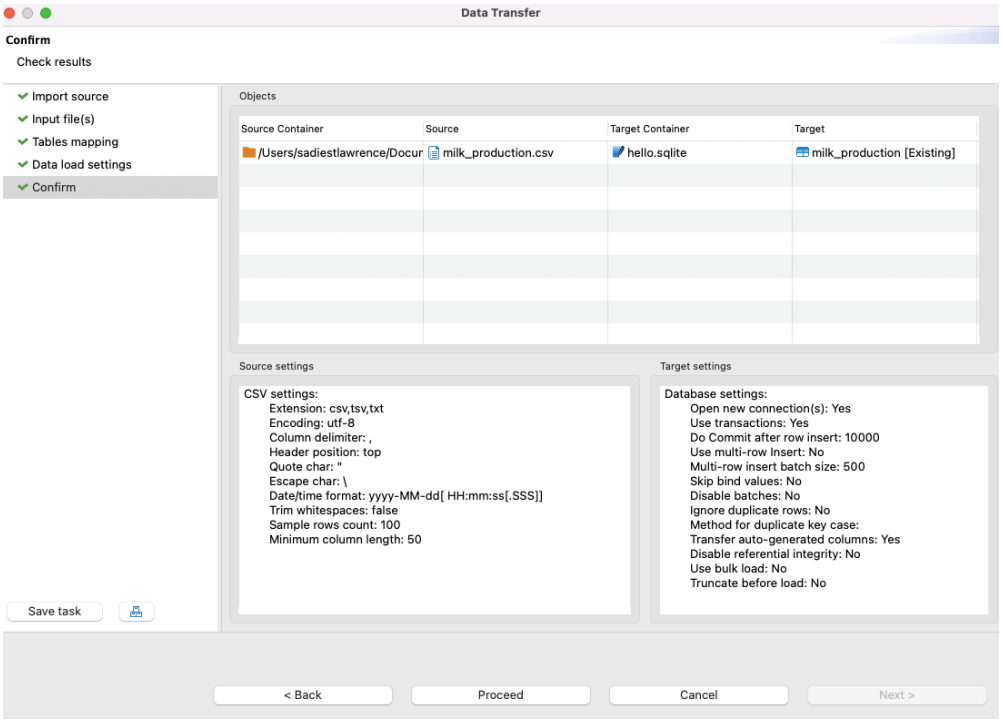
7. Choose CSV File: A new window will pop up. Select `CSV` as the source format and browse to find your file. Be sure to upload the corresponding 'CSV' file name to the table name.
    a. Select CSV file



b. Add the CSV file the corresponds to the table name you created.



8. Map Columns: DBeaver will display the columns from the CSV and the table. Make sure they are mapped correctly. You can also specify additional settings like delimiter, quote character, etc.
9. Start the Import: Once you're satisfied with the settings, click `Next` to review, and then `Finish` to start importing the data.
    a. Click Next until you get a to the confirmation window.
    b. Then Click “Proceed” to populate the table
    c. If at any point you believe that the data import was wrong in any way, feel free to delete that table from your SQLite DB inside DBeaver and create the table and import the data again.



10. Verify Data: After the import process, refresh your table to see if the data has been successfully imported.
    a. 

11. Repeat this process until you have created all tables and imported the data for all tables.

Script to Create Tables:

```
CREATE TABLE milk_production (
    Year INTEGER,
    Period TEXT,
    Geo_Level TEXT,
    State_ANSI INTEGER,
    Commodity_ID INTEGER,
    Domain TEXT,
    Value INTEGER
);

CREATE TABLE cheese_production (
    Year INTEGER,
    Period TEXT,
    Geo_Level TEXT,
    State_ANSI INTEGER,
    Commodity_ID INTEGER,
    Domain TEXT,
    Value INTEGER
);

CREATE TABLE coffee_production (
    Year INTEGER,
    Period TEXT,
    Geo_Level TEXT,
    State_ANSI INTEGER,
    Commodity_ID INTEGER,
    Value INTEGER
);
```

```
CREATE TABLE egg_production (
    Year INTEGER,
    Period TEXT,
    Geo_Level TEXT,
    State_ANSI INTEGER,
    Commodity_ID INTEGER,
    Value INTEGER
);


CREATE TABLE honey_production (
    Year INTEGER,
    Geo_Level TEXT,
    State_ANSI INTEGER,
    Commodity_ID INTEGER,
    Value INTEGER
);

CREATE TABLE state_lookup (
    State TEXT,
    State_ANSI INTEGER
);

CREATE TABLE yogurt_production (
    Year INTEGER,
    Period TEXT,
    Geo_Level TEXT,
    State_ANSI INTEGER,
    Commodity_ID INTEGER,
    Domain TEXT,
    Value INTEGER
);
```