Instantiate the IMDB and starwars database on Postgres

Please read carefully this guide and follow the instructions in order. Before starting this instructions, you must have installed PostgreSQL and you must have the backup files for the imdb_100k and starwars databases. It is recommended to follow the process using the Terminal, since it's the format supported in the labs, but it can also be done through pgAdmin. You can find a section with sample queries below.

Terminal:

Windows

Press **Windows** key and type **cmd.**
Go to PostgreSQL location: Type **`cd`** and the location where PostgreSQL was installed, the default location is **`C:\Program Files\PostgreSQL\10\bin`**

Create an empty database where the database will be restored.
For the IMDB database (for lectures and practice) type:
`psql.exe -p 5432 -U postgres -c "CREATE DATABASE imdb_100k"`

For the eCommerce database (for the lab) type:
`psql.exe -p 5432 -U postgres -c "CREATE DATABASE starwars"`

Important! The default port of installation for postgres is **5432, but it might be 5433.*

Type the password from the installation process, and the database will be created.
Then type the following command to restore from the backup file for the IMDB database:
`pg_restore.exe -p 5432 -U postgres --dbname "imdb_100k" --clean "C:\<FILE-LOCATION>\postgres_IMDB100.backup"`

For the starwars database, use:
`pg_restore.exe -p 5432 -U postgres --dbname "starwars" --clean "C:\<FILE-LOCATION>\postgres_starwars"`

**Important! The restore file includes a command to DROP every table in case it exists, so it may show errors, it's okay.*

Now the databases are ready, you can connect by typing:

- `psql -U postgres -p 5432 -d starwars`
- `psql -U postgres -p 5432 -d imdb_100k`

For the ecommerce or imdb_100k databases, respectively. Once connected you can switch between them with the `\c` (connect) command. For example: `\c starwars`

Mac

Press **Command + spacebar** type **Terminal**
Go to PostgreSQL installation location: **/Library/PostgreSQL/10/bin/**

Create an empty database where the database will be restored.
For the IMDB database (for lectures and practice) type:
psql -p 5432 -U postgres -c "CREATE DATABASE imdb_100k"

For the eCommerce database (for the lab) type:
psql -p 5432 -U postgres -c "CREATE DATABASE starwars"

Important! The default port of installation for postgres is **5432, but it might be 5433.*

Type the password from the installation process, and the database will be created.

Then type the following command to restore from the backup file for the IMDB database:
pg_restore -p 5432 -U postgres --dbname "imdb_100k" --clean "*<FILE-LOCATION>*/postgres_IMDB100.backup"

For the starwars database, use:
pg_restore -p 5432 -U postgres --dbname "starwars" --clean "*<FILE-LOCATION>*/postgres_starwars"

**Important! The restore file includes a command to DROP every table in case it exists, so it may show errors, it's okay.*

Now the databases are ready, you can connect by typing:

- `psql -U postgres -p 5432 -d starwars`
- `psql -U postgres -p 5432 -d imdb_100k`

For the ecommerce or imdb_100k databases, respectively. Once connected you can switch between them with the `\c` (connect) command. For example: `\c starwars`

Sample Queries:

Try the following queries in the *imdb100k* database. Pay attention that the quotes **(')** in the queries are in the correct format. *Remember that you have to connect with* **`psql -U postgres`** *and your password, you can type* **`\c imdb100k`** *to use the database)*

1. Find the names of all people in the database (**Warning**: remember there are 100k movies, which means there is a lot of people in the database, so it's recommended to put a **limit** on the query):

```
SELECT name
FROM person_100k;

SELECT name
FROM person_100k
LIMIT 5;
```

2. Return the imdb_index and production_year of all items called The Matrix

```
SELECT imdb_index, production_year
FROM title_100k
WHERE title = 'The Matrix';
```

3. Return the id, title and millenium_age (the production year minus 2000) of all items called The Matrix

```
SELECT id, title, production_year - 2000 AS millenium_age
FROM title_100k
WHERE title = 'The Matrix';
```

4. Return the name of people that their name_pcode_cf is A1652 and their gender is male or female

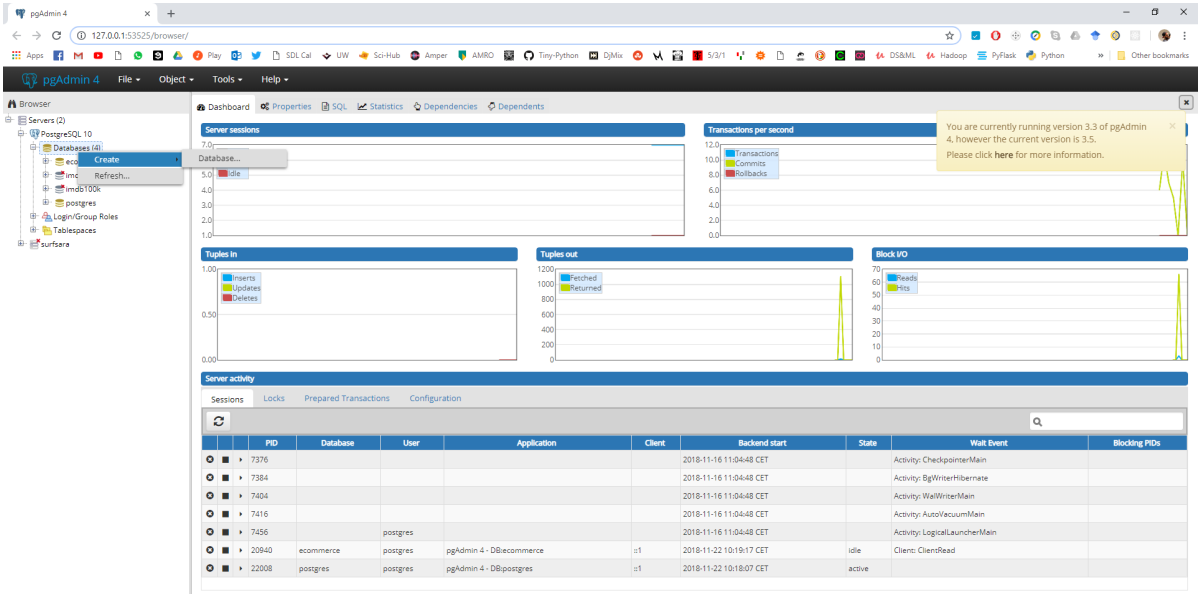
```
SELECT name
FROM person_100k
WHERE name_pcode_cf = 'A1652' AND
(gender = 'm' OR gender = 'f');
```

5. Return the title, production_year and kind of all items called The Matrix

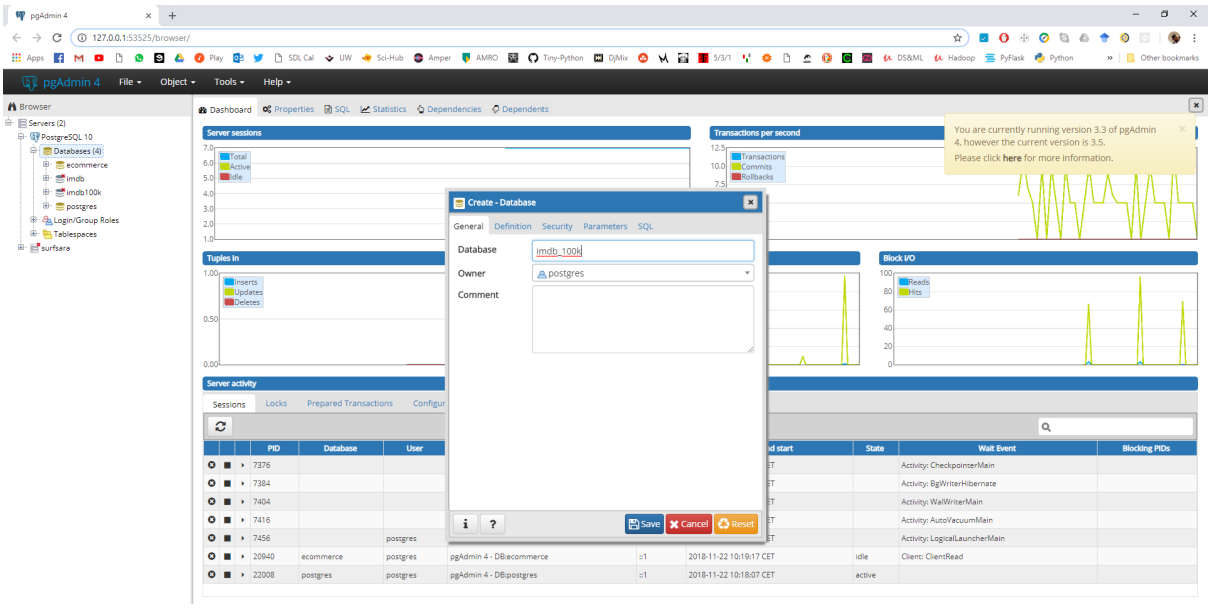
```
SELECT t.title, t.production_year, k.kind
FROM title_100k AS t
JOIN kind_type AS k
ON t.kind_id = k.id
WHERE t.title = 'The Matrix';
```

pgAdmin:

Open pgAdmin 4 and right click on **Databases**:



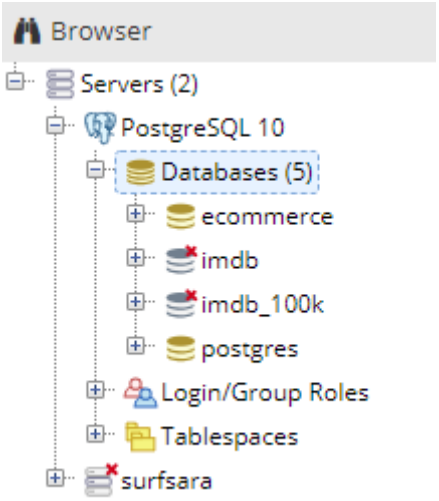
Select **Create -> Database:**



Type the name of the database, for example **imdb_100k** for the IMDB database with 100 thousand titles, or **ecommerce** for the store database used for the Lab.
Click **Save.** This will **automatically** run the following SQL command for you:

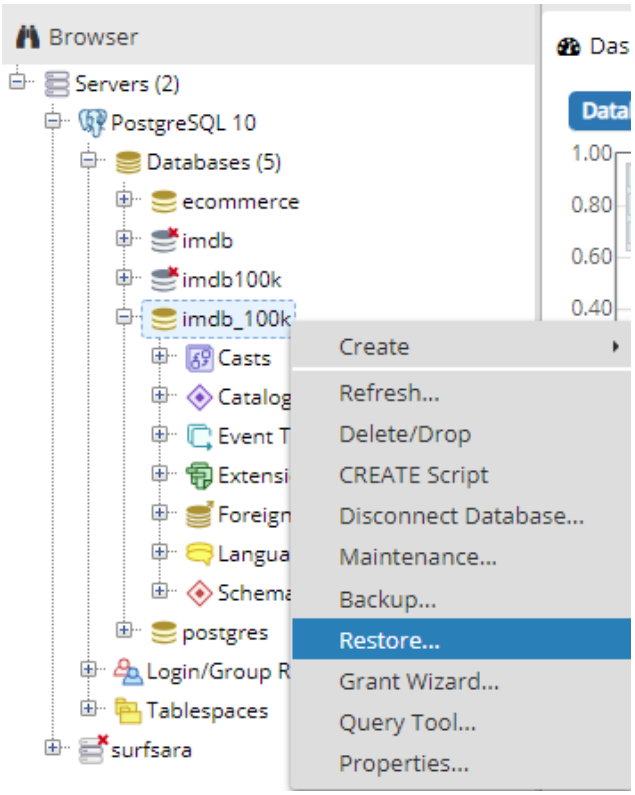
```
CREATE DATABASE imdb_100k
    WITH
    OWNER = postgres
    ENCODING = 'UTF8'
    CONNECTION LIMIT = -1;
```

The new database will show on the Browser.

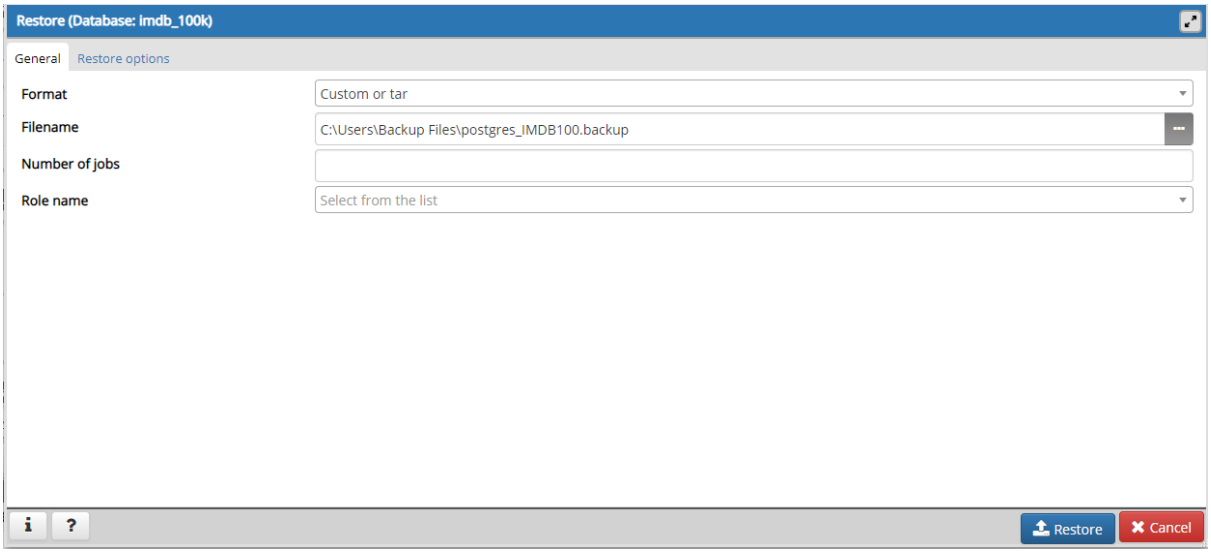


Double click on the database to connect to it

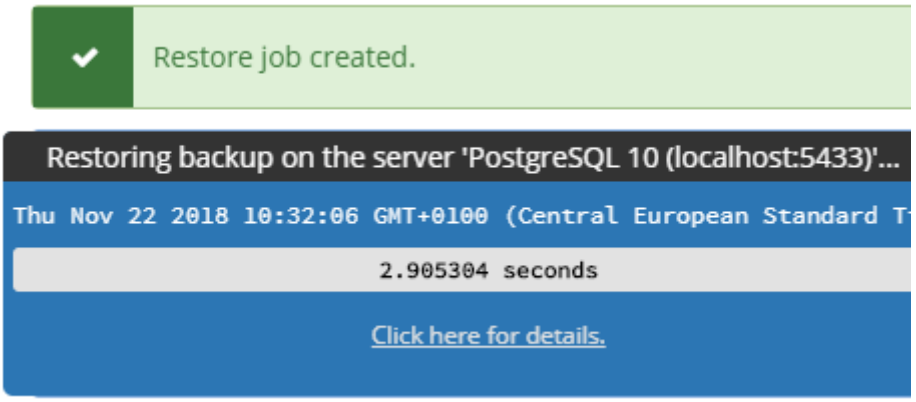
Right click on the database, and select **Restore:**



This will open the Restore Wizard, select location of the backup file, for example



Finally, click **Restore,** this will start the Restore job:



Once it says **Successfully completed,** the database will be ready for queries.