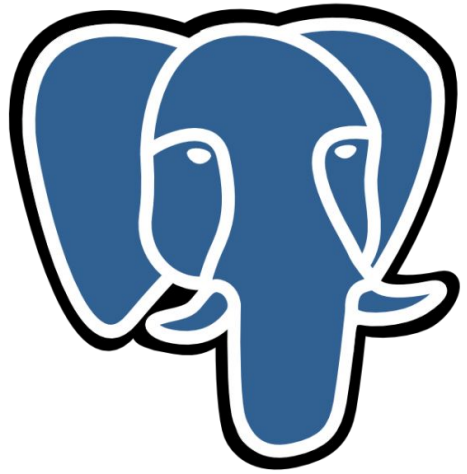
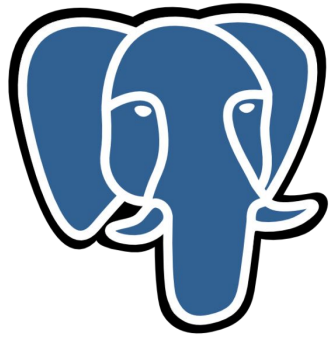
Installing PostgreSQL



PostgreSQL

PostgreSQL

PostgreSQL is widely used, open-source Relational Database Management System originally developed in 1986 at UC Berkeley. Read about current features at https://www.postgresql.org/about/



PostgreSQL

PgAdmin is an administration and development platform for PostgreSQL

Installation of Postgres and PgAdmin

Download and install the latest stable (not beta) version of PostgreSQL for your OS:
https://www.enterprisedb.com/downloads/postgres-postgresql-downloads

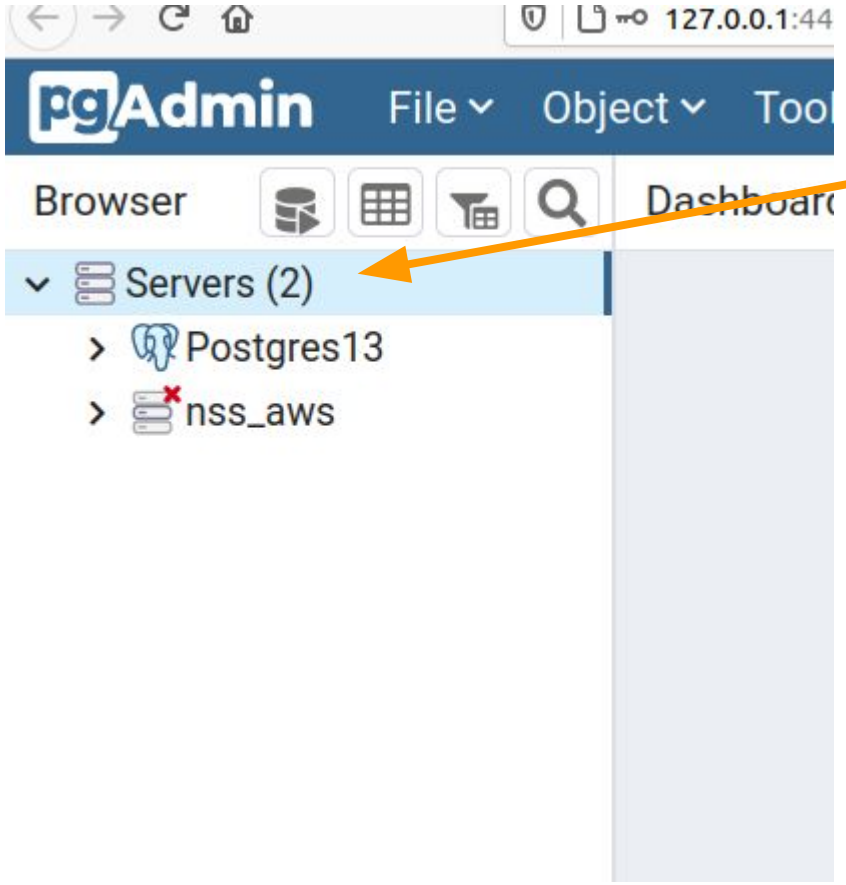
When installing postgres, you should be given the option to also install PgAdmin, but in case you are not, you can download it from https://www.pgadmin.org/download/.

During installation you can accept all the defaults. A few things to confirm:

1. Database Port is 5432
2. Database password is **“postgres”**

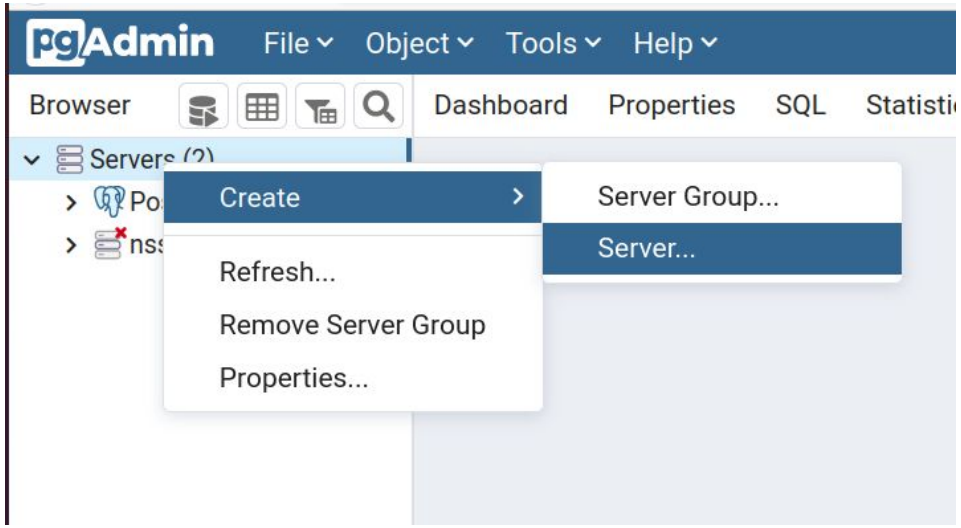
Since this is not secure data and it is for learning use, **set the postgres and pgAdmin administrative passwords to “postgres”**. This is not something you would do with secure data in a production environment!

Initial Setup



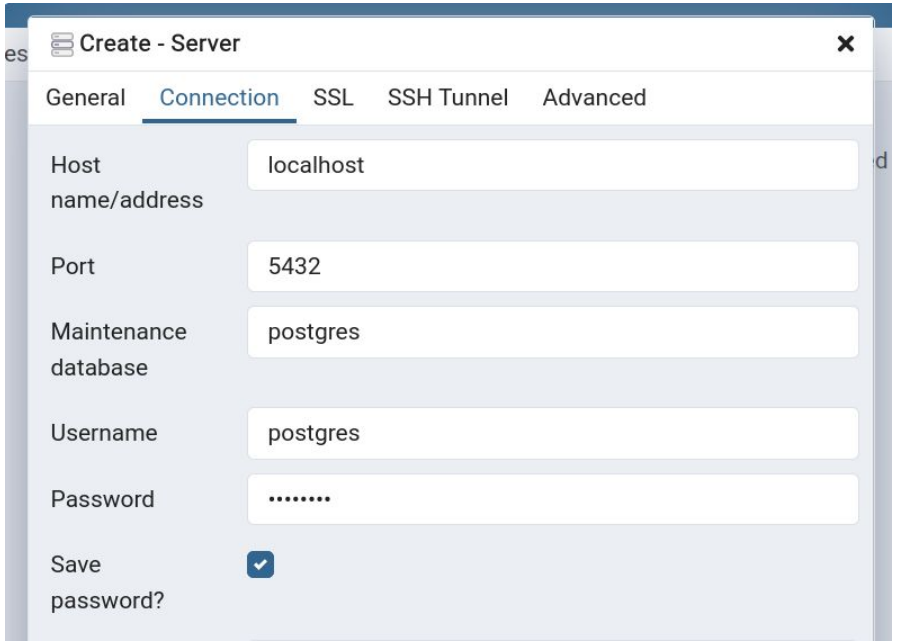
- After installing postgres and pgAdmin, launch PgAdmin
- In the upper left, click on “Servers”
- You may or may not see a Server. If not, you’ll need to create one.

Creating a Server (Not Needed if you see a server already)



If you don't have a server already, right-click on "Servers" and choose Create -> Server

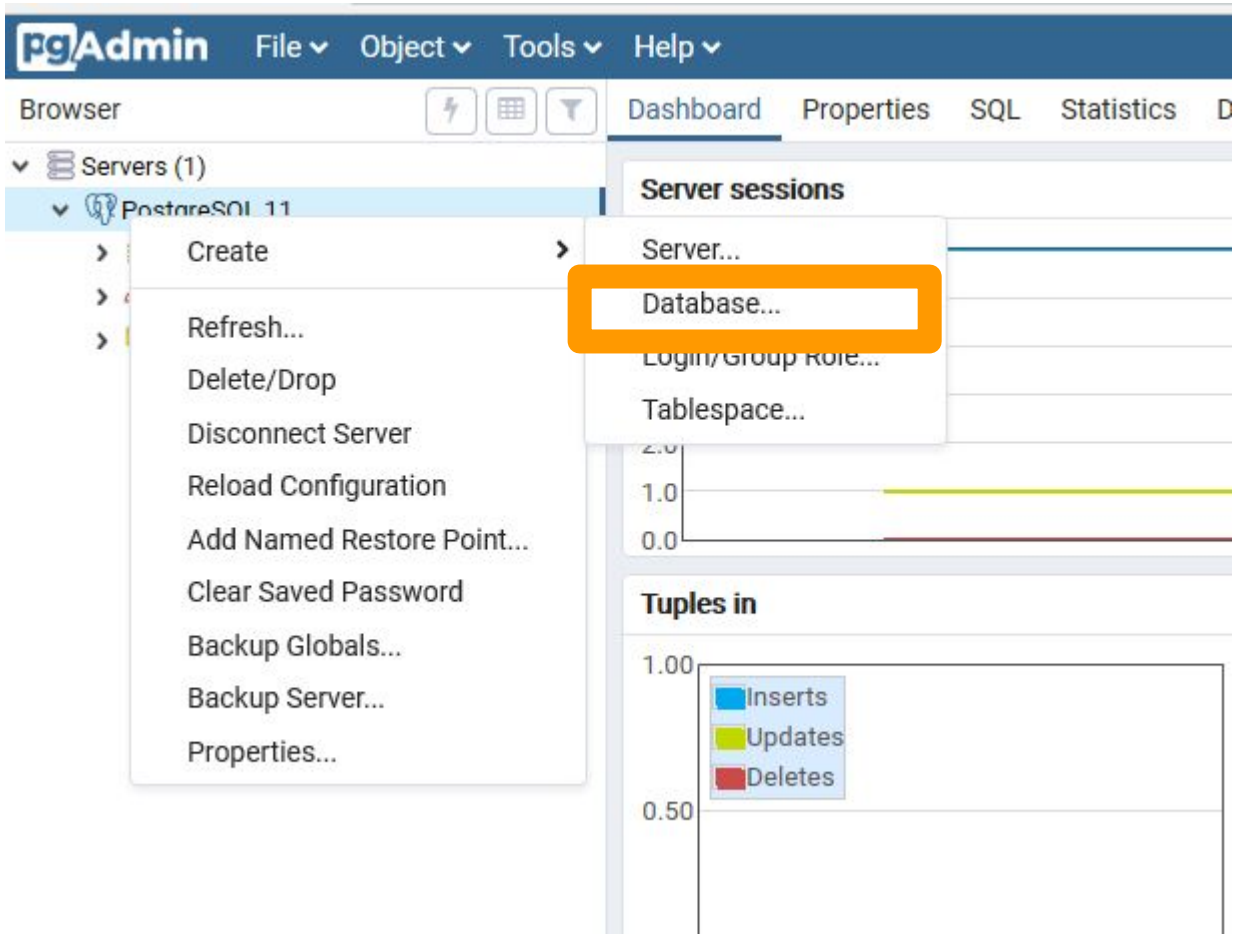
Name it "Postgres" and then on the connection tab, set Host name/address to "localhost"

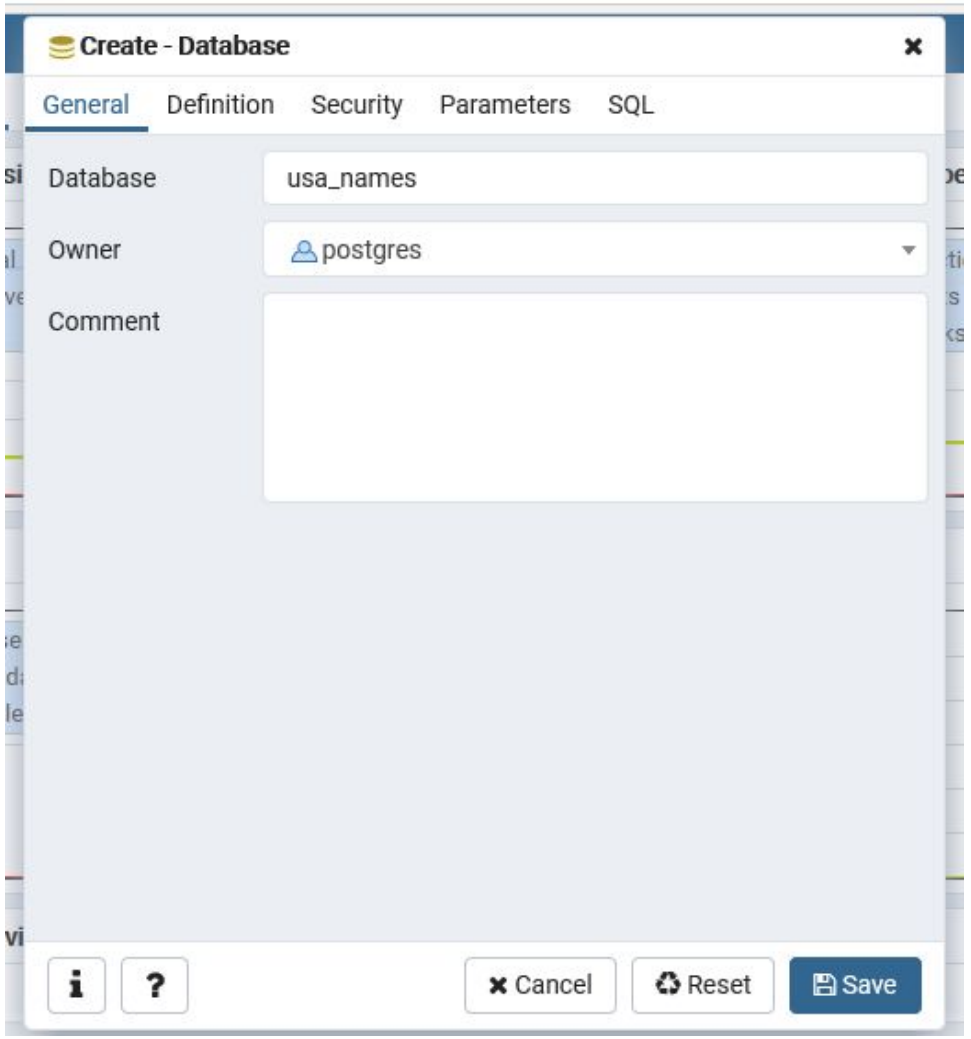


Double-check that the Port is set to 5432 and input your password (postgres)

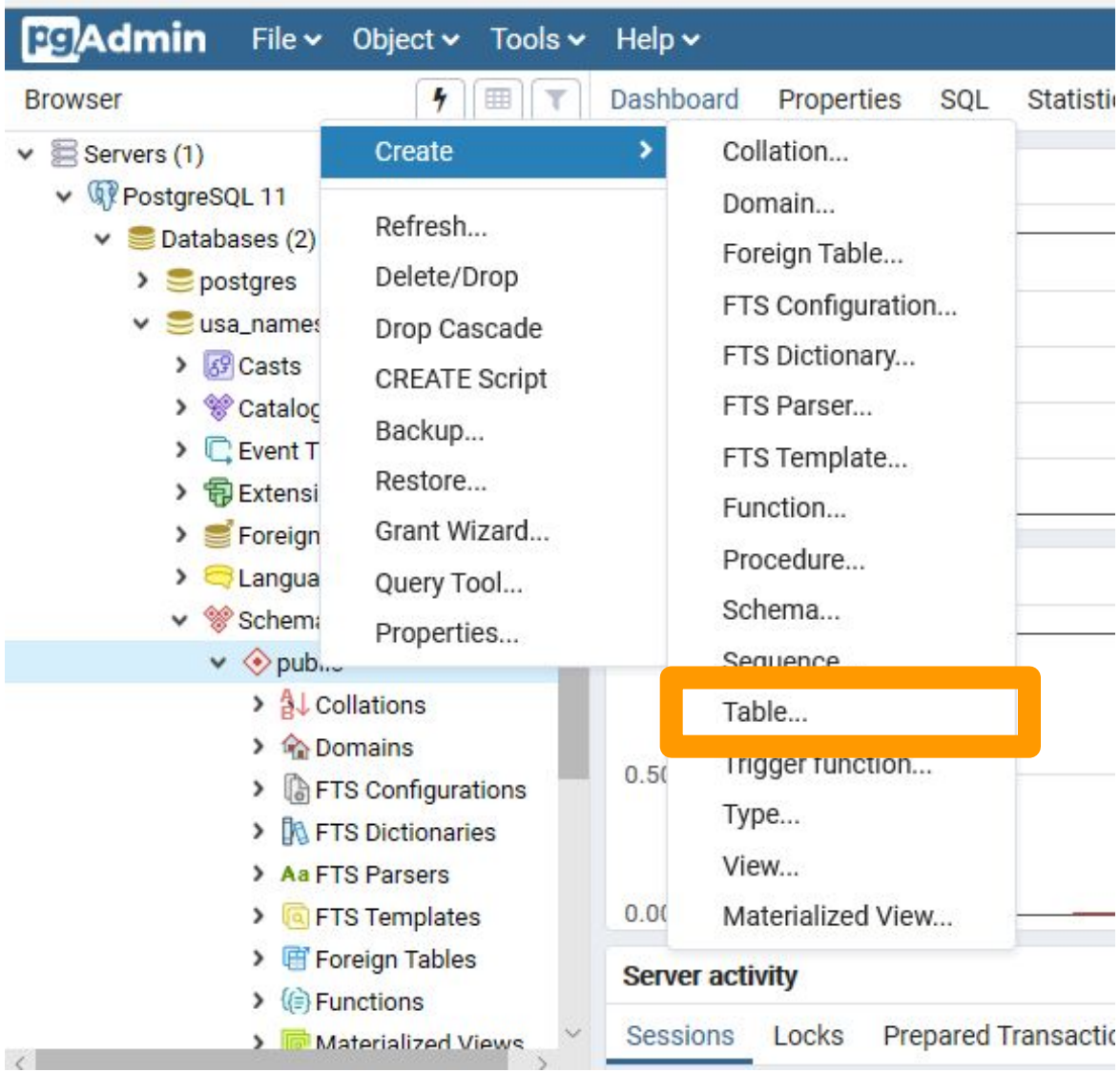
Then click "Save".

Now we're ready to create our first database.
Right-click on your Postgres Server and choose Create > Database
Name this Database "usa_names".

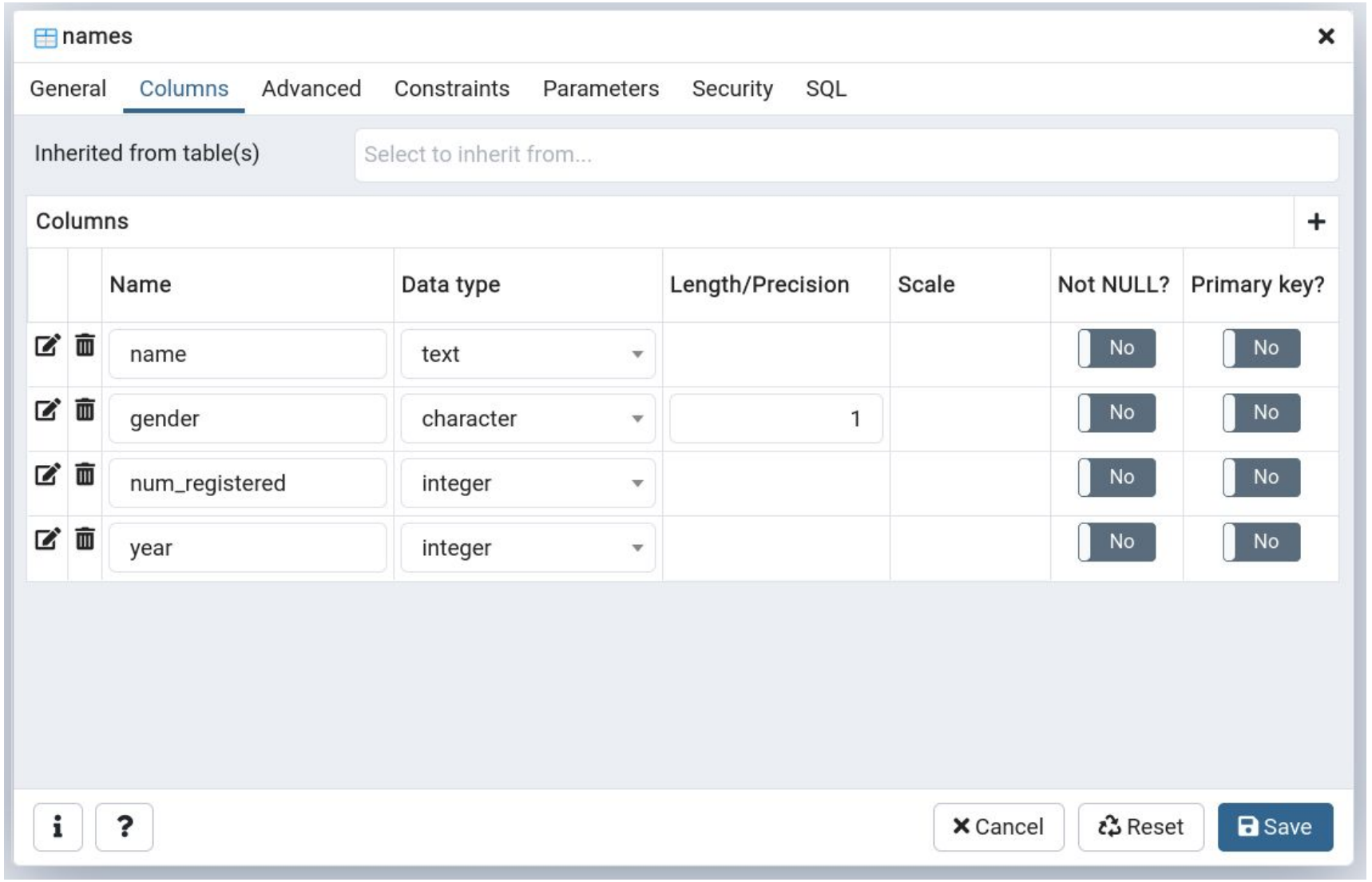


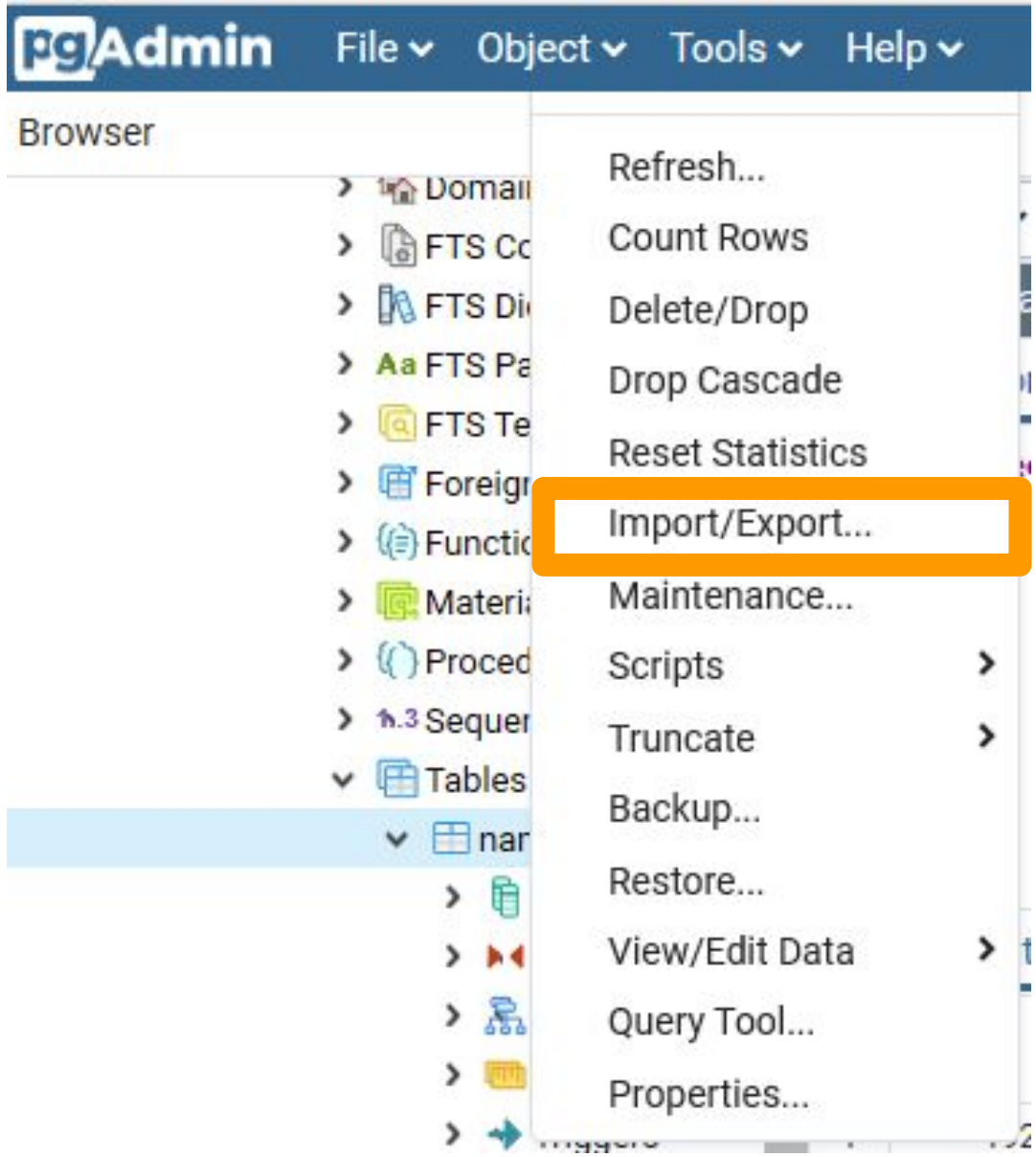


Expand the usa_names database, right-click the *public* Schema, and choose Create > Table.



Name this table “names”
Go to the Columns tab and add the columns as shown.





Right-click on the *names* table and select Import/Export

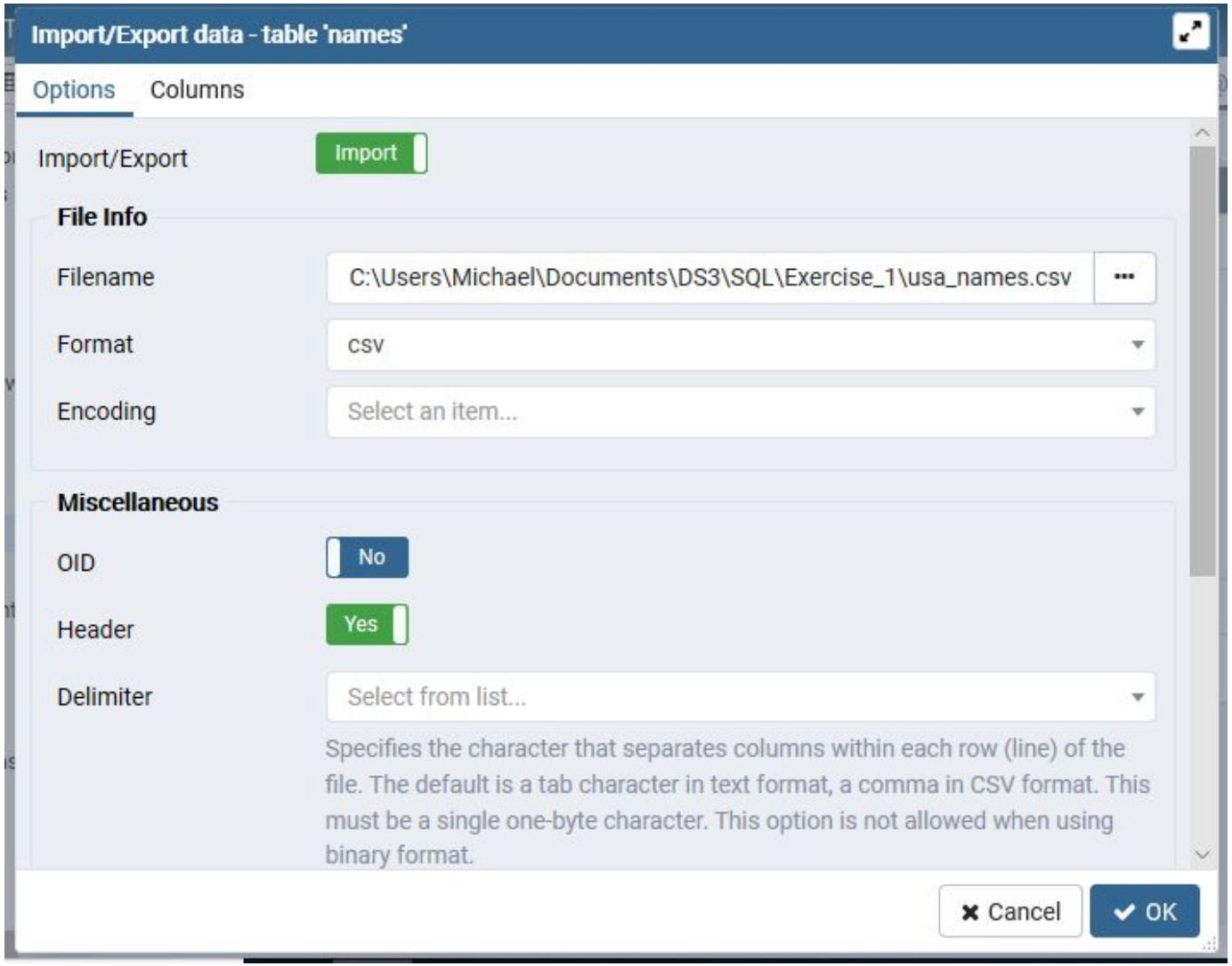
Download the USA names dataset from

https://drive.google.com/file/d/18-1x7hsWaRncGPoi257uCo3xHK3k5T-V/view?usp=sharing

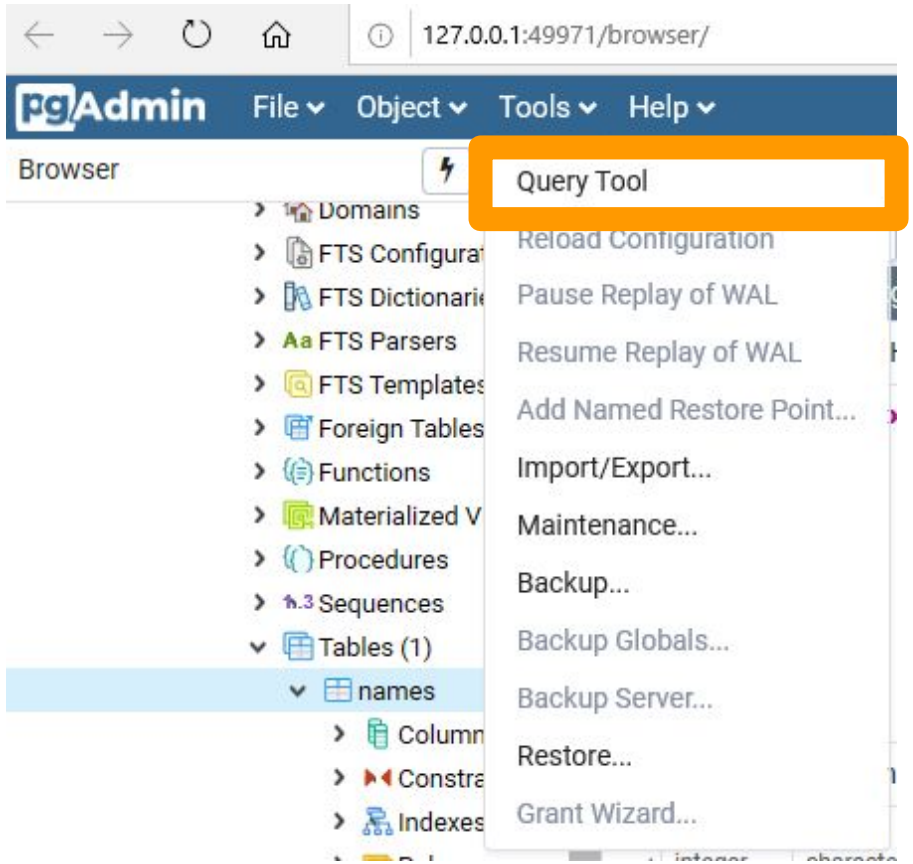
This contains a count by year of all names registered with the Social Security administration. (In order for a name to appear there must have been at least 5 registrations in a single state for that name in that year).

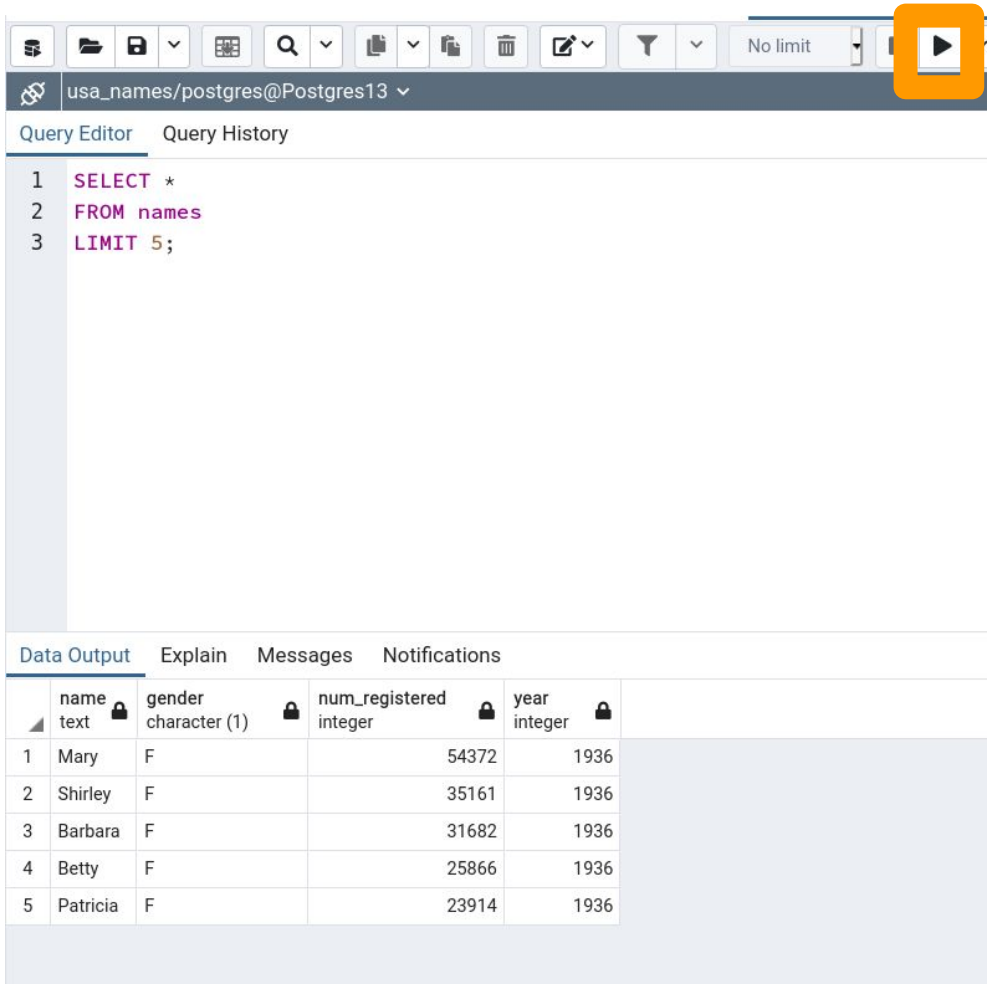
In the next step, we'll convert the downloaded csv into a table in postgres.

- Select **Import** (Export is selected by default)
- For Filename, click the … button and browse to where you saved the file
- Make sure that **Header** is set to **Yes**



- Launch the query editor Tools > Query Tool
- To check that everything worked correctly, run the query “SELECT * FROM names LIMIT 5;”
- To run the query, either use the Play (or Lightning Bolt, depending on your version of pgAdmin) button or the F5 key





	name text	gender character (1)	num_registered integer	year integer
1	Mary	F	54372	1936
2	Shirley	F	35161	1936
3	Barbara	F	31682	1936
4	Betty	F	25866	1936
5	Patricia	F	23914	1936