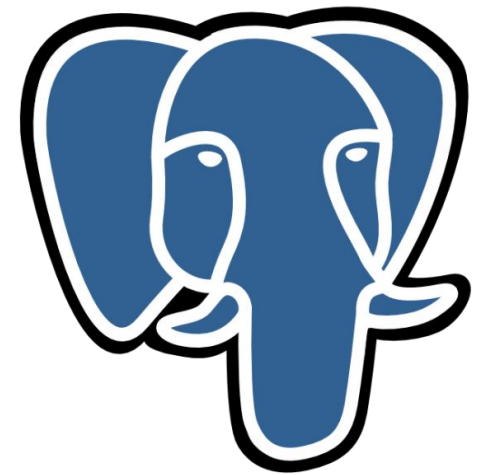




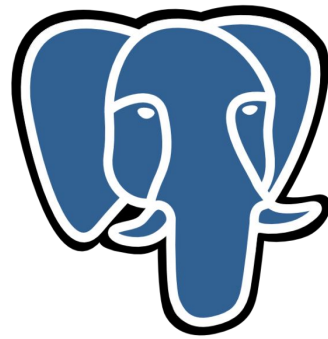
Installing PostgreSQL



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:

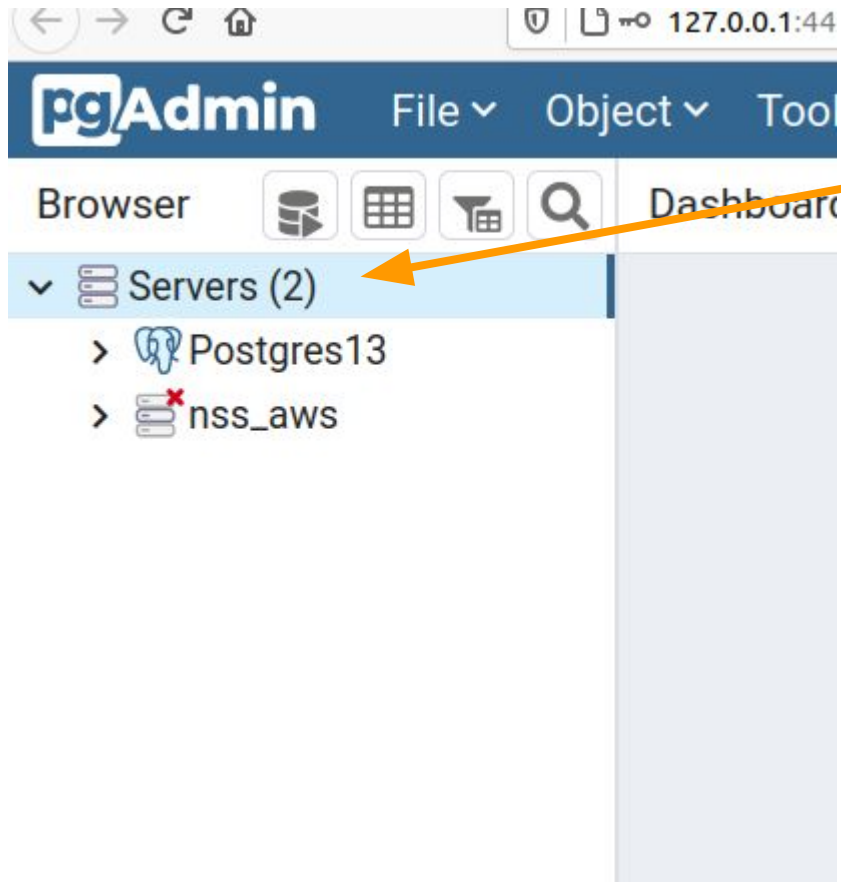
<https://www.enterprisedb.com/downloads/postgres-postgresql-downloads>

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

1. Database Port is 5432
2. Database password is **"postgres"**

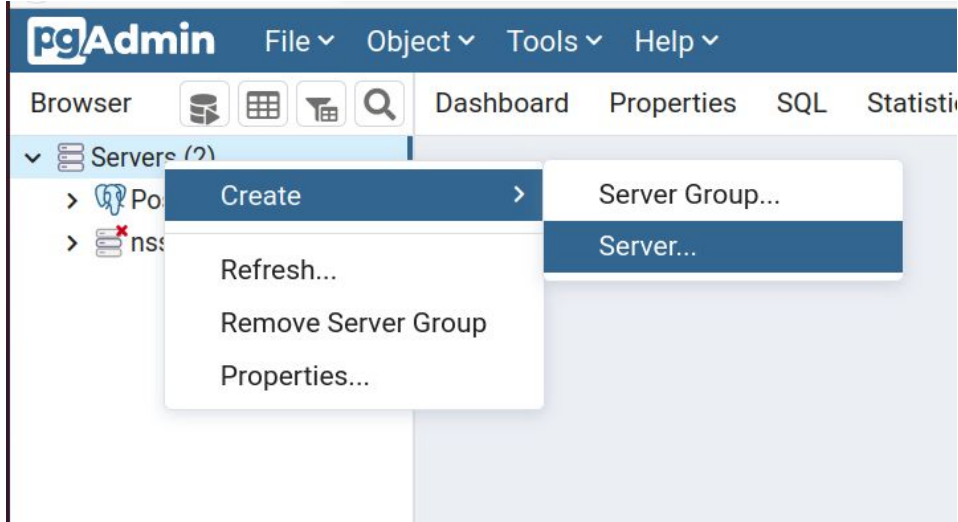
Since this is not secure data and it is for learning use, **set the postgres and pgAdmin administrative passwords to "postgres"**. This is not something you would do with secure data in a production environment!

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)

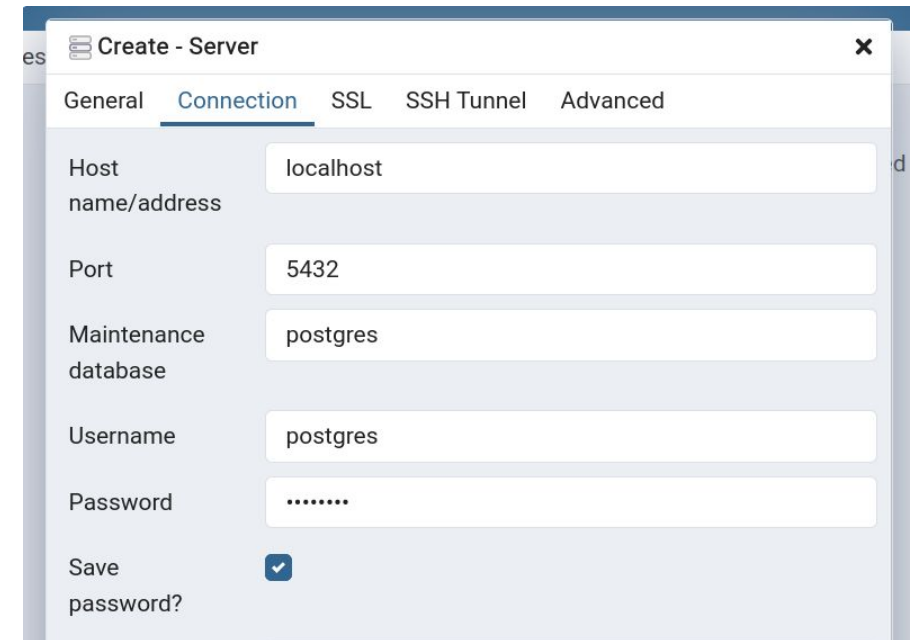


If you don't have a server already, right-click on "Servers" and choose Create -> Server

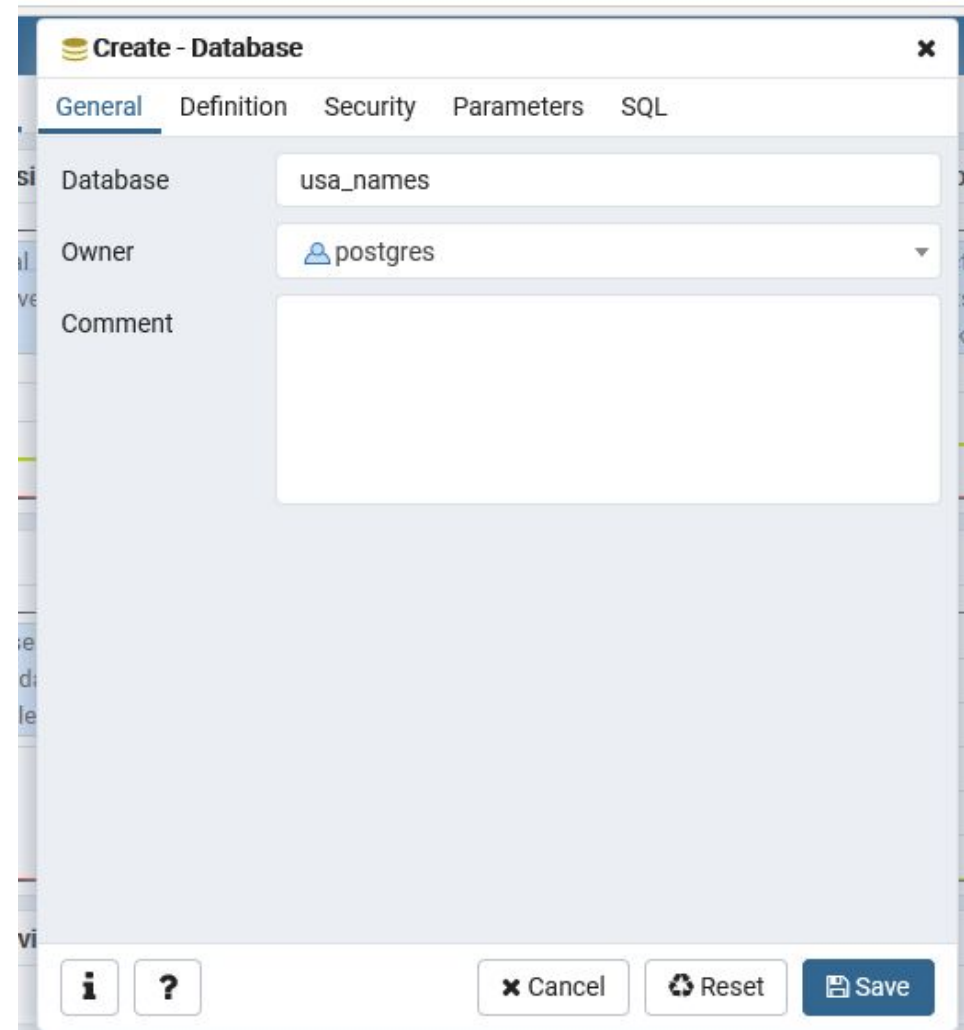
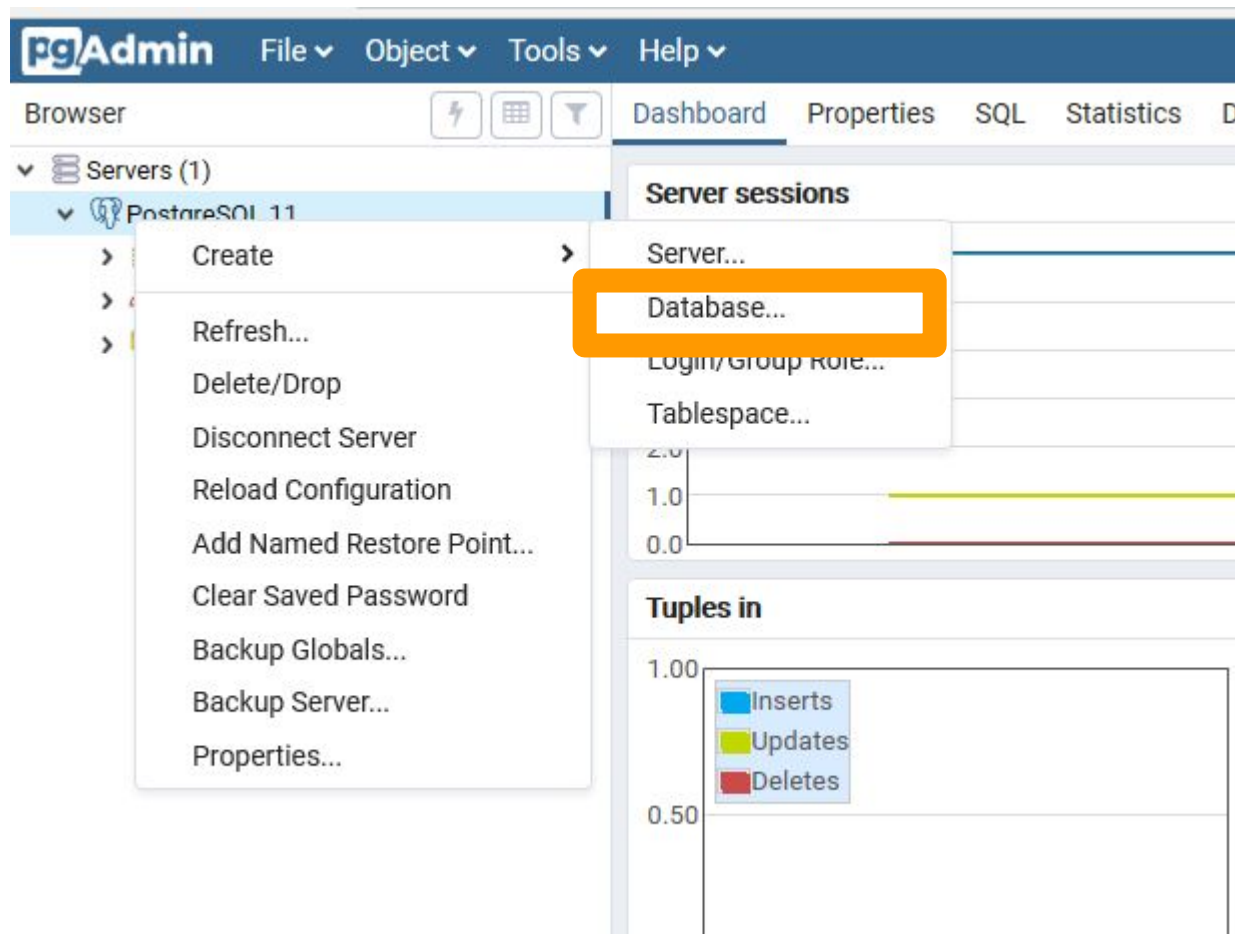
Name it "Postgres" and then on the connection tab, set Host name/address to "localhost"

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

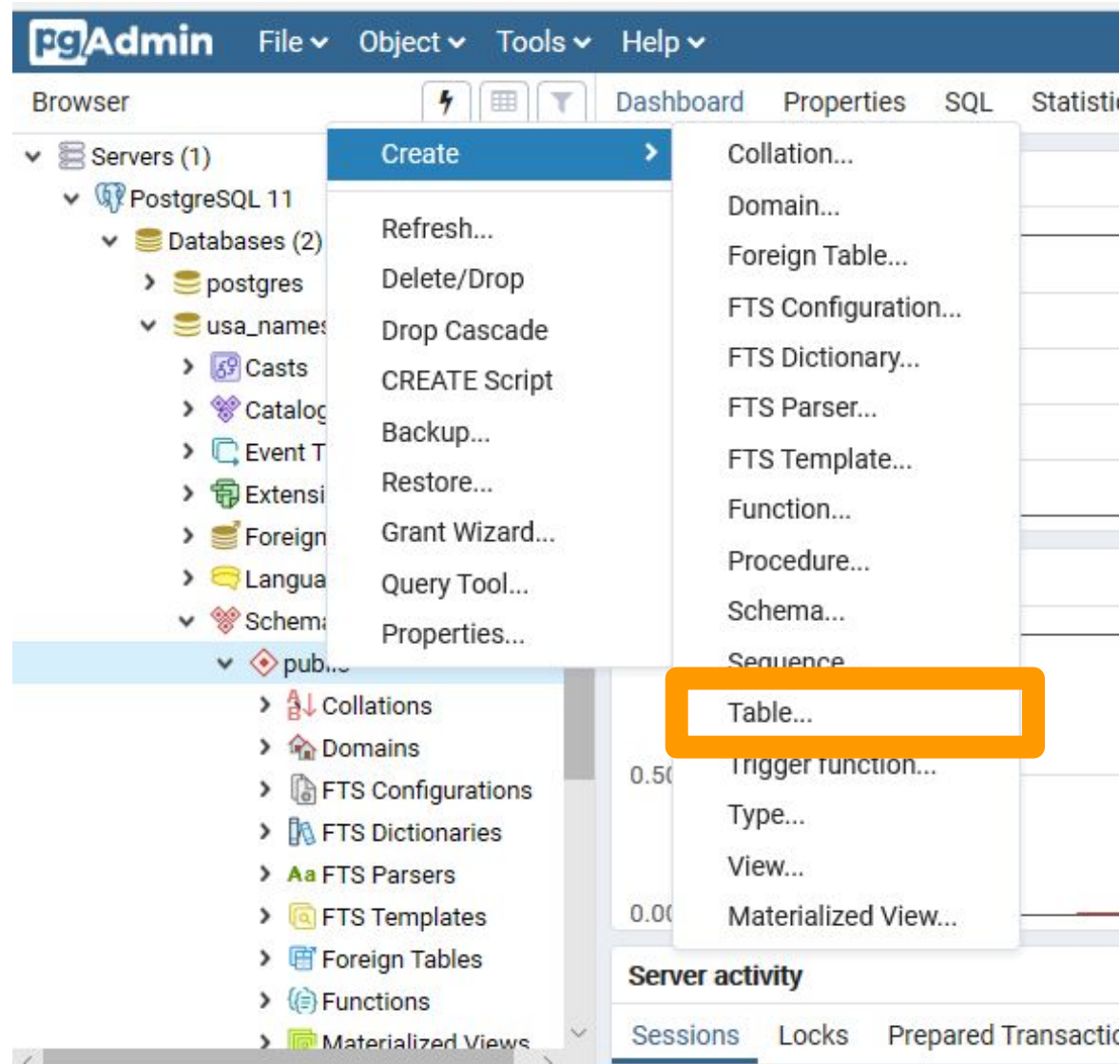
Then click "Save".



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.

names

General

Columns

Advanced

Constraints

Parameters

Security

SQL

Inherited from table(s)

Select to inherit from...

Columns

+

		Name	Data type	Length/Precision	Scale	Not NULL?	Primary key?
		<div>name</div>	<div>text</div>			<div>No</div>	<div>No</div>
		<div>gender</div>	<div>character</div>	<div>1</div>		<div>No</div>	<div>No</div>
		<div>num_registered</div>	<div>integer</div>			<div>No</div>	<div>No</div>
		<div>year</div>	<div>integer</div>			<div>No</div>	<div>No</div>

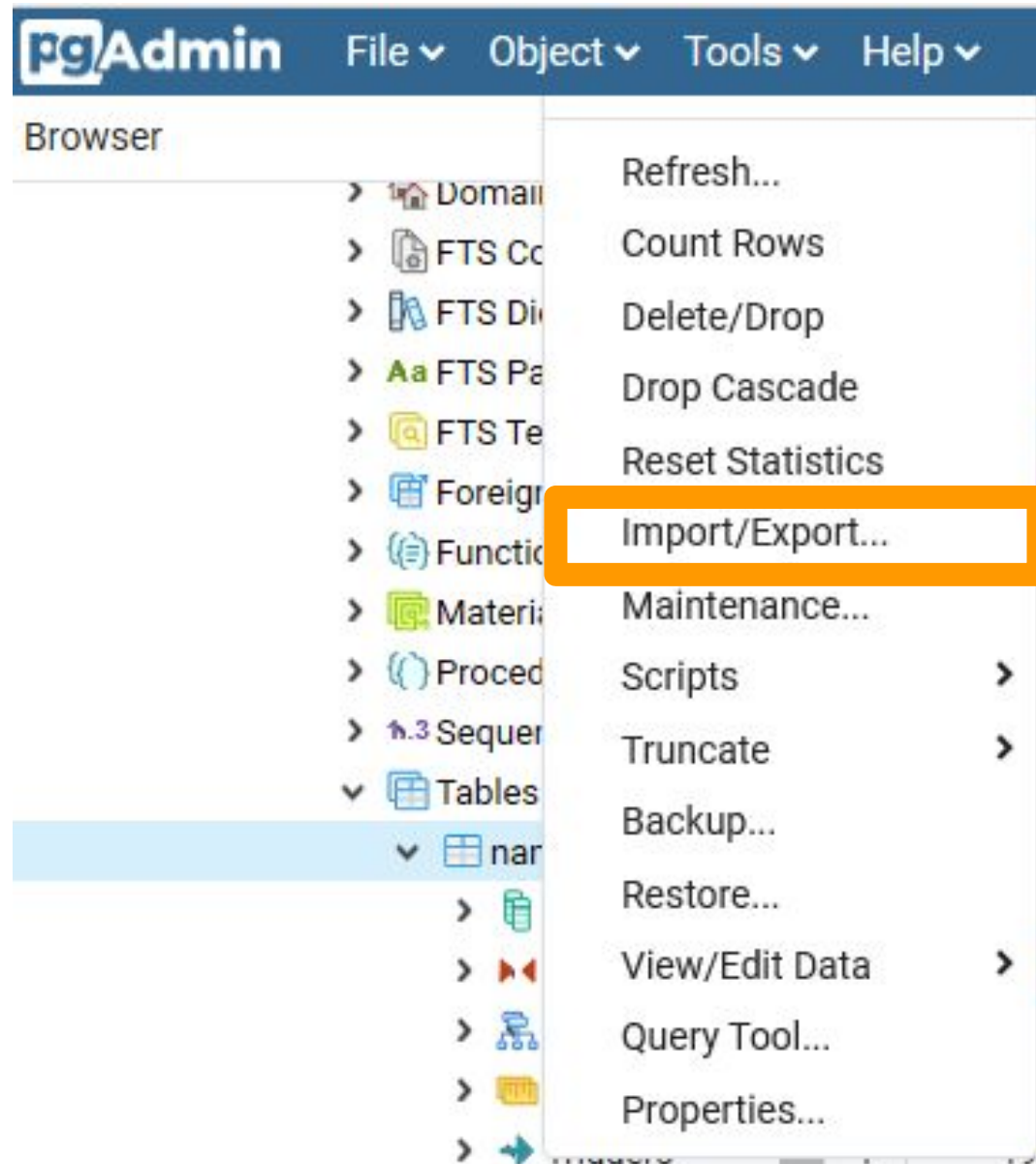
i

?

Cancel

Reset

Save



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**

Import/Export data - table 'names'

Options Columns

Import/Export **Import**

File Info

Filename C:\Users\Michael\Documents\DS3\SQL\Exercise_1\usa_names.csv ...

Format CSV

Encoding Select an item...

Miscellaneous

OID No

Header Yes

Delimiter Select from list...

Specifies the character that separates columns within each row (line) of the file. The default is a tab character in text format, a comma in CSV format. This must be a single one-byte character. This option is not allowed when using binary format.

Cancel OK

- 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

