This tutorial is a quick starting guide to help you get started with the data.

The database is a [PostgreSQL](https://en.wikipedia.org/wiki/PostgreSQL) (PSQL) database, one of the object-relational database management systems. To access the database, I went through the following two routes:

1. **Through the PSQL shell**: download PSQL [here](http://www.postgresql.org/download/windows/). Then open the PSQL shell, log in, and query away. You’ll discover differences from SQL commands along the way, but this [cheat sheet](http://www.postgresonline.com/downloads/special_feature/postgresql83_psql_cheatsheet.pdf) will get you started with some handy short cuts.
2. **Through Python**: The learning curve is a bit steep on this one.
   1. Of course, you’ll need python installed on your machine.
   2. You’ll also need the *psycopg2* package. If you’re lucky, typing ‘pip install psycopg2’ in command line will do the job (you can also try [easy\_install](https://pythonhosted.org/setuptools/easy_install.html#downloading-and-installing-a-package)). If not, you’ll have to go to their [website](http://initd.org/psycopg/download/) and do the installation yourself.
   3. Now we are ready to talk to the database. We have a couple options:
      1. [PyGreSQL](http://www.pygresql.org/index.html) seems like it has the most beginner-friendly syntax, however I wasn’t able to get it to work on my machine for some reason. It looks like this option would be good in terms of an easy log-in and running queries.
      2. You can use [*psycopg2*](https://wiki.postgresql.org/wiki/Psycopg2_Tutorial) mentioned above.
      3. You can use [*sqlalchemy*](http://docs.sqlalchemy.org/en/latest/core/tutorial.html). This is what I recommend if you like object-oriented programming. This is also transferrable to other SQL dialects too. Sqlalchemy has an object-relational-mapper (ORM) component that allows you to treat tables like python classes.
   4. If you use pandas and all you want to do is get the tables onto your machine, download the [psql\_db](https://github.com/jibidnd/psql_db.git) module to get started.

To get you started, get the psql\_db module. You will probably have to manually put this inside your python library folder (i.e. where your *pandas* package is located). Read the README file for details. In short, it gets you the table you want and lets you start working in python without worrying about the database.

Here’s an example:

Import psql\_db

x=psql\_db.db(‘host’, ‘username’, ‘password’, ‘dbname’)

x.get\_trmi(‘trmiv22\_hou\_etf’, start\_date=’2006-03-01’

1. **Other Options**: [This](https://www.a2hosting.com/kb/developer-corner/postgresql) is a wonderful resource to get you started. It also has a lot of useful guides on things you might want to do in psql.