Data Analytics: Setting Up your Environment

Postgres Setup

Here are the postgres docs , which can be useful for setting stuff up.

MacOS Postgres Setup

Install postgres

1. If you haven't already installed brew, do it now. Instructions here
2. If you haven't already installed brew cask, do it now by entering `brew install caskroom/cask/brew-cask` in your shell
3. If you already had them, make sure they're up to date by entering `brew update && brew upgrade brew-cask` in your shell.
4. Install your Postgres database. The easiest way to to install the pre-build application (which comes with an adorable icon) using the following command:
5. `brew cask install postgres`
6. After the installation is complete, use Spotlight to search for `postgres` and open the Application. It will ask you if you want to move it to the Applications folder. Select "Yes". You should now have an elephant symbol on the top bar of your desktop

Set up psql

1. Go to the home directory by running `cd` in the terminal
2. Open your terminal configuration file in your favorite text editor:
3. `atom ~/.bash_profile`
4. Insert the following line at the end of the file and save the file.
5. `export PATH=/Applications/Postgres.app/Contents/Versions/latest/bin:$PATH`

6. Open a new terminal window and run `psql`

Install psycopg2

1. Install with pip: `pip install psycopg2`
2. You might get this error message when you try to import the module: `Library not loaded: libssl.1.0.0.dylib`
3. Here's a stack overflow post with the solution. Basically psycopg2 is looking for a module that's in a different space on your computer and you need to set up a symbolic link (shortcut) to the module. Use these commands (replace YOURUSERNAME with your actual username).
4. ```
   sudo ln -s /Users/YOURUSERNAME/anaconda/lib/libssl.1.0.0.dylib /usr/lib
   sudo ln -s /Users/YOURUSERNAME/anaconda/lib/libcrypto.1.0.0.dylib /usr/lib
   ```

Ubuntu Postgres Setup

Postgres & psql

1. In a terminal, type `sudo apt-get install postgresql`
2. Run the following commands, replacing `$USER` with your system username
3. `sudo -u postgres createuser --superuser $USER`
4. `sudo -u postgres createdb $USER`
5. Open a new terminal and run `psql`

psycopg2

1. In a new terminal window, type `conda install psycopg2`
2. By default, psycopg2 looks for postgres in the wrong place, so we'll create a symbolic link pointing it to the correct postgres server. Enter this command: `sudo ln -s /var/run/postgresql/.s.PGSQL.5432 /tmp/.s.PGSQL.5432`
   ```

3. Now, when using the `psycopg2.connect()` function in python, you only need to specify the `database` keyword, and not `user` or `host`

Windows Postgres Setup

Installation Directions:
https://www.openscg.com/bigsql/docs/installwindows/installwin/

Download location:
https://www.openscg.com/bigsql/oscg_download/?file=packages/PostgreSQL-10.4-1-win64-bigsql.exe&user=${auth.authName}

Microsoft Excel Setup

Buy product here and follow installation instructions:
https://products.office.com/en-us/compare-all-microsoft-office-products-h?tab=1

Tableau Setup

Tableau will be set up part way through the course. You do not need to start the course with Tableau installed.