How to Install Program

Here is an install guide for installing all of the dependencies necessary to run our program along with installing the program itself. This install guide is for installing the program on Ubuntu 14.04 LTS. The guide also assumes that the install is being run on a clean installation of Ubuntu 14.04 and thus the dependencies that need to be installed, have not already been installed.

Make sure you have an up to date version of Python 2.7. For Ubuntu, Python 2.7 comes pre-installed, so we will not cover installing Python. However, if you need to install Python, you can do so here: https://www.python.org/downloads/release/python-2710/

Before we start, make sure that all of these commands are run from your main user profile.

You can run the following command to check and see what version of Python you have installed
$ python -V

Before we start installing packages, we need to make sure that our package repository is up to date, which can be done with the following command
$ sudo apt-get update

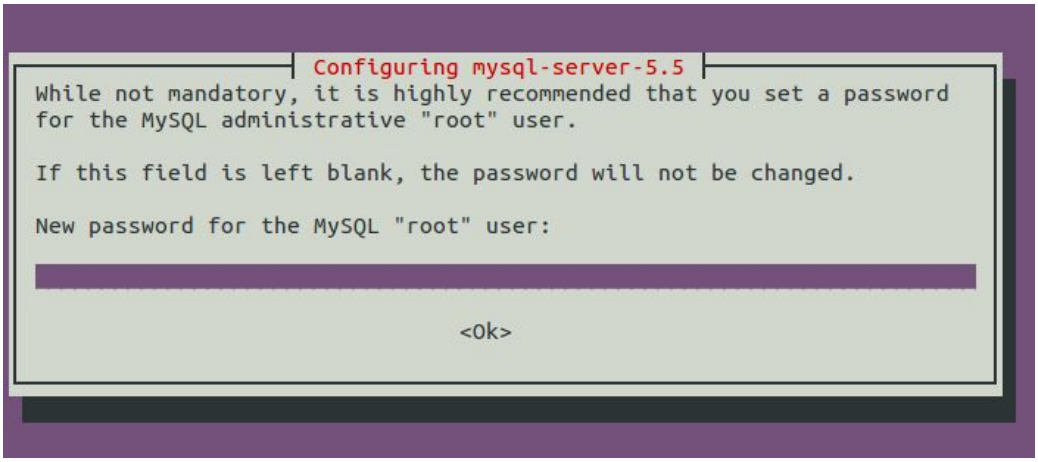
Next, we need to install the python development tools package
$ sudo apt-get install python-dev

The next step is to install PostgreSQL if you do not have it already installed. This can be done with the following command, which also makes sure that the libpq-dev package is installed, which is needed to run the program.
$ sudo apt-get install postgresql libpq-dev

Once this is done, we need to make sure that the pg_config variable has been correctly added to our PATH. This can be done by typing the following command and making sure that it does not give you an error message.
$ pg_config

Now, we are going to install MySQL Server. We are also going to need to install a MySQL development package libmysqlclient-dev as well. This can be done with the following command.
$ sudo apt-get install mysql-server libmysqlclient-dev

While the above command is running, you will be shown a window during the MySQL server installation that prompts you to enter a root user password. Here is what it should look like.



It is recommended to go ahead and set a password for your MySQL “root” user and please remember this password as you will need it to access your database later when running the viewmydb program.

Once this is done, we need to make sure that the mysql_config variable has been correctly added to our PATH. This can be done with the following command and making sure that an error message is not returned.
$ mysql_config

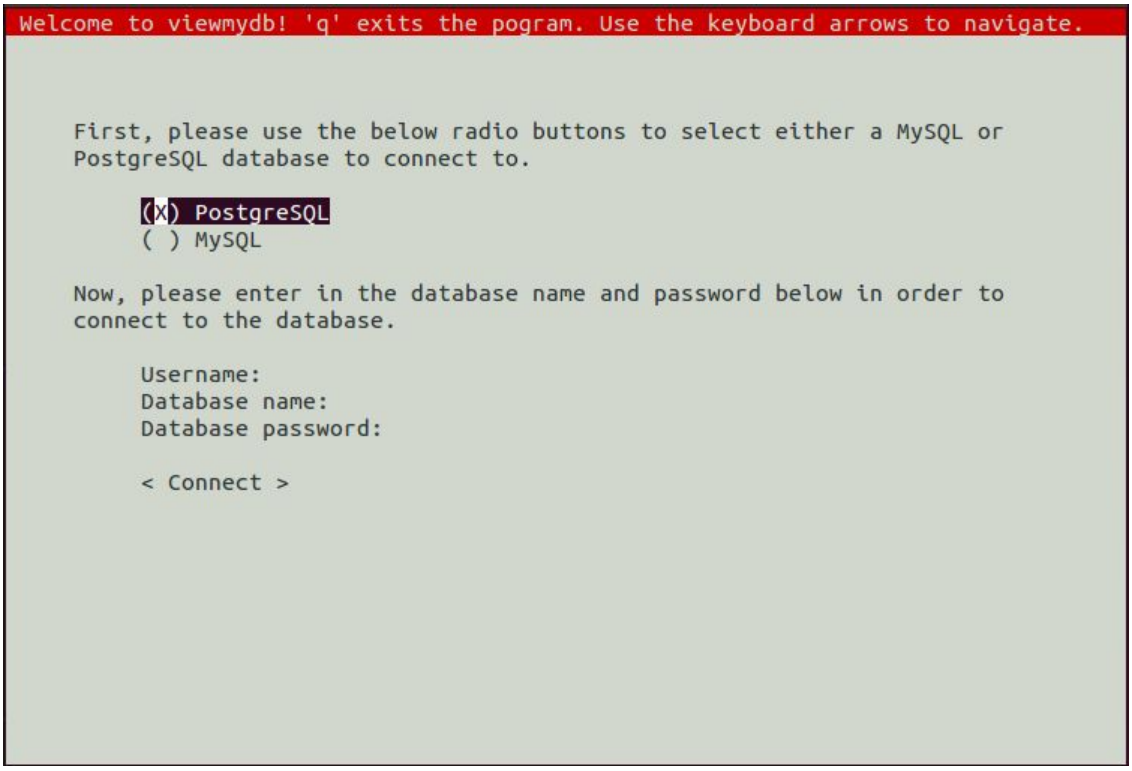
Next, we need to install pip, which is a python package manager and will be used to install of our application code and setup the python dependencies for the program. Pip can be installed with the following command
$ sudo apt-get install python-pip

Now that pip is installed, we can run the command to install the viewmydb application.
$ sudo pip install viewmydb

Once all of this is done, the application has been successfully installed.

How to Run Program
After you have gone through the previous mentioned installation procedure, the program start procedure can now be triggered through a PATH variable, which was created upon installation. The program can therefore be run from the command line by typing in the following command.
$ viewmydb

Once that command is run, you should see the following screen show up in your terminal and you can now start using the viewmydb program. If you have just installed both MySQL and PostgreSQL, then you can view the getting started guide to see how to quickly set up both of these so that you have a database that you can access. If you have no databases created, then you cannot connect to a database and use the program.



Special Hardware, OS, or Runtime Requirements

There are no special hardware or runtime requirements for our program. In terms of OS requirements, the program was built using a Linux OS, specifically Ubuntu 14.04 LTS. So, we know that the program does not have any operating system compatibility issues with Ubuntu 14.04 LTS. That being said, our program was created with portability in mind and although we have not explicitly tested it on other operating systems, it should be fairly portable especially within different linux distributions. The portability of the program depends largely upon being able to set up the required dependencies on whatever OS you are running.

Here is a list of the dependences that need to be pre-installed for the program:

Python 2.7 https://docs.python.org/2.7/ (version: 2.7.10)
https://www.python.org/downloads/release/python-2710/

pip https://pypi.python.org/pypi/pip (version: 7.1.0)

Python Development Package
- Ubuntu: python-dev http://packages.ubuntu.com/search?keywords=python-dev
- Debian: python-dev https://packages.debian.org/wheezy/python-dev

PostgreSQL http://www.postgresql.org/download/

PostgreSQL libpq-dev

Ubuntu:	http://packages.ubuntu.com/trusty/libpq-dev
Debian:	https://packages.debian.org/sid/libpq-dev

MySQL Server https://dev.mysql.com/downloads/mysql/

MySQL libmysqlclient-dev

Ubuntu:	http://packages.ubuntu.com/trusty/libmysqlclient-dev
Debian:	https://packages.debian.org/wheezy/libmysqlclient-dev

Python package dependencies handled automatically through pip:

urwid	https://pypi.python.org/pypi/urwid/1.3.0	(version: 1.3.0)
psycopg2	https://pypi.python.org/pypi/psycopg2/2.6.1	(version: 2.6.1)
MySQL-python	https://pypi.python.org/pypi/MySQL-python/1.2.5	(version: 1.2.5)
nose	https://pypi.python.org/pypi/nose/1.3.7	(version: 1.3.7)
viewmydb	https://pypi.python.org/pypi/viewmydb	(version: latest)