# Rosetta Installation Documentation For MacBook 2020 Users

## About

In November of 2020, Apple released a line of Mac products containing a M1 chip with ARM architecture. Previously, they had been using Intel chips with x86 architecture. This has caused issues with some applications and software packages designed to work on x86 architecture. If you have a new 2020 MacBook with the M1 chip, you may encounter some issues when working through the course. Luckily, Apple has included an x86 emulator called Rosetta on all their new machines.

If you are having issues due to the M1 chip, you will need to set up a Rosetta terminal and install some software onto it. This guide will walk you through setting up a Rosetta terminal, installing Homebrew, and using Homebew to install Python and libpq. This should allow you to use psycopg2. You may encounter other problems when working with the M1 chip. If this documentation does not resolve your issues, please reach out to a TA.

## Setting up Rosetta

1) **Install Rosetta on the Command Line**

   To install Rosetta for the command line, enter the following command:

   ```
   /usr/sbin/softwareupdate --install-rosetta --agree-to-license
   ```

   This command will automatically agree to Apple's software license agreement for Rosetta. If you would like to read through this license and manually click agree, then omit the flag --agree-to-license.

2) **Set Up A Rosetta Terminal**

   Now, go to your Utilities Folder (Finder -> Go Menu/Applications -> Utilities)

   You'll see an Application called Terminal in the Utilities folder.

   Control + Click on Terminal, and then select Duplicate. You'll need to enter your password in order to do this.

   Rename the duplicate Terminal ***"Rosetta Terminal"***

   Control Click on the new Rosetta Terminal and select "Get Info"

A panel will appear called Rosetta Terminal Info. In the General section of this panel, you'll see a checkbox next to "Open Using Rosetta." Click this check box, then close out of the panel. You may wish to reopen the Info panel to verify that this option is still selected.

You will want to use this terminal instead of the default terminal when running applications which give you M1 issues.

3) **Installing Homebrew**

To install Homebrew onto your Rosetta Terminal enter the following command.

```
arch -x86_64 /bin/bash -c "$(curl -fsSL
https://raw.githubusercontent.com/Homebrew/install/master/install.sh)"
```

Now that you have homebrew set up, you can use it to install packages onto your terminal.

4) **Installing Packages and Python**

**An Important Note: As you install these packages, you might be prompted to execute additional commands not outlined in the documentation. If your computer prompts you to do, for instance, execute some commands to set your PATH variable, then please do as you are prompted.**

To install a package on Rosetta, you'll need to type:

```
arch -x86_64 brew install <package>
```

For instance, To get Python 3.7 on your Rosetta Terminal, type:

```
arch -x86_64 brew install python3.7
```

Now that you have Python installed, you'll need to set up a few things.

python3.7 -m pip install ...
python3.7 -m venv venv
python3.7 -m IPython

Lastly, you'll need to use:

```
arch -x86_64 brew install libpq
```

Now, psycopg2 should be compatible with Rosetta and you should be able to run Postgres normally!