

Chapter-1 -Code Setup

For Mac OS:

Step0 (Optional): This step is very specific to mac (as it handles the missing dependencies in Mac)

<https://brew.sh/>

Downloading brew

```
/bin/bash -c "$(curl -fsSL https://raw.githubusercontent.com/Homebrew/install"
```

```
echo >> /Users/pyarelal/.zprofile  
echo 'eval "$(/opt/homebrew/bin/brew shellenv)"' >> /Users/pyarelal/.zprofile  
eval "$(/opt/homebrew/bin/brew shellenv)"
```

For linux

Step1: Installing the Python

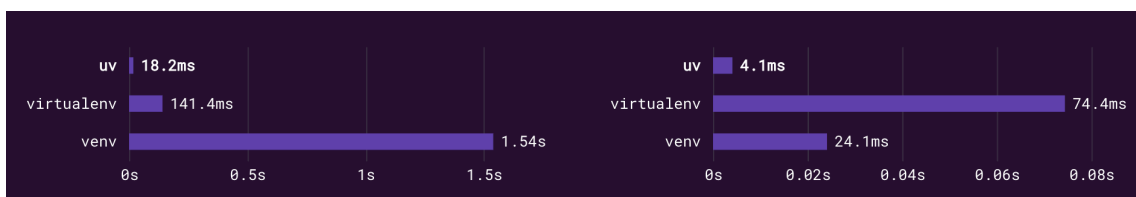
As there are many ways to install the python version, but i found this works better for me. You could use any way to setup the python version.

<https://www.python.org/downloads/>

As of now i can see python 3.13 is latest, but we will work with little lower version so that other pakages are compatible with our python version. General rule prefer (2 lower version) i.e. 3.11 for us.

```
brew install python@3.11
```

Step2: Create a virtual environment



We will use uv package manager.

1. Install uv → uv is more faster than pip

```
pip3.11 install uv
```

2. creating the virtual environment

```
uv venv --python=python3.10
```

activate :

```
source .venv/bin/activate
```

location of python

```
which python
```

version check

```
python --version
```

3. Installing Packages

```
uv pip install <packages>
```

Installing the packages from the text file.

```
uv pip install -r requirements.txt
```

open new jupyter notebook

```
uv run jupyter lab
```