Lab Experiment 4: The Raft Consensus Algorithm Pre-installs

**Installations:**

1. **Anaconda/Pyenv**
2. **Tmux**
3. **Linux/macOS system/VM/container. If you HAVE to use windows, use WSL2.**

**Instructions:**

Please read **ALL the instructions** carefully before proceeding.

**1: Installing Conda or Pyenv**

Raftos was not designed for the newer versions of Python, so we’re going to need **Python 3.6.8, or at the very most, Python 3.8.11.**

For Linux users, **pyenv** should suffice:

<https://realpython.com/intro-to-pyenv/#installing-pyenv>

After installing pyenv, make sure to add the following to your .bashrc/.zshrc:

export PATH="$HOME/.pyenv/bin:$PATH"

eval "$(pyenv init -)"

eval "$(pyenv virtualenv-init -)"

Then install the specific version of Python that we want, with

pyenv install 3.6.8

If you’re on a Mac, it’s possible pyenv won’t work for you. In that case, you’ll need to use **Conda.**

Follow [**this**](https://docs.conda.io/projects/conda/en/4.6.0/user-guide/install/macos.html)guide to install **Miniconda**. I

You will need to install **python 3.8.11**;, **you will encounter strange error messages (that can be ignored)** related to asyncio and Futures, later on in the experiment.

Then create a virtual environment with python 3.8.11.

conda create -n py3.8.11 python=3.8.11

**2: Installing tmux**

Install **tmux** by typing sudo apt install tmux, or if you’re on Mac, brew install tmux. If you don’t have brew installed on your Mac by this point (and you really should), use [this guide](https://www.digitalocean.com/community/tutorials/how-to-install-and-use-homebrew-on-macos) to install brew first.

**3: Downloading raftos**

Create a directory called **CC\_E4\_<YOUR\_SRN> (THIS IS IMPORTANT, WE’LL BE IDENTIFYING SCREENSHOTS BY THIS)**  and clone the repo <https://github.com/zhebrak/raftos> inside it. Raftos is one of the many implementations of raft that are publicly available. You can clone raftos using the command

git clone https://github.com/zhebrak/raftos