## Project 2

In this assignment, you will learn some basic SDN programming on the <u>Pyretic</u> platform, using the same VM from assignment 1.

- 1. Read the <u>Pyretic Documentation</u>
- 2. Clone the pyretic repo to your VM

```
$ git clone https://github.com/frenetic-lang/pyretic.git
```

\$ sudo pip install networkx bitarray netaddr ipaddr pytest ipdb sphinx pyparsing==1.5.7 yappi

\$ sudo gem install Jekyll

3. Patch asynchat Python dependency

\$ wget https://raw.github.com/freneticlang/pyretic/master/pyretic/backend/patch/asynchat.py

```
$ sudo mv asynchat.py /usr/lib/python2.7/
```

\$ sudo chown root:root /usr/lib/python2.7/asynchat.py

4. Setup your environment variables EITHER by adding the following lines to end of .profile:

```
export PATH=$PATH:$HOME/pyretic:$HOME/pox
export PYTHONPATH=$HOME/pyretic:$HOME/mininet:$HOME/pox
```

5. Implement a <u>simple mac learning module</u>. To run your pyretic module, use the following command:

```
pyretic.py -m p0 --use pyretic pyretic.tutorial.of tutorial
```

6. Write a simple monitoring module that counts all packets going to or leaving host 1

## **Submission**

Submit your code in a zip or tarball file to Canvas.

**DUE: Nov 12<sup>th</sup> 11:59 pm ET**