Windows users need to use WSL with Ubuntu 18 or Ubuntu 20 for this lab. Type Ubuntu at a windows terminal. It is recommended that you run the following commands after changing the working directory to a mounted drive. For example, /mnt/c/ would point to C Drive which is accessible through Windows File Explorer.

ns3 requires python3, gcc to be installed - these are usually present by default in Ubuntu, macOS, and WSL.

Download and extract ns3

```
1. wget http://www.nsnam.org/release/ns-allinone-3.30.1.tar.bz2;
```

```
2. tar -xf ns-allinone-3.30.1.tar.bz2;
```

Install ns3

- 3. cd ns-allinone-3.30.1/;
- ./build.py --enable-examples --enable-tests;

Test and run ns3

- 5. cd ns-3.30.1/;
- 6. ./waf --run scratch-simulator;

In Windows, you can also access the files created within WSL via

- 1) Open "File Explorer"
- 2) Connect to your running WSL instance just like you would connect to a network drive: --> Enter \\wsl\$\Ubuntu in the address bar
- 3) Browse your WSL folder structure

Following are additional steps if you get an error at INSTALL ns3 for MAC users especially with the M1 chip.

- 1) Go to file "ns-allinone-3.30.1/ns-3.30.1/wscipt" Change line 65 to VERSION = '3.30.1'
- 2) Delete the file "ns-allinone-3.30.1/ns-3.30.1/Version"
- 3) Go to folder "ns-allinone-3.30.1/ns-3.30.1" and run CXXFLAGS="-Wall" ./waf configure --enable-examples --enable-tests ./waf -vv

It should compile successfully