## PRE LAB SOLUTIONS

- 1. On Linux, the groups command will show which groups you are part of
- 2. The \$ sign holds the result of the last executed command
- 3. Ctrl + Z
- 4. You can find the kernel version by typing in: uname -v . You can find the nodename by typing in: uname -n. You can find both together by typing in: uname -vn.
- 5. The ~ symbol is the home directory. The . symbol is the current directory. The .. symbol is the previous directory, you go up a directory. The / symbol is the root directory.
- 6. Pid is the process id. It shows the processes that are running. You should use the **ps** command to find the pid for a process that is currently running.
- 7. Type in: getent passwd | cut -d: -f1,7
- 8. Both commands are used to gain administrative privileges. However, the 'sudo' command temporarily gives you administrative privileges for the single command ran with it and does not require credentials. The 'su root' switches you to the root account and required root credentials. It allows you to do all administrative tasks until you log out.
- 9. You use the cron software to schedule tasks. Use the cron tab command to manage all of the cron jobs.
- 10. Solution in Christy Jose-script.sh

## LAB SOLUTIONS

- 1. Refer to Christy-topo.py
- 2. dump

This screenshot shows the topology of the given network. In the beginning, I saved my code in the file test.py. Later, I renamed the file to Christy-topo.py.

## pingall

```
mininet> pingall

*** Ping: testing ping reachability

h1 -> h2 h3 h4

h2 -> h1 h3 h4

h3 -> h1 h2 h4

h4 -> h1 h2 h3

*** Results: 0% dropped (12/12 received)

mininet>
```

The pingall command checks the connectivity of all of the hosts in the network by checking if any packets were dropped

3. iperf

```
mininet>
mininet>
mininet> iperf

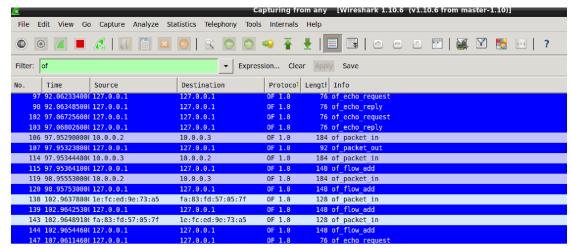
*** Iperf: testing TCP bandwidth between h1 and h4

*** Results: ['62.0 Gbits/sec', '62.1 Gbits/sec']

mininet>
```

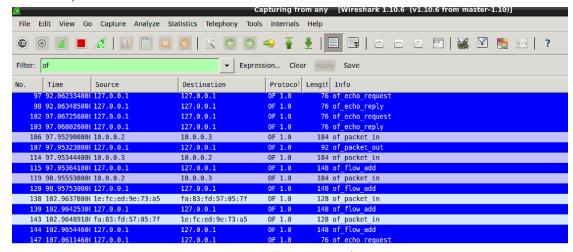
The connect was 62.0 Gbits/sec

4. .



There are 5 packet in messages

b. The source IP addresses are 10.0.0.2, and 10.0.0.3. The destination IP addresses are the same ones. For the packet\_out, the source IP address is 127.0.0.1, and the destination IP address is 127.0.0.1



c. 48 entries were generated on wireshark. The types of icmp entries that showed up were Echo request and Echo reply.

## Christy Jose

