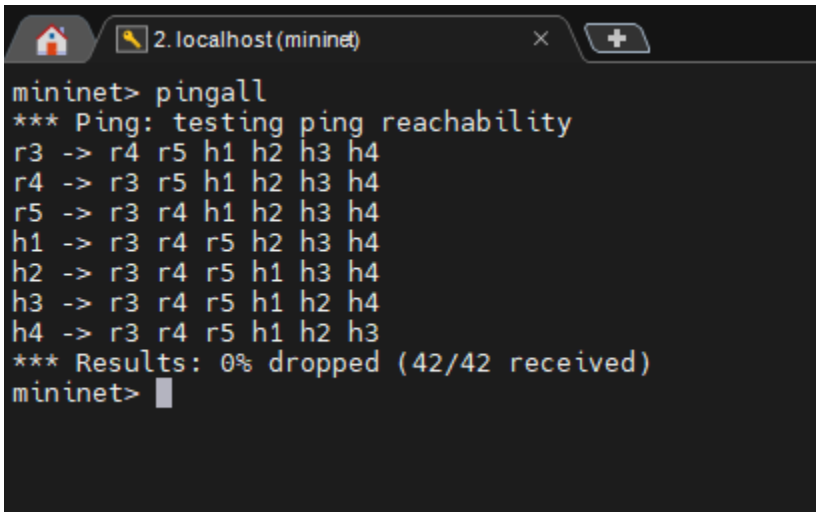
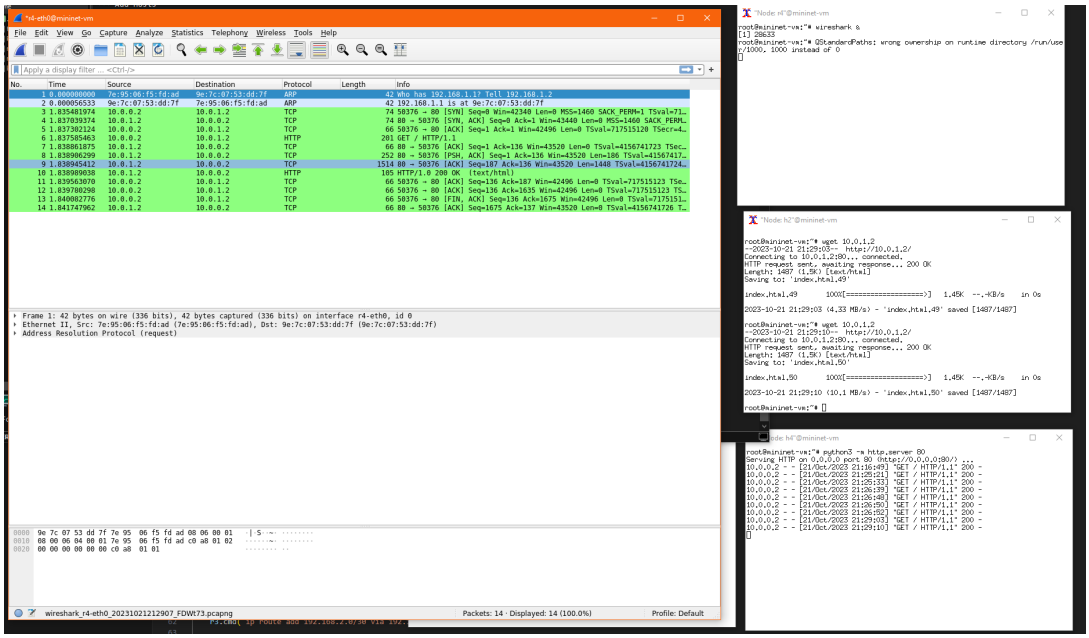
Task deliverables

the program running without errors
successful pingall at the mininet

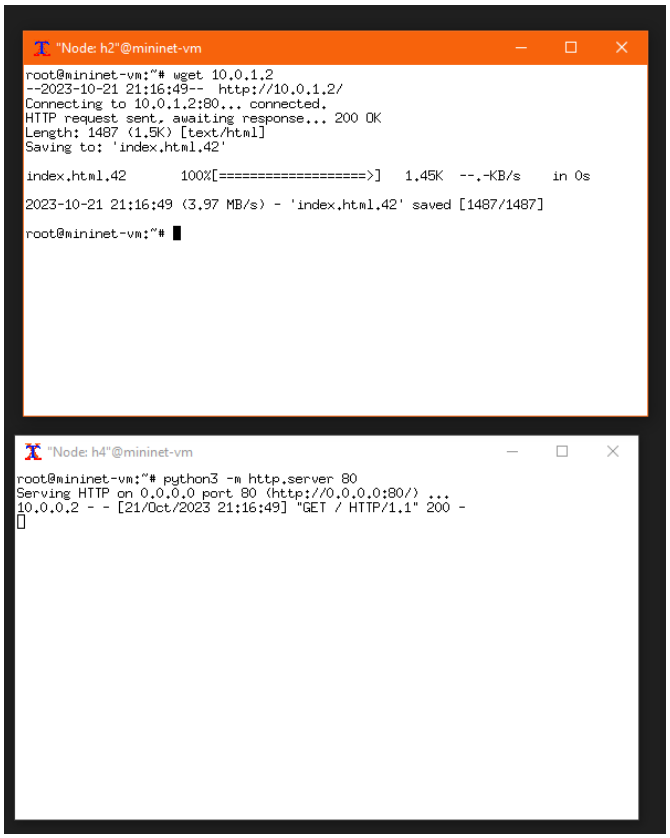


a successful chat between the two clients

a wireshark trace between a client and the server



successful wget of the web server index file



*** What were any interesting findings and lessons learned?**
I found it interesting that I had to manually create and connect the links by adding hosts, links, and port rules individually. Keeping notes of which addresses goes where was a meticulous but invaluable lesson to think about when imagining how early programmers invented networks.

*** Why didn't the original program forward packets between the hosts?**
The original program, most importantly, didn't have port rules that defined how the routers link with each other. It also didn't have the script to set true to allow forwarding with net IPv4 addresses. The broadcasts weren't included in the original, which played a large part in defining the location of the hosts.

*** Is the line ' r3.cmd('sysctl -w net.ipv4.ip_forward=1') ' required?**
Yes, …ip_forward=1 is set to true. While ip_forward=0 is set to false when the program is terminated.

Code changes to script files.
Lines of code changed in PA4_legacy_Network.py

- Switches 1 &2 moved on top of routers lines.
- IP addresses assigned.
- With host 1-4 a defaultRoute attribute was added
- AddLink with r3->r4 and r4->r5 added parameters to link routers.
- For r3->r5 added porting rules
- Under config and switches added what should be the cert script.

Lines of code changed with PA4_mod_server_Team8.py

- Changed IP address to h1 ip addresses since h1 was the server.