Assignment 5
Sali Sharfman 209128966
Josef Sokolov 337959928

Part 1: myping

We first created an ICMP lien protocol, the environment we chose

Make the protocol is Linux because it is more convenient to work there.

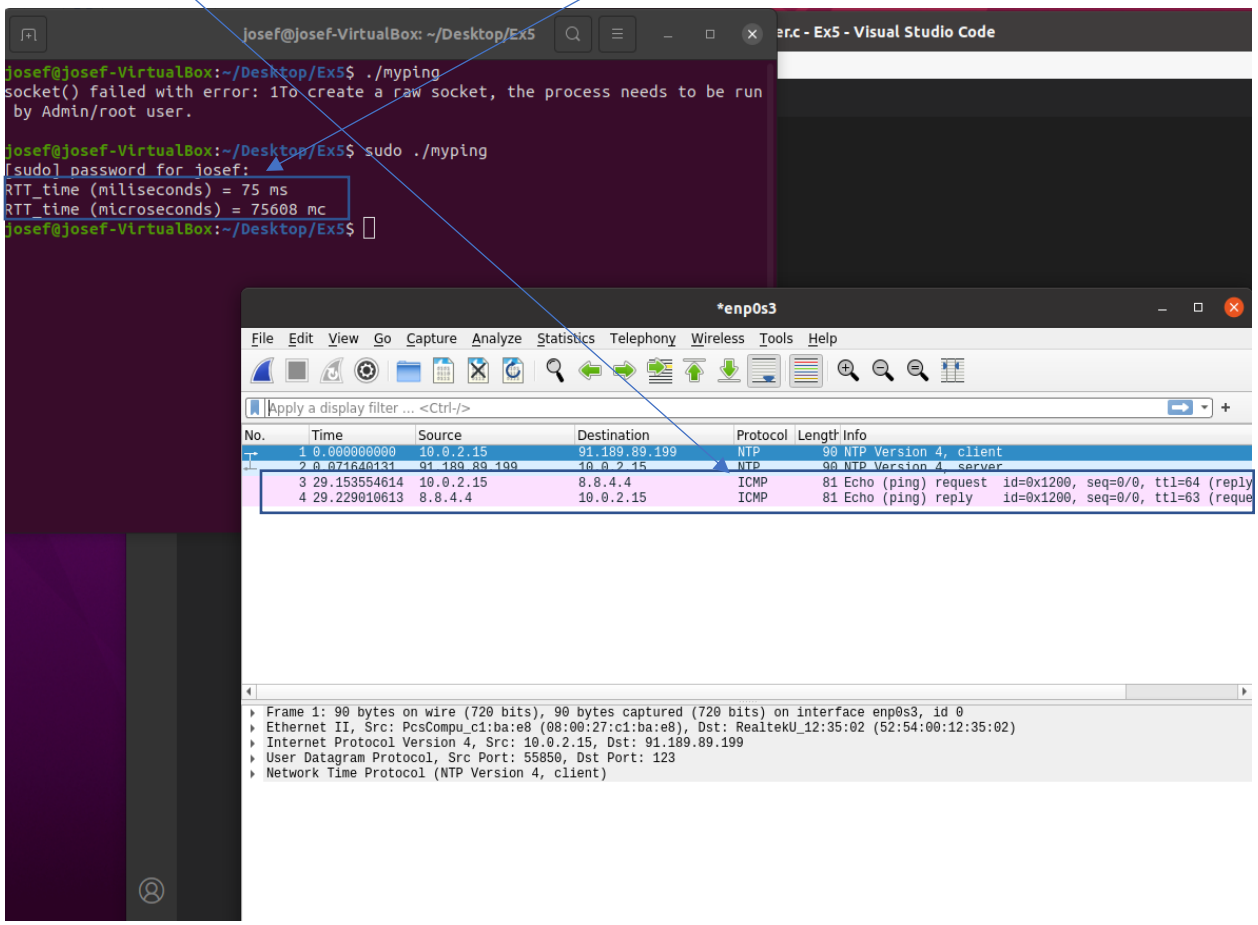
The protocol knows how to do 2 things.

First of all, myping sends ICMP ECHO REQUEST and receives ICMP-ECHO-REPLY.

Then, we will simultaneously run the program with Wireshark sniffing and it looks like we successfully sent the ICMP ECHO-REQUEST and then received the ICMP Finally, we also calculated the RTT in milliseconds and microseconds, first

The time we sent from ip 10.0.2.15 to 8.8.4.4 took 75608 microseconds so it printed the time in ms to be 75.

In the attached screenshot you can see the RTT calculation in the terminal and the wireshark recording.



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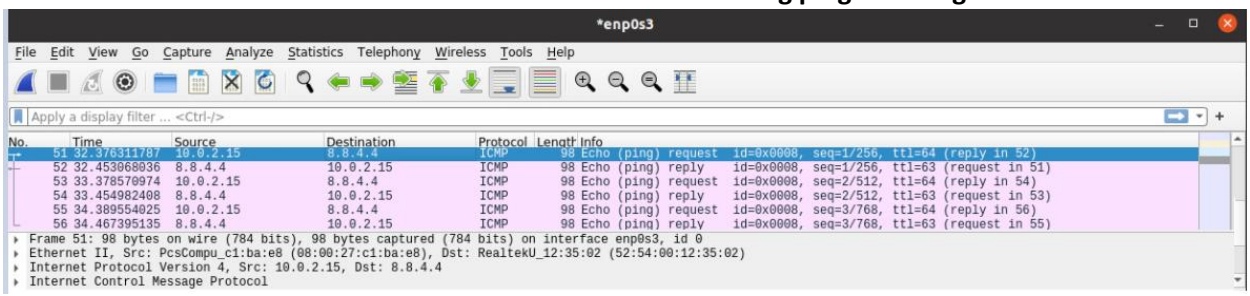
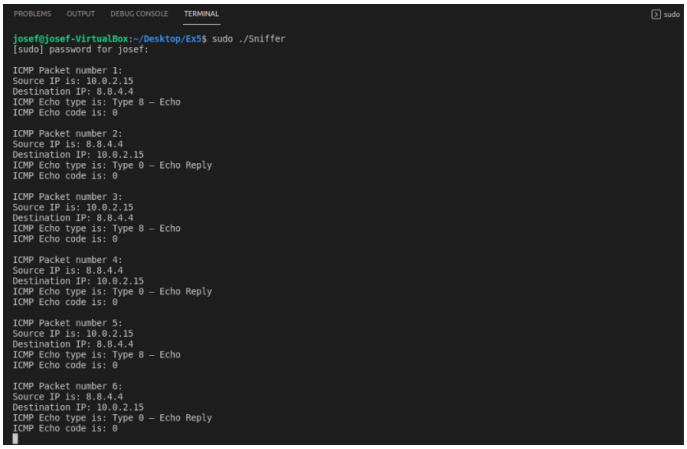
Part 2: sniffing

At first we built a sniffer that would sniff ICMP packets online to print the IP source and destination, code and type.
After writing the sniper we opened Wireshark and ran to see that it was working properly.

Attached is a screenshot of the results in wireshark after sending pings to Google's server:



Attached is a screenshot of the results in VS code terminal after sending pings to Google's server:



Attached is a screenshot of the results in linux terminal after sending pings to Google's server: