Advanced Computer Networks: Assignment #2

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Contents

Problem 1

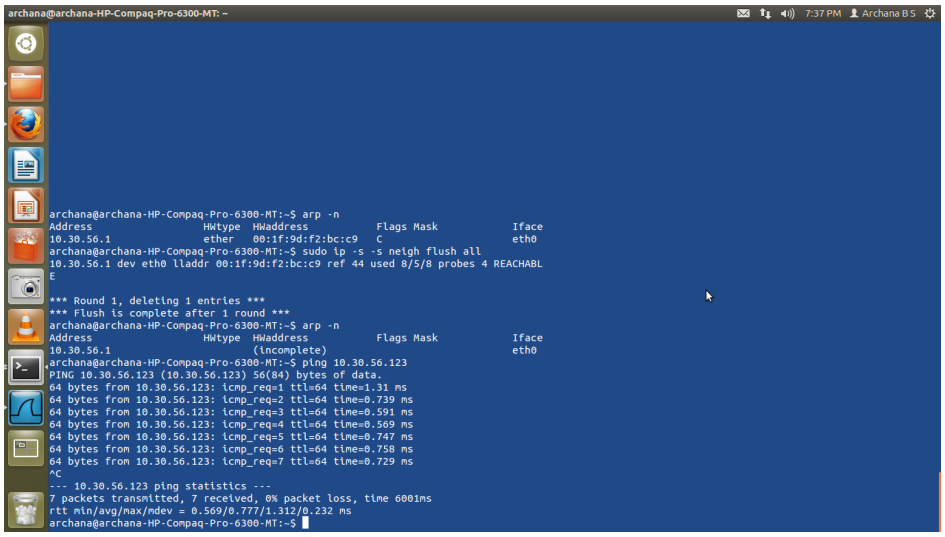
SNIFFER CAPTURE : LOCAL IP

Install wireshark. Start sniffing packets. Ping IP. Analyze. Save file.

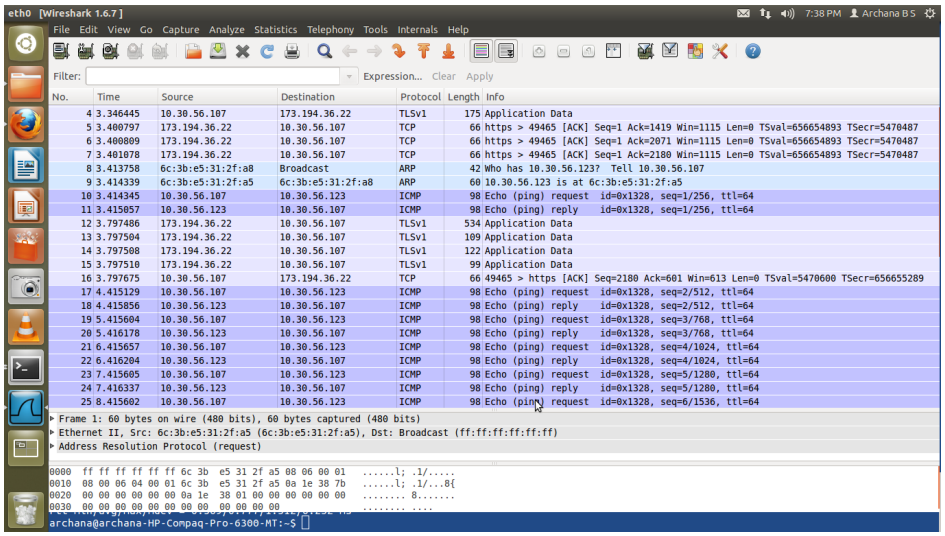
Clear the ARP table.

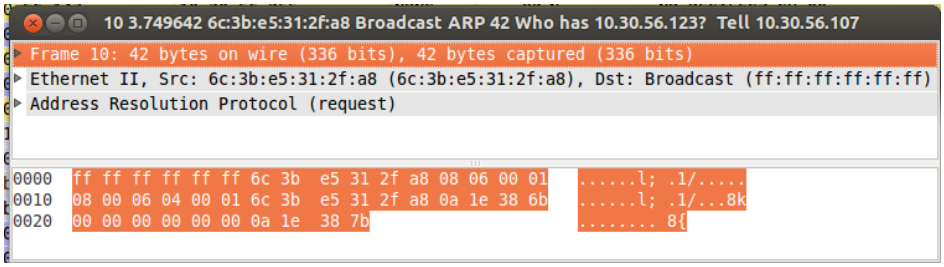
Commands : arp -n
sudo ip -s -s neigh flush all

PING to Ip.



Screenshots from WIRESHARK.




10 3.749642 6c:3b:e5:31:2f:a8 Broadcast ARP 42 Who has 10.30.56.123? Tell 10.30.56.107
Frame 10: 42 bytes on wire (336 bits), 42 bytes captured (336 bits)
Ethernet II, Src: 6c:3b:e5:31:2f:a8 (6c:3b:e5:31:2f:a8), Dst: Broadcast (ff:ff:ff:ff:ff:ff)
Address Resolution Protocol (request)
0000 ff ff ff ff ff ff 6c 3b e5 31 2f a8 08 06 00 01 ......l; .1/.....
0010 08 00 06 04 00 01 6c 3b e5 31 2f a8 0a 1e 38 6b ......l; .1/...8k
0020 00 00 00 00 00 00 0a 1e 38 7b .... 8{

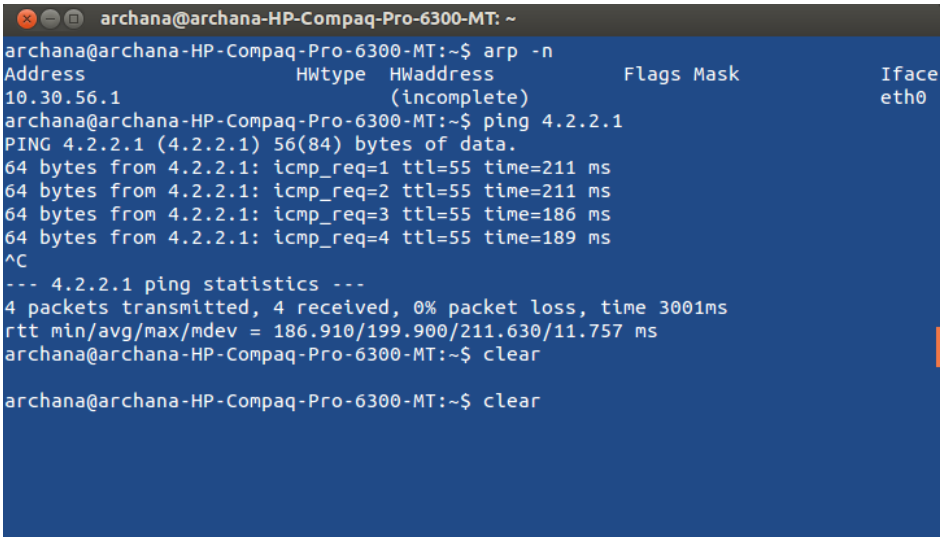
Problem 2

SNIFFER CAPTURE :PING 4.2.2.1.

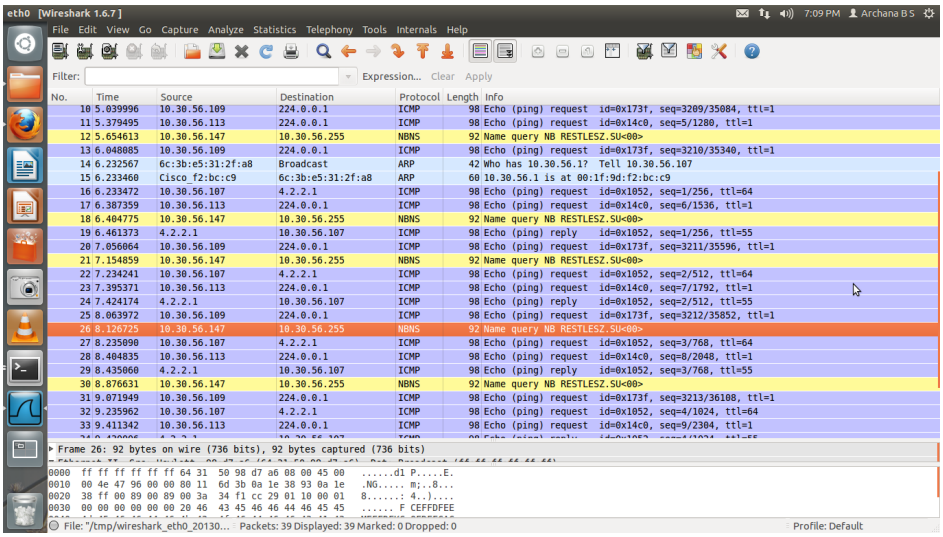
Open sniffer capture. Ping 4.2.2.1 Save file.

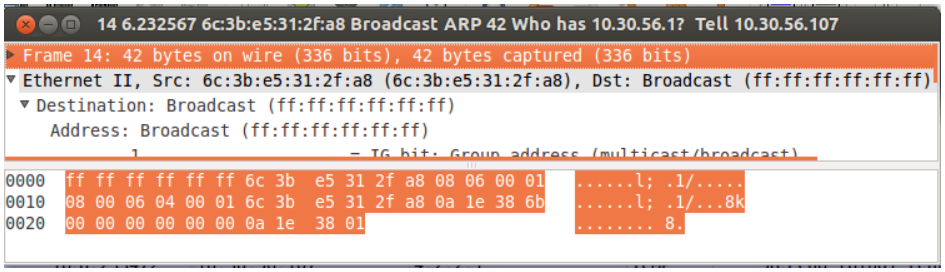
Clear arp.

PING 4.2.2.1



Screenshots from WIRESHARK.




14 6.232567 6c:3b:e5:31:2f:a8 Broadcast ARP 42 Who has 10.30.56.1? Tell 10.30.56.107
Frame 14: 42 bytes on wire (336 bits), 42 bytes captured (336 bits)
Ethernet II, Src: 6c:3b:e5:31:2f:a8 (6c:3b:e5:31:2f:a8), Dst: Broadcast (ff:ff:ff:ff:ff:ff)
Destination: Broadcast (ff:ff:ff:ff:ff:ff)
Address: Broadcast (ff:ff:ff:ff:ff:ff)
0000 ff ff ff ff ff ff 6c 3b e5 31 2f a8 08 06 00 01 ......l; .1/.....
0010 08 00 06 04 00 01 6c 3b e5 31 2f a8 0a 1e 38 6b ......l; .1/...8k
0020 00 00 00 00 00 00 0a 1e 38 01 .... 8.

Problem 3

SNIFFER CAPTURE : MULTICAST
PING 224.0.0.1

Screenshots from WIRESHARK.