Lab 7 Write-Up

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Task 1

What kind of protocol is used when performing a ping command?
Ping protocol utilizes the Internet Control Message Protocol(ICMP)
What information is transferred in this protocol?
It sends operational data and error messages to indicate success or failure when attempting to communicate
with another IP address. This makes it generally reserved for control and diagnostics of IP operations. In
the context of the trace, the client is consistently requesting the destination address which in turn sends
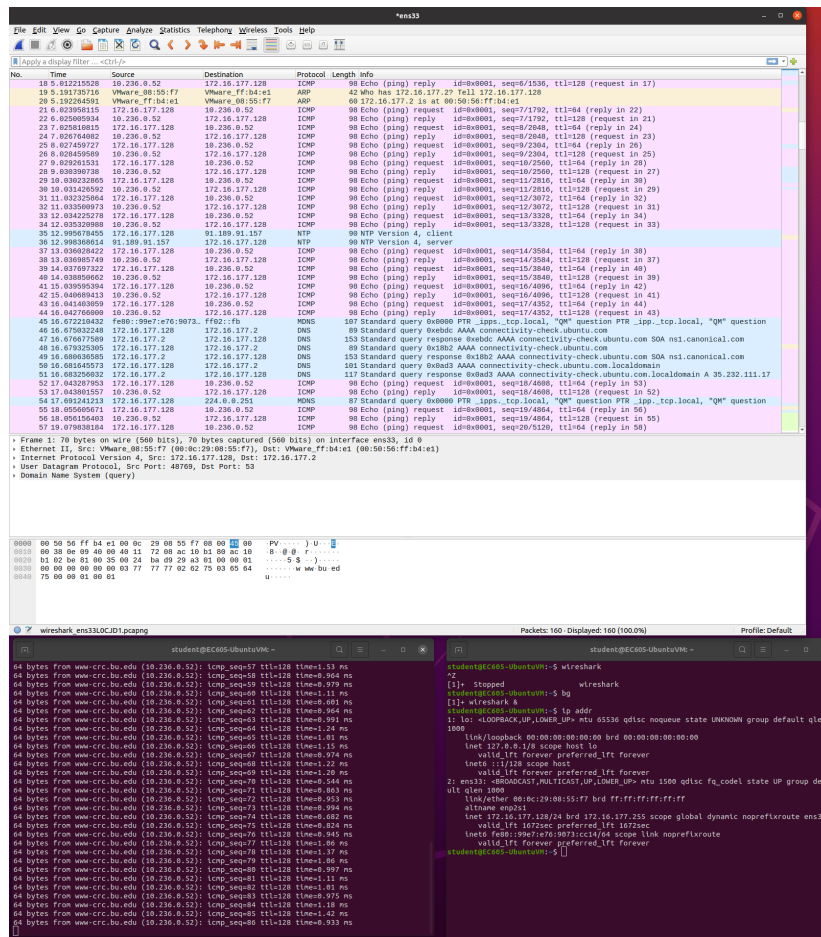replies after the request.

Figure 1: Picture of trace for task 1

Task 2

Specify the destination IP address
142.250.80.4
Specify the destination MAC address
172.16.177.2
Specify the Internet Protocol version
IPV4 (Version-4)
Specify the Source and Destination Port
38124 is source and destination is 80
Specify the version of wget
GNU Wget 1.20.3 built on linux-gnu
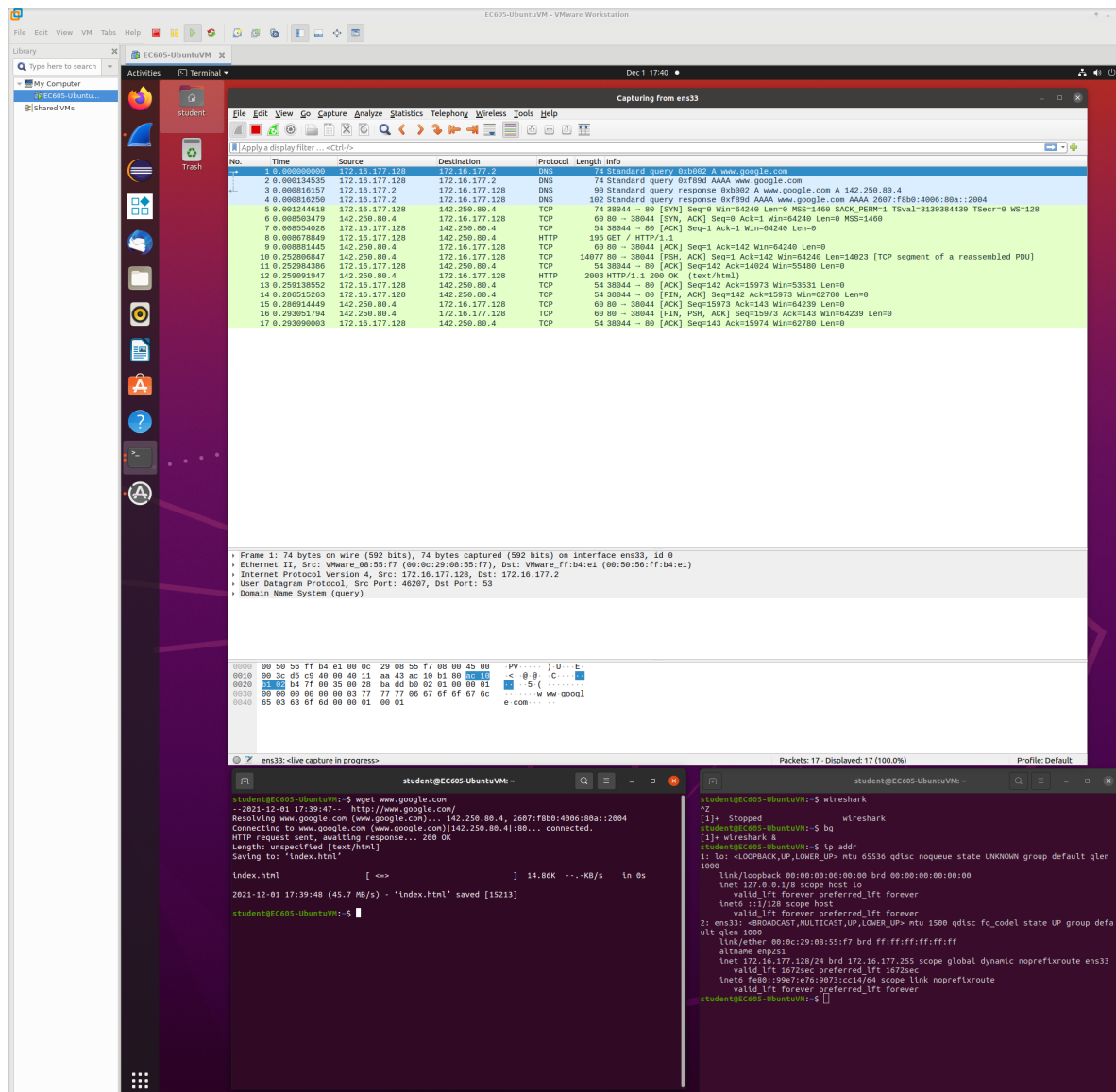**Specify the TCP Flags**
SYN, ACK, PSH and FIN

Figure 2: Picture of trace for task 2

Task 3

DNS
Domain Name System, as the name implies, is used to identify computers or networking capable devices.
TCP
Transmission Control Protocol is used to ensure transmission of packets reliably and with low overhead.
TLSv1.2
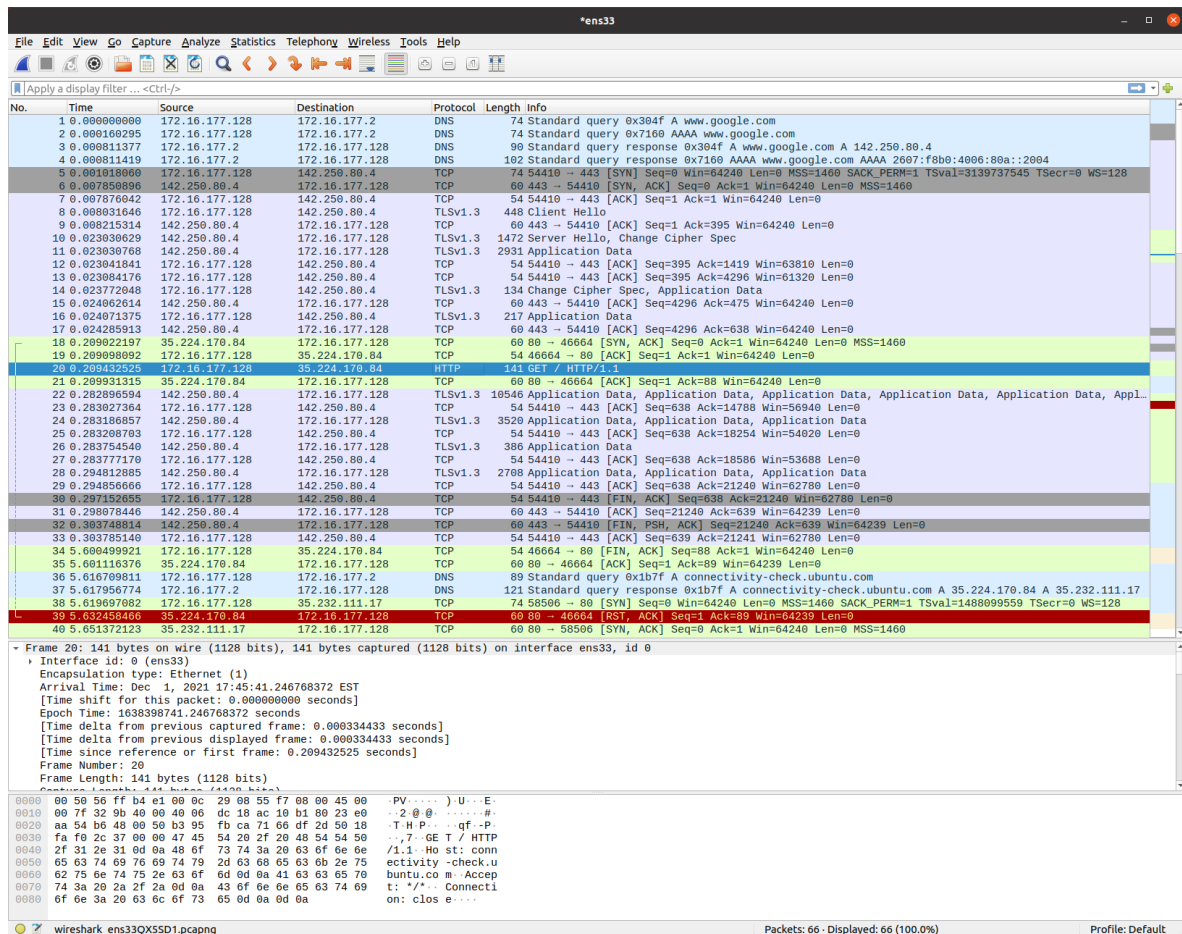Transport Layer Security is used to provide privacy and data integrity between the communicating parties.

Figure 3: Picture of trace for task 3

Task 4

List as much information you can about the trace, including...
Which IP addresses are in the trace? 74.125.29.189
192.168.1.17
216.58.219.238
128.197.26.34

Which IP is the client?
192.168.1.17

What domains are being accessed?
GOOGLE

3

(RIVATE-ADDRESS-CBLK-RFC1918-IANA-RESERVED) Private address belonging to IANA
GOOGLE
(BU-NET) Boston University

Figure 4: Image extracted from task 4 trace