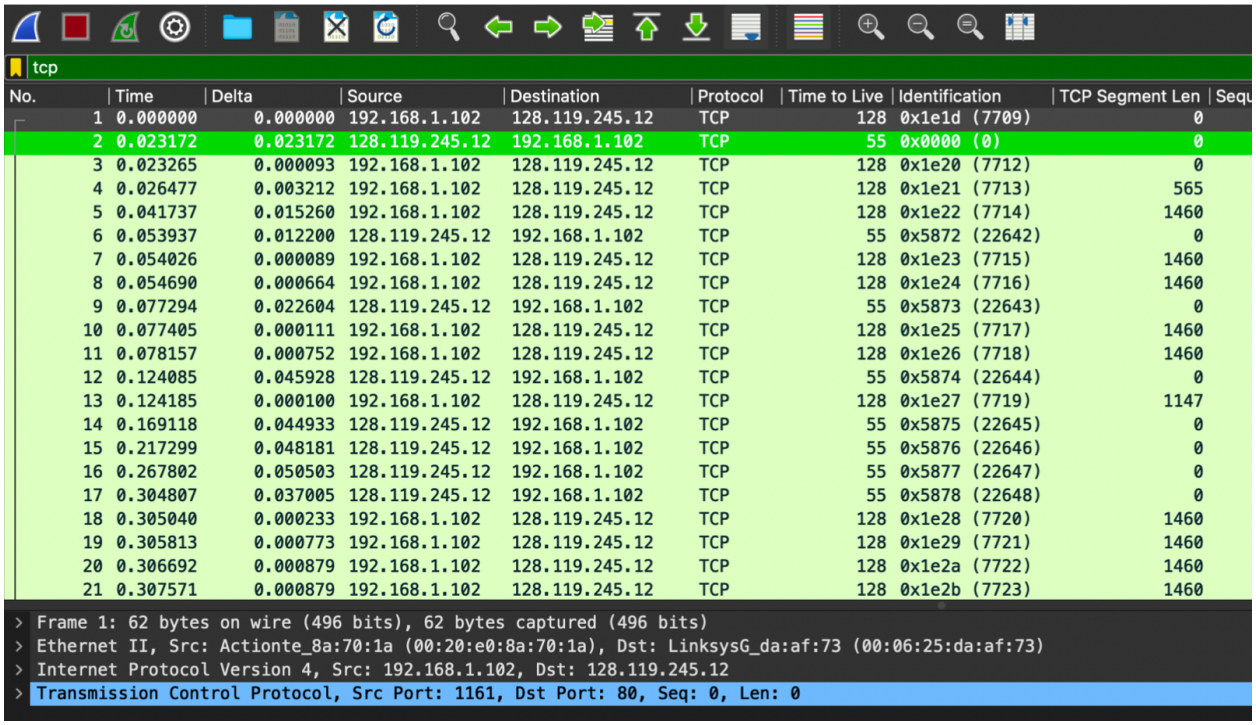
NEHAL JHAJHARIA (U20CS093)

COMPUTER NETWORKS

ASSIGNMENT 05

TCP

1)



2) Packet no: 199

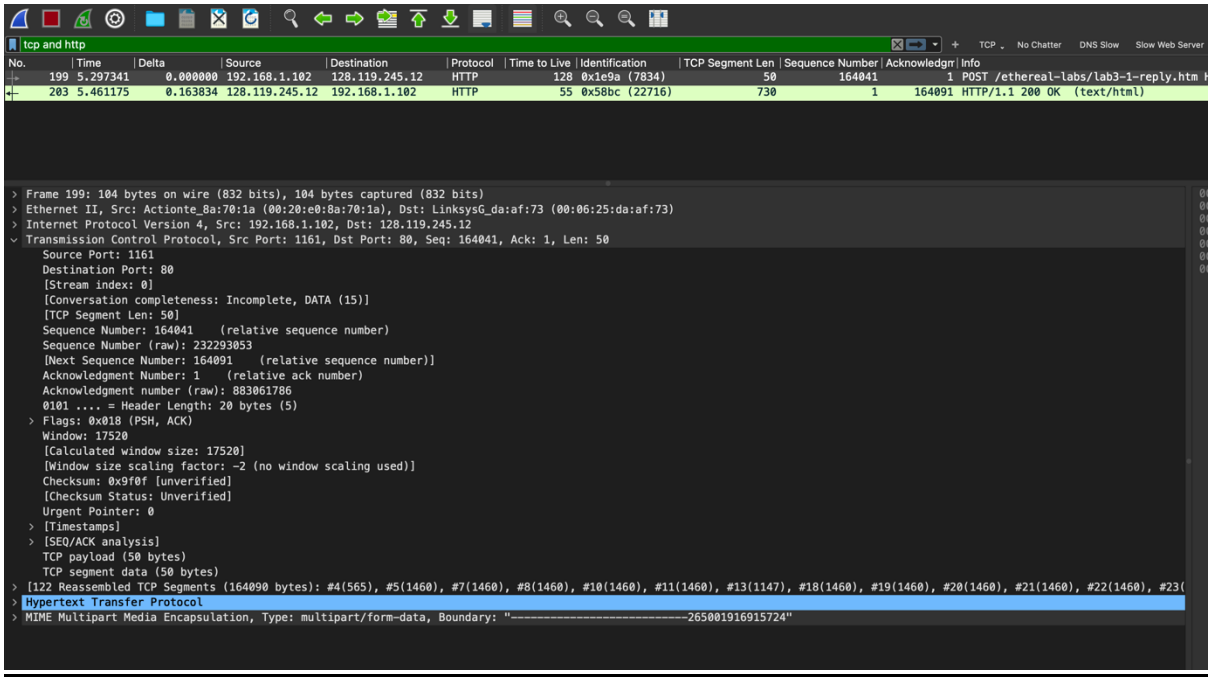
3) First packet is 199 Last packet is: 203

4) Client IP address: Client Port No. :

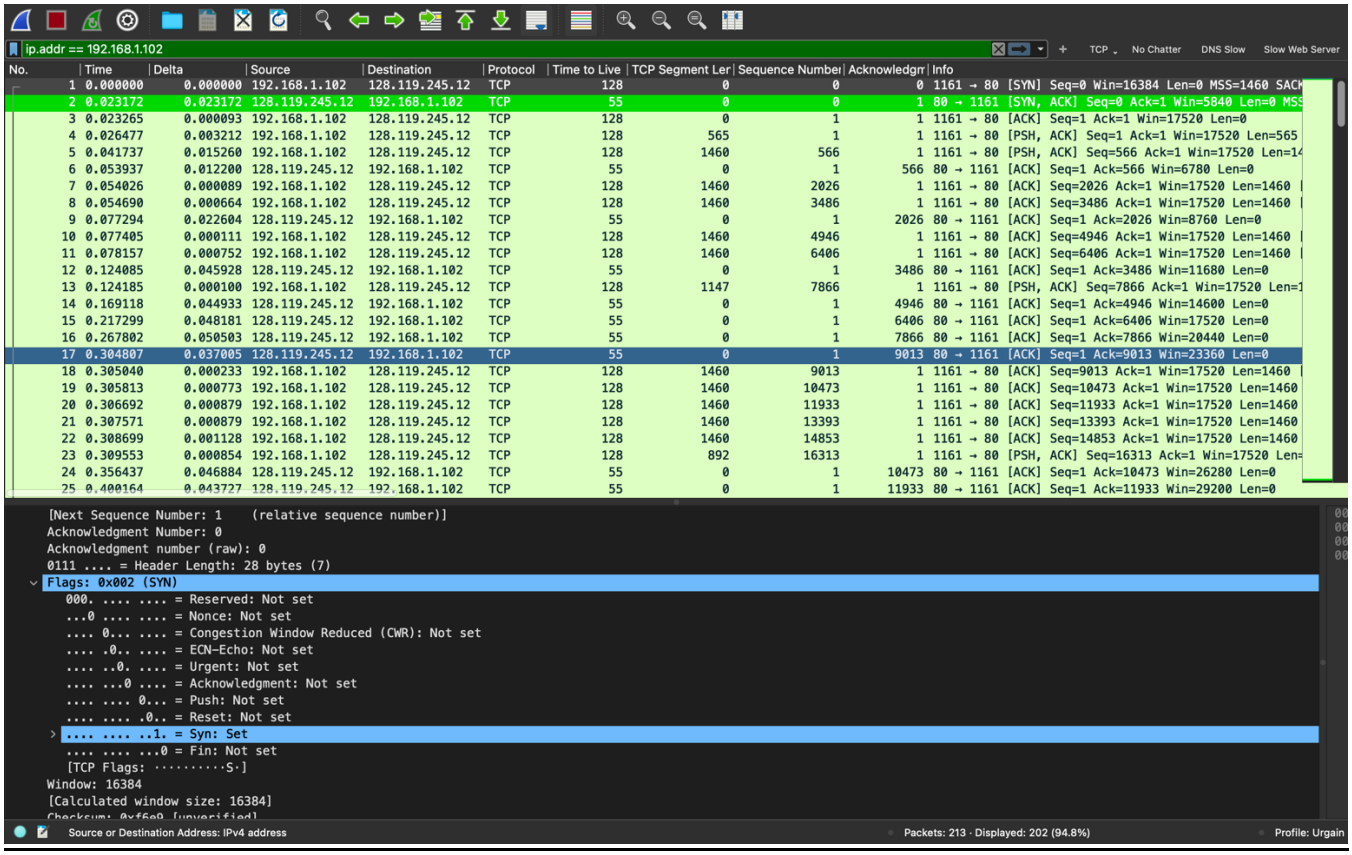
192.168.1.102

1161

5) IP address of gaia.cs.umass.edu: 128.119.245.12 Post No: 80



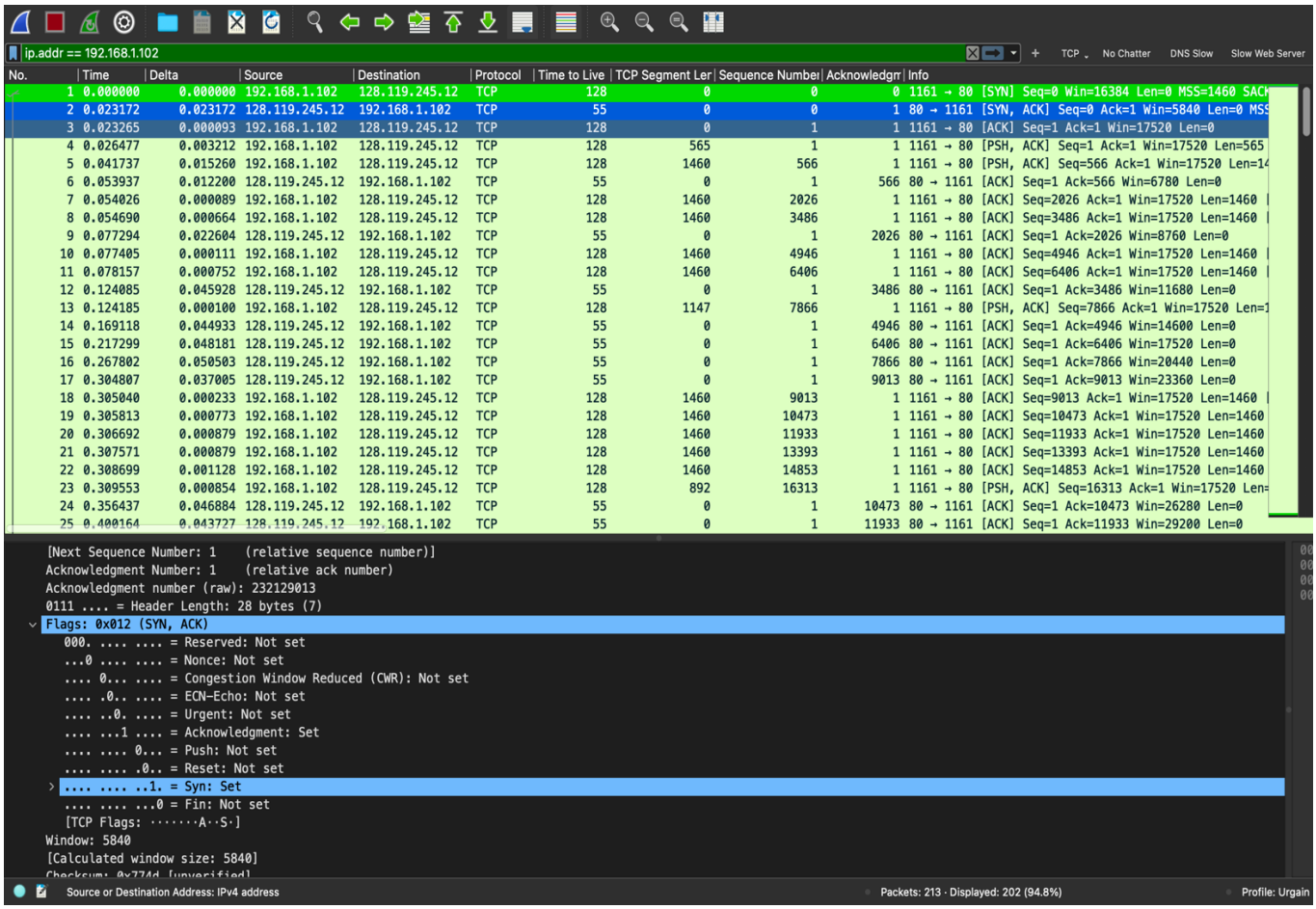
6) Sequence No. : 0
The flags in the TCP packets shows that SYN flag is set.



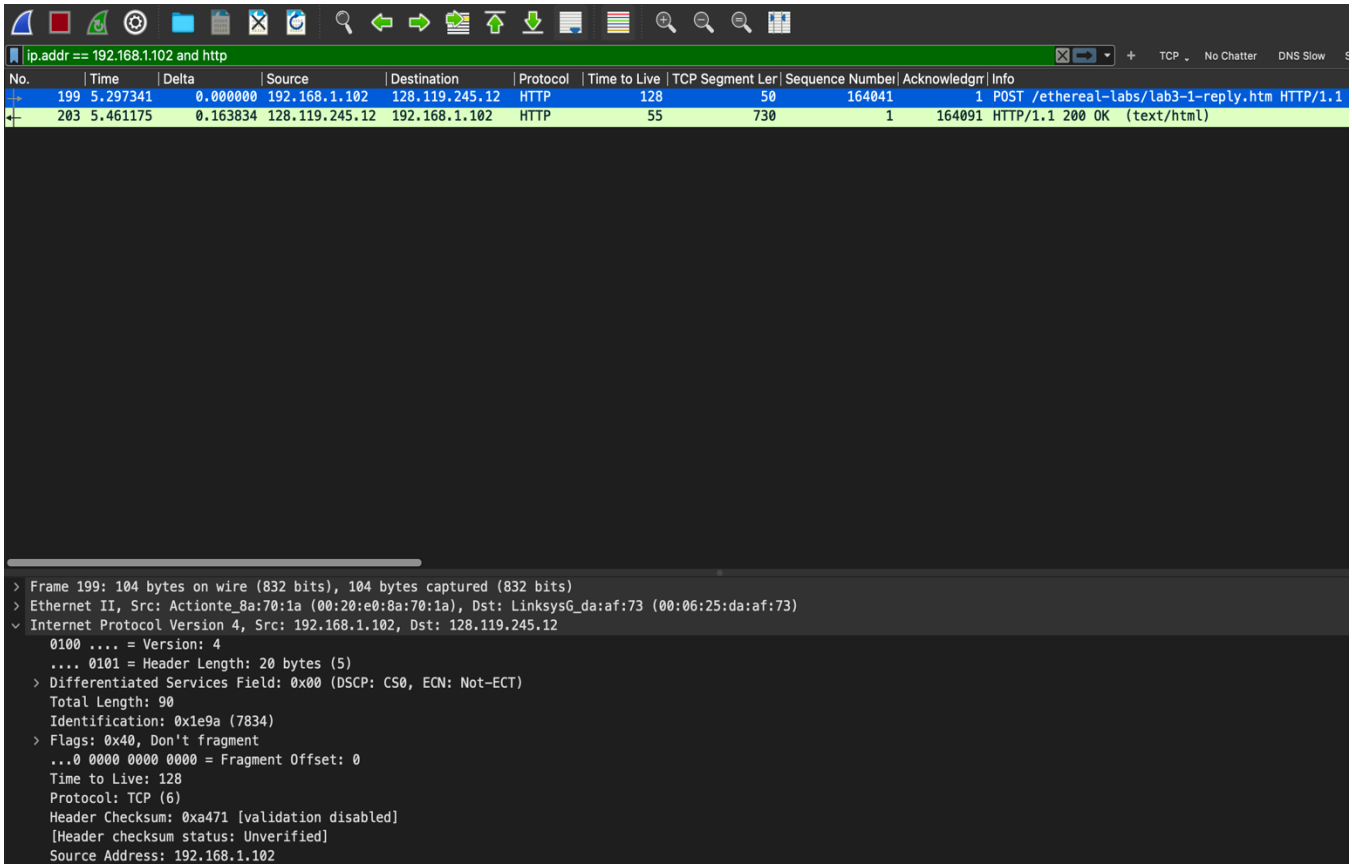
7) Acknowledgement no is: 1
Sequence no is: 0

gaia.cs.umass.edu determines the ack no by adding 1 to client's sequence number.

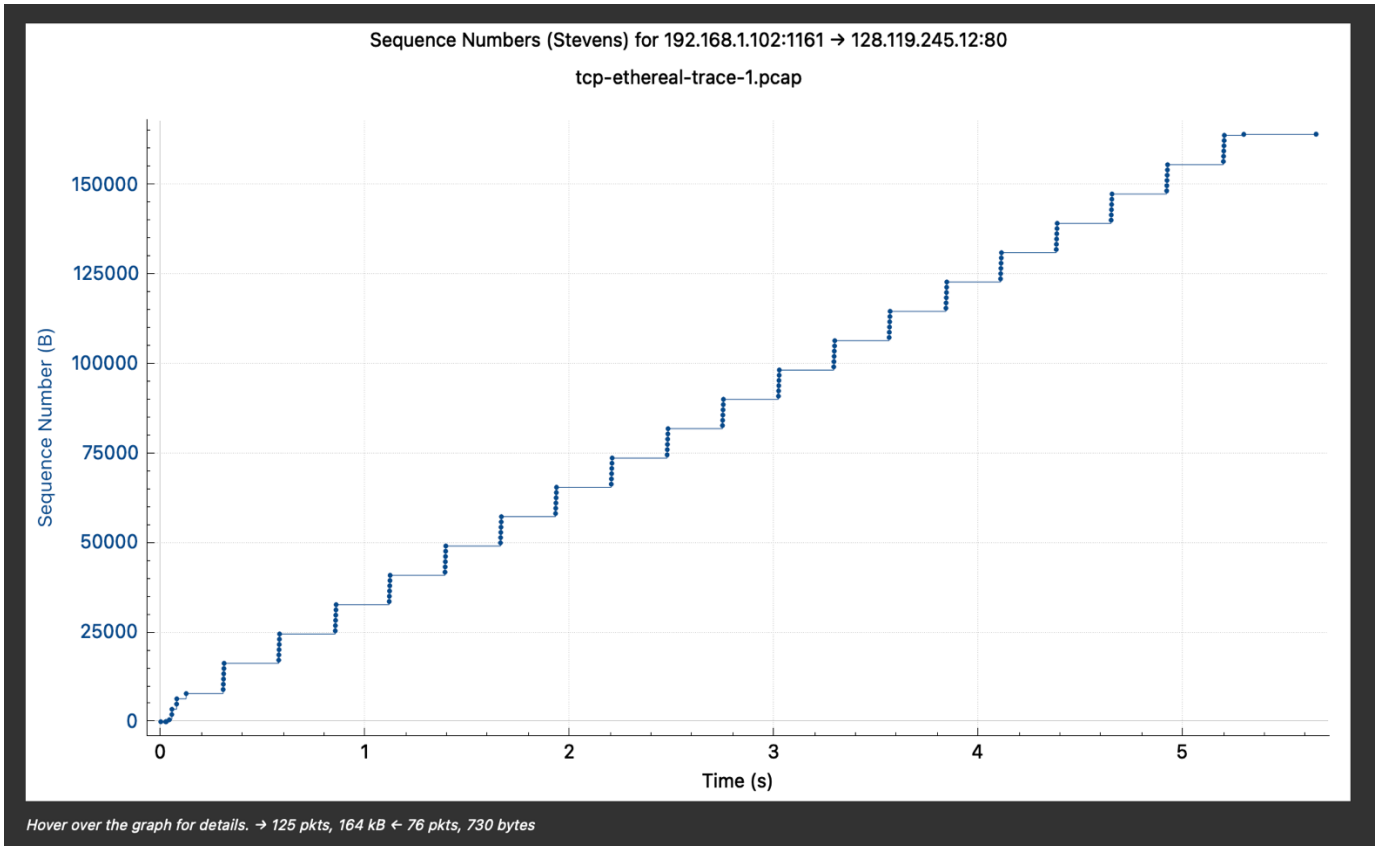
SYN as well as ACK flags are set in the packet that identify it as a syn/ack packet.



8) Sequence no of HTTP post command: 164041



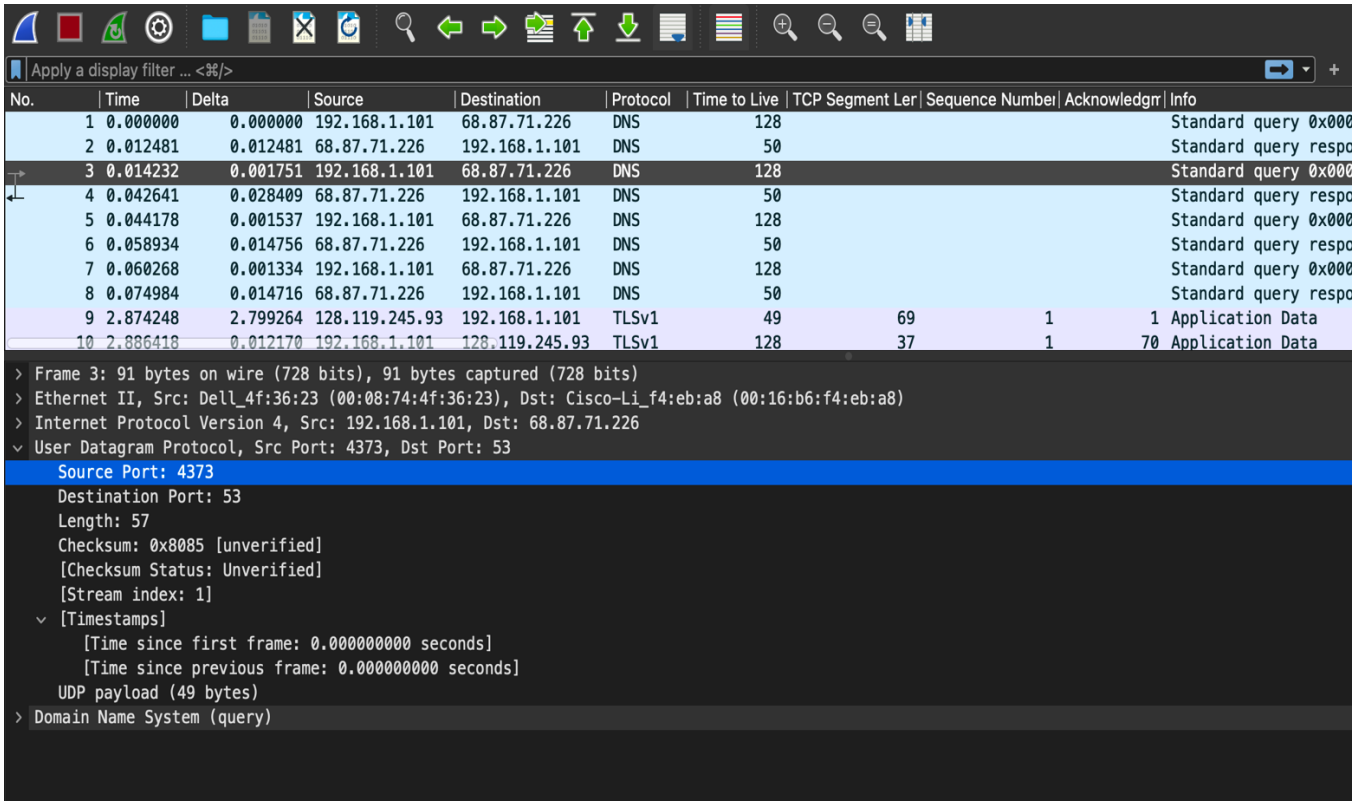
9)



Here, each dot represents a TCP segment sent, plotting the sequence number of the segment versus the time at which it was sent. Note that a set of dots stacked above each other represents a series of packets that were sent back-to-back by the sender.

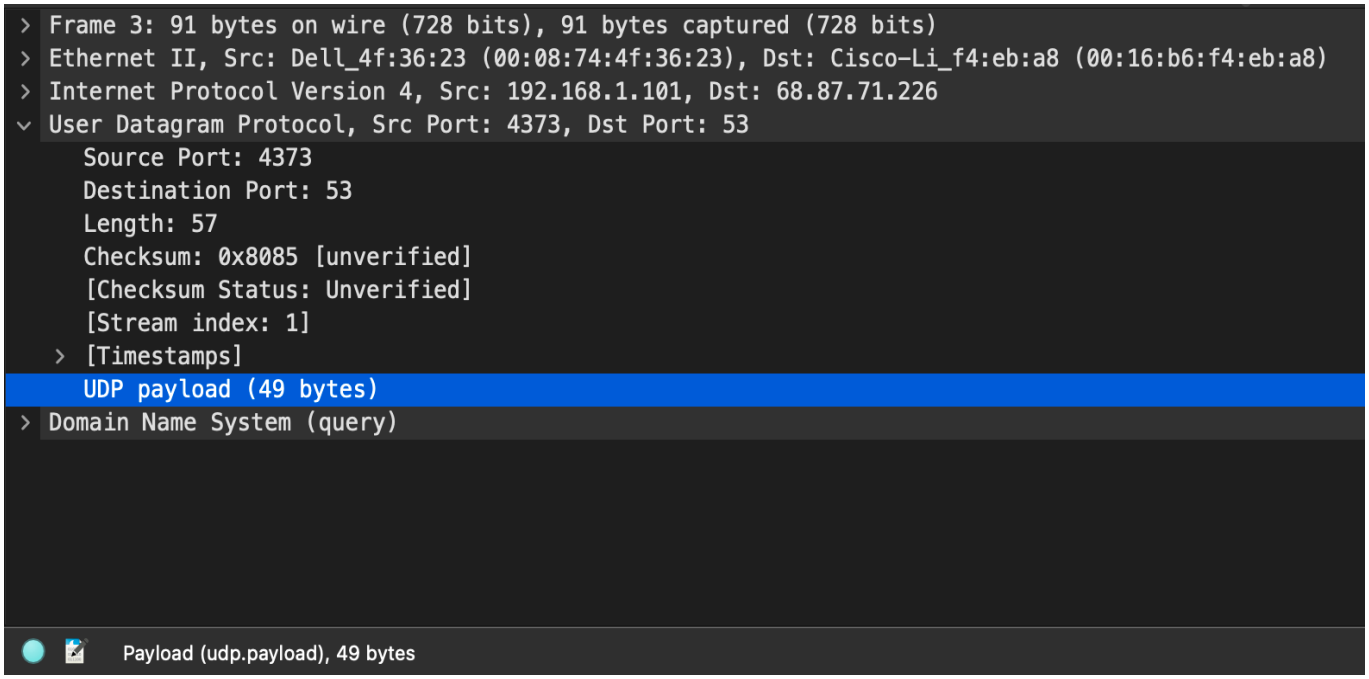
UDP

1) There are 4 fields in UDP header.
   Those are:
   - Source Port
   - Destination Port
   - Length
   - Checksum



2) By consulting the displayed information in Wireshark's packet content field, we found the following sizes:

Field Name	Size (bytes)
Source Port	2
Destination Port	2
Length	2
Checksum	2



3) The length field specifies the number of bytes in the UDP segment plus header data.
In my selected packet, UDP payload is 49 bytes.

4) A UDP datagram is carried in a single IP packet and is hence limited to a maximum payload of 65,507 bytes for IPv4 and 65,527 bytes for IPv6.

5) Largest possible source port number is 65535.

6) Protocol Number for UDP is 17.
In hexadecimal, it is: 0x11.

7) The source port of the UDP packet sent by the host is the same as the destination port of the reply packet, and conversely the destination port of the UDP packet sent by the host is the same as the source port of the reply packet.