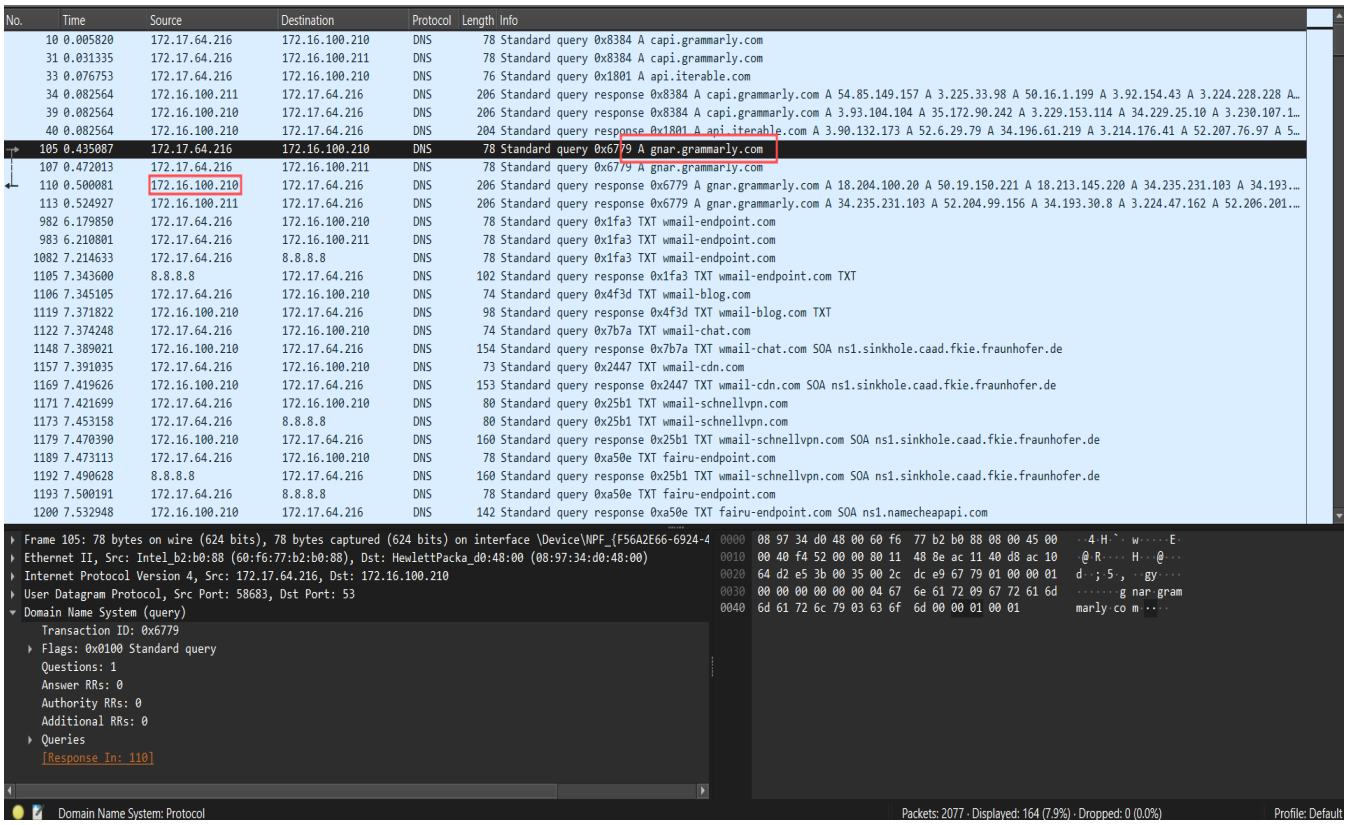
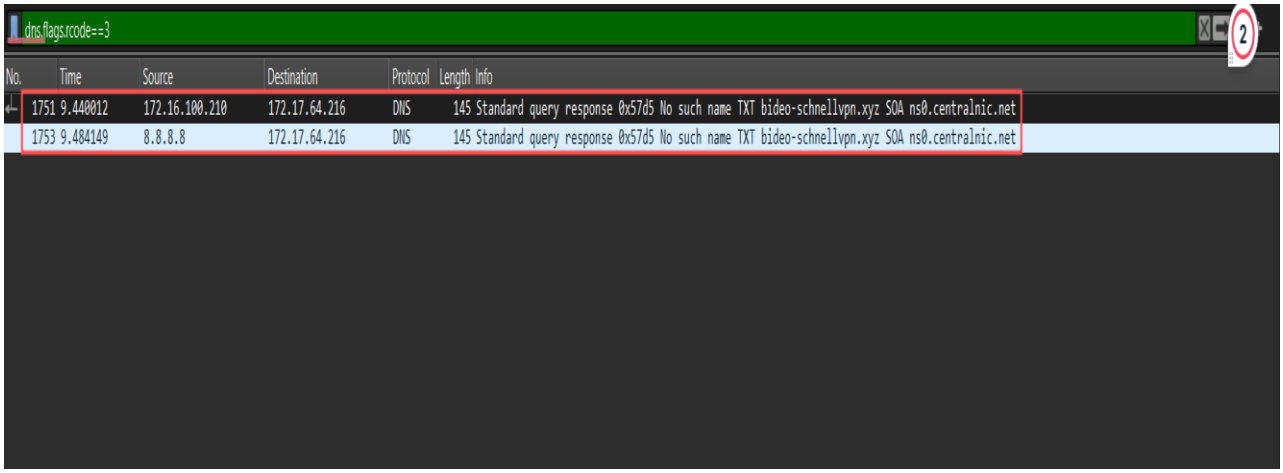
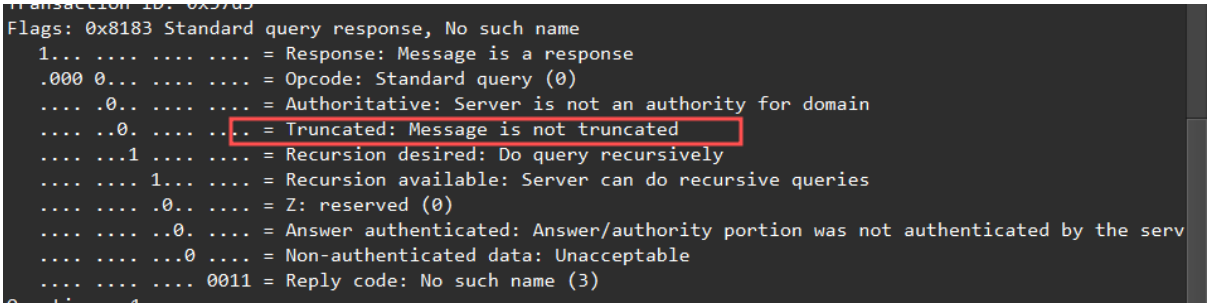
# Week 4-Computer Networks LAB

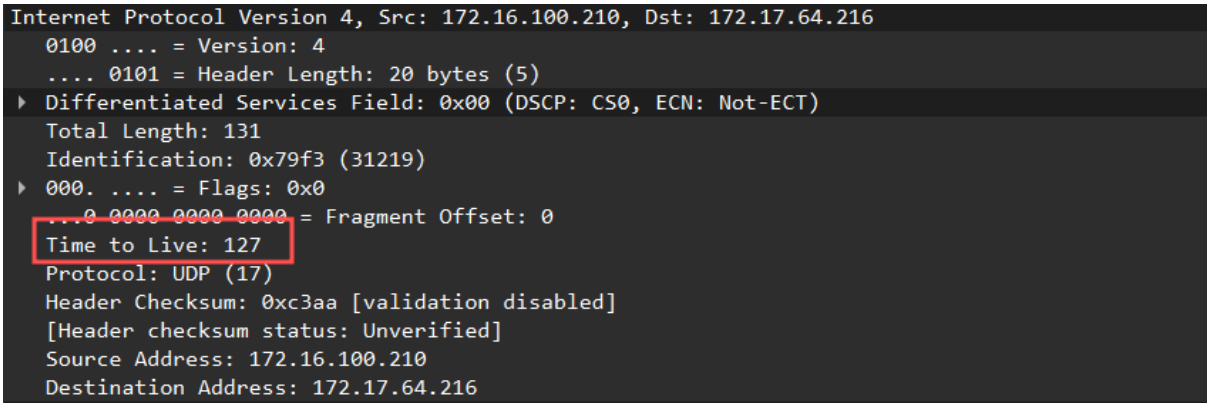



## Task#1

1. The Record Type of DNS is ‘A’.
2. The Domain Name used by the server was **gnar.grammarly.com**: type A, class IN.
3. DNS query is using **UDP** as the transport protocol.
4. The IP address of the response server is **172.16.100.210.**
5. Yes, the IP was included in the response packet of the queried server.
6. 

There were 2 packets for **dns.flags.rcode==3.**

7.

Flags: 0x8183 Standard query response, No such name
1... .... .... .... = Response: Message is a response
.000 0... .... .... = Opcode: Standard query (0)
.... .0.. .... .... = Authoritative: Server is not an authority for domain
.... ..0. .... .... = Truncated: Message is not truncated
.... ...1 .... .... = Recursion desired: Do query recursively
.... .... 1... .... = Recursion available: Server can do recursive queries
.... .... .0.. .... = Z: reserved (0)
.... .... ..0. .... = Answer authenticated: Answer/authority portion was not authenticated by the serv
.... .... ...0 .... = Non-authenticated data: Unacceptable
.... .... .... 0011 = Reply code: No such name (3)

8.

Internet Protocol Version 4, Src: 172.16.100.210, Dst: 172.17.64.216
0100 .... = Version: 4
.... 0101 = Header Length: 20 bytes (5)
Differentiated Services Field: 0x00 (DSCP: CS0, ECN: Not-ECT)
Total Length: 131
Identification: 0x79f3 (31219)
000. .... = Flags: 0x0
...0 0000 0000 0000 = Fragment Offset: 0
Time to Live: 127
Protocol: UDP (17)
Header Checksum: 0xc3aa [validation disabled]
[Header checksum status: Unverified]
Source Address: 172.16.100.210
Destination Address: 172.17.64.216