LAB-5 HOME-UDP

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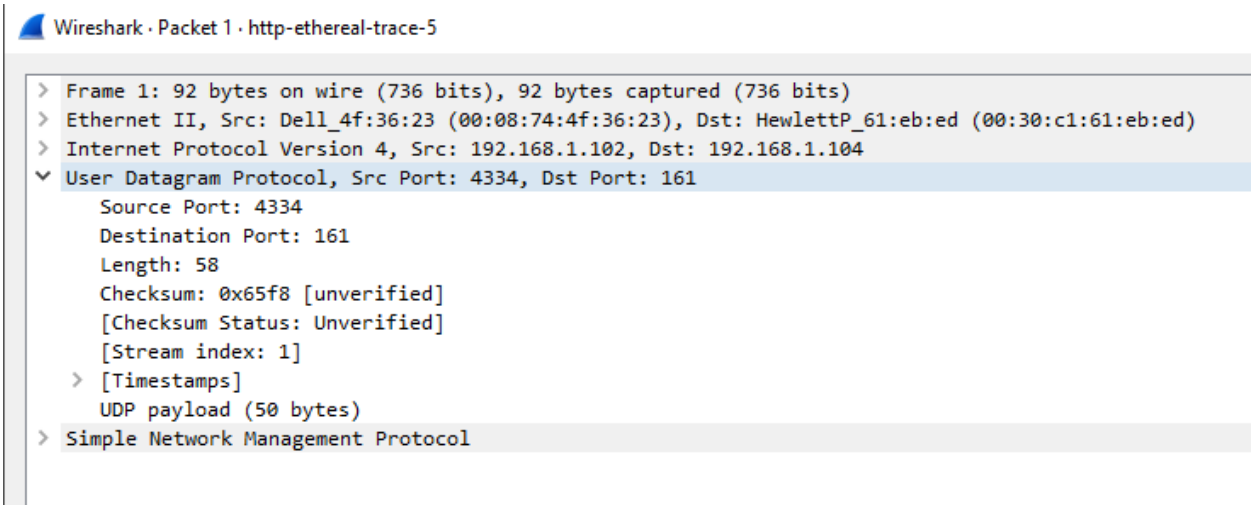
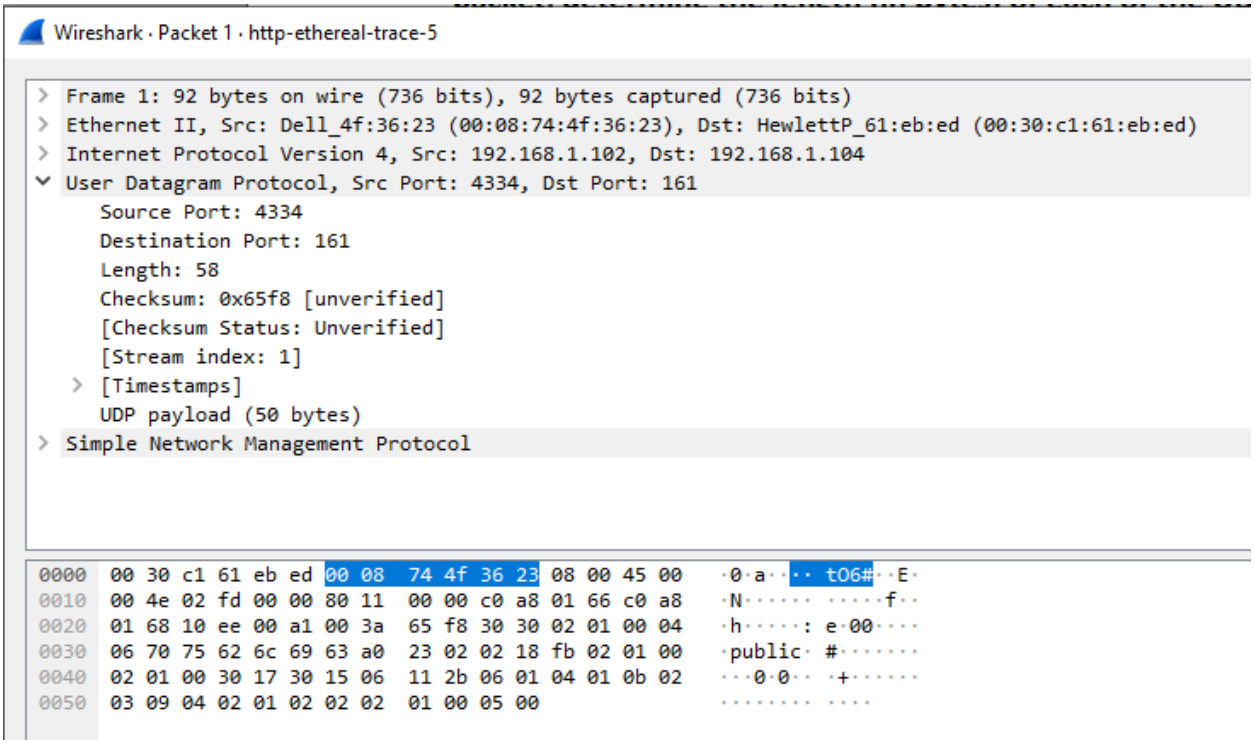
Question 1:



Question 2:

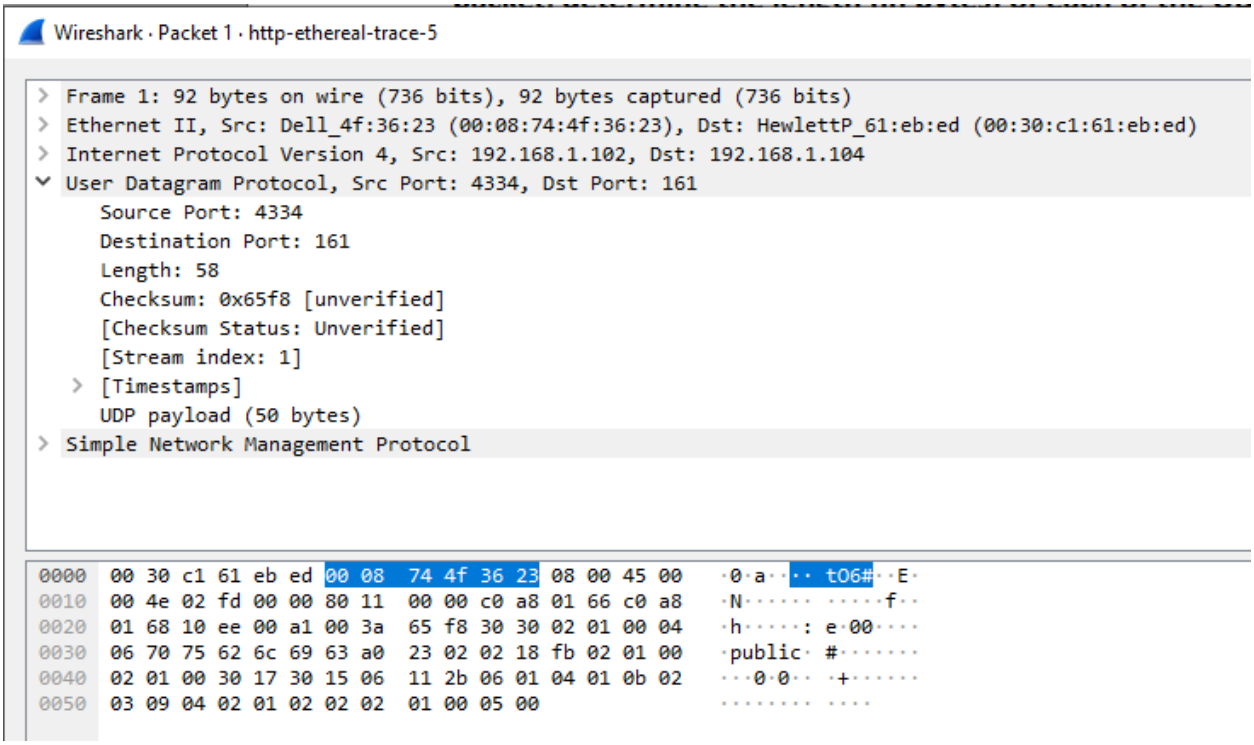
Each UDP header is 16 hexadecimal characters long; 16 hexa = 64 bits = 8 bytes.



Question 3;

The value in the length field is the size, in bytes, of the entire segment (header+payload). We do not need to specify header length separately because all UDP headers are of the same size.

My captured packet shows length = 58 and payload = 50; 58 - 8 = 50 bytes.



Question 4:

The maximum size of a UDP payload is (2^16 -1) and we also need to deduct an extra 8 bytes

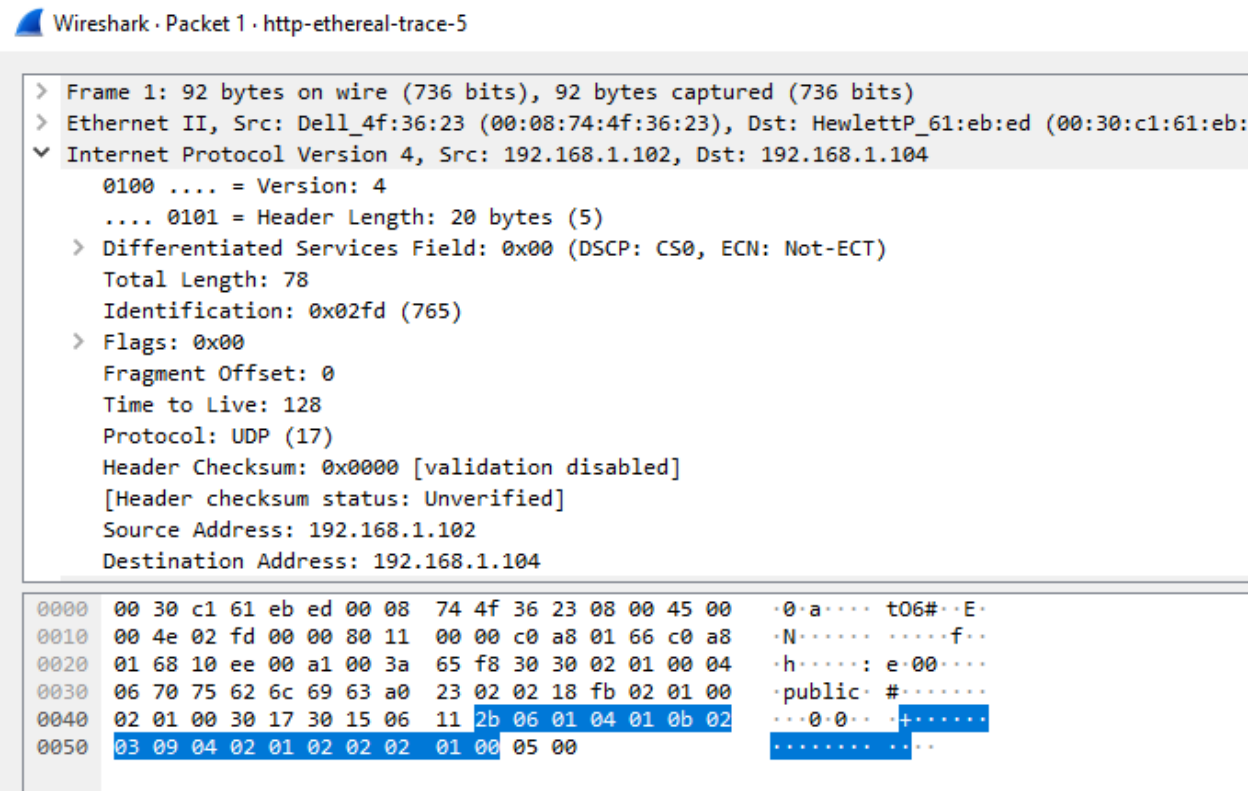
for the header. So, the maximum size of the payload can be 65527 byte.

Question 5:

The largest possible port number is (2^16 - 1) which is equal to 65535

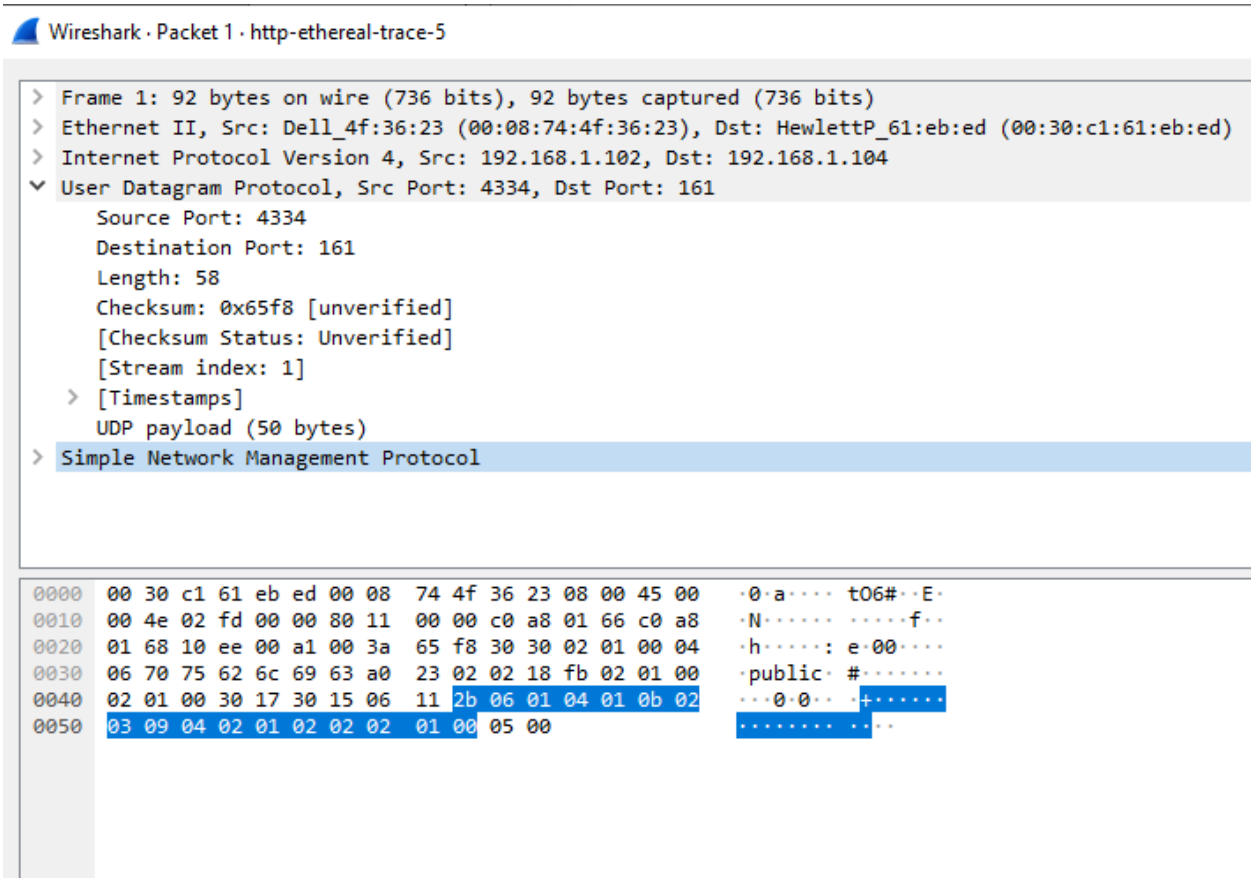
Question 6:

The protocol number for UDP is 11 in hexadecimal which is equal to 17 in decimal. (F = 15; 10 = 16, 11 = 17)



Question 7:

Packet 1: Source Port: 4334, Destination Port: 161


Wireshark · Packet 1 · http-ethereal-trace-5
Frame 1: 92 bytes on wire (736 bits), 92 bytes captured (736 bits)
Ethernet II, Src: Dell_4f:36:23 (00:08:74:4f:36:23), Dst: HewlettP_61:eb:ed (00:30:c1:61:eb:ed)
Internet Protocol Version 4, Src: 192.168.1.102, Dst: 192.168.1.104
User Datagram Protocol, Src Port: 4334, Dst Port: 161
Source Port: 4334
Destination Port: 161
Length: 58
Checksum: 0x65f8 [unverified]
[Checksum Status: Unverified]
[Stream index: 1]
[Timestamps]
UDP payload (50 bytes)
Simple Network Management Protocol
0000 00 30 c1 61 eb ed 00 08 74 4f 36 23 08 00 45 00
0010 00 4e 02 fd 00 00 80 11 00 00 c0 a8 01 66 c0 a8
0020 01 68 10 ee 00 a1 00 3a 65 f8 30 30 02 01 00 04
0030 06 70 75 62 6c 69 63 a0 23 02 02 18 fb 02 01 00
0040 02 01 00 30 17 30 15 06 11 2b 06 01 04 01 0b 02
0050 03 09 04 02 01 02 02 02 01 00 05 00