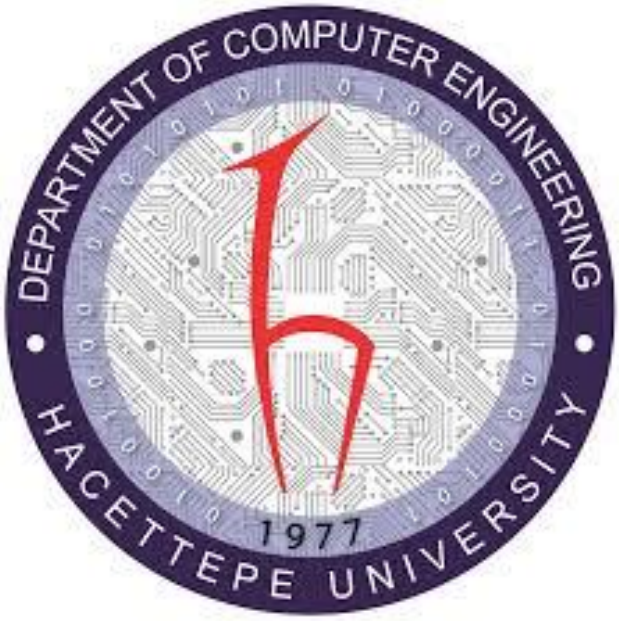
HACETTEPE UNIVERSITY

COMPUTER ENGINEERING DEPARTMENT

COMPUTER NETWORKS LABORATORY



EXPERIMENT 4

UDP

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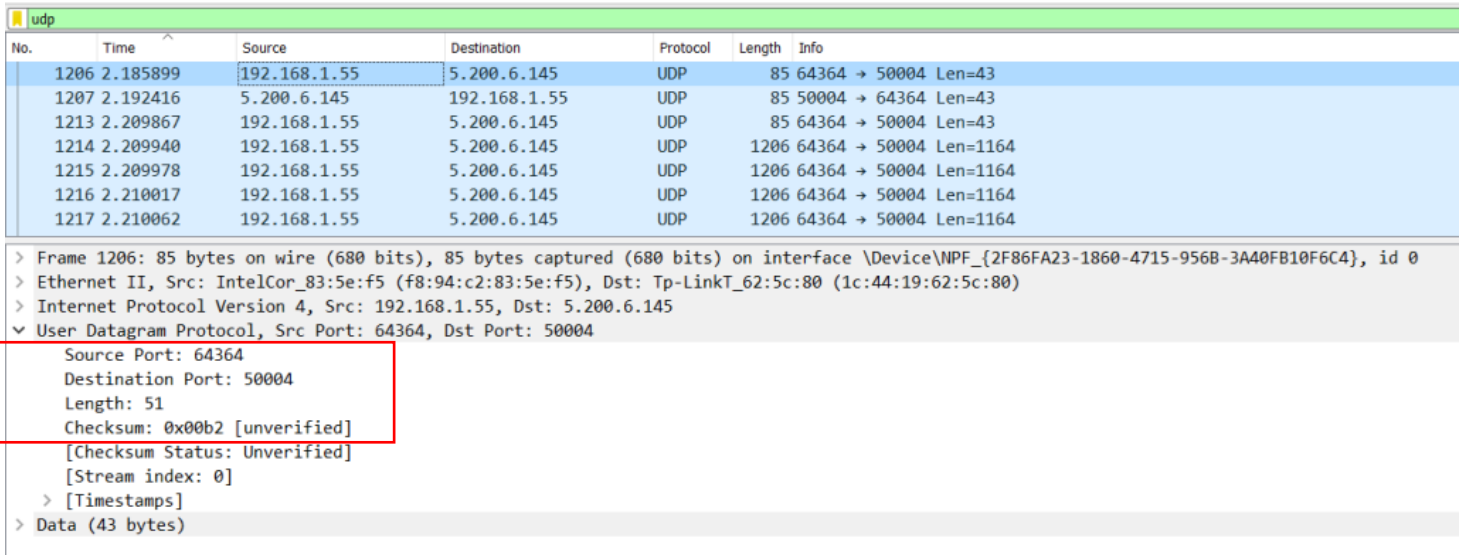
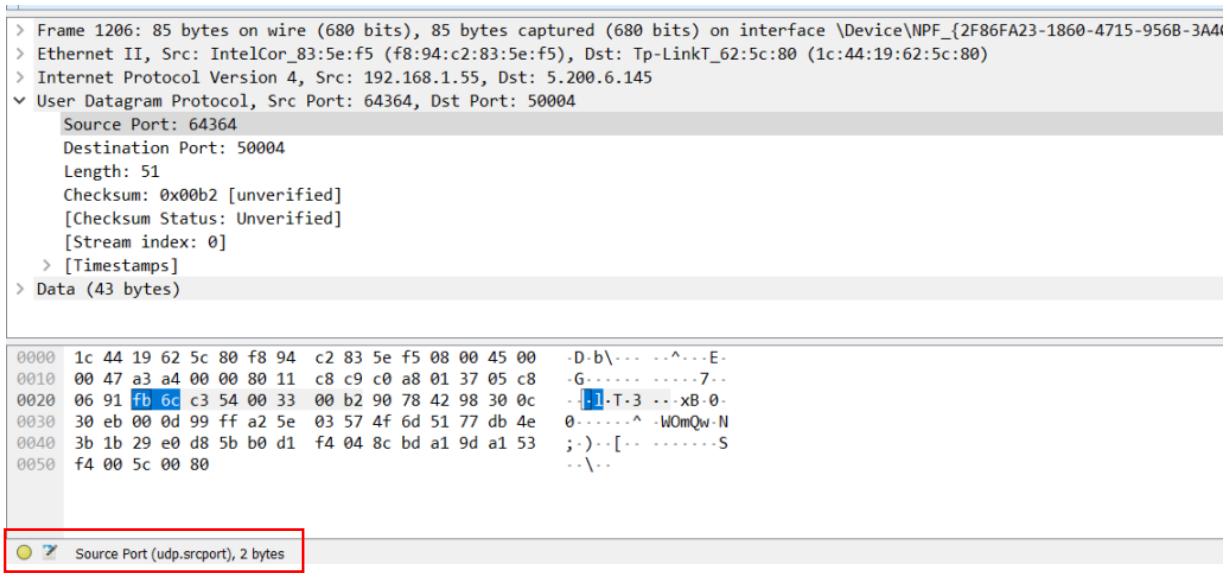
GROUP NUMBER : 12

IP address of our computer: 192.168.1.55

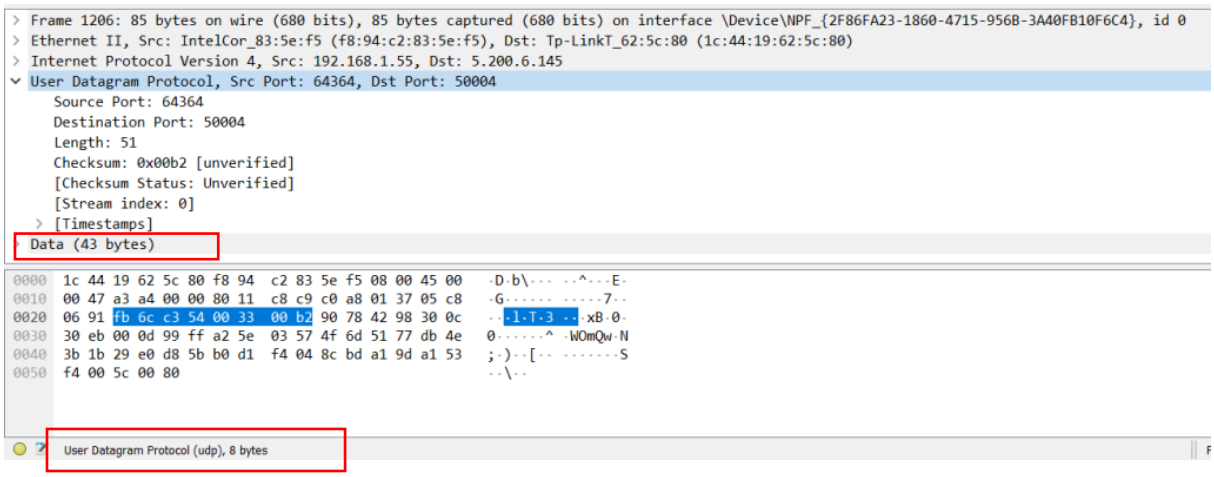
1. There are four headers which are source port (64364), destination port (50004), length (51) and checksum (0x00b2). We used mit.edu website when capturing packets.



2. Each UDP header field is 2 byte



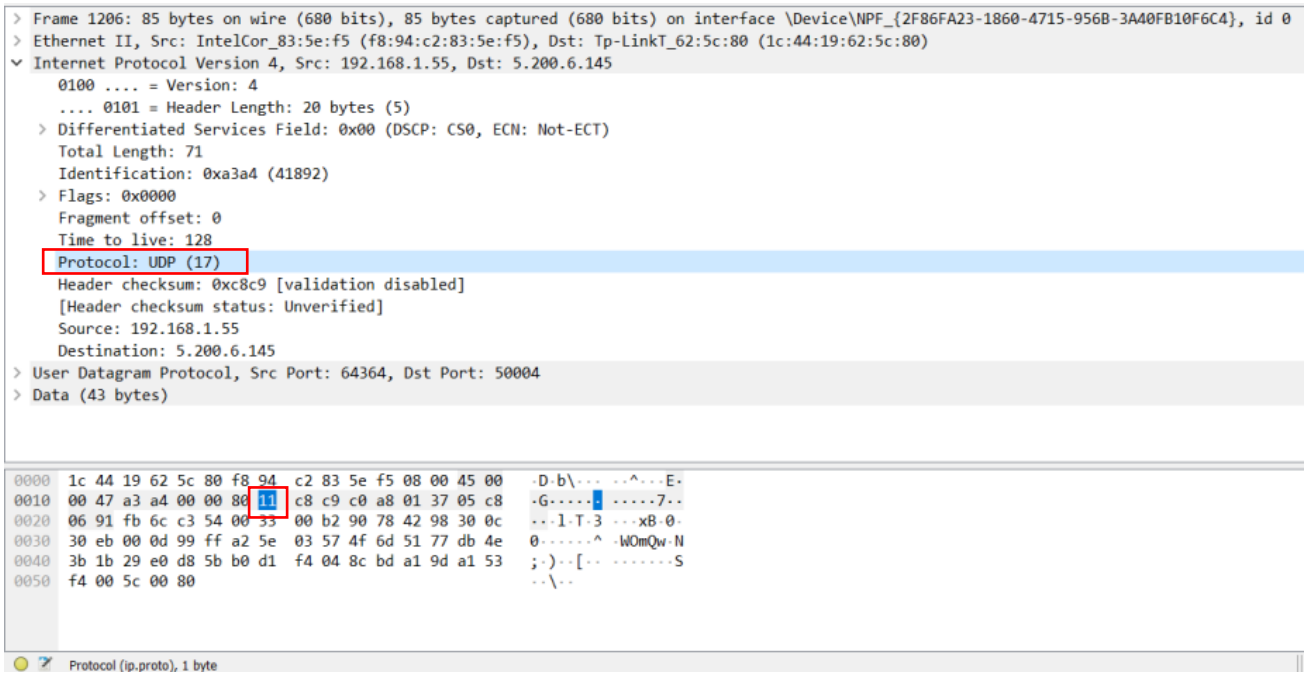
3. Length 51: 8 bytes UDP header data + 43 byte encapsulated data



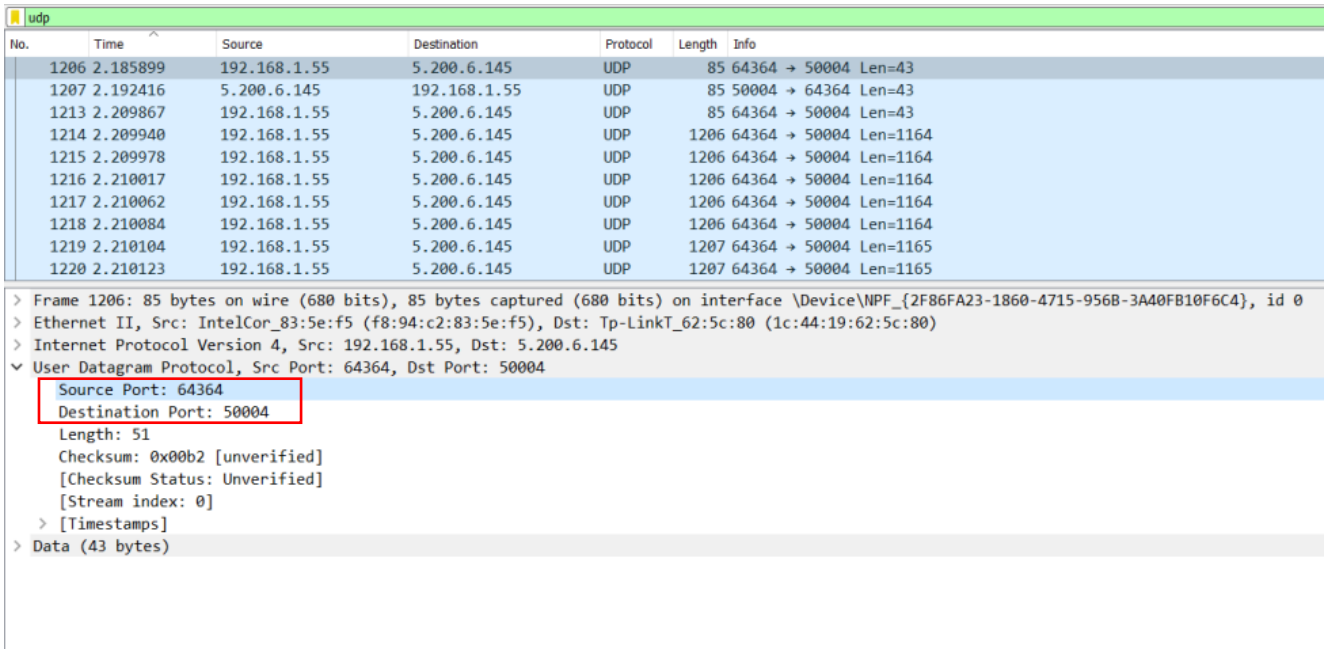
4. Maximum number of bytes: (2^{16} – 1) minus the number of header bytes which is 8 bytes. From this we can conclude that 65535 – 8 = 65527.

5. Largest possible source port number is 2^{16} – 1 = 65535. As we specified this in 4th question.

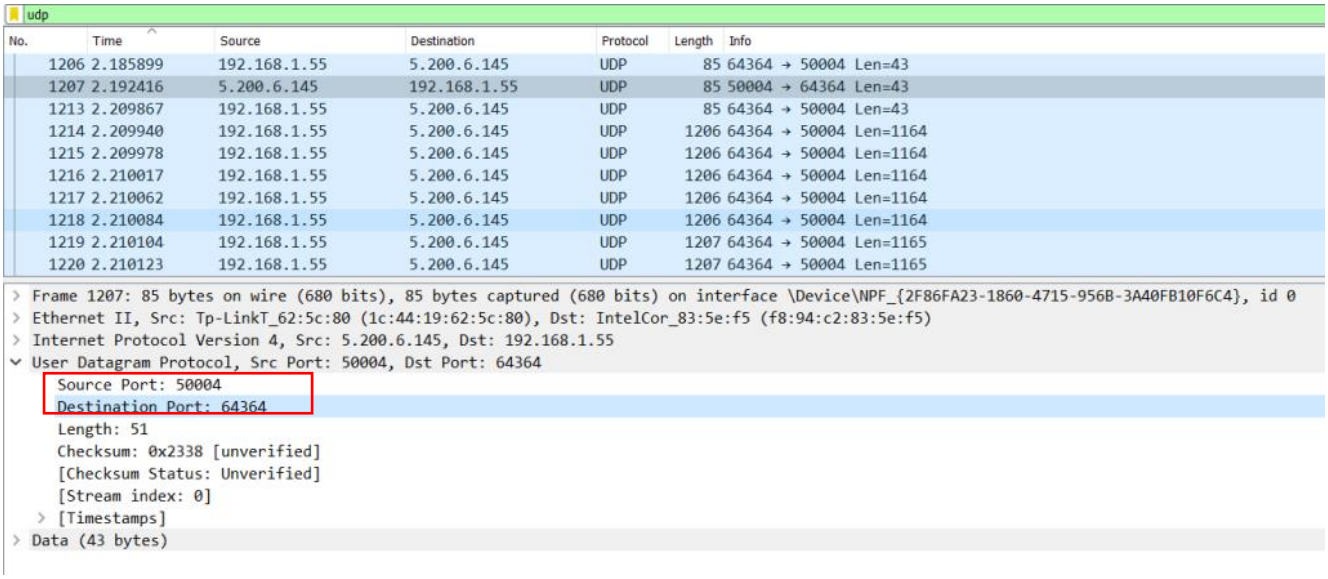
6. Protocol number is 17 (in decimal form) and protocol number in hexadecimal is 0x11.



7. UDP sent by host:



UDP reply to host :



As we show in the pictures above, source port of UDP packet sent (64364) is the same as the destination port of UDP reply. Likewise, destination port of UDP packet sent (50004) is the same as the source port of UDP reply.