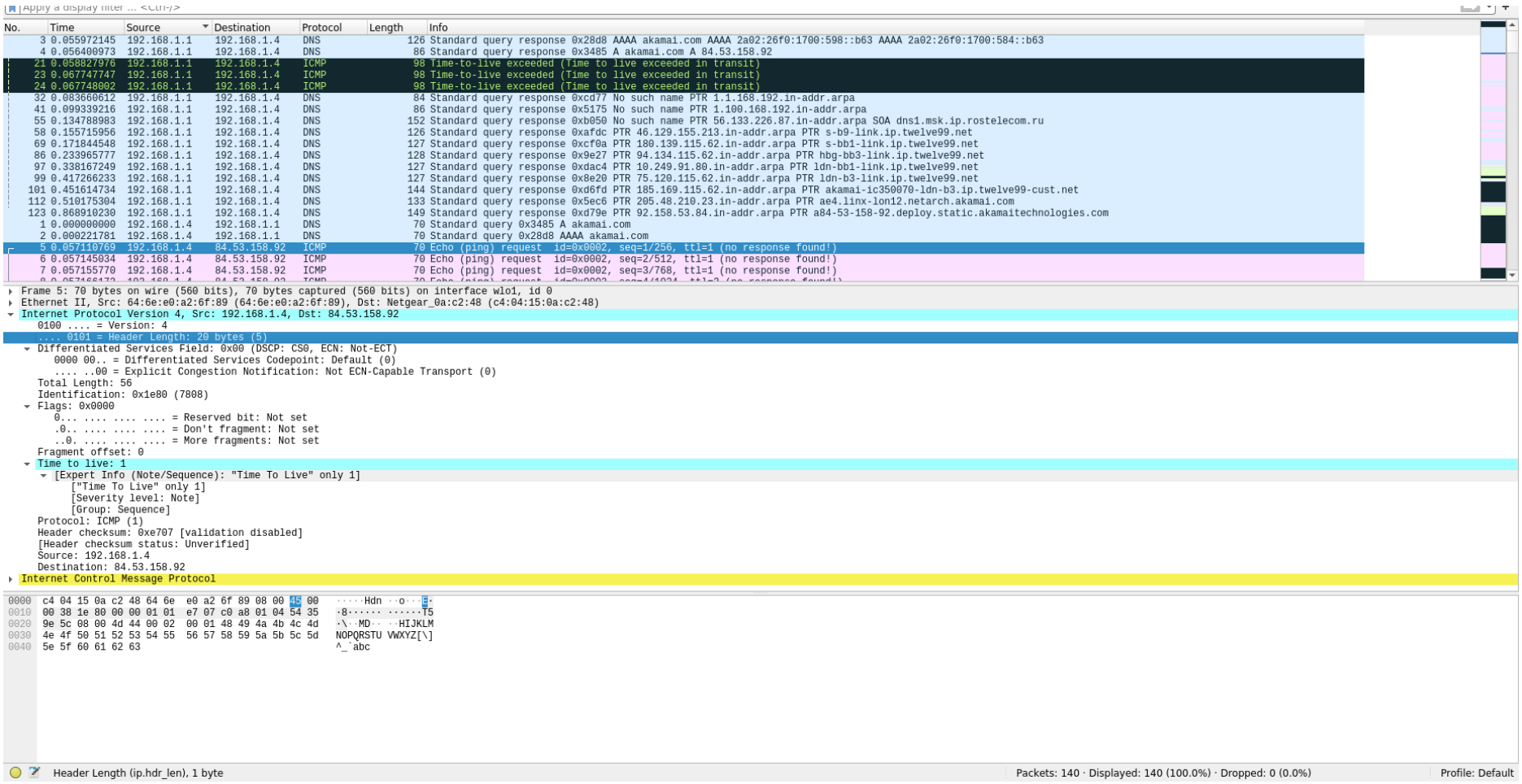
Home work 10



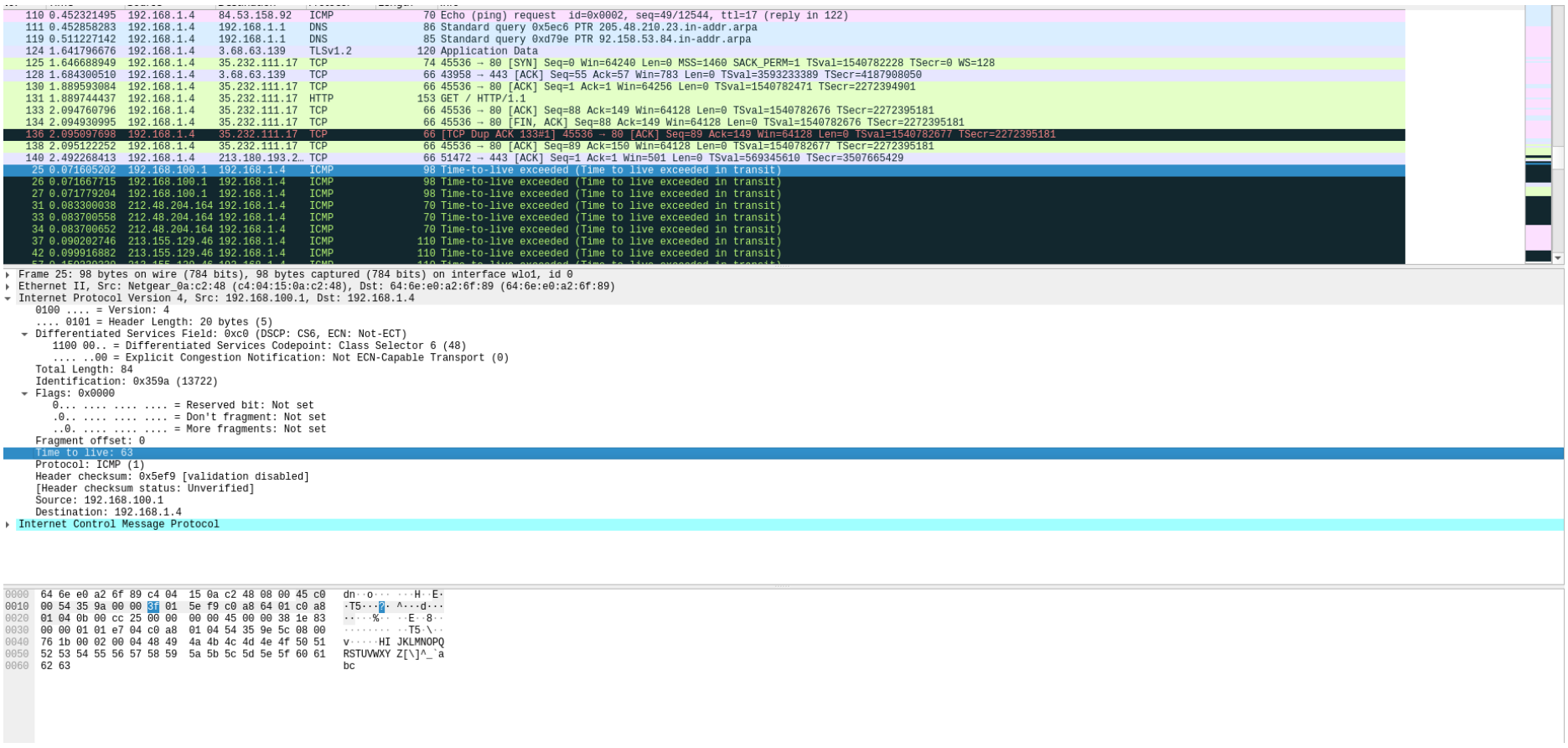
1. Source: 192.168.1.4
2. Protocol: ICMP (1)
3. .... 0101 = Header Length: 20 bytes (5), полезная 56 - 20

4a. меняются TTL,Identification, Header checksum

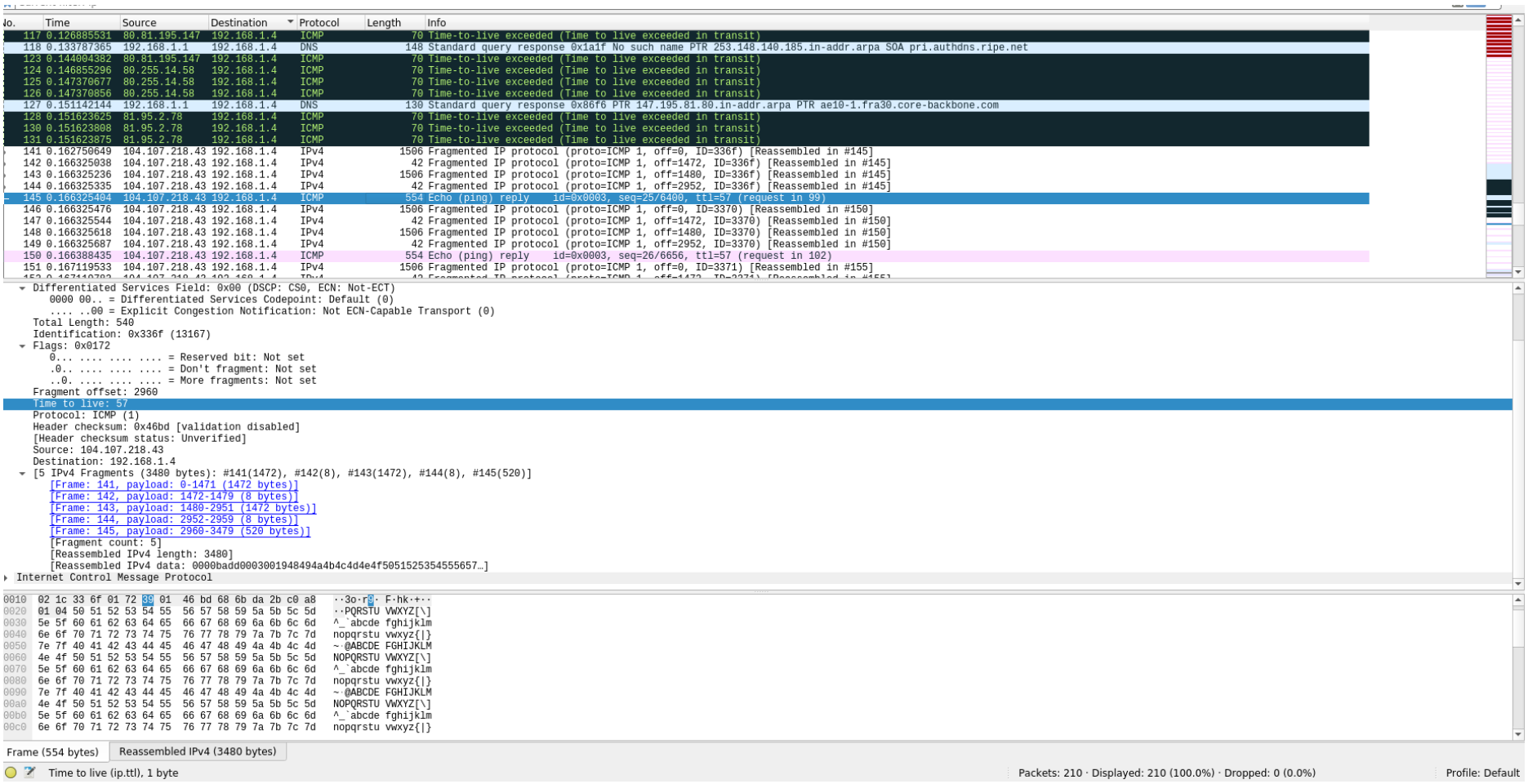
4b. все остальные поля не меняются и не должны, поля выше должны меняться

4c. инкрементирование

5. Identification: 0x1e80 (7808), Time to live: 1
6. Нет
7. Identification: 0x359a (13722), Time to live: 63



8. a. да, 5; b. checksum, flags, total length, fragment offset


No. Time Source Destination Protocol Length Info
117 0.126885531 80.81.195.147 192.168.1.4 ICMP 70 Time-to-live exceeded (Time to live exceeded in transit)
118 0.133787365 192.168.1.1 192.168.1.4 DNS 148 Standard query response 0x1a1f No such name PTR 253.148.140.185.in-addr.arpa SOA pri.authdns.ripe.net
123 0.144004382 80.81.195.147 192.168.1.4 ICMP 70 Time-to-live exceeded (Time to live exceeded in transit)
124 0.146855296 80.255.14.58 192.168.1.4 ICMP 70 Time-to-live exceeded (Time to live exceeded in transit)
125 0.147370677 80.255.14.58 192.168.1.4 ICMP 70 Time-to-live exceeded (Time to live exceeded in transit)
126 0.147370856 80.255.14.58 192.168.1.4 ICMP 70 Time-to-live exceeded (Time to live exceeded in transit)
127 0.151142144 192.168.1.1 192.168.1.4 DNS 130 Standard query response 0x86f6 PTR 147.195.81.80.in-addr.arpa PTR ae10-1.fra30.core-backbone.com
128 0.151623625 81.95.2.78 192.168.1.4 ICMP 70 Time-to-live exceeded (Time to live exceeded in transit)
130 0.151623808 81.95.2.78 192.168.1.4 ICMP 70 Time-to-live exceeded (Time to live exceeded in transit)
131 0.151623875 81.95.2.78 192.168.1.4 ICMP 70 Time-to-live exceeded (Time to live exceeded in transit)
141 0.162750649 104.107.218.43 192.168.1.4 IPv4 1506 Fragmented IP protocol (proto=ICMP 1, off=0, ID=336f) [Reassembled in #145]
142 0.166325038 104.107.218.43 192.168.1.4 IPv4 42 Fragmented IP protocol (proto=ICMP 1, off=1472, ID=336f) [Reassembled in #145]
143 0.166325236 104.107.218.43 192.168.1.4 IPv4 1506 Fragmented IP protocol (proto=ICMP 1, off=1480, ID=336f) [Reassembled in #145]
144 0.166325335 104.107.218.43 192.168.1.4 IPv4 42 Fragmented IP protocol (proto=ICMP 1, off=2952, ID=336f) [Reassembled in #145]
145 0.166325404 104.107.218.43 192.168.1.4 ICMP 554 Echo (ping) reply id=0x0003, seq=25/6400, ttl=57 (request in 99)
146 0.166325476 104.107.218.43 192.168.1.4 IPv4 1506 Fragmented IP protocol (proto=ICMP 1, off=0, ID=3370) [Reassembled in #150]
147 0.166325544 104.107.218.43 192.168.1.4 IPv4 42 Fragmented IP protocol (proto=ICMP 1, off=1472, ID=3370) [Reassembled in #150]
148 0.166325618 104.107.218.43 192.168.1.4 IPv4 1506 Fragmented IP protocol (proto=ICMP 1, off=1480, ID=3370) [Reassembled in #150]
149 0.166325687 104.107.218.43 192.168.1.4 IPv4 42 Fragmented IP protocol (proto=ICMP 1, off=2952, ID=3370) [Reassembled in #150]
150 0.166388435 104.107.218.43 192.168.1.4 ICMP 554 Echo (ping) reply id=0x0003, seq=26/6656, ttl=57 (request in 102)
151 0.167119533 104.107.218.43 192.168.1.4 IPv4 1506 Fragmented IP protocol (proto=ICMP 1, off=0, ID=3371) [Reassembled in #155]
Differentiated Services Field: 0x00 (DSCP: CS0, ECN: Not-ECT)
0000 00.. = Differentiated Services Codepoint: Default (0)
.... ..00 = Explicit Congestion Notification: Not ECN-Capable Transport (0)
Total Length: 540
Identification: 0x336f (13167)
Flags: 0x0172
0... .... = Reserved bit: Not set
.0.. .... = Don't fragment: Not set
..0. .... = More fragments: Not set
Fragment offset: 2960
Time to live: 57
Protocol: ICMP (1)
Header checksum: 0x46bd [validation disabled]
[Header checksum status: Unverified]
Source: 104.107.218.43
Destination: 192.168.1.4
[5 IPv4 Fragments (3480 bytes): #141(1472), #142(8), #143(1472), #144(8), #145(520)]
[Frame: 141, payload: 0-1471 (1472 bytes)]
[Frame: 142, payload: 1472-1479 (8 bytes)]
[Frame: 143, payload: 1480-2951 (1472 bytes)]
[Frame: 144, payload: 2952-2959 (8 bytes)]
[Frame: 145, payload: 2960-3479 (520 bytes)]
[Fragment count: 5]
[Reassembled IPv4 length: 3480]
[Reassembled IPv4 data: 0000badd0003001948494a4b4c4d4e4f5051525354555657…]
Internet Control Message Protocol
0010 02 1c 33 6f 01 72 30 01 46 bd 68 6b da 2b c0 a8 ··3o·r0· F·hk·+··
0020 01 04 50 51 52 53 54 55 56 57 58 59 5a 5b 5c 5d ··PQRSTU VWXYZ[\]
0030 5e 5f 60 61 62 63 64 65 66 67 68 69 6a 6b 6c 6d ^_`abcde fghijklm
0040 6e 6f 70 71 72 73 74 75 76 77 78 79 7a 7b 7c 7d nopqrstu vwxyz{|}
0050 7e 7f 40 41 42 43 44 45 46 47 48 49 4a 4b 4c 4d ~·@ABCDE FGHIJKLM
0060 4e 4f 50 51 52 53 54 55 56 57 58 59 5a 5b 5c 5d NOPQRSTU VWXYZ[\]
0070 5e 5f 60 61 62 63 64 65 66 67 68 69 6a 6b 6c 6d ^_`abcde fghijklm
0080 6e 6f 70 71 72 73 74 75 76 77 78 79 7a 7b 7c 7d nopqrstu vwxyz{|}
0090 7e 7f 40 41 42 43 44 45 46 47 48 49 4a 4b 4c 4d ~·@ABCDE FGHIJKLM
00a0 4e 4f 50 51 52 53 54 55 56 57 58 59 5a 5b 5c 5d NOPQRSTU VWXYZ[\]
00b0 5e 5f 60 61 62 63 64 65 66 67 68 69 6a 6b 6c 6d ^_`abcde fghijklm
00c0 6e 6f 70 71 72 73 74 75 76 77 78 79 7a 7b 7c 7d nopqrstu vwxyz{|}
Frame (554 bytes)
Reassembled IPv4 (3480 bytes)
Time to live (ip.ttl), 1 byte
Packets: 210 · Displayed: 210 (100.0%) · Dropped: 0 (0.0%)
Profile: Default