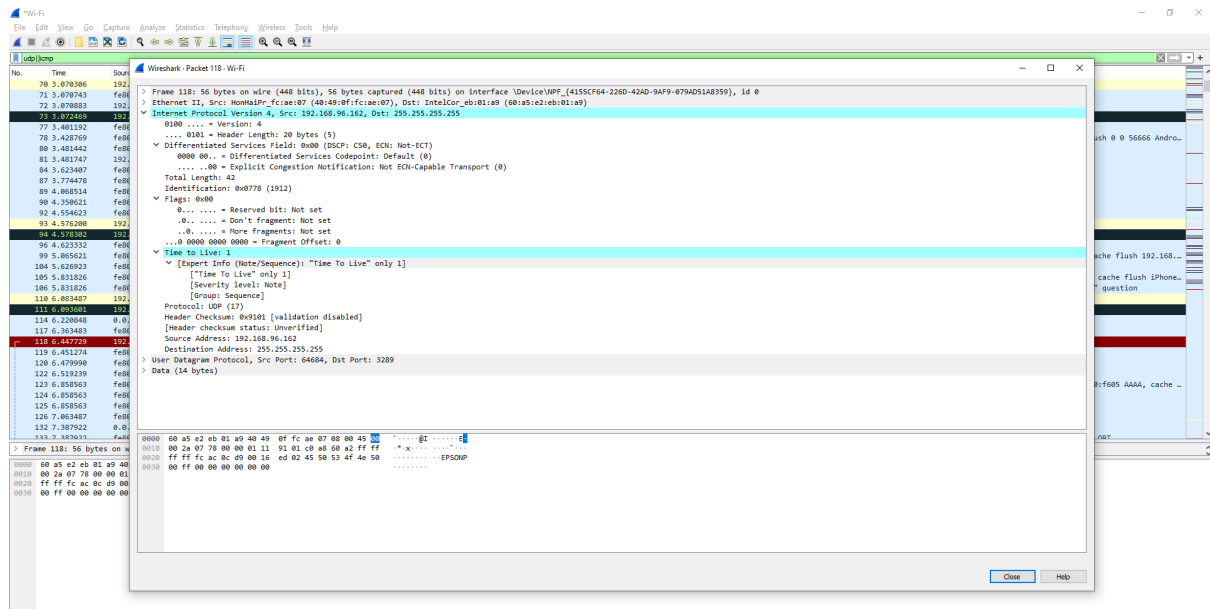


1. Selecione o primeiro segmento UDP enviado por seu computador por meio do comando traceroute para gaia.cs.umass.edu. (Dica: este é o 44º pacote no arquivo de rastreamento no arquivo ip-wireshark-trace1-1.pcapng na nota de rodapé 1). Expanda a parte do Protocolo de Internet do pacote na janela de detalhes do pacote. Qual é o endereço IP do seu computador?



Endereço de IP: 192.168.96.162

2. Qual é o valor no campo time-to-live (TTL) no cabeçalho deste datagrama IPv4?

TTL: 1

3. Qual é o valor no campo de protocolo da camada superior no cabeçalho deste datagrama IPv4? (Nota: as respostas para Linux/macOS diferem do Windows aqui).

Protocol: UDP (17)

4. Quantos bytes há no cabeçalho IP?

Header Length: 20 bytes

5. Quantos bytes há no payload do datagrama IP? Explique como você determinou o número de bytes de carga útil.

The screenshot displays the Wireshark network protocol analyzer interface. The top menu bar includes File, Edit, View, Go, Capture, Analyze, Statistics, Telephony, Wireless, Tools, and Help. The toolbar contains icons for various functions like opening files, capturing packets, and analyzing data. The packet list pane at the top shows a single captured packet, No. 44, which is an ICMP Echo (ping) request from source IP 192.168.86.1 to destination IP 128.119.245.12. The packet details pane on the right shows the hierarchical structure of the packet: Ethernet II (Type: IPv4), Internet Protocol Version 4 (Source: 192.168.86.1, Destination: 128.119.245.12), and User Datagram Protocol (Source Port: 64928, Destination Port: 33435). The packet bytes pane at the bottom shows the raw data of the packet in hexadecimal and ASCII format.

No.	Time	Source	Destination	Protocol	Length	Request line	User Datagram Protocol	Info
44	0.000000	192.168.86.1	128.119.245.12	UDP	70		✓	64928 → 33435 Len=28
48	0.008379	192.168.86.1	128.119.245.12	UDP	70		✓	64928 → 33436 Len=28
50	0.001385	192.168.86.1	128.119.245.12	UDP	70		✓	64928 → 33437 Len=28
52	0.001319	192.168.86.1	128.119.245.12	UDP	70		✓	64928 → 33438 Len=28
56	0.008847	192.168.86.1	128.119.245.12	UDP	70		✓	64928 → 33439 Len=28
58	0.003435	192.168.86.1	128.119.245.12	UDP	70		✓	64928 → 33440 Len=28
60	0.003654	192.168.86.1	128.119.245.12	UDP	70		✓	64928 → 33441 Len=28
62	0.014380	192.168.86.1	128.119.245.12	UDP	70		✓	64928 → 33442 Len=28
64	0.021137	192.168.86.1	128.119.245.12	UDP	70		✓	64928 → 33443 Len=28
67	0.012106	192.168.86.1	128.119.245.12	UDP	70		✓	64928 → 33444 Len=28
69	0.011202	192.168.86.1	128.119.245.12	UDP	70		✓	64928 → 33445 Len=28
71	0.013854	192.168.86.1	128.119.245.12	UDP	70		✓	64928 → 33446 Len=28
73	0.010464	192.168.86.1	128.119.245.12	UDP	70		✓	64928 → 33447 Len=28
75	0.015940	192.168.86.1	128.119.245.12	UDP	70		✓	64928 → 33448 Len=28
77	0.017148	192.168.86.1	128.119.245.12	UDP	70		✓	64928 → 33449 Len=28
79	0.016135	192.168.86.1	128.119.245.12	UDP	70		✓	64928 → 33450 Len=28
81	0.020723	192.168.86.1	128.119.245.12	UDP	70		✓	64928 → 33451 Len=28
83	0.017358	192.168.86.1	128.119.245.12	UDP	70		✓	64928 → 33452 Len=28
85	0.018238	192.168.86.1	128.119.245.12	UDP	70		✓	64928 → 33453 Len=28

Packet 44 details:

- Ethernet II, Src: Apple\_S8:d9:27 (78:4d:43:98:d9:27), Dst: Google\_89:0e:c8 (3c:28:6d:89:0e:c8)
- Internet Protocol Version 4, Src: 192.168.86.1, Dst: 128.119.245.12
- User Datagram Protocol, Src Port: 64928, Dst Port: 33435
- Data (28 bytes)

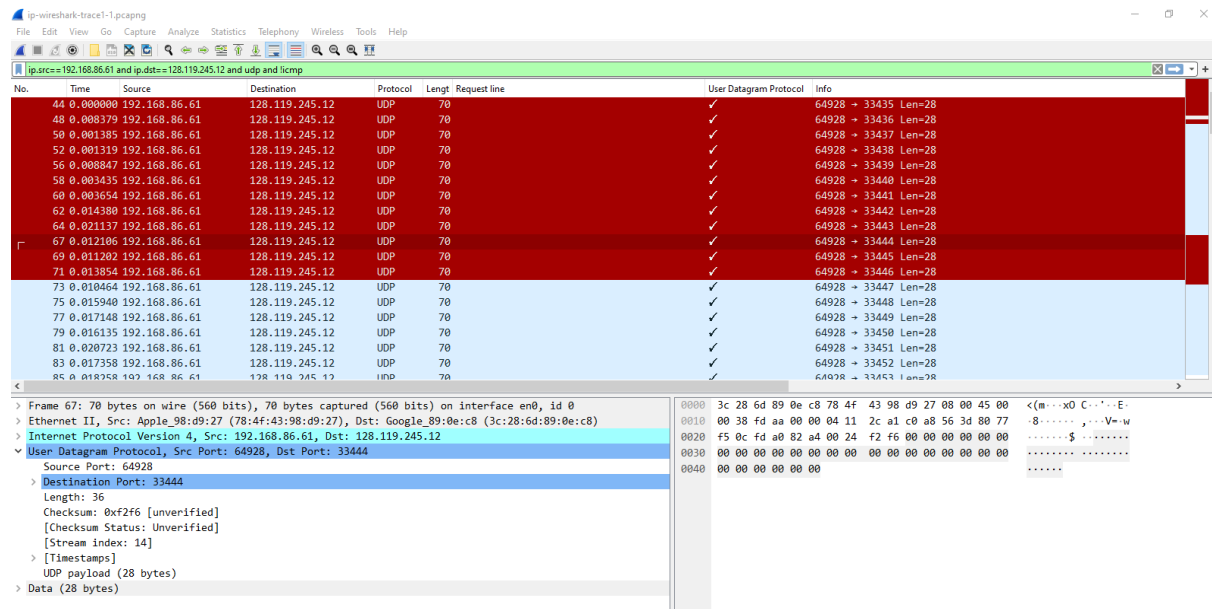
Packet 44 bytes:

```

0000  3c 28 6d 89 0e c8 78 4f 43 98 d9 27 00 00 45 00  <(---xX C---E-
0010  00 3f d1 a1 00 00 01 11 2f aa c0 a8 56 3d 80 77  -8----- /--W-w
0020  f5 0c fd a0 82 90 00 24 f2 ff 00 00 00 00 00 00  .....$ .....
0030  00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  .....
0040  00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  .....
  
```

O campo de Destino e de Origem permanecem constante devido à comunicação ser entre o mesmo client e o mesmo host. Já o Len=28 (presente na coluna Info) permanece constante por todos os pacotes terem o mesmo tamanho.

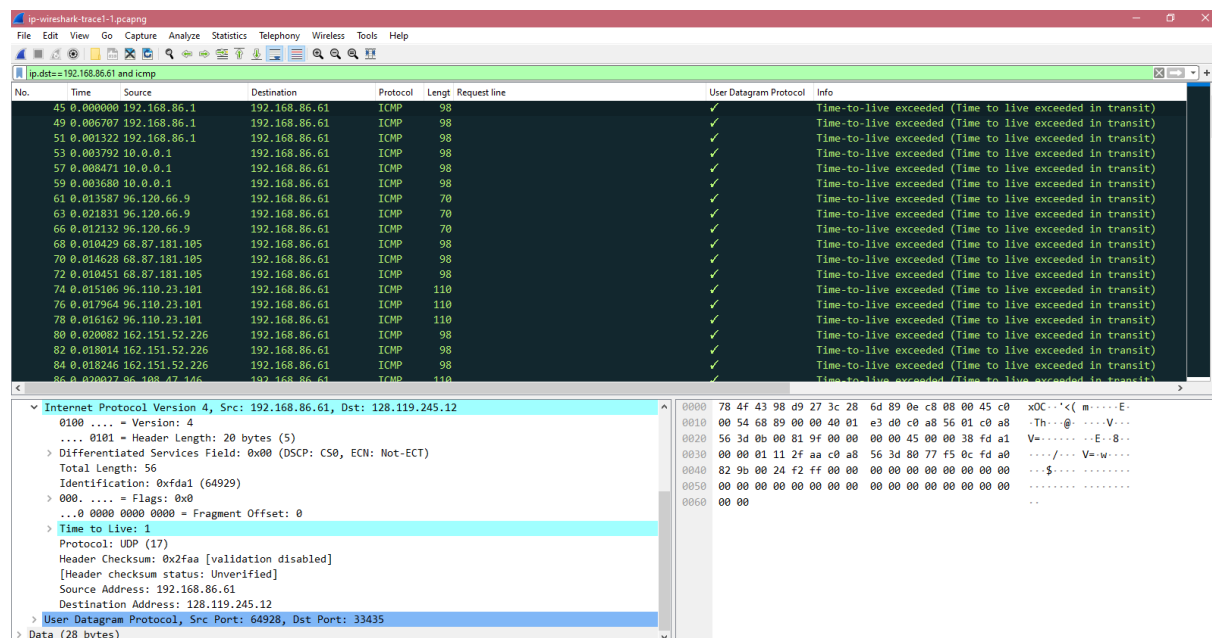
## 9. Descreva o padrão que você vê nos valores no campo Identificação dos datagramas IP enviados pelo seu computador.



The Wireshark capture shows a series of UDP packets. The 'Info' column for each packet indicates a length of 28 bytes. The packet details pane shows the structure of a UDP packet, including the Ethernet II header, Internet Protocol Version 4 header, and User Datagram Protocol header. The source port is 64928 and the destination port is 33444. The data field is 28 bytes long.

A porta de origem: 64928 permanece constante, o campo Length e o UDP payload: 28 bytes.

## 10. Qual é o protocolo da camada superior especificado nos datagramas IP retornados dos roteadores? (Nota: as respostas para Linux/MacOS diferem do Windows aqui).



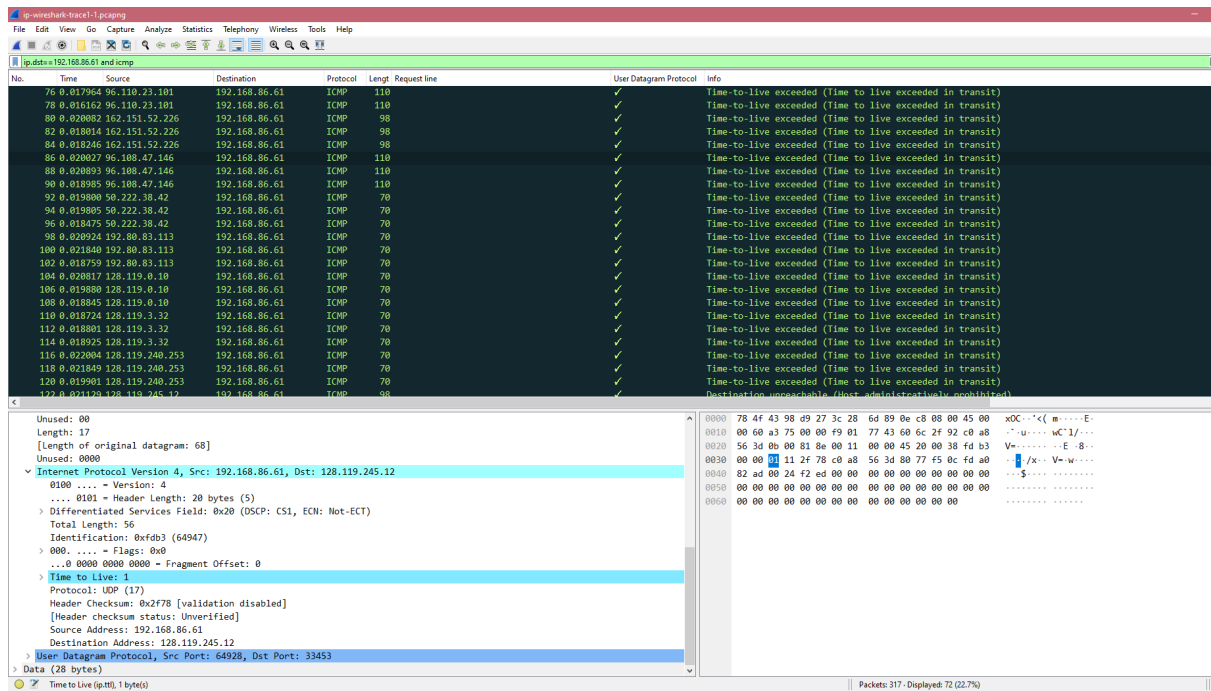
The Wireshark capture shows a series of ICMP Echo (ping) requests. The 'Info' column for each packet indicates 'Time-to-live exceeded (Time to live exceeded in transit)'. The packet details pane shows the structure of an ICMP Echo request, including the Internet Protocol Version 4 header, Differentiated Services Field (DSCP: CS0, ECN: Not-ECT), Total Length: 56, Identification: 0xfda1 (64929), Time to Live: 1, Protocol: UDP (17), Header Checksum: 0x2faa, Source Address: 192.168.86.61, Destination Address: 128.119.245.12, User Datagram Protocol header, and Data field.

Protocolo UDP.

11. Os valores nos campos de identificação (através da sequência de todos os pacotes ICMP de todos os roteadores) são semelhantes em comportamento à sua resposta à pergunta 9 acima?

Não.

12. Os valores dos campos TTL são semelhantes em todos os pacotes ICMP de todos os roteadores?



Sim.

13. Encontre o primeiro datagrama IP contendo a primeira parte do segmento enviado para 128.119.245.12 enviado pelo seu computador através do comando traceroute para gaia.cs.umass.edu, depois de especificar que o comprimento do pacote traceroute deve ser 3000. (Dica : Este é o pacote 179 no arquivo de rastreamento ip-wireshark-trace1-1.pcapng na nota de rodapé 2. Os pacotes 179, 180 e 181 são três datagramas IP criados pela fragmentação do primeiro segmento UDP de 3000 bytes enviado para 128.119.145.12) . Esse segmento foi fragmentado em mais de um datagrama IP? (Dica: a resposta é sim2!)

No.	Time	Source	Destination	Protocol	Length	Request line	User Datagram Protocol	Info
172	0.000000	172.217.10.138	10.0.0.44	TLSv1.3	97			[TCP Previous segment not captured], Application Data
173	0.000001	172.217.10.138	10.0.0.44	TCP	646			[TCP Out-Of-Order] 443 → 54971 [PSH, ACK] Seq=8169 Ack=1664 Win=
174	0.000154	10.0.0.44	172.217.10.138	TCP	78			[TCP Dup ACK 1544] 54971 → 443 [ACK] Seq=1664 Ack=8169 Win=
175	0.000001	10.0.0.44	172.217.10.138	TCP	66			54971 → 443 [ACK] Seq=1664 Ack=8780 Win=130432 Len=0 TSval=49
176	0.000913	10.0.0.44	172.217.10.138	TLSv1.3	97			Application Data
177	0.004155	172.217.10.138	10.0.0.44	TLSv1.3	646			Application Data, Application Data
178	0.000089	10.0.0.44	172.217.10.138	TCP	66			54970 → 443 [ACK] Seq=748 Ack=8748 Win=130432 Len=0 TSval=492
179	0.000698	10.0.0.44	172.217.10.138	TLSv1.3	97			Application Data
180	0.008384	172.217.10.138	10.0.0.44	TLSv1.3	100			Application Data
181	0.000068	10.0.0.44	172.217.10.138	TCP	66			54970 → 443 [ACK] Seq=779 Ack=8779 Win=131008 Len=0 TSval=492
182	0.000223	172.217.10.138	10.0.0.44	TLSv1.3	549			Application Data
183	0.000003	172.217.10.138	10.0.0.44	TLSv1.3	100			Application Data
184	0.000001	172.217.10.138	10.0.0.44	TLSv1.3	105			Application Data
185	0.000040	10.0.0.44	172.217.10.138	TCP	66			54971 → 443 [ACK] Seq=1695 Ack=9263 Win=130560 Len=0 TSval=49
186	0.000000	10.0.0.44	172.217.10.138	TCP	66			54971 → 443 [ACK] Seq=1695 Ack=9294 Win=130496 Len=0 TSval=49
187	0.000030	10.0.0.44	172.217.10.138	TCP	66			54971 → 443 [ACK] Seq=1695 Ack=9333 Win=130496 Len=0 TSval=49
188	0.000620	10.0.0.44	172.217.10.138	TLSv1.3	105			Application Data
189	0.001220	10.0.0.44	172.217.10.138	TCP	1484			54970 → 443 [ACK] Seq=779 Ack=8779 Win=131072 Len=1418 TSval=
190	0.000000	10.0.0.44	172.217.10.138	TLSv1.3	433			Application Data
191	0.000062	10.0.0.44	172.217.10.138	TLSv1.3	219			Application Data
192	0.013751	172.217.10.138	10.0.0.44	TCP	68			443 → 54971 [ACK] Seq=9333 Ack=1695 Win=69632 Len=0 TSval=272
193	0.002002	172.217.10.138	10.0.0.44	TCP	68			443 → 54970 [ACK] Seq=8779 Ack=779 Win=67840 Len=0 TSval=1968
194	0.000005	172.217.10.138	10.0.0.44	TCP	66			443 → 54971 [ACK] Seq=9333 Ack=1734 Win=69632 Len=0 TSval=272
195	0.008941	172.217.10.138	10.0.0.44	TCP	68			443 → 54970 [ACK] Seq=8779 Ack=2564 Win=73472 Len=0 TSval=196
196	0.000005	172.217.10.138	10.0.0.44	TCP	66			443 → 54970 [ACK] Seq=8779 Ack=2717 Win=76288 Len=0 TSval=196
197	0.046938	172.217.10.138	10.0.0.44	TLSv1.3	887			Application Data
198	0.000005	10.0.0.44	172.217.10.138	TCP	66			54970 → 443 [ACK] Seq=2717 Ack=9600 Win=130240 Len=0 TSval=49

Sim.

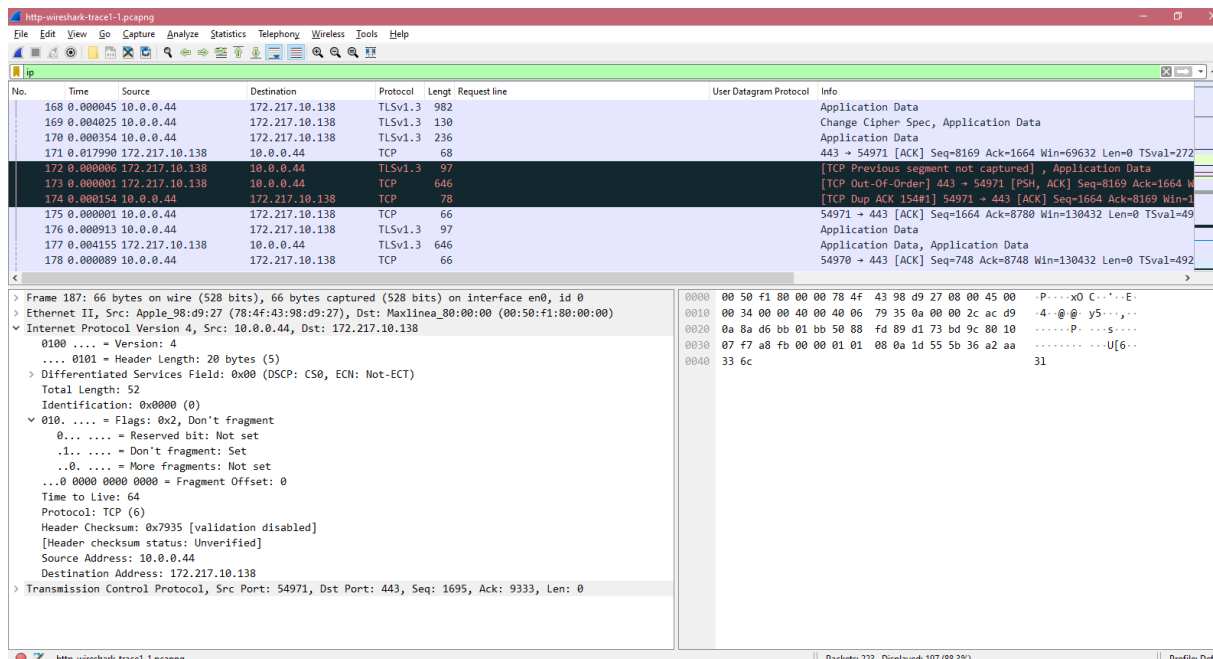
14. Que informação no cabeçalho IP indica que este datagrama foi fragmentado?

```

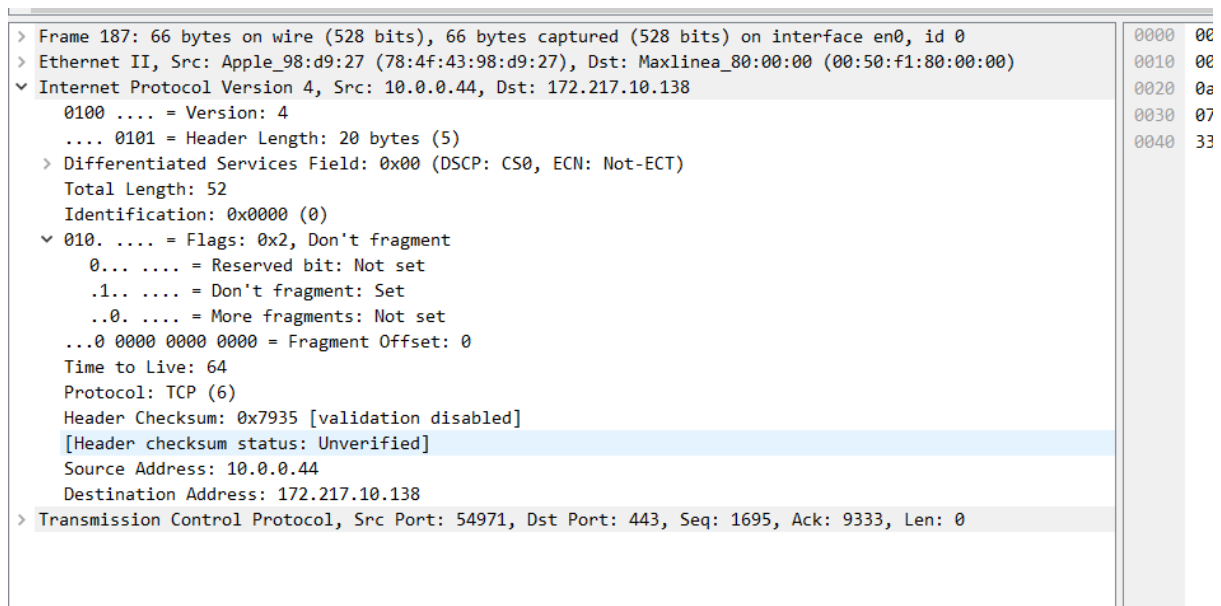
> Frame 185: 66 bytes on wire (528 bits), 66 bytes captured (528 bits) on interface en0, id 0
> Ethernet II, Src: Apple_98:d9:27 (78:4f:43:98:d9:27), Dst: Maxlinea_80:00:00 (00:50:f1:80:00:00)
> Internet Protocol Version 4, Src: 10.0.0.44, Dst: 172.217.10.138
  0100 .... = Version: 4
  .... 0101 = Header Length: 20 bytes (5)
> Differentiated Services Field: 0x00 (DSCP: CS0, ECN: Not-ECT)
  Total Length: 52
  Identification: 0x0000 (0)
> 010. .... = Flags: 0x2, Don't fragment
  ...0 0000 0000 0000 = Fragment Offset: 0
  Time to Live: 64
  Protocol: TCP (6)
  Header Checksum: 0x7935 [validation disabled]
  [Header checksum status: Unverified]
  Source Address: 10.0.0.44
  Destination Address: 172.217.10.138
> Transmission Control Protocol, Src Port: 54971, Dst Port: 443, Seq: 1695, Ack: 9263, Len: 0

```

15. Quais informações no cabeçalho IP deste pacote indicam se este é o primeiro fragmento ou um fragmento posterior?



16. Quantos bytes há neste datagrama IP (cabeçalho mais payload)?



20 + 52 = 72 bytes

17. Agora inspecione o datagrama contendo o segundo fragmento do segmento UDP fragmentado. Que informação no cabeçalho IP indica que este não é o primeiro fragmento de datagrama?

178 0.000089 10.0.0.44 172.217.10.138 TCP 66

> Frame 175: 66 bytes on wire (528 bits), 66 bytes captured (528 bits) on interface en0, id 0

> Ethernet II, Src: Apple\_98:d9:27 (78:4f:43:98:d9:27), Dst: Maxlinea\_80:00:00 (00:50:f1:80:00:00)

▼ Internet Protocol Version 4, Src: 10.0.0.44, Dst: 172.217.10.138

0100 .... = Version: 4

.... 0101 = Header Length: 20 bytes (5)

> Differentiated Services Field: 0x00 (DSCP: CS0, ECN: Not-ECT)

Total Length: 52

Identification: 0x0000 (0)

▼ 010. .... = Flags: 0x2, Don't fragment

0... .... = Reserved bit: Not set

.1.. .... = Don't fragment: Set

..0. .... = More fragments: Not set

...0 0000 0000 0000 = Fragment Offset: 0

Time to Live: 64

Protocol: TCP (6)

Header Checksum: 0x7935 [validation disabled]

[Header checksum status: Unverified]

Source Address: 10.0.0.44

Destination Address: 172.217.10.138

> Transmission Control Protocol, Src Port: 54971, Dst Port: 443, Seq: 1664, Ack: 8780, Len: 0

identification.

18. Quais campos mudam no cabeçalho IP entre o primeiro e o segundo fragmento?

No.	Time	Source	Destination	Protocol	Length	Request line	User Datagram Protocol	Info
168	0.000045	10.0.0.44	172.217.10.138	TLSv1.3	982			Application Data
169	0.000025	10.0.0.44	172.217.10.138	TLSv1.3	130			Change Cipher Spec, Application
170	0.000354	10.0.0.44	172.217.10.138	TLSv1.3	236			Application Data
171	0.017990	172.217.10.138	10.0.0.44	TCP	68			443 → 54971 [ACK] Seq=8169 Ack=
172	0.000006	172.217.10.138	10.0.0.44	TLSv1.3	97			[TCP Previous segment not captu
173	0.000001	172.217.10.138	10.0.0.44	TCP	646			[TCP Out-Of-Order] 443 → 54971
174	0.000154	10.0.0.44	172.217.10.138	TCP	78			[TCP Dup ACK 154#1] 54971 → 443
175	0.000001	10.0.0.44	172.217.10.138	TCP	66			54971 → 443 [ACK] Seq=1664 Ack=
176	0.000913	10.0.0.44	172.217.10.138	TLSv1.3	97			Application Data
177	0.004155	172.217.10.138	10.0.0.44	TLSv1.3	646			Application Data, Application D
178	0.000089	10.0.0.44	172.217.10.138	TCP	66			54970 → 443 [ACK] Seq=748 Ack=8

> Frame 175: 66 bytes on wire (528 bits), 66 bytes captured (528 bits) on interface en0, id 0

> Ethernet II, Src: Apple\_98:d9:27 (78:4f:43:98:d9:27), Dst: Maxlinea\_80:00:00 (00:50:f1:80:00:00)

▼ Internet Protocol Version 4, Src: 10.0.0.44, Dst: 172.217.10.138

0100 .... = Version: 4

.... 0101 = Header Length: 20 bytes (5)

> Differentiated Services Field: 0x00 (DSCP: CS0, ECN: Not-ECT)

Total Length: 52

Identification: 0x0000 (0)

▼ 010. .... = Flags: 0x2, Don't fragment

0... .... = Reserved bit: Not set

.1.. .... = Don't fragment: Set

..0. .... = More fragments: Not set

...0 0000 0000 0000 = Fragment Offset: 0

Time to Live: 64

Protocol: TCP (6)

Header Checksum: 0x7935 [validation disabled]

[Header checksum status: Unverified]

Source Address: 10.0.0.44

Destination Address: 172.217.10.138

> Transmission Control Protocol, Src Port: 54971, Dst Port: 443, Seq: 1664, Ack: 8780, Len: 0

0000 00 50 f1 80 00 00 78 4f 43 98 d9 27 08 00 45 00

0010 00 34 00 00 40 00 40 06 79 35 0a 00 00 2c ac d0

0020 0a 8a d6 bb 01 bb 50 88 fd 6a d1 73 bb 73 80 10

0030 07 f6 ab 61 00 00 01 01 08 0a 1d 55 5b 28 a2 a0

0040 33 5d

Identification, TTL, Flag, Src Port, Dst Port, Seq



19. Agora encontre o datagrama IP contendo o terceiro fragmento do segmento UDP original. Que informação no cabeçalho IP indica que este é o último fragmento daquele segmento?

1/8 0.000089 10.0.0.44	1/2.21/10.138	TCP	bb	549
<				
> Frame 171: 68 bytes on wire (544 bits), 68 bytes captured (544 bits) on interface en0, id 0				
> Ethernet II, Src: Maxlinea_80:00:00 (00:50:f1:80:00:00), Dst: Apple_98:d9:27 (78:4f:43:98:d9:27)				
▼ Internet Protocol Version 4, Src: 172.217.10.138, Dst: 10.0.0.44				
0100 .... = Version: 4				
.... 0101 = Header Length: 20 bytes (5)				
> Differentiated Services Field: 0x00 (DSCP: CS0, ECN: Not-ECT)				
Total Length: 52				
Identification: 0x917e (37246)				
▼ 000. .... = Flags: 0x00				
0... .... = Reserved bit: Not set				
.0.. .... = Don't fragment: Not set				
..0. .... = More fragments: Not set				
...0 0000 0000 0000 = Fragment Offset: 0				
Time to Live: 58				
Protocol: TCP (6)				
Header Checksum: 0x2db7 [validation disabled]				
[Header checksum status: Unverified]				
Source Address: 172.217.10.138				
Destination Address: 10.0.0.44				
> Transmission Control Protocol, Src Port: 443, Dst Port: 54971, Seq: 8169, Ack: 1664, Len: 0				

0000

78 4f 43 98 d9 27 06

0010 00 34 91 7e 00 00 3a

0020 00 2c 01 bb d6 bb d1

0030 01 10 b4 c0 00 00 01

0040 5b 12 64 51

Ack e Seq.

20. Qual é o endereço IPv6 do computador que faz a solicitação DNS AAAA? Este é o endereço de origem do vigésimo pacote no rastreamento. Forneça o endereço de origem IPv6 para este datagrama exatamente da mesma forma exibida na janela do Wireshark3.

No.	Time	Source	Destination	Protocol	Length	Info
1	0.000000	10.0.0.44	35.186.224.47	TLSv1.2	101	Application Data
2	0.029774	35.186.224.47	10.0.0.44	TCP	66	443 → 49993 [ACK] Seq=1 Ack=36 Win=266 Len=0 TSval=1471340864
3	0.050759	35.186.224.47	10.0.0.44	TLSv1.2	97	Application Data
4	0.050820	10.0.0.44	35.186.224.47	TCP	66	49993 → 443 [ACK] Seq=36 Ack=32 Win=2047 Len=0 TSval=45968036
5	0.385902	10.0.0.44	172.217.11.3	TLSv1.2	105	Application Data
6	0.412186	172.217.11.3	10.0.0.44	TLSv1.2	105	Application Data
7	0.412291	10.0.0.44	172.217.11.3	TCP	66	50475 → 443 [ACK] Seq=40 Ack=40 Win=2047 Len=0 TSval=45968072
8	0.502856	Somos_25:3a:2a	Spanning-tree-(for-bridg...	STP	68	Conf. Root = 36864/0/48:a6:b8:25:3a:2a Cost = 0 Port = 0x00
9	1.987334	52.114.132.119	10.0.0.44	TLSv1.2	398	Application Data
10	1.987393	10.0.0.44	52.114.132.119	TCP	54	49987 → 443 [ACK] Seq=1 Ack=337 Win=4090 Len=0
11	2.181465	10.0.0.44	52.114.132.119	TLSv1.2	242	Application Data
12	2.340566	10.0.0.44	52.114.132.119	TCP	242	[TCP Retransmission] 49987 → 443 [PSH, ACK] Seq=1 Ack=337 Win=
13	2.457995	52.114.132.119	10.0.0.44	TCP	60	443 → 49987 [ACK] Seq=337 Ack=189 Win=2051 Len=0
14	2.460039	52.114.132.119	10.0.0.44	TCP	60	[TCP Dup ACK 13] 443 → 49987 [ACK] Seq=337 Ack=189 Win=2051
15	2.653323	10.0.0.123	224.0.0.251	MDNS	139	Standard query 0x0000 PTR _companion-link._tcp.local, "QU" qu
16	2.653622	fe80::1085:6434:3583:9e7a	ff02::fb	MDNS	159	Standard query 0x0000 PTR _companion-link._tcp.local, "QU" qu
17	3.267794	Somos_25:3a:2a	Spanning-tree-(for-bridg...	STP	68	Conf. Root = 36864/0/48:a6:b8:25:3a:2a Cost = 0 Port = 0x00
18	3.620864	52.112.115.23	10.0.0.44	TCP	56	443 → 50510 [RST, ACK] Seq=1 Ack=1 Win=0 Len=0
19	3.814364	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x4667 A youtube.com
20	3.814489	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x920d AAAA youtube.com
21	3.816338	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	85	Standard query 0x7004 A youtube.com
22	3.816338	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	85	Standard query 0x7004 A youtube.com
▼						
.... 0000 0000 .... = Traffic Class: 0x00 (DSCP: CS0, ECN: Not-ECT)						
.... 0000 00.. .... = Differentiated Services Codepoint: Default (0)						
.... ..00 .... = Explicit Congestion Notification: Not ECN-Capable Transport (0)						
.... .... 1010 0100 1001 0001 1000 = Flow Label: 0xa4918						
Payload Length: 37						
Next Header: UDP (17)						
Hop Limit: 255						
Source: 2601:193:8302:4620:215c:f5ae:8b40:a27a						
Destination: 2001:558:feed::1						

21. Qual é o endereço de destino IPv6 para este datagrama? Forneça este endereço IPv6 exatamente da mesma forma exibida na janela do Wireshark.



No.	Time	Source	Destination	Protocol	Length	Request line	User Datagram Protocol	Info
1	0.000000	10.0.0.44	35.186.224.47	TLSv1.2	101			Application Data
2	0.029774	35.186.224.47	10.0.0.44	TCP	66			443 → 49993 [ACK] Seq=1 Ack=36 Win=266 Len=0 TSval=147134064
3	0.020985	35.186.224.47	10.0.0.44	TLSv1.2	97			Application Data
4	0.000061	10.0.0.44	35.186.224.47	TCP	66			49993 → 443 [ACK] Seq=36 Ack=32 Win=2047 Len=0 TSval=45968036
5	0.335082	10.0.0.44	172.217.11.3	TLSv1.2	105			Application Data
6	0.026284	172.217.11.3	10.0.0.44	TLSv1.2	105			Application Data
7	0.000105	10.0.0.44	172.217.11.3	TCP	66			50475 → 443 [ACK] Seq=40 Ack=40 Win=2047 Len=0 TSval=45968072
9	1.575043	52.114.132.119	10.0.0.44	TLSv1.2	390			Application Data
10	0.000059	10.0.0.44	52.114.132.119	TCP	54			49987 → 443 [ACK] Seq=1 Ack=337 Win=4090 Len=0
11	0.194072	10.0.0.44	52.114.132.119	TLSv1.2	242			Application Data
12	0.159101	10.0.0.44	52.114.132.119	TCP	242			[TCP Retransmission] 49987 → 443 [PSH, ACK] Seq=1 Ack=337 Win=4090 Len=0
13	0.117429	52.114.132.119	10.0.0.44	TCP	60			443 → 49987 [ACK] Seq=337 Ack=189 Win=2051 Len=0
14	0.022044	52.114.132.119	10.0.0.44	TCP	66			[TCP Dup ACK 13#1] 443 → 49987 [ACK] Seq=337 Ack=189 Win=2051 Len=0
15	0.173284	10.0.0.123	224.0.0.251	MDNS	139		✓	Standard query 0x0000 PTR _companion-link._tcp.local, "QU"
18	0.976541	52.112.115.23	10.0.0.44	TCP	56			443 → 50518 [RST, ACK] Seq=1 Ack=1 Win=0 Len=0
34	0.597780	52.70.172.237	10.0.0.44	TLSv1.2	612			Application Data
35	0.000003	52.70.172.237	10.0.0.44	TLSv1.2	97			Encrypted Alert
36	0.000059	10.0.0.44	52.70.172.237	TCP	66			50621 → 443 [ACK] Seq=1 Ack=547 Win=2048 Len=0 TSval=45968072
37	0.000049	10.0.0.44	52.70.172.237	TCP	66			50621 → 443 [ACK] Seq=1 Ack=579 Win=2047 Len=0 TSval=45968072
38	0.000191	10.0.0.44	52.70.172.237	TLSv1.2	97			Encrypted Alert
39	0.000643	10.0.0.44	52.70.172.237	TCP	66			50621 → 443 [FIN, ACK] Seq=32 Ack=579 Win=2048 Len=0 TSval=45968072
42	0.267482	10.0.0.44	52.70.172.237	TCP	97			[TCP Retransmission] 50621 → 443 [FIN, PSH, ACK] Seq=1 Ack=547 Win=2048 Len=0
45	0.337362	10.0.0.44	52.70.172.237	TCP	97			[TCP Retransmission] 50621 → 443 [FIN, PSH, ACK] Seq=1 Ack=547 Win=2048 Len=0
46	0.110653	128.119.240.53	10.0.0.44	TCP	66			4282 → 50018 [ACK] Seq=1 Ack=1 Win=269 Len=0 TSval=28515963
47	0.000080	10.0.0.44	128.119.240.53	TCP	66			[TCP ZeroWindow] [TCP ACKed unseen segment] 50018 → 4282 [RST, ACK] Seq=1 Ack=1 Win=0 Len=0
48	0.094706	52.70.172.237	10.0.0.44	TCP	97			[TCP Spurious Retransmission] 443 → 50621 [FIN, PSH, ACK] Seq=1 Ack=547 Win=2048 Len=0
49	0.000004	52.70.172.237	10.0.0.44	TCP	643			[TCP Spurious Retransmission] 443 → 50621 [FIN, PSH, ACK] Seq=1 Ack=547 Win=2048 Len=0

2001:558:feed::1

22. Qual é o valor do rótulo de fluxo para este datagrama?

No.	Time	Source	Destination	Protocol	Length	Info
1	0.000000	10.0.0.44	35.186.224.47	TLSv1.2	101	Application Data
2	0.029774	35.186.224.47	10.0.0.44	TCP	66	443 → 49993 [ACK] Seq=1 Ack=36 Win=266 Len=0 TSval=147134064
3	0.050759	35.186.224.47	10.0.0.44	TLSv1.2	97	Application Data
4	0.050820	10.0.0.44	35.186.224.47	TCP	66	49993 → 443 [ACK] Seq=36 Ack=32 Win=2047 Len=0 TSval=45968036
5	0.385902	10.0.0.44	172.217.11.3	TLSv1.2	105	Application Data
6	0.412186	172.217.11.3	10.0.0.44	TLSv1.2	105	Application Data
7	0.412291	10.0.0.44	172.217.11.3	TCP	66	50475 → 443 [ACK] Seq=40 Ack=40 Win=2047 Len=0 TSval=45968072
8	0.582856	Sonos_25:3a:2a	Spanning-tree-(for-bridg...		STP	60 Conf. Root = 36864/0/48:a6:b8:25:3a:2a Cost = 0 Port = 0x8000
9	1.987334	52.114.132.119	10.0.0.44	TLSv1.2	390	Application Data
10	1.987393	10.0.0.44	52.114.132.119	TCP	54	49987 → 443 [ACK] Seq=1 Ack=337 Win=4090 Len=0
11	2.181465	10.0.0.44	52.114.132.119	TLSv1.2	242	Application Data
12	2.340566	10.0.0.44	52.114.132.119	TCP	242	[TCP Retransmission] 49987 → 443 [PSH, ACK] Seq=1 Ack=337 Win=4090 Len=0
13	2.457995	52.114.132.119	10.0.0.44	TCP	60	443 → 49987 [ACK] Seq=337 Ack=189 Win=2051 Len=0
14	2.480039	52.114.132.119	10.0.0.44	TCP	66	[TCP Dup ACK 13#1] 443 → 49987 [ACK] Seq=337 Ack=189 Win=2051 Len=0
15	2.653323	10.0.0.123	224.0.0.251	MDNS	139	Standard query 0x0000 PTR _companion-link._tcp.local, "QU" qu
16	2.653622	fe80::1085:6434:3583:9e7a	ff02::fb	MDNS	159	Standard query 0x0000 PTR _companion-link._tcp.local, "QU" qu
17	3.267704	Sonos_25:3a:2a	Spanning-tree-(for-bridg...		STP	60 Conf. Root = 36864/0/48:a6:b8:25:3a:2a Cost = 0 Port = 0x8000
18	3.629864	52.112.115.23	10.0.0.44	TCP	56	443 → 50518 [RST, ACK] Seq=1 Ack=1 Win=0 Len=0
19	3.814364	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x4667 A youtube.com
20	3.814489	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x920d AAAA youtube.com
21	3.814538	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x3004 A youtube.com
22	3.814587	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x3004 A youtube.com
23	3.814636	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x3004 A youtube.com
24	3.814685	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x3004 A youtube.com
25	3.814734	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x3004 A youtube.com
26	3.814783	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x3004 A youtube.com
27	3.814832	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x3004 A youtube.com
28	3.814881	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x3004 A youtube.com
29	3.814930	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x3004 A youtube.com
30	3.814979	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x3004 A youtube.com
31	3.815028	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x3004 A youtube.com
32	3.815077	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x3004 A youtube.com
33	3.815126	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x3004 A youtube.com
34	3.815175	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x3004 A youtube.com
35	3.815224	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x3004 A youtube.com
36	3.815273	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x3004 A youtube.com
37	3.815322	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x3004 A youtube.com
38	3.815371	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x3004 A youtube.com
39	3.815420	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x3004 A youtube.com
40	3.815469	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x3004 A youtube.com
41	3.815518	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x3004 A youtube.com
42	3.815567	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x3004 A youtube.com
43	3.815616	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x3004 A youtube.com
44	3.815665	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x3004 A youtube.com
45	3.815714	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x3004 A youtube.com
46	3.815763	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x3004 A youtube.com
47	3.815812	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x3004 A youtube.com
48	3.815861	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x3004 A youtube.com
49	3.815910	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x3004 A youtube.com
50	3.815959	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x3004 A youtube.com
51	3.816008	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x3004 A youtube.com
52	3.816057	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x3004 A youtube.com
53	3.816106	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x3004 A youtube.com
54	3.816155	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x3004 A youtube.com
55	3.816204	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x3004 A youtube.com
56	3.816253	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x3004 A youtube.com
57	3.816302	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x3004 A youtube.com
58	3.816351	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x3004 A youtube.com
59	3.816400	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x3004 A youtube.com
60	3.816449	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x3004 A youtube.com
61	3.816498	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x3004 A youtube.com
62	3.816547	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x3004 A youtube.com
63	3.816596	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x3004 A youtube.com
64	3.816645	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x3004 A youtube.com
65	3.816694	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x3004 A youtube.com
66	3.816743	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x3004 A youtube.com
67	3.816792	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x3004 A youtube.com
68	3.816841	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x3004 A youtube.com
69	3.816890	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x3004 A youtube.com
70	3.816939	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x3004 A youtube.com
71	3.816988	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x3004 A youtube.com
72	3.817037	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x3004 A youtube.com
73	3.817086	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x3004 A youtube.com
74	3.817135	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x3004 A youtube.com
75	3.817184	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x3004 A youtube.com
76	3.817233	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x3004 A youtube.com
77	3.817282	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x3004 A youtube.com
78	3.817331	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x3004 A youtube.com
79	3.817380	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x3004 A youtube.com
80	3.817429	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x3004 A youtube.com
81	3.817478	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x3004 A youtube.com
82	3.817527	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x3004 A youtube.com
83	3.817576	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x3004 A youtube.com
84	3.817625	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x3004 A youtube.com
85	3.817674	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x3004 A youtube.com
86	3.817723	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x3004 A youtube.com
87	3.817772	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x3004 A youtube.com
88	3.817821	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x3004 A youtube.com
89	3.817870	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x3004 A youtube.com
90	3.817919	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x3004 A youtube.com
91	3.817968	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x3004 A youtube.com
92	3.818017	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x3004 A youtube.com
93	3.818066	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x3004 A youtube.com
94	3.818115	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x3004 A youtube.com
95	3.818164	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x3004 A youtube.com
96	3.818213	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x3004 A youtube.com
97	3.818262	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x3004 A youtube.com
98	3.818311	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x3004 A youtube.com
99	3.818360	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x3004 A youtube.com
100	3.818409	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x3004 A youtube.com
101	3.818458	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x3004 A youtube.com
102	3.818507	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x3004 A youtube.com
103	3.818556	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x3004 A youtube.com
104	3.818605	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x3004 A youtube.com
105	3.818654	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x3004 A youtube.com
106	3.818703	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x3004 A youtube.com
107	3.818752	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x3004 A youtube.com
108	3.818801	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x3004 A youtube.com
109	3.818850	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x3004 A youtube.com
110	3.818899	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x3004 A youtube.com
111	3.818948	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x3004 A youtube.com
112	3.818997	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x3004 A youtube.com
113	3.819046	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x300

24. Qual é o protocolo da camada superior para o qual a carga útil deste datagrama será entregue no destino?

Protocolo DNS.

25. Quantos endereços IPv6 são retornados em resposta a esta solicitação AAAA?

2 endereços.

26. Qual é o primeiro endereço IPv6 retornado pelo DNS para youtube.com (no arquivo de rastreamento ip-wireshark-trace2-1.pcapng, este também é o endereço numericamente menor)? Forneça este endereço IPv6 exatamente da mesma forma abreviada exibida na janela do Wireshark.

No.	Time	Source	Destination	Protocol	Length	Info
1	0.000000	10.0.0.44	35.186.224.47	TLSv1.2	101	Application Data
2	0.029774	35.186.224.47	10.0.0.44	TCP	66	443 → 49993 [ACK] Seq=1 Ack=36 Win=266 Len=0 TSval=1471340864
3	0.050759	35.186.224.47	10.0.0.44	TLSv1.2	97	Application Data
4	0.050820	10.0.0.44	35.186.224.47	TCP	66	49993 → 443 [ACK] Seq=36 Ack=32 Win=2047 Len=0 TSval=45968036
5	0.385902	10.0.0.44	172.217.11.3	TLSv1.2	105	Application Data
6	0.412186	172.217.11.3	10.0.0.44	TLSv1.2	105	Application Data
7	0.412291	10.0.0.44	172.217.11.3	TCP	66	50475 → 443 [ACK] Seq=40 Ack=40 Win=2047 Len=0 TSval=45968072
8	0.502856	Sonos_25:3a:2a	Spanning-tree-for-bridg...	STP	60	Conf. Root = 36864/0/48:a6:b8:25:3a:2a Cost = 0 Port = 0x80
9	1.987334	52.114.132.119	10.0.0.44	TLSv1.2	390	Application Data
10	1.987393	10.0.0.44	52.114.132.119	TCP	54	49987 → 443 [ACK] Seq=1 Ack=337 Win=4090 Len=0
11	2.181465	10.0.0.44	52.114.132.119	TLSv1.2	242	Application Data
12	2.340566	10.0.0.44	52.114.132.119	TCP	242	[TCP Retransmission] 49987 → 443 [PSH, ACK] Seq=1 Ack=337 Win=
13	2.457995	52.114.132.119	10.0.0.44	TCP	60	443 → 49987 [ACK] Seq=337 Ack=189 Win=2051 Len=0
14	2.480039	52.114.132.119	10.0.0.44	TCP	66	[TCP Dup ACK 13#1] 443 → 49987 [ACK] Seq=337 Ack=189 Win=2051
15	2.653323	10.0.0.123	224.0.0.251	MDNS	139	Standard query 0x0000 PTR _companion-link_tcp.local, "QU" qu
16	2.653622	fe80::1085:6434:3583:9e7a	ff02::fb	MDNS	159	Standard query 0x0000 PTR _companion-link_tcp.local, "QU" qu
17	3.267704	Sonos_25:3a:2a	Spanning-tree-for-bridg...	STP	60	Conf. Root = 36864/0/48:a6:b8:25:3a:2a Cost = 0 Port = 0x80
18	3.629864	52.112.115.23	10.0.0.44	TCP	56	443 → 50518 [RST, ACK] Seq=1 Ack=1 Win=0 Len=0
19	3.814364	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x4667 A youtube.com
20	3.814489	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	91	Standard query 0x920d AAAA youtube.com
21	3.814770	2601:193:8302:4620:215c:f5ae:8b40:a27a	2001:558:feed::1	DNS	95	Standard query 0x7804 AAAA youtube.com
▼ ..... 0000 0000 ..... = Traffic Class: 0x00 (DSCP: CS0, ECN: Not-ECT)						
..... 0000 00 ..... = Differentiated Services Codepoint: Default (0)						
..... 00 ..... = Explicit Congestion Notification: Not ECN-Capable Transport (0)						
..... 1010 0100 1001 0001 1000 = Flow Label: 0xa4918						
Payload Length: 37						
Next Header: UDP (17)						
Hop Limit: 255						
Source: 2601:193:8302:4620:215c:f5ae:8b40:a27a						
Destination: 2001:558:feed::1						
▼ User Datagram Protocol, Src Port: 62315, Dst Port: 53						
0020 f5 ae 8b 40 a2 7a 20 01 05 58 fe ed 00 00 00 00 ...@:z...X.....						
0030 00 00 00 00 00 01 f3 6b 00 35 00 25 a8 3c 46 67 .....k5N<Fg						
0040 01 00 00 01 00 00 00 00 00 00 97 79 6f 75 74 75 .....youtube						
0050 62 65 83 63 6f 6d 00 00 01 00 01 .....be.com.....						

2001:558:feed::1