COMPUTER NETWORKS HW-1

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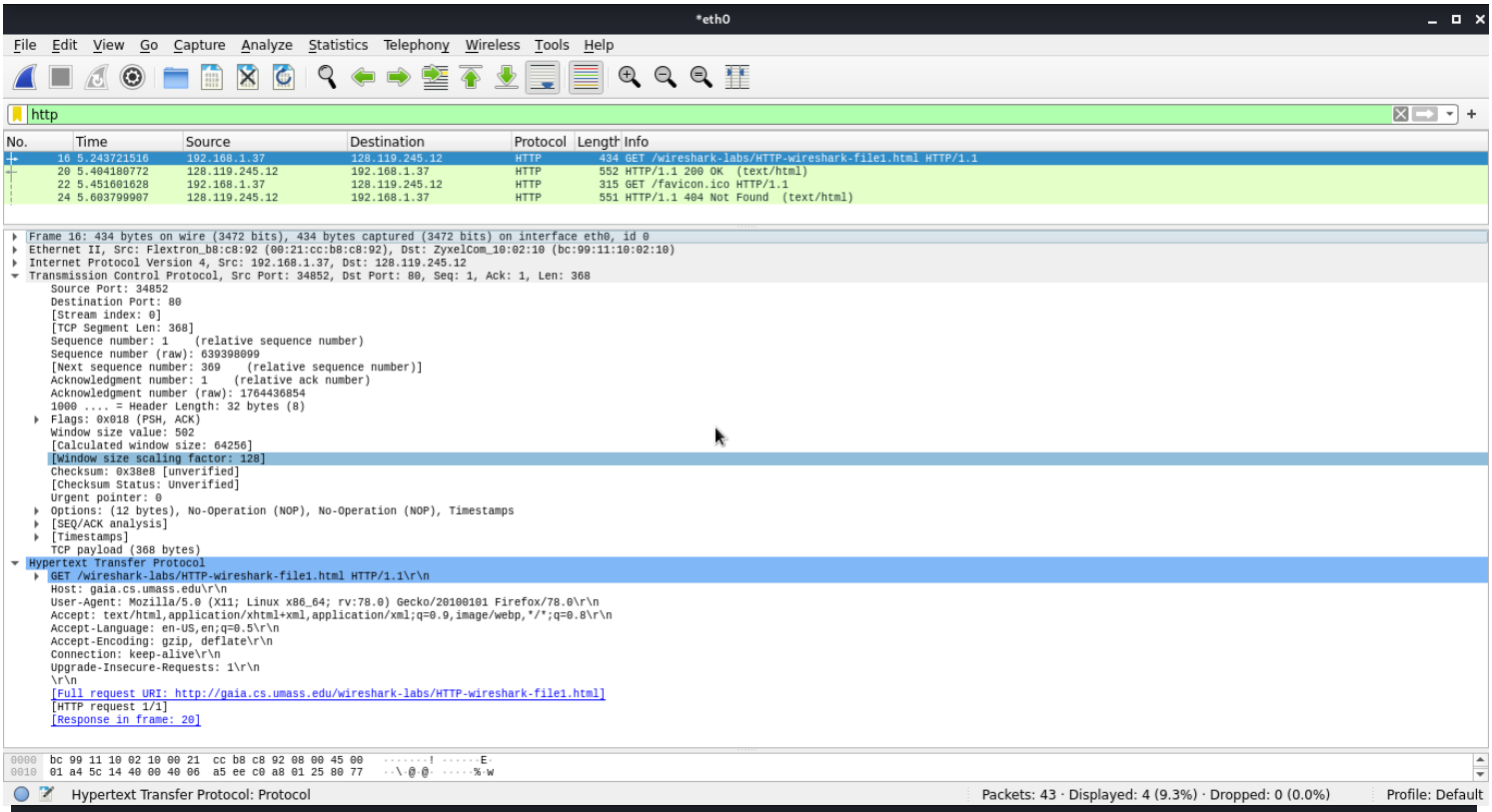
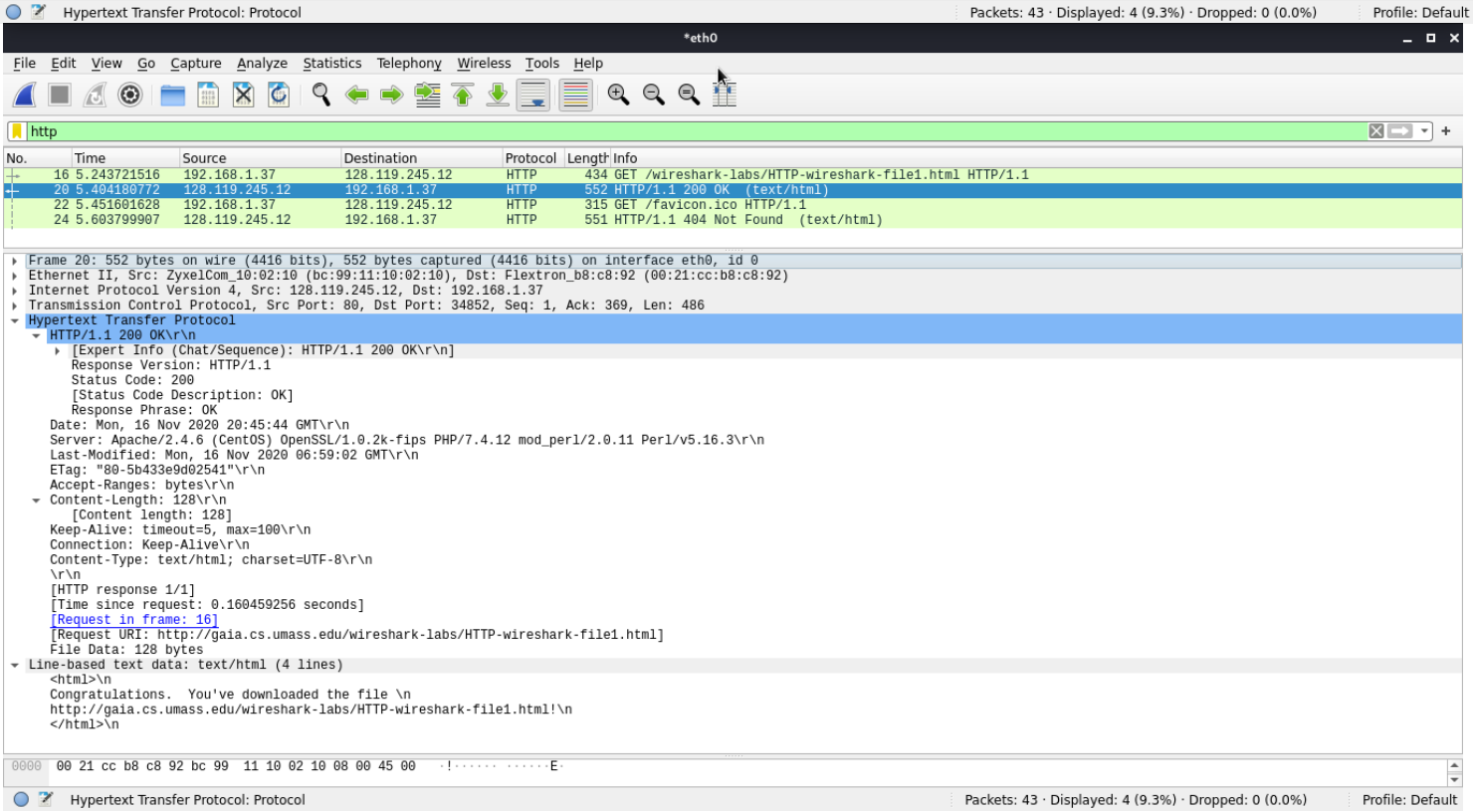
Question 1.





1.1) HTTP/1.1

1.2) Accept – Language: en-Us

1.3) My address: 192.168.1.37 Gaia server: 128.119.245.12

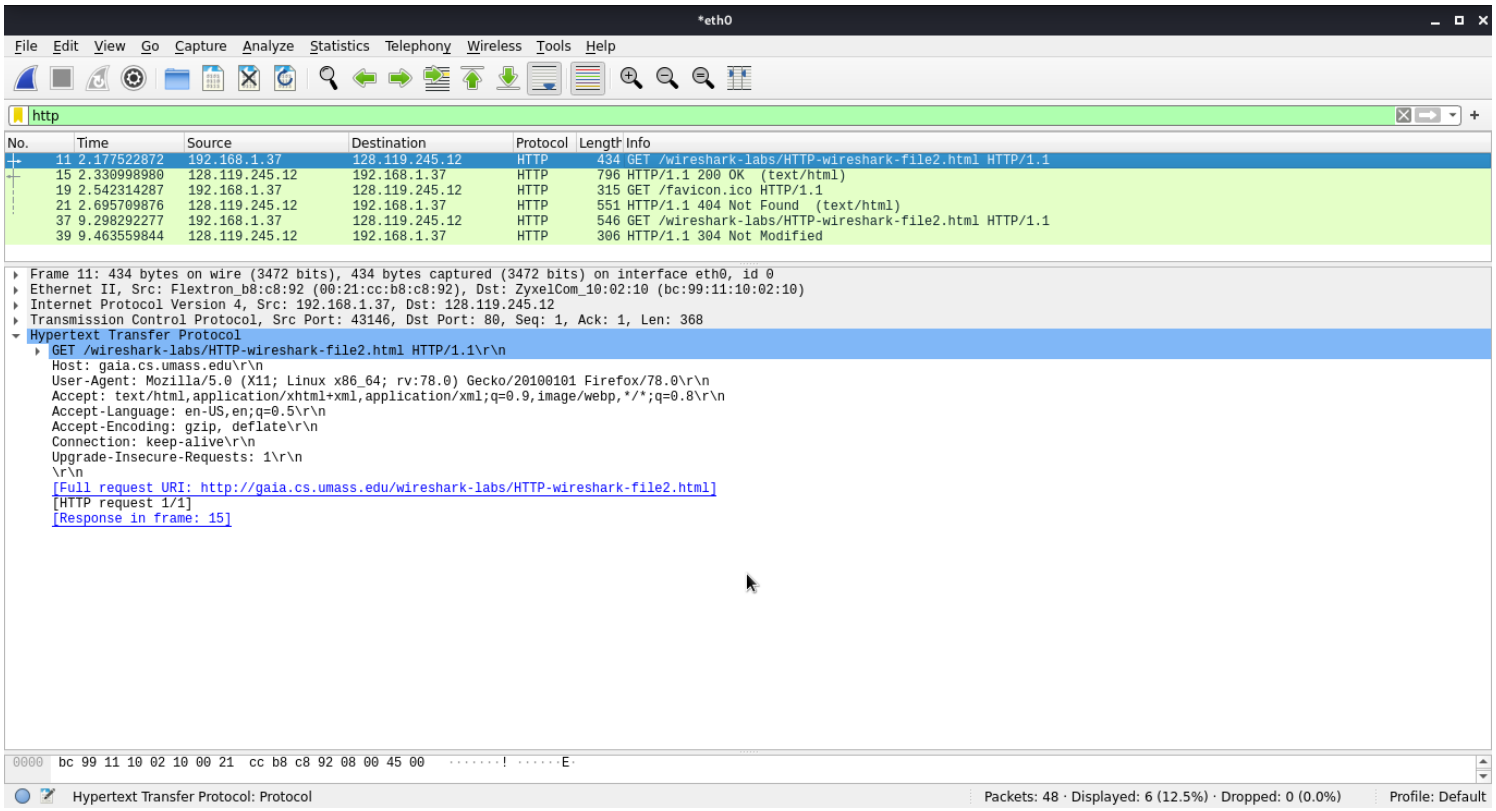
1.4) Return Status: 200 OK

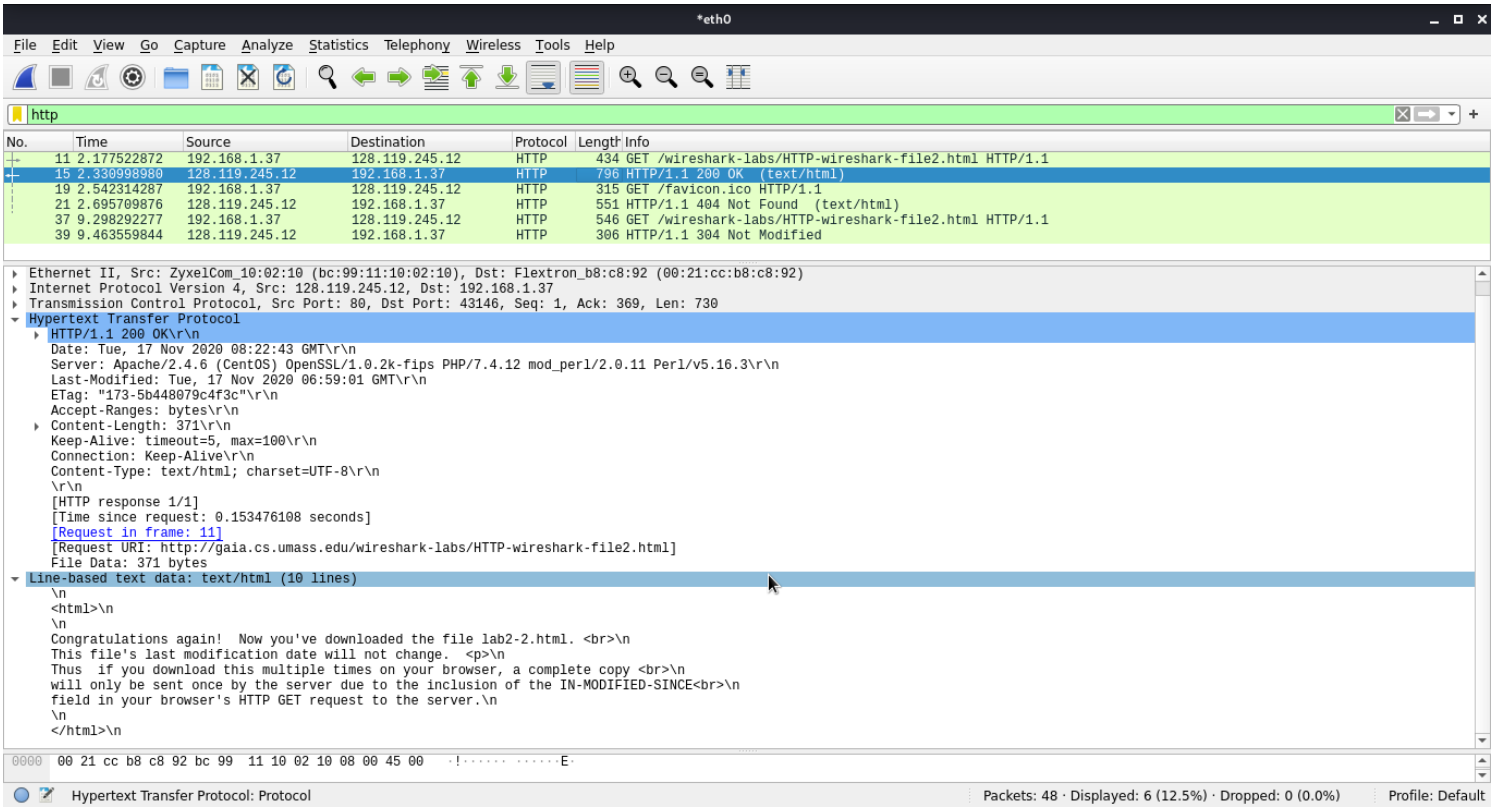
1.5) Mon, 16 Nov 2020 06:59:02 GMT

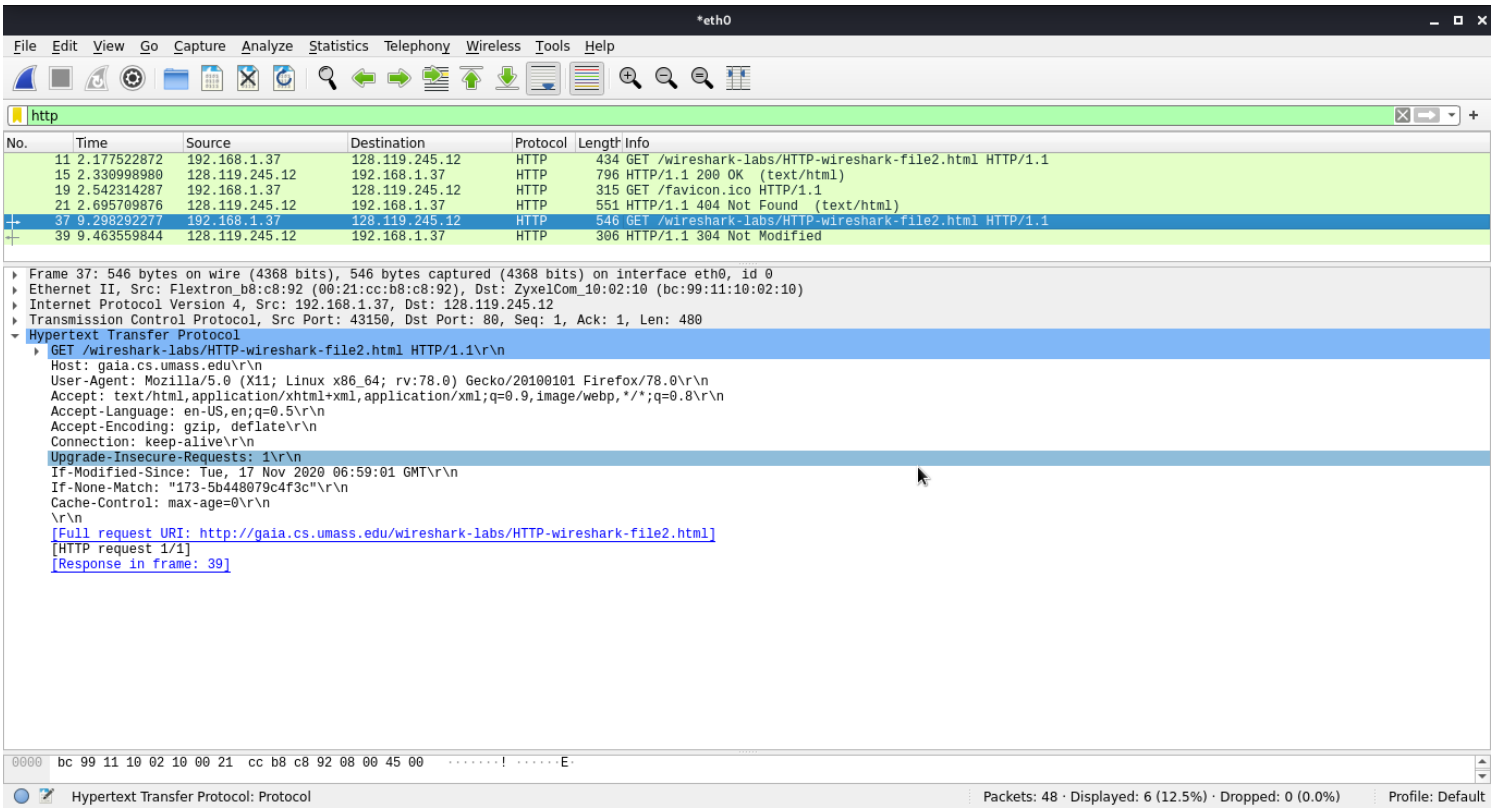
1.6) 128

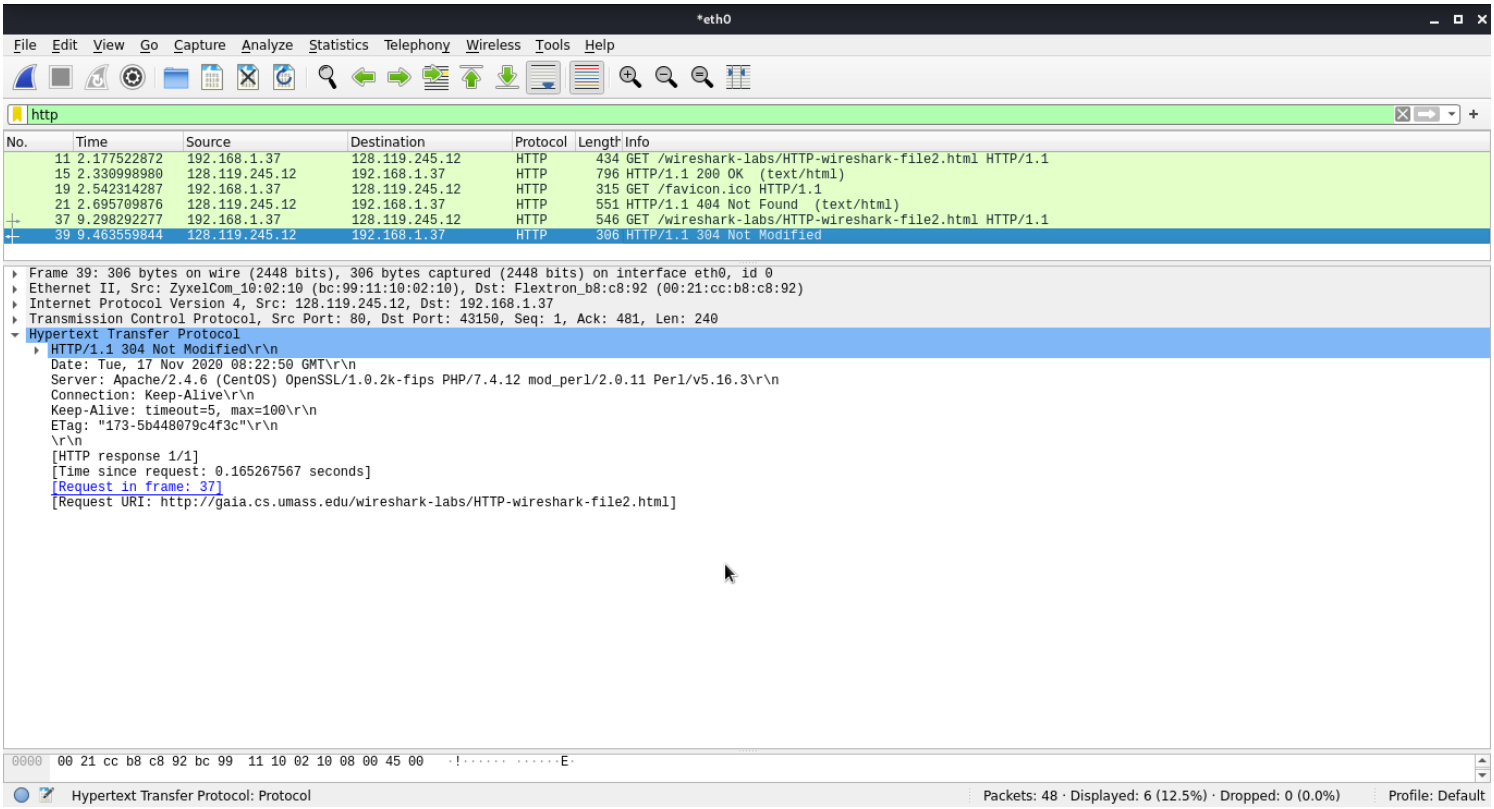
1.7) I don't see any header in the packet-listing window that is not displayed.

Question 2.




*eth0
File Edit View Go Capture Analyze Statistics Telephony Wireless Tools Help
http
No. Time Source Destination Protocol Length Info
11 2.177522872 192.168.1.37 128.119.245.12 HTTP 434 GET /wireshark-labs/HTTP-wireshark-file2.html HTTP/1.1
15 2.330998980 128.119.245.12 192.168.1.37 HTTP 796 HTTP/1.1 200 OK (text/html)
19 2.542314287 192.168.1.37 128.119.245.12 HTTP 315 GET /favicon.ico HTTP/1.1
21 2.695709876 128.119.245.12 192.168.1.37 HTTP 551 HTTP/1.1 404 Not Found (text/html)
37 9.298292277 192.168.1.37 128.119.245.12 HTTP 546 GET /wireshark-labs/HTTP-wireshark-file2.html HTTP/1.1
39 9.463559844 128.119.245.12 192.168.1.37 HTTP 306 HTTP/1.1 304 Not Modified
Ethernet II, Src: ZyxelCom_10:02:10 (bc:99:11:10:02:10), Dst: Flextron_b8:c8:92 (00:21:cc:b8:c8:92)
Internet Protocol Version 4, Src: 128.119.245.12, Dst: 192.168.1.37
Transmission Control Protocol, Src Port: 80, Dst Port: 43146, Seq: 1, Ack: 369, Len: 730
Hypertext Transfer Protocol
HTTP/1.1 200 OK\r\n
Date: Tue, 17 Nov 2020 08:22:43 GMT\r\n
Server: Apache/2.4.6 (CentOS) OpenSSL/1.0.2k-fips PHP/7.4.12 mod_perl/2.0.11 Perl/v5.16.3\r\n
Last-Modified: Tue, 17 Nov 2020 06:59:01 GMT\r\n
ETag: "173-5b448079c4f3c"\r\n
Accept-Ranges: bytes\r\n
Content-Length: 371\r\n
Keep-Alive: timeout=5, max=100\r\n
Connection: Keep-Alive\r\n
Content-Type: text/html; charset=UTF-8\r\n
\r\n
[HTTP response 1/1]
[Time since request: 0.153476108 seconds]
[Request in frame: 11]
[Request URI: http://gaia.cs.umass.edu/wireshark-labs/HTTP-wireshark-file2.html]
File Data: 371 bytes
Line-based text data: text/html (10 lines)
\n
<html>\n
\n
Congratulations again! Now you've downloaded the file lab2-2.html.
\n
This file's last modification date will not change. <p>\n
Thus if you download this multiple times on your browser, a complete copy
\n
will only be sent once by the server due to the inclusion of the IN-MODIFIED-SINCE
\n
field in your browser's HTTP GET request to the server.\n
\n
</html>\n
0000 00 21 cc b8 c8 92 bc 99 11 10 02 10 08 00 45 00
Hypertext Transfer Protocol: Protocol
Packets: 48 · Displayed: 6 (12.5%) · Dropped: 0 (0.0%)
Profile: Default


*eth0
File Edit View Go Capture Analyze Statistics Telephony Wireless Tools Help
http
No. Time Source Destination Protocol Length Info
11 2.177522872 192.168.1.37 128.119.245.12 HTTP 434 GET /wireshark-labs/HTTP-wireshark-file2.html HTTP/1.1
15 2.330998980 128.119.245.12 192.168.1.37 HTTP 796 HTTP/1.1 200 OK (text/html)
19 2.542314287 192.168.1.37 128.119.245.12 HTTP 315 GET /favicon.ico HTTP/1.1
21 2.695709876 128.119.245.12 192.168.1.37 HTTP 551 HTTP/1.1 404 Not Found (text/html)
37 9.298292277 192.168.1.37 128.119.245.12 HTTP 546 GET /wireshark-labs/HTTP-wireshark-file2.html HTTP/1.1
39 9.463559844 128.119.245.12 192.168.1.37 HTTP 306 HTTP/1.1 304 Not Modified
Frame 37: 546 bytes on wire (4368 bits), 546 bytes captured (4368 bits) on interface eth0, id 0
Ethernet II, Src: Flextron_b8:c8:92 (00:21:cc:b8:c8:92), Dst: ZyxelCom_10:02:10 (bc:99:11:10:02:10)
Internet Protocol Version 4, Src: 192.168.1.37, Dst: 128.119.245.12
Transmission Control Protocol, Src Port: 43150, Dst Port: 80, Seq: 1, Ack: 1, Len: 480
Hypertext Transfer Protocol
GET /wireshark-labs/HTTP-wireshark-file2.html HTTP/1.1\r\n
Host: gaia.cs.umass.edu\r\n
User-Agent: Mozilla/5.0 (X11; Linux x86_64; rv:78.0) Gecko/20100101 Firefox/78.0\r\n
Accept: text/html,application/xhtml+xml,application/xml;q=0.9,image/webp,*/*;q=0.8\r\n
Accept-Language: en-US,en;q=0.5\r\n
Accept-Encoding: gzip, deflate\r\n
Connection: keep-alive\r\n
Upgrade-Insecure-Requests: 1\r\n
If-Modified-Since: Tue, 17 Nov 2020 06:59:01 GMT\r\n
If-None-Match: "173-5b448079c4f3c"\r\n
Cache-Control: max-age=0\r\n
\r\n
[Full request URI: http://gaia.cs.umass.edu/wireshark-labs/HTTP-wireshark-file2.html]
[HTTP request 1/1]
[Response in frame: 39]
0000 bc 99 11 10 02 10 00 21 cc b8 c8 92 08 00 45 00
Hypertext Transfer Protocol: Protocol
Packets: 48 · Displayed: 6 (12.5%) · Dropped: 0 (0.0%)
Profile: Default



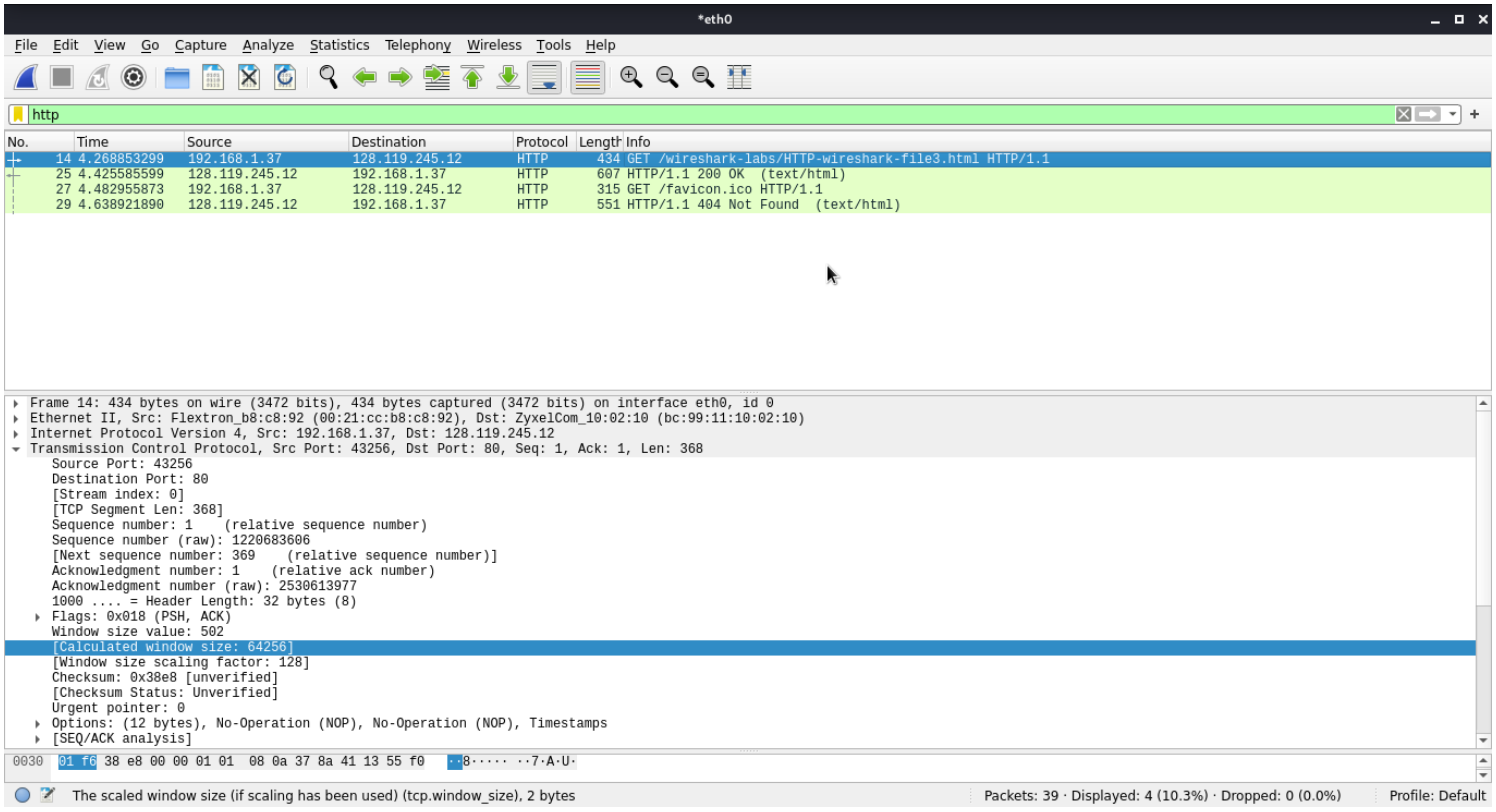
2.1) First GET doesn’t contain any IF-MODIFIED-SINCE line.

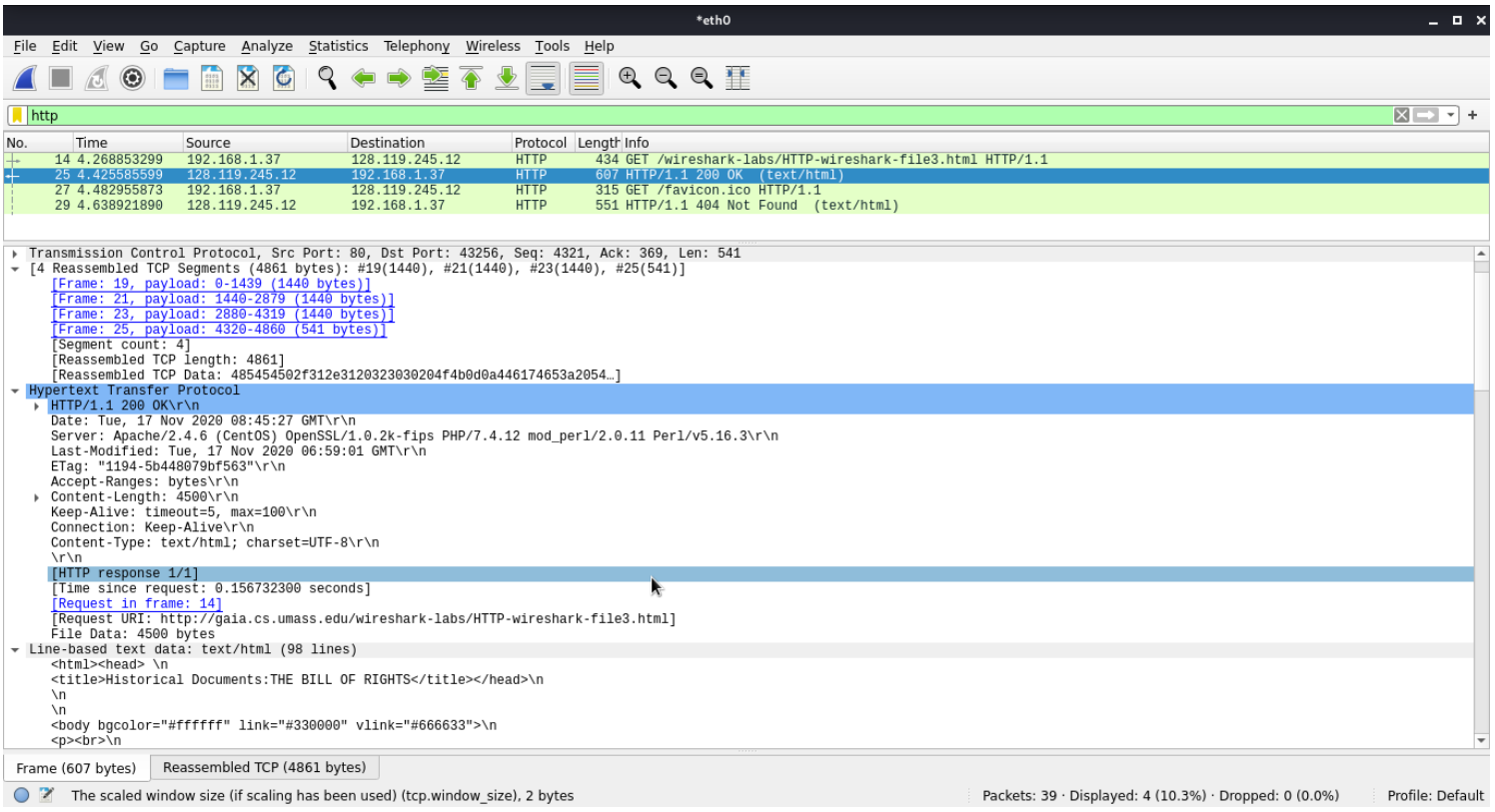
2.2) The contents of the file are explicitly returned in the first response.

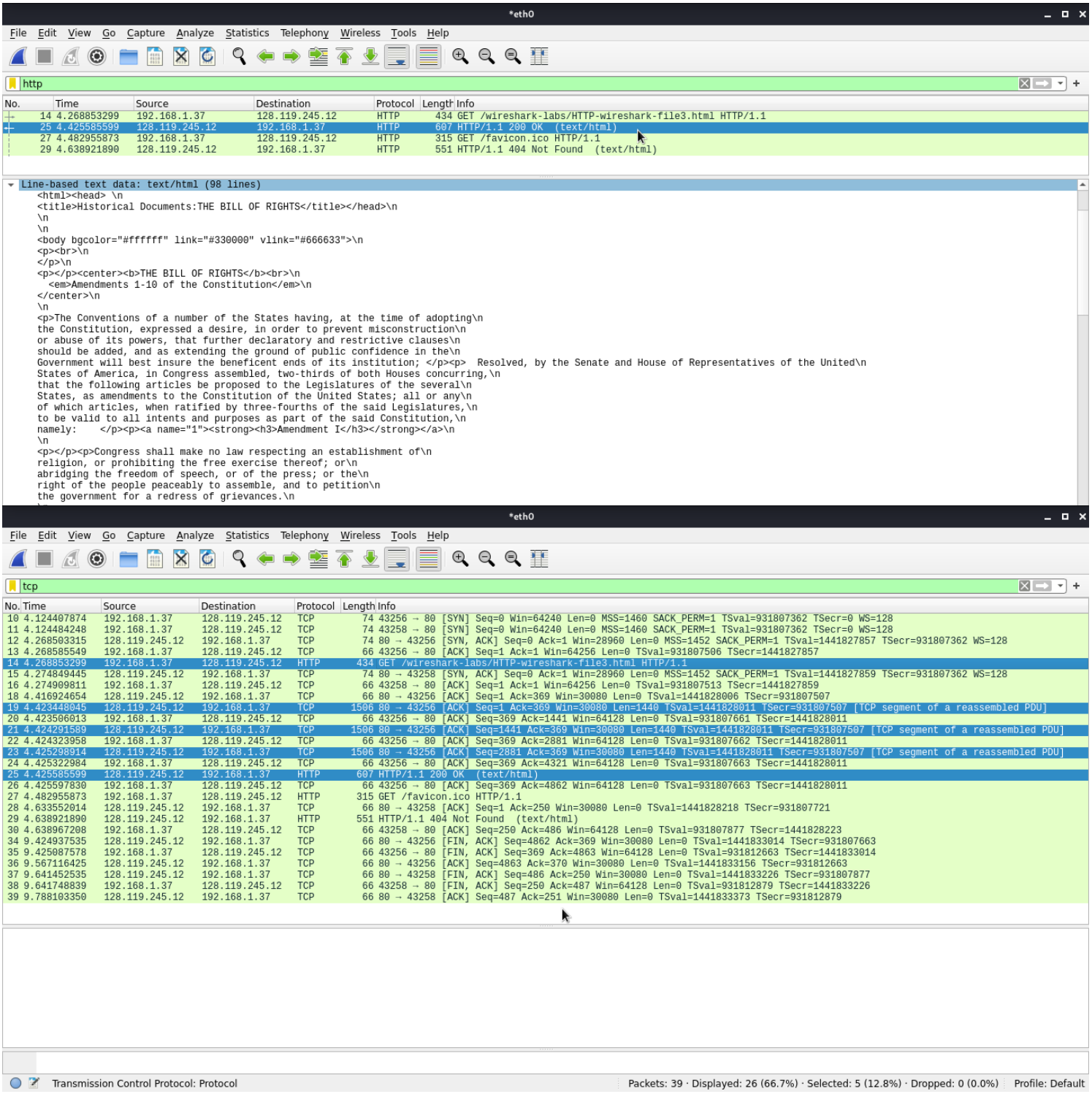
2.3) There is IF-MODIFIED-SINCE line in the second GET.

2.4) The file doesn’t modified so the content of the file doesn’t returned explicitly.

Question 3.


*eth0
File Edit View Go Capture Analyze Statistics Telephony Wireless Tools Help
http
No. Time Source Destination Protocol Length Info
14 4.268853299 192.168.1.37 128.119.245.12 HTTP 434 GET /wireshark-labs/HTTP-wireshark-file3.html HTTP/1.1
25 4.425585599 128.119.245.12 192.168.1.37 HTTP 607 HTTP/1.1 200 OK (text/html)
27 4.482955873 192.168.1.37 128.119.245.12 HTTP 315 GET /favicon.ico HTTP/1.1
29 4.638921890 128.119.245.12 192.168.1.37 HTTP 551 HTTP/1.1 404 Not Found (text/html)
Frame 14: 434 bytes on wire (3472 bits), 434 bytes captured (3472 bits) on interface eth0, id 0
Ethernet II, Src: Flextron_b8:c8:92 (00:21:cc:b8:c8:92), Dst: ZyxelCom_10:02:10 (bc:99:11:10:02:10)
Internet Protocol Version 4, Src: 192.168.1.37, Dst: 128.119.245.12
Transmission Control Protocol, Src Port: 43256, Dst Port: 80, Seq: 1, Ack: 1, Len: 368
Source Port: 43256
Destination Port: 80
[Stream index: 0]
[TCP Segment Len: 368]
Sequence number: 1 (relative sequence number)
Sequence number (raw): 1220683606
[Next sequence number: 369 (relative sequence number)]
Acknowledgment number: 1 (relative ack number)
Acknowledgment number (raw): 2530613977
1000 .... = Header Length: 32 bytes (8)
Flags: 0x018 (PSH, ACK)
Window size value: 502
[Calculated window size: 64256]
[Window size scaling factor: 128]
Checksum: 0x38e8 [unverified]
[Checksum Status: Unverified]
Urgent pointer: 0
Options: (12 bytes), No-Operation (NOP), No-Operation (NOP), Timestamps
[SEQ/ACK analysis]
0030 01 f6 38 e8 00 00 01 01 08 0a 37 8a 41 13 55 f0
The scaled window size (if scaling has been used) (tcp.window_size), 2 bytes
Packets: 39 · Displayed: 4 (10.3%) · Dropped: 0 (0.0%)
Profile: Default


*eth0
File Edit View Go Capture Analyze Statistics Telephony Wireless Tools Help
http
No. Time Source Destination Protocol Length Info
14 4.268853299 192.168.1.37 128.119.245.12 HTTP 434 GET /wireshark-labs/HTTP-wireshark-file3.html HTTP/1.1
25 4.425585599 128.119.245.12 192.168.1.37 HTTP 607 HTTP/1.1 200 OK (text/html)
27 4.482955873 192.168.1.37 128.119.245.12 HTTP 315 GET /favicon.ico HTTP/1.1
29 4.638921890 128.119.245.12 192.168.1.37 HTTP 551 HTTP/1.1 404 Not Found (text/html)
Transmission Control Protocol, Src Port: 80, Dst Port: 43256, Seq: 4321, Ack: 369, Len: 541
[4 Reassembled TCP Segments (4861 bytes): #19(1440), #21(1440), #23(1440), #25(541)]
[Frame: 19, payload: 0-1439 (1440 bytes)]
[Frame: 21, payload: 1440-2879 (1440 bytes)]
[Frame: 23, payload: 2880-4319 (1440 bytes)]
[Frame: 25, payload: 4320-4860 (541 bytes)]
[Segment count: 4]
[Reassembled TCP length: 4861]
[Reassembled TCP Data: 485454502f312e3120323030204f4b0d0a446174653a2054…]
Hypertext Transfer Protocol
HTTP/1.1 200 OK\r\n
Date: Tue, 17 Nov 2020 08:45:27 GMT\r\n
Server: Apache/2.4.6 (CentOS) OpenSSL/1.0.2k-fips PHP/7.4.12 mod_perl/2.0.11 Perl/v5.16.3\r\n
Last-Modified: Tue, 17 Nov 2020 06:59:01 GMT\r\n
ETag: "1194-5b448079bf563"\r\n
Accept-Ranges: bytes\r\n
Content-Length: 4500\r\n
Keep-Alive: timeout=5, max=100\r\n
Connection: Keep-Alive\r\n
Content-Type: text/html; charset=UTF-8\r\n
\r\n
[HTTP response 1/1]
[Time since request: 0.156732300 seconds]
[Request in frame: 14]
[Request URI: http://gaia.cs.umass.edu/wireshark-labs/HTTP-wireshark-file3.html]
File Data: 4500 bytes
Line-based text data: text/html (98 lines)
<html><head> \n
<title>Historical Documents:THE BILL OF RIGHTS</title></head>\n
\n
\n
<body bgcolor="#ffffff" link="#330000" vlink="#666633">\n
<p>
\n
Frame (607 bytes)
Reassembled TCP (4861 bytes)
The scaled window size (if scaling has been used) (tcp.window_size), 2 bytes
Packets: 39 · Displayed: 4 (10.3%) · Dropped: 0 (0.0%)
Profile: Default


*eth0
File Edit View Go Capture Analyze Statistics Telephony Wireless Tools Help
http
No. Time Source Destination Protocol Length Info
14 4.268853299 192.168.1.37 128.119.245.12 HTTP 434 GET /wireshark-labs/HTTP-wireshark-file3.html HTTP/1.1
25 4.425585599 128.119.245.12 192.168.1.37 HTTP 607 HTTP/1.1 200 OK (text/html)
27 4.482955873 192.168.1.37 128.119.245.12 HTTP 315 GET /favicon.ico HTTP/1.1
29 4.638921890 128.119.245.12 192.168.1.37 HTTP 551 HTTP/1.1 404 Not Found (text/html)
Line-based text data: text/html (98 lines)
<html><head> \n
<title>Historical Documents:THE BILL OF RIGHTS</title></head>\n
\n
\n
<body bgcolor="#ffffff" link="#330000" vlink="#666633">\n

\n
\n
THE BILL OF RIGHTS
\n
Amendments 1-10 of the Constitution\n
\n
\n
The Conventions of a number of the States having, at the time of adopting\n
the Constitution, expressed a desire, in order to prevent misconstruction\n
or abuse of its powers, that further declaratory and restrictive clauses\n
should be added, and as extending the ground of public confidence in the\n
Government will best insure the beneficent ends of its institution; Resolved, by the Senate and House of Representatives of the United\n
States of America, in Congress assembled, two-thirds of both Houses concurring,\n
that the following articles be proposed to the Legislatures of the several\n
States, as amendments to the Constitution of the United States; all or any\n
of which articles, when ratified by three-fourths of the said Legislatures,\n
to be valid to all intents and purposes as part of the said Constitution,\n
namely: <h3>Amendment I</h3>\n
\n
Congress shall make no law respecting an establishment of\n
religion, or prohibiting the free exercise thereof; or\n
abridging the freedom of speech, or of the press; or the\n
right of the people peaceably to assemble, and to petition\n
the government for a redress of grievances.\n
*eth0
File Edit View Go Capture Analyze Statistics Telephony Wireless Tools Help
tcp
No. Time Source Destination Protocol Length Info
10 4.124407874 192.168.1.37 128.119.245.12 TCP 74 43256 → 80 [SYN] Seq=0 Win=64240 Len=0 MSS=1460 SACK_PERM=1 TSval=931807362 TSecr=0 WS=128
11 4.124484248 192.168.1.37 128.119.245.12 TCP 74 43258 → 80 [SYN] Seq=0 Win=64240 Len=0 MSS=1460 SACK_PERM=1 TSval=931807362 TSecr=0 WS=128
12 4.268503315 128.119.245.12 192.168.1.37 TCP 74 80 → 43256 [SYN, ACK] Seq=0 Ack=1 Win=28960 Len=0 MSS=1452 SACK_PERM=1 TSval=1441827857 TSecr=931807362 WS=128
13 4.268585549 192.168.1.37 128.119.245.12 TCP 66 43256 → 80 [ACK] Seq=1 Ack=1 Win=64256 Len=0 TSval=931807506 TSecr=1441827857
14 4.268853299 192.168.1.37 128.119.245.12 HTTP 434 GET /wireshark-labs/HTTP-wireshark-file3.html HTTP/1.1
15 4.274849445 128.119.245.12 192.168.1.37 TCP 74 80 → 43258 [SYN, ACK] Seq=0 Ack=1 Win=28960 Len=0 MSS=1452 SACK_PERM=1 TSval=1441827859 TSecr=931807362 WS=128
16 4.274909811 192.168.1.37 128.119.245.12 TCP 66 43258 → 80 [ACK] Seq=1 Ack=1 Win=64256 Len=0 TSval=931807513 TSecr=1441827859
18 4.416924654 128.119.245.12 192.168.1.37 TCP 66 80 → 43256 [ACK] Seq=1 Ack=369 Win=30080 Len=0 TSval=1441828006 TSecr=931807507
19 4.423448045 128.119.245.12 192.168.1.37 TCP 1506 80 → 43256 [ACK] Seq=1 Ack=369 Win=30080 Len=1440 TSval=1441828011 TSecr=931807507 [TCP segment of a reassembled PDU]
20 4.423506013 192.168.1.37 128.119.245.12 TCP 66 43256 → 80 [ACK] Seq=369 Ack=1441 Win=64128 Len=0 TSval=931807661 TSecr=1441828011
21 4.424291589 128.119.245.12 192.168.1.37 TCP 1506 80 → 43256 [ACK] Seq=1441 Ack=369 Win=30080 Len=1440 TSval=1441828011 TSecr=931807507 [TCP segment of a reassembled PDU]
22 4.424323958 192.168.1.37 128.119.245.12 TCP 66 43256 → 80 [ACK] Seq=369 Ack=2881 Win=64128 Len=0 TSval=931807662 TSecr=1441828011
23 4.425298914 128.119.245.12 192.168.1.37 TCP 1506 80 → 43256 [ACK] Seq=2881 Ack=369 Win=30080 Len=1440 TSval=1441828011 TSecr=931807507 [TCP segment of a reassembled PDU]
24 4.425322984 192.168.1.37 128.119.245.12 TCP 66 43256 → 80 [ACK] Seq=369 Ack=4321 Win=64128 Len=0 TSval=931807663 TSecr=1441828011
25 4.425585599 128.119.245.12 192.168.1.37 HTTP 607 HTTP/1.1 200 OK (text/html)
26 4.425597830 192.168.1.37 128.119.245.12 TCP 66 43256 → 80 [ACK] Seq=369 Ack=4862 Win=64128 Len=0 TSval=931807663 TSecr=1441828011
27 4.482955873 192.168.1.37 128.119.245.12 HTTP 315 GET /favicon.ico HTTP/1.1
28 4.633552014 128.119.245.12 192.168.1.37 TCP 66 80 → 43258 [ACK] Seq=1 Ack=250 Win=30080 Len=0 TSval=1441828218 TSecr=931807721
29 4.638921890 128.119.245.12 192.168.1.37 HTTP 551 HTTP/1.1 404 Not Found (text/html)
30 4.638967208 192.168.1.37 128.119.245.12 TCP 66 43258 → 80 [ACK] Seq=250 Ack=486 Win=64128 Len=0 TSval=931807877 TSecr=1441828223
34 9.424937535 128.119.245.12 192.168.1.37 TCP 66 80 → 43256 [FIN, ACK] Seq=4862 Ack=369 Win=30080 Len=0 TSval=1441833014 TSecr=931807663
35 9.425087578 192.168.1.37 128.119.245.12 TCP 66 43256 → 80 [FIN, ACK] Seq=369 Ack=4863 Win=64128 Len=0 TSval=931812663 TSecr=1441833014
36 9.567116425 128.119.245.12 192.168.1.37 TCP 66 80 → 43256 [ACK] Seq=4863 Ack=370 Win=30080 Len=0 TSval=1441833156 TSecr=931812663
37 9.641452535 128.119.245.12 192.168.1.37 TCP 66 80 → 43258 [FIN, ACK] Seq=486 Ack=250 Win=30080 Len=0 TSval=1441833226 TSecr=931807877
38 9.641748839 192.168.1.37 128.119.245.12 TCP 66 43258 → 80 [FIN, ACK] Seq=250 Ack=487 Win=64128 Len=0 TSval=931812879 TSecr=1441833226
39 9.788103350 128.119.245.12 192.168.1.37 TCP 66 80 → 43258 [ACK] Seq=487 Ack=251 Win=30080 Len=0 TSval=1441833373 TSecr=931812879
Transmission Control Protocol: Protocol
Packets: 39 · Displayed: 26 (66.7%) · Selected: 5 (12.8%) · Dropped: 0 (0.0%)
Profile: Default

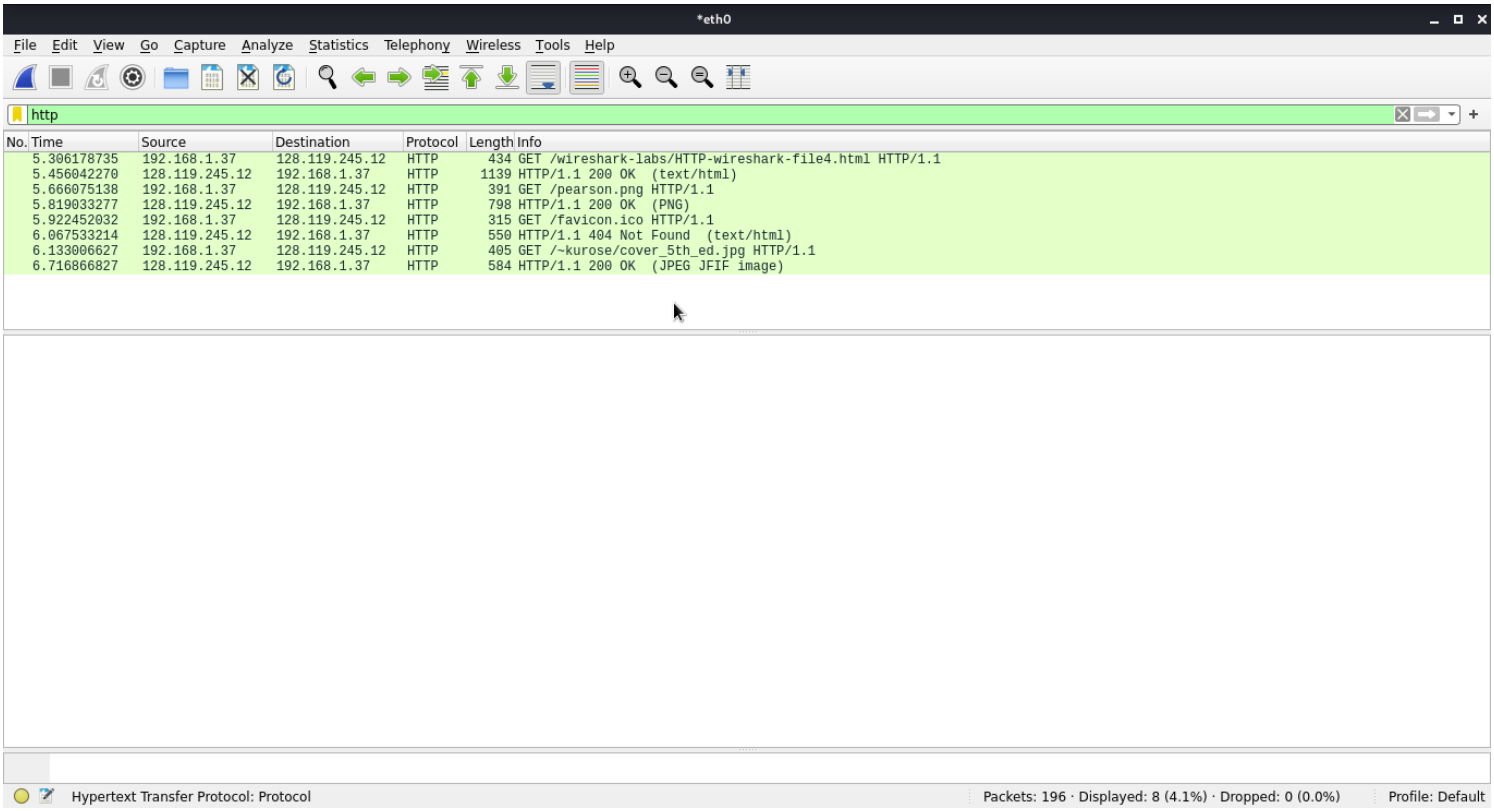
3.1) 1 Request. Packet:14

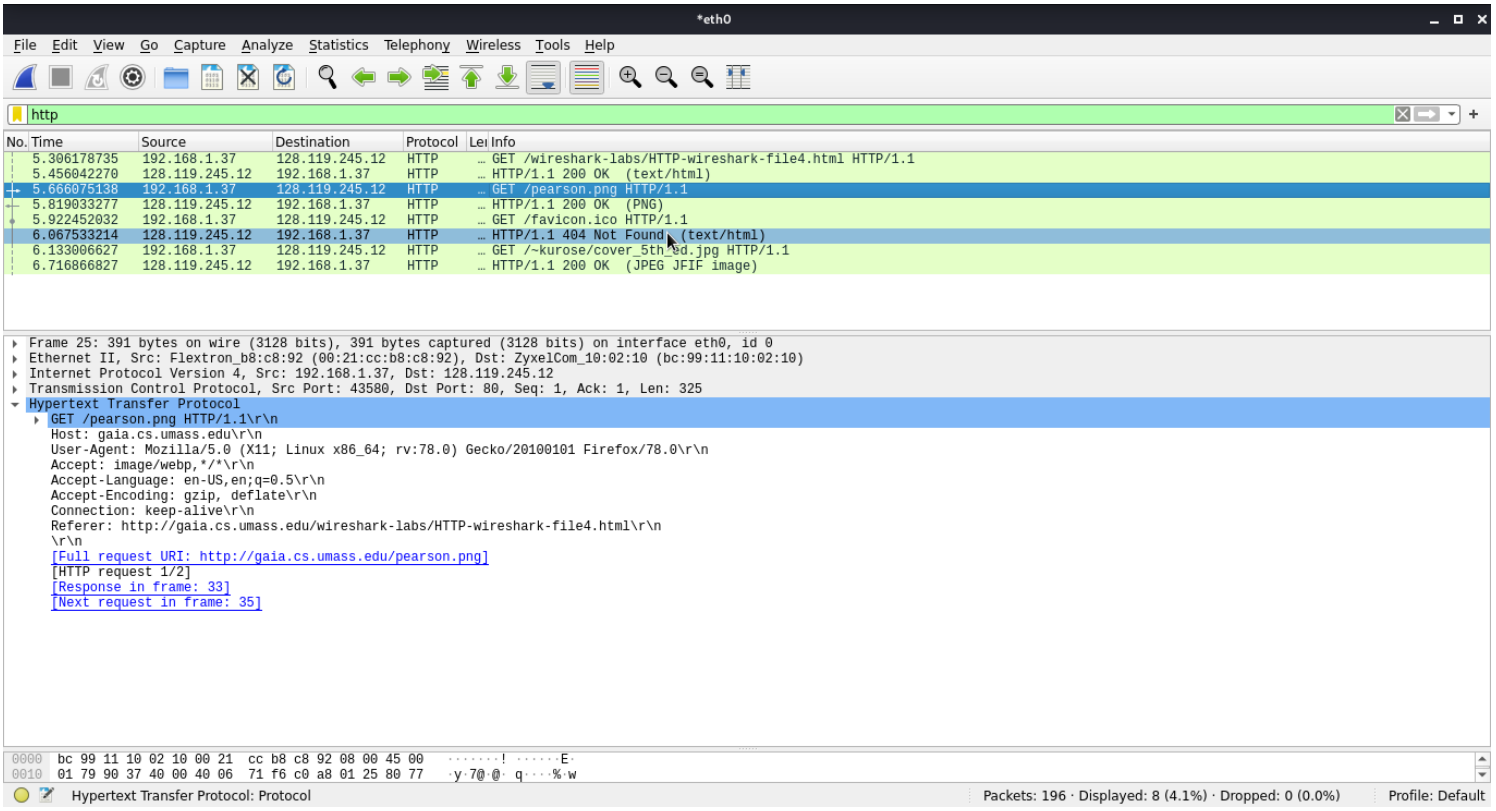
3.2) Packet 25

3.3) 200 OK

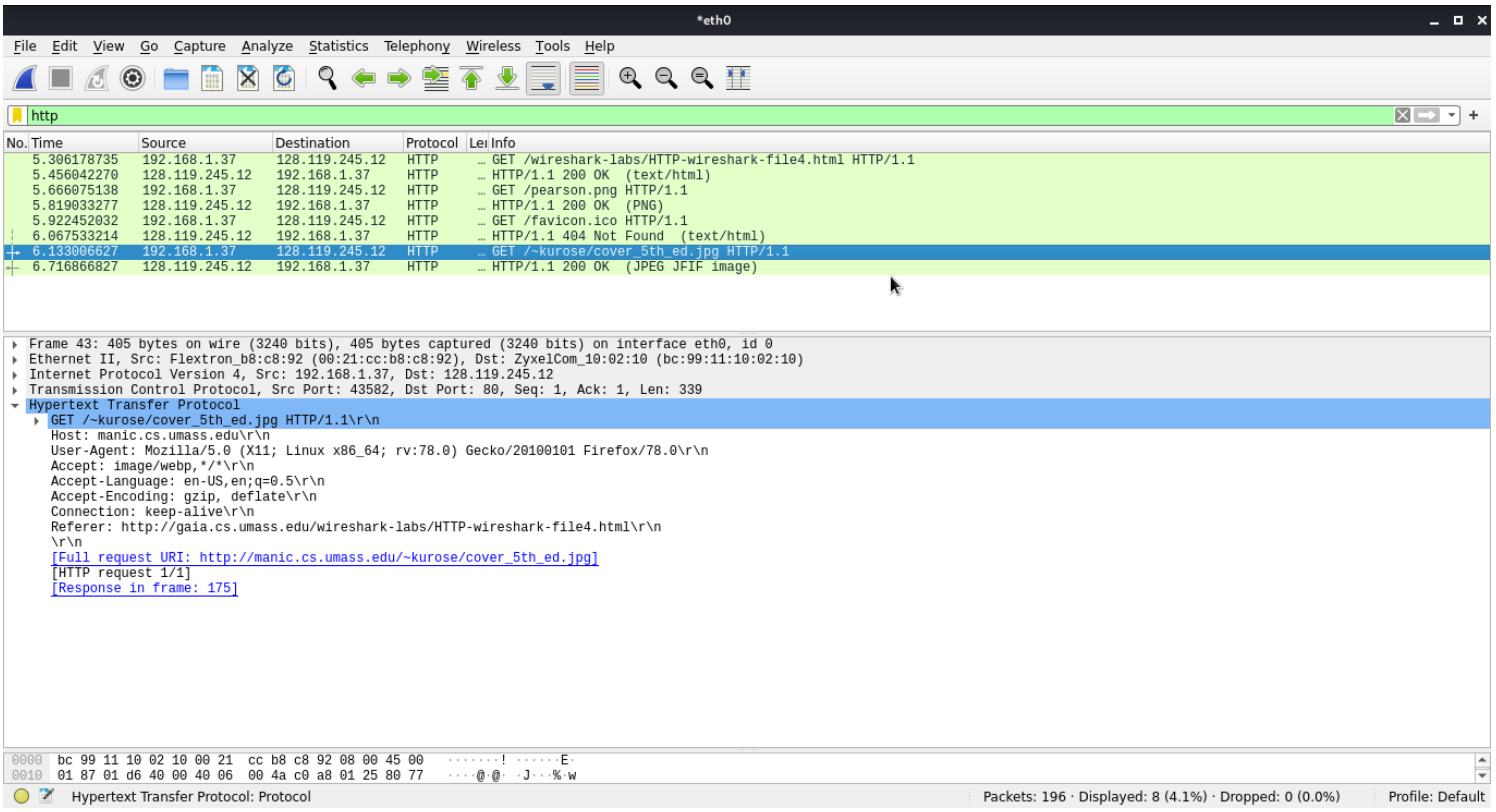
3.4) 3 packets. 19,21,23

Question 4.




*eth0
File Edit View Go Capture Analyze Statistics Telephony Wireless Tools Help
http
No. Time Source Destination Protocol Le Info
5.306178735 192.168.1.37 128.119.245.12 HTTP … GET /wireshark-labs/HTTP-wireshark-file4.html HTTP/1.1
5.456042270 128.119.245.12 192.168.1.37 HTTP … HTTP/1.1 200 OK (text/html)
5.666075138 192.168.1.37 128.119.245.12 HTTP … GET /pearson.png HTTP/1.1
5.819033277 128.119.245.12 192.168.1.37 HTTP … HTTP/1.1 200 OK (PNG)
5.922452032 192.168.1.37 128.119.245.12 HTTP … GET /favicon.ico HTTP/1.1
6.067533214 128.119.245.12 192.168.1.37 HTTP … HTTP/1.1 404 Not Found (text/html)
6.133006627 192.168.1.37 128.119.245.12 HTTP … GET /~kurose/cover_5th_ed.jpg HTTP/1.1
6.716866827 128.119.245.12 192.168.1.37 HTTP … HTTP/1.1 200 OK (JPEG JFIF image)
Frame 25: 391 bytes on wire (3128 bits), 391 bytes captured (3128 bits) on interface eth0, id 0
Ethernet II, Src: Flextron_b8:c8:92 (00:21:cc:b8:c8:92), Dst: ZyxelCom_10:02:10 (bc:99:11:10:02:10)
Internet Protocol Version 4, Src: 192.168.1.37, Dst: 128.119.245.12
Transmission Control Protocol, Src Port: 43580, Dst Port: 80, Seq: 1, Ack: 1, Len: 325
Hypertext Transfer Protocol
GET /pearson.png HTTP/1.1\r\n
Host: gaia.cs.umass.edu\r\n
User-Agent: Mozilla/5.0 (X11; Linux x86_64; rv:78.0) Gecko/20100101 Firefox/78.0\r\n
Accept: image/webp,*/*\r\n
Accept-Language: en-US,en;q=0.5\r\n
Accept-Encoding: gzip, deflate\r\n
Connection: keep-alive\r\n
Referer: http://gaia.cs.umass.edu/wireshark-labs/HTTP-wireshark-file4.html\r\n
\r\n
[Full request URI: http://gaia.cs.umass.edu/pearson.png]
[HTTP request 1/2]
[Response in frame: 33]
[Next request in frame: 35]
0000 bc 99 11 10 02 10 00 21 cc b8 c8 92 08 00 45 00 ·····! ·····E·
0010 01 79 90 37 40 00 40 06 71 f6 c0 a8 01 25 80 77 ·y·7@·@· q····%·w
Hypertext Transfer Protocol: Protocol
Packets: 196 · Displayed: 8 (4.1%) · Dropped: 0 (0.0%)
Profile: Default

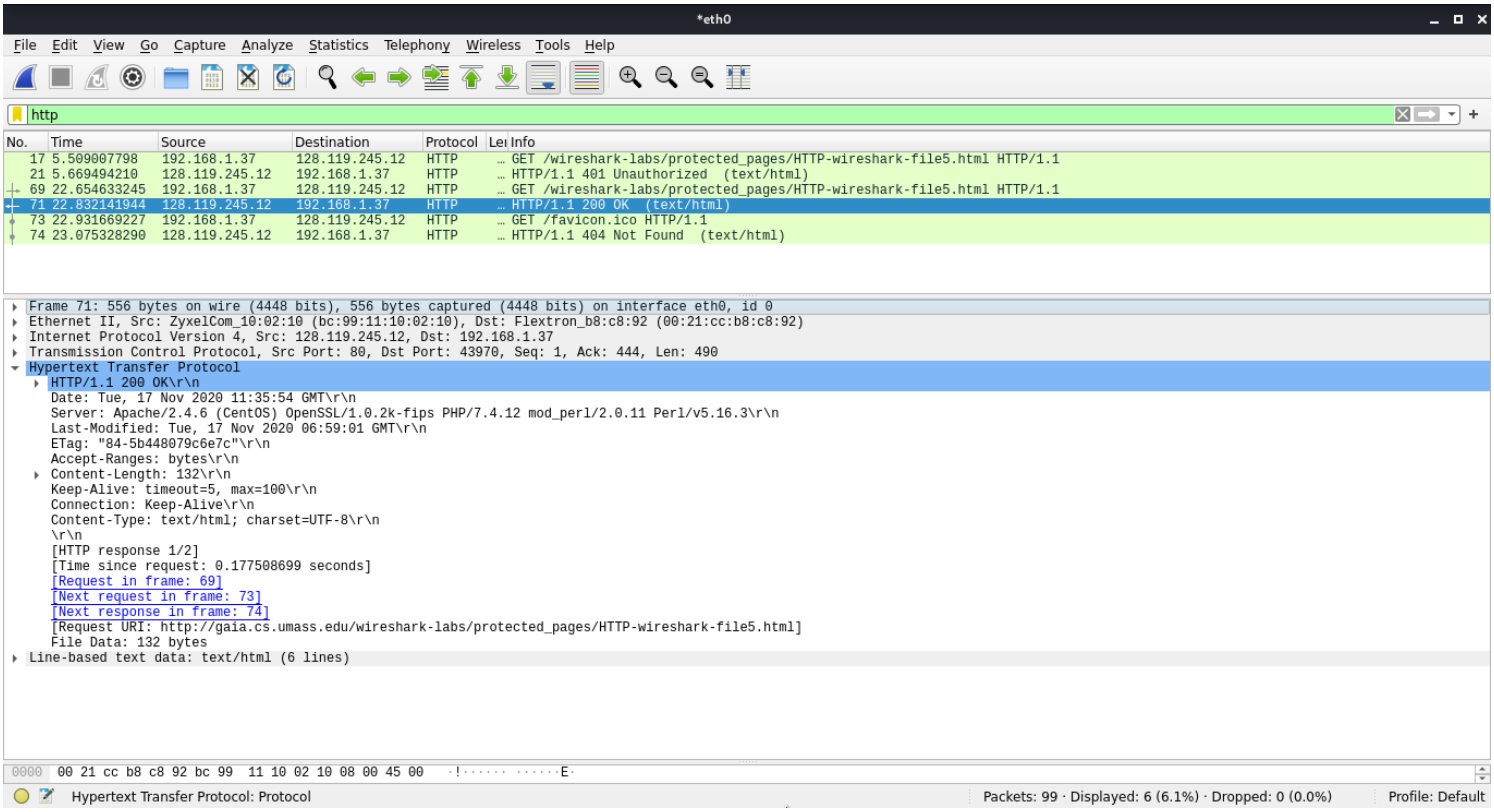
,

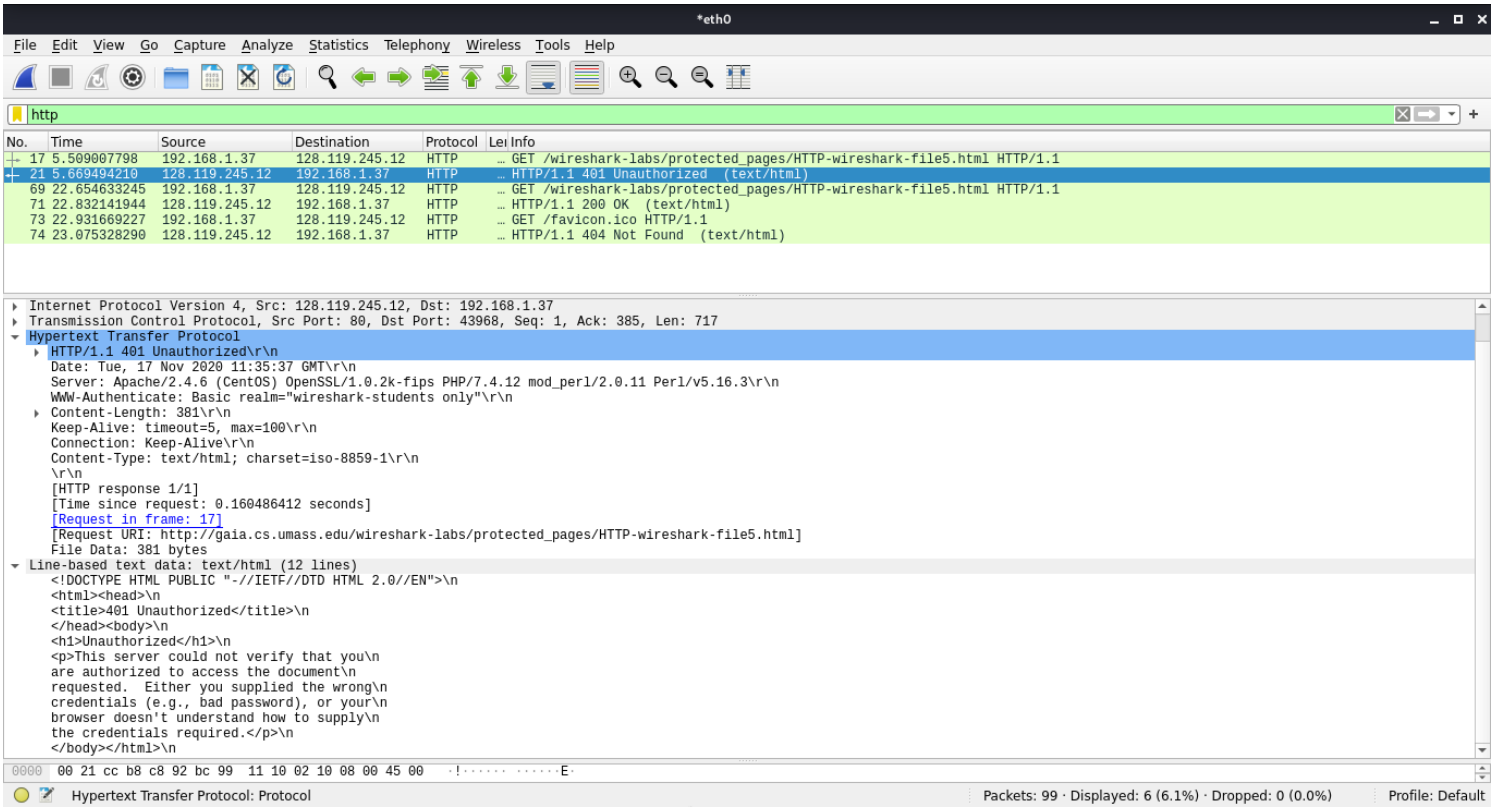

*eth0
File Edit View Go Capture Analyze Statistics Telephony Wireless Tools Help
http
No. Time Source Destination Protocol Le Info
5.306178735 192.168.1.37 128.119.245.12 HTTP … GET /wireshark-labs/HTTP-wireshark-file4.html HTTP/1.1
5.456042270 128.119.245.12 192.168.1.37 HTTP … HTTP/1.1 200 OK (text/html)
5.666075138 192.168.1.37 128.119.245.12 HTTP … GET /pearson.png HTTP/1.1
5.819033277 128.119.245.12 192.168.1.37 HTTP … HTTP/1.1 200 OK (PNG)
5.922452032 192.168.1.37 128.119.245.12 HTTP … GET /favicon.ico HTTP/1.1
6.067533214 128.119.245.12 192.168.1.37 HTTP … HTTP/1.1 404 Not Found (text/html)
6.133006627 192.168.1.37 128.119.245.12 HTTP … GET /~kurose/cover_5th_ed.jpg HTTP/1.1
6.716866827 128.119.245.12 192.168.1.37 HTTP … HTTP/1.1 200 OK (JPEG JFIF image)
Frame 43: 405 bytes on wire (3240 bits), 405 bytes captured (3240 bits) on interface eth0, id 0
Ethernet II, Src: Flextron_b8:c8:92 (00:21:cc:b8:c8:92), Dst: ZyxelCom_10:02:10 (bc:99:11:10:02:10)
Internet Protocol Version 4, Src: 192.168.1.37, Dst: 128.119.245.12
Transmission Control Protocol, Src Port: 43582, Dst Port: 80, Seq: 1, Ack: 1, Len: 339
Hypertext Transfer Protocol
GET /~kurose/cover_5th_ed.jpg HTTP/1.1\r\n
Host: manic.cs.umass.edu\r\n
User-Agent: Mozilla/5.0 (X11; Linux x86_64; rv:78.0) Gecko/20100101 Firefox/78.0\r\n
Accept: image/webp,*/*\r\n
Accept-Language: en-US,en;q=0.5\r\n
Accept-Encoding: gzip, deflate\r\n
Connection: keep-alive\r\n
Referer: http://gaia.cs.umass.edu/wireshark-labs/HTTP-wireshark-file4.html\r\n
\r\n
[Full request URI: http://manic.cs.umass.edu/~kurose/cover_5th_ed.jpg]
[HTTP request 1/1]
[Response in frame: 175]
0000 bc 99 11 10 02 10 00 21 cc b8 c8 92 08 00 45 00 ·····! ·····E·
0010 01 87 01 d6 40 00 40 06 00 4a c0 a8 01 25 80 77 ····@·@· ·J···%·w
Hypertext Transfer Protocol: Protocol
Packets: 196 · Displayed: 8 (4.1%) · Dropped: 0 (0.0%)
Profile: Default

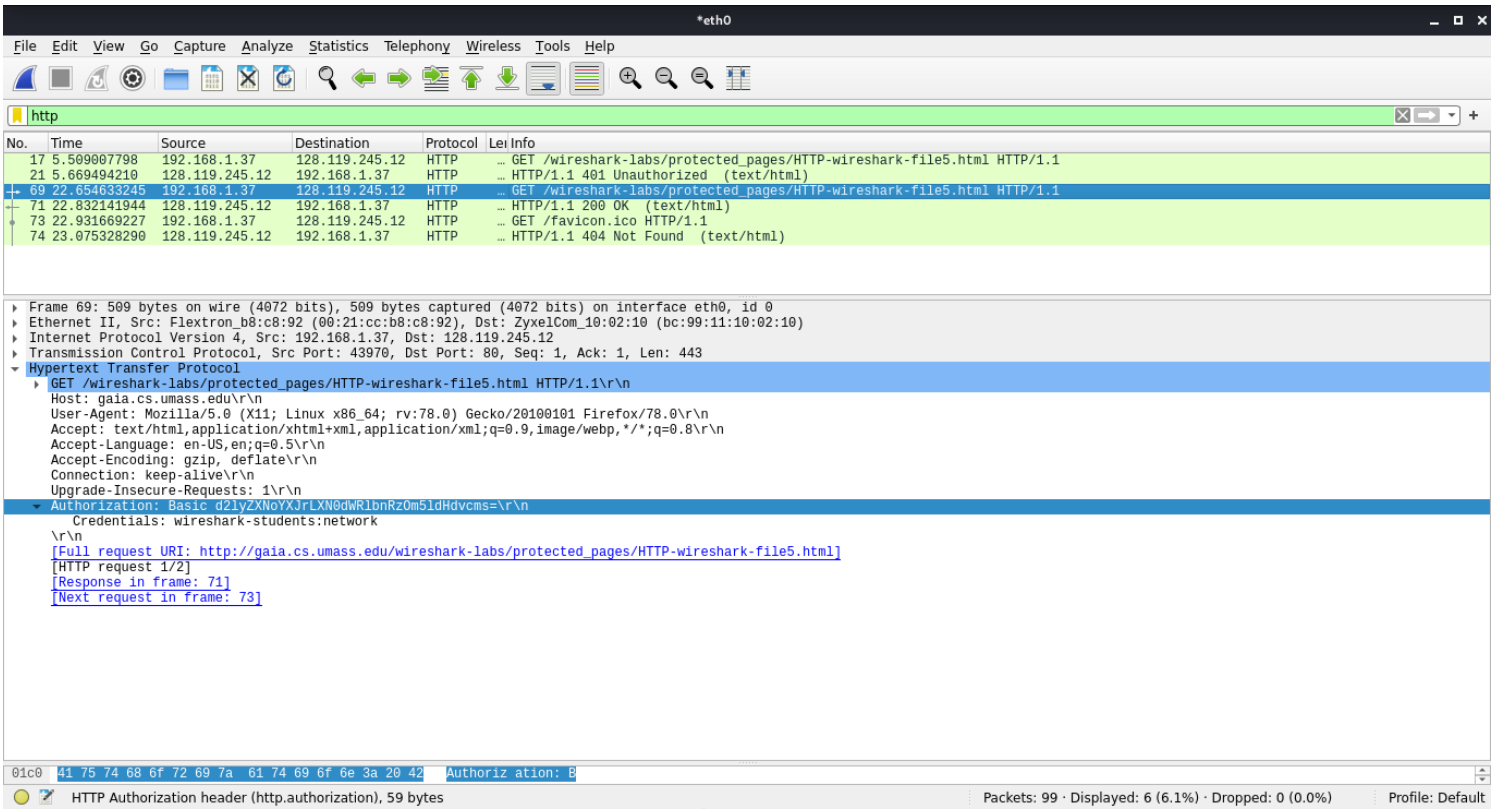
4.1) 3 HTTP GET messages send. One of them is for getting the .html file, one of them is for pearson.png and one of them is for picture of cover of the book. 128.119.245.12

4.2) The images are downloaded serially because second image's GET message send after the OK message of the first image. First image's response is in frame 33 but the second image's GET message is in frame 43.

Question 5.







5.1) In the second screenshot, the response is 401 Unauthorized.

5.2) The authorization field is added to the HTTP message.