আন্তর্জাতিক ইসলামী বিশ্ববিদ্যালয় চট্টগ্রাম
الجامعة الإسلامية العالمية شيتاغونغ
International Islamic University Chittagong

Department of Computer Science & Engineering

Lab_Report #2

Course Code : **CSE-3634**

Course Title : **Computer Network Lab**

Submitted To:

Abdul Kayum

Adj. Faculty, Dept. Of **CSE**

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Submitted By:

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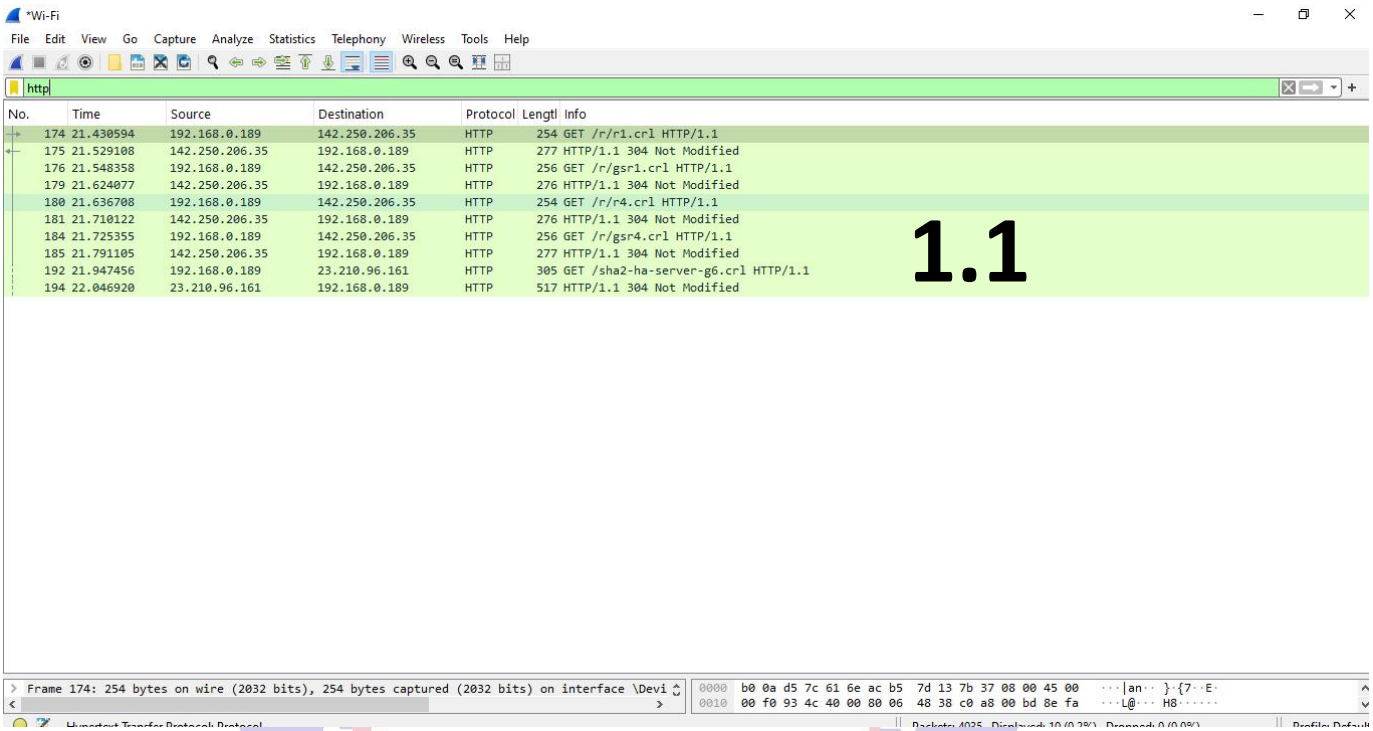
ID : **C221361**

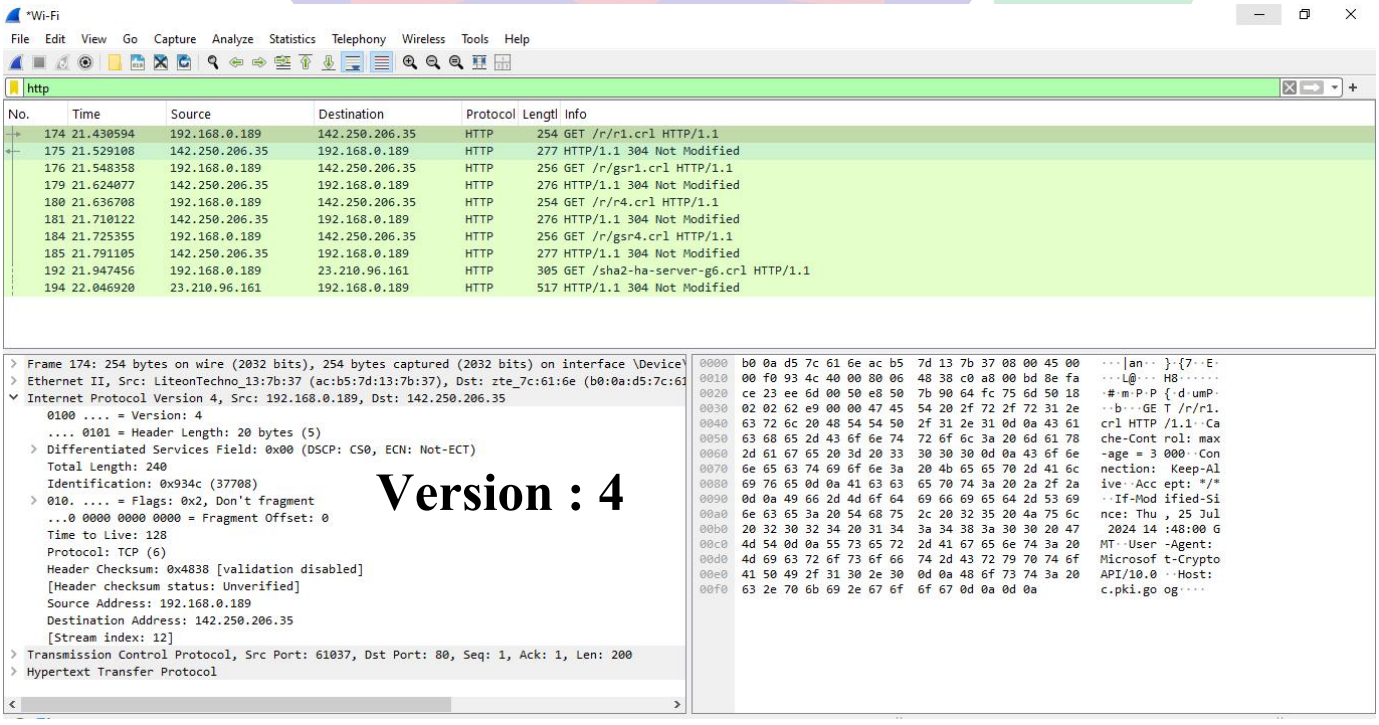
Section : **7DM**

Semester : **7th**

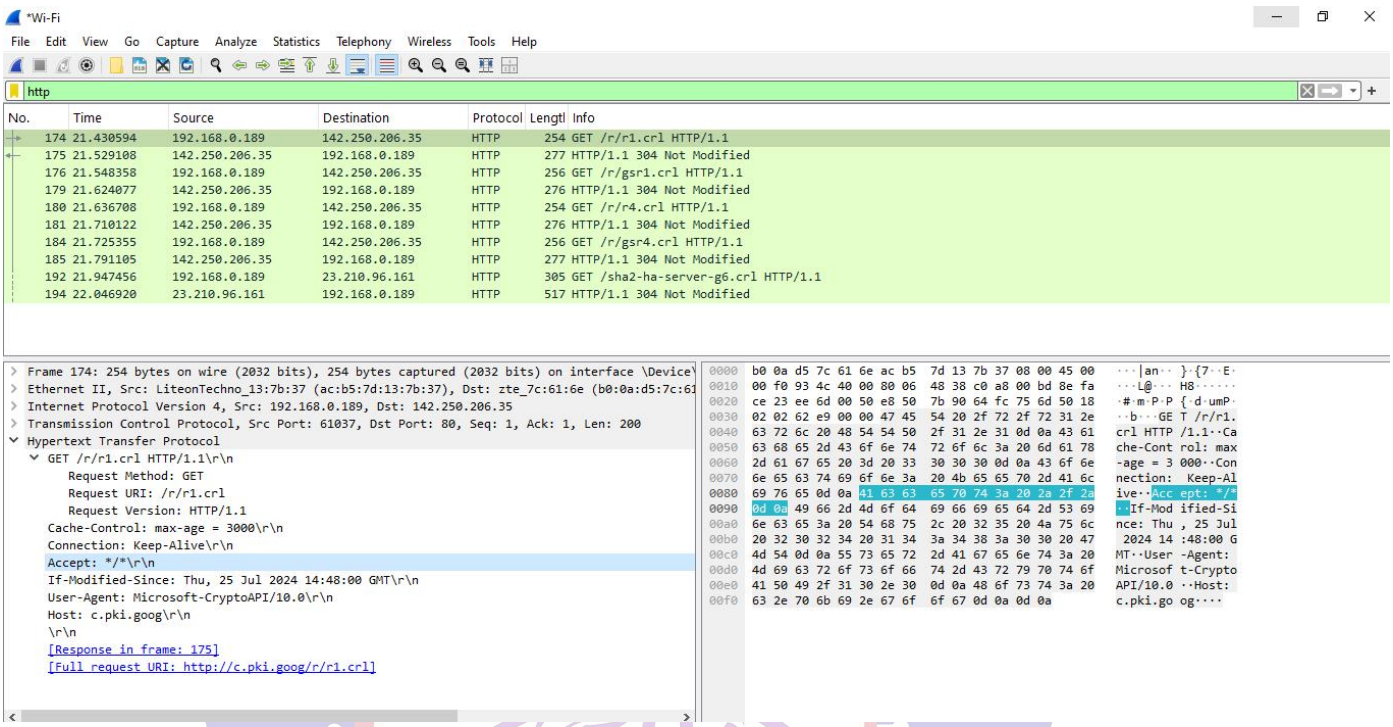
The Basic HTTP GET/response interaction

1. Is your browser running HTTP version 1.0 or 1.1? What version of HTTP is the server running?

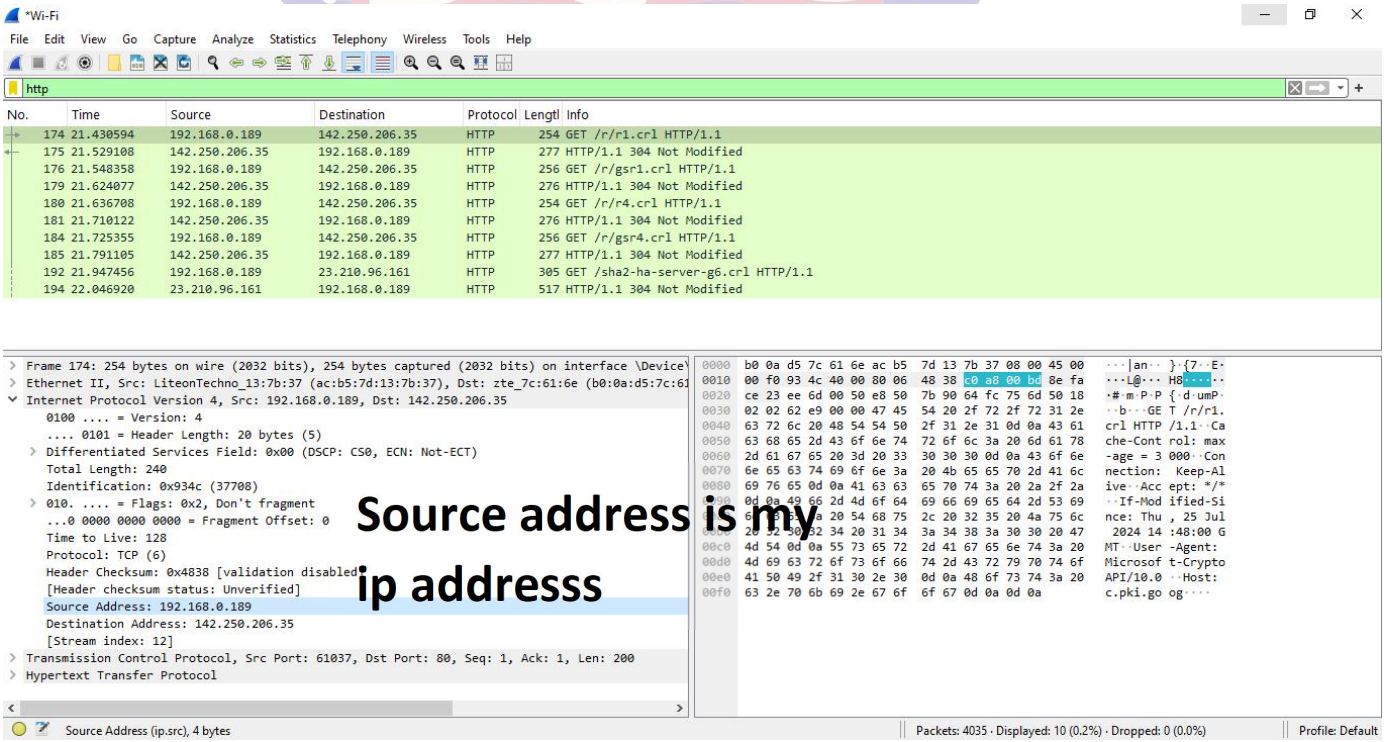


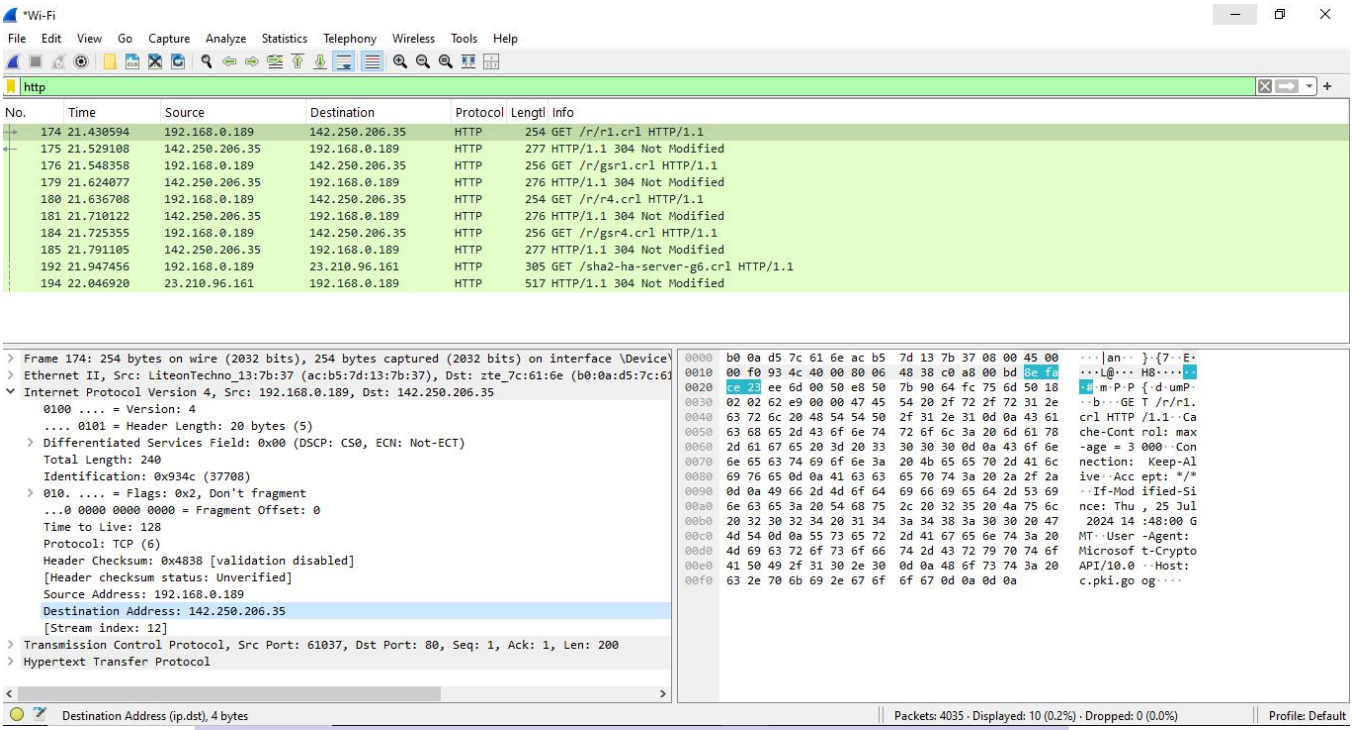


2. What languages (if any) does your browser indicate that it can accept to the server?

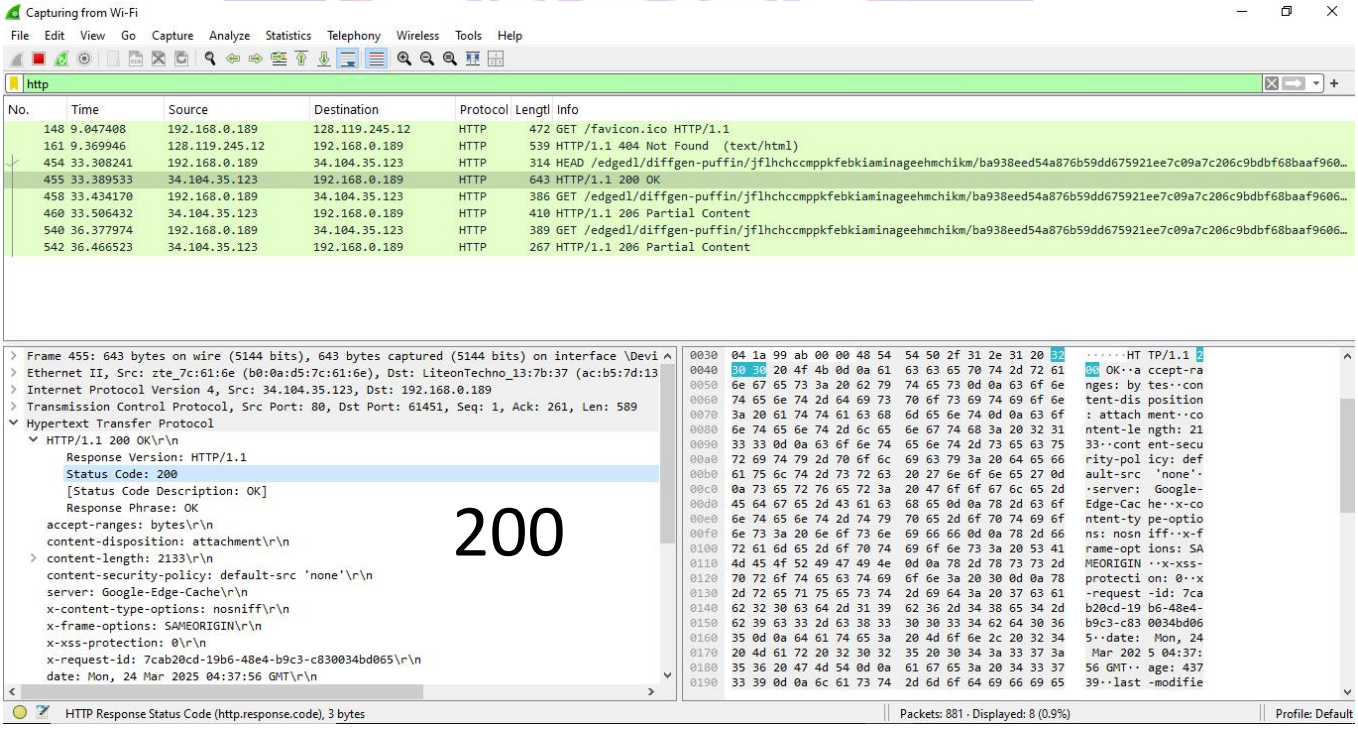


3. What is the IP address of your computer? Of the gaia.cs.umass.edu server

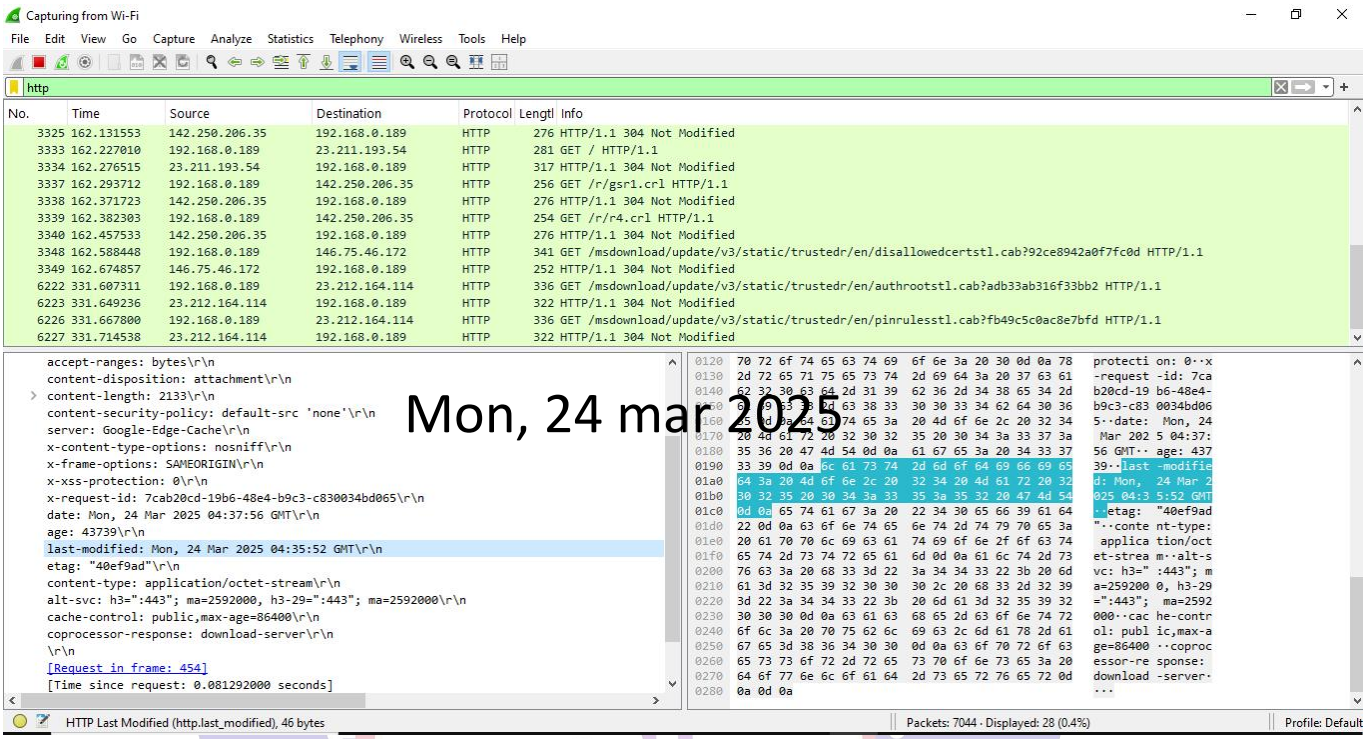




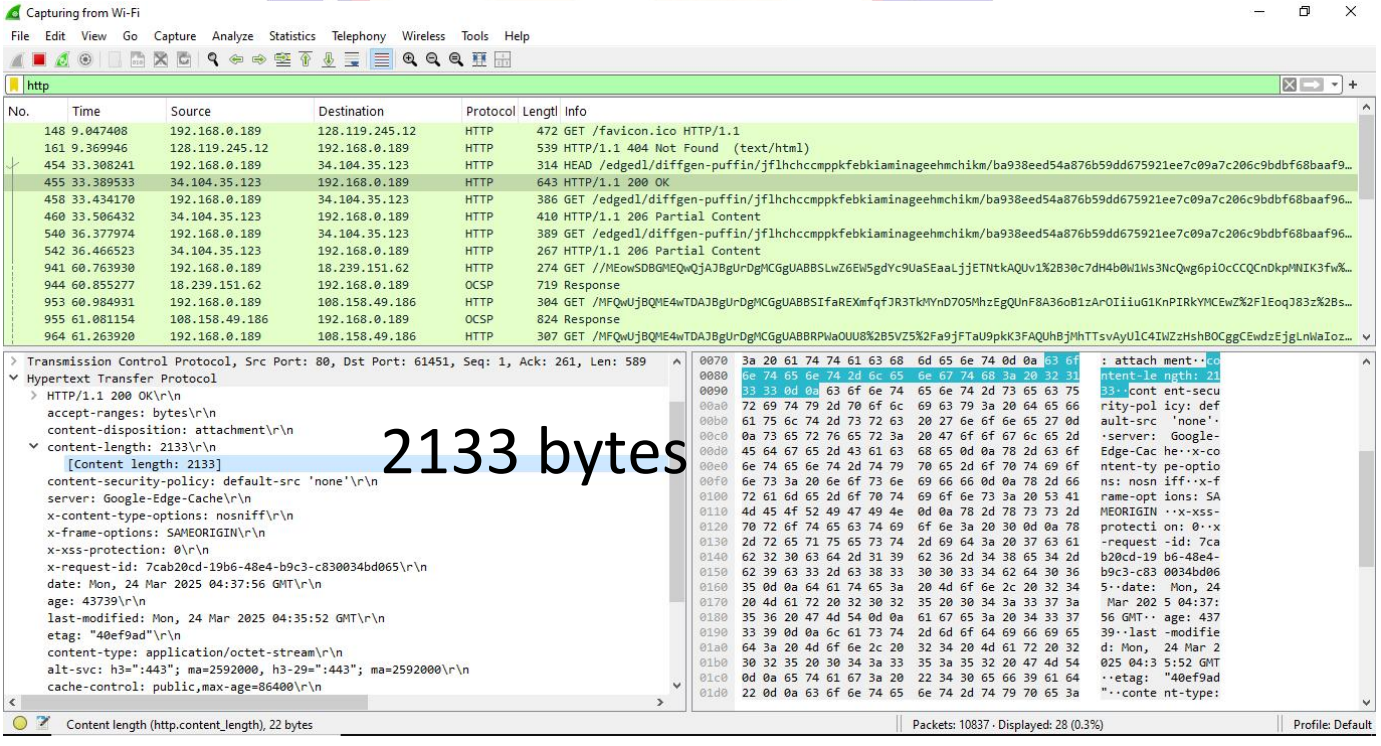
4. What is the status code returned from the server to your browser?



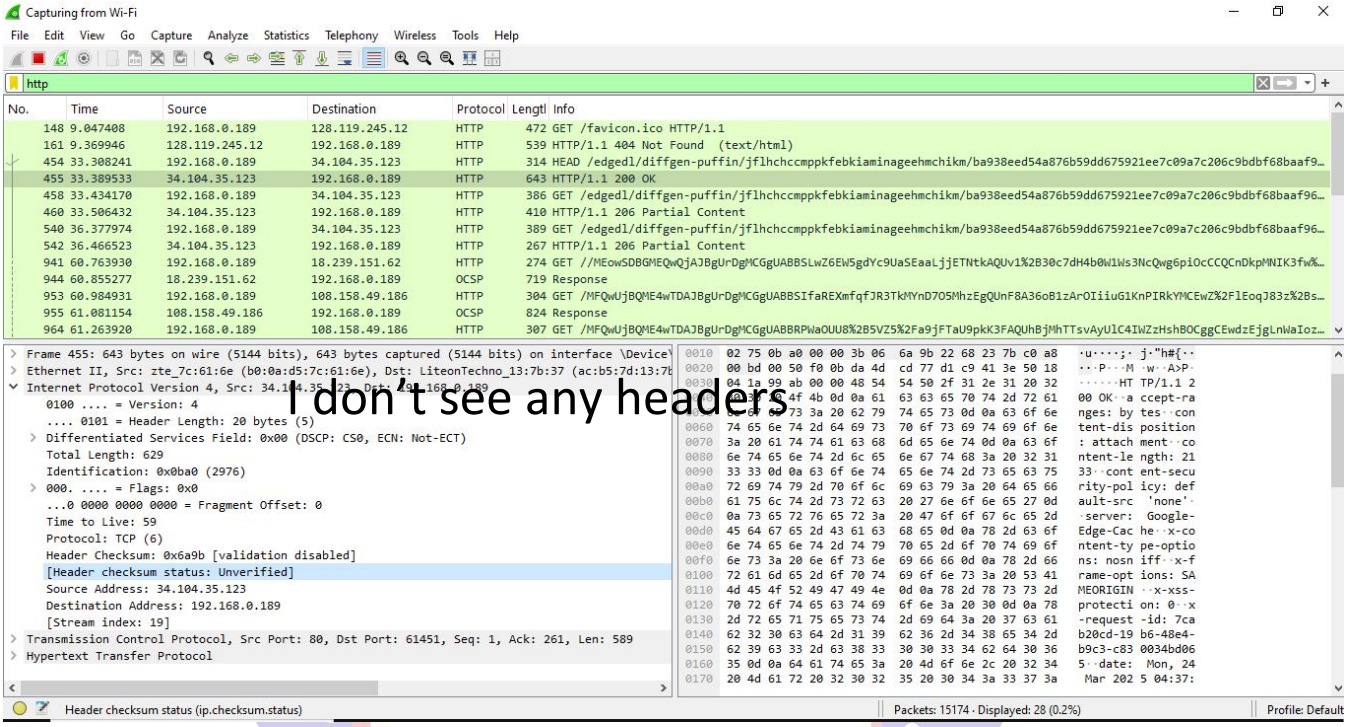
5. When was the HTML file that you are retrieving last modified at the server?



6. How many bytes of content are being returned to your browser?

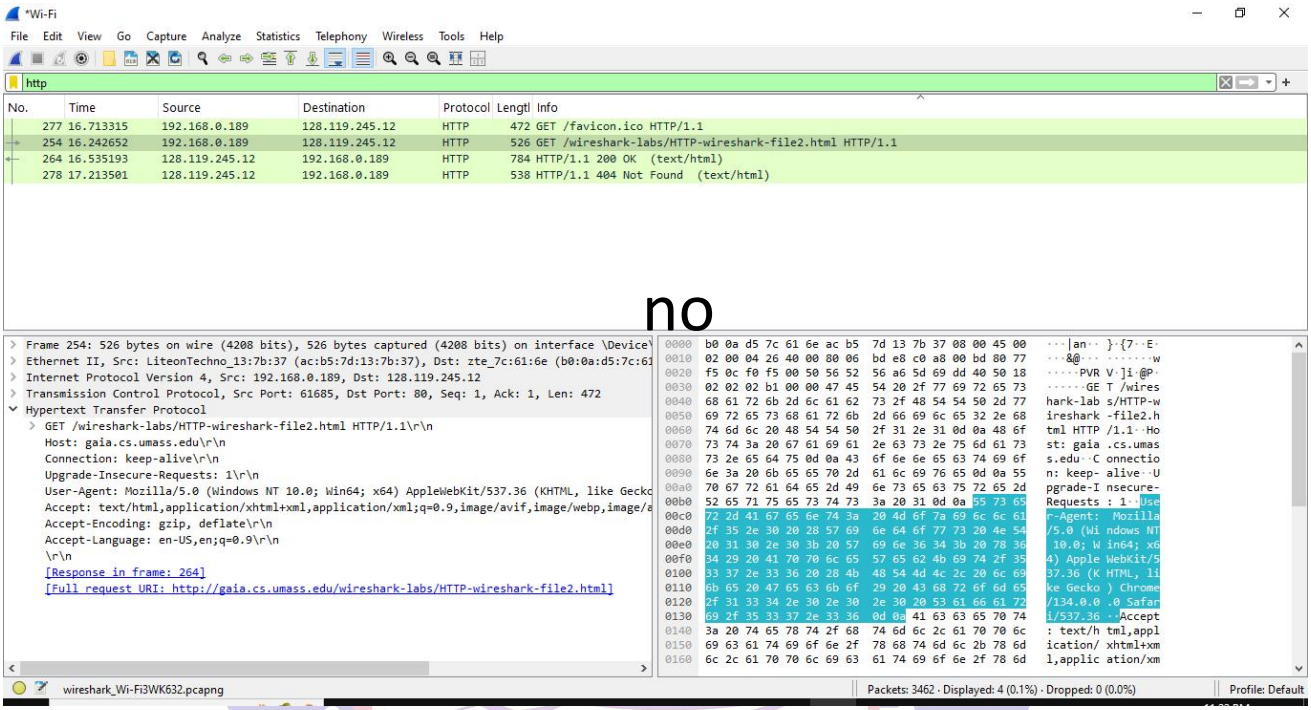


7. By inspecting the raw data in the packet content window, do you see any headers within the data that are not displayed in the packet-listing window? If so, name one.

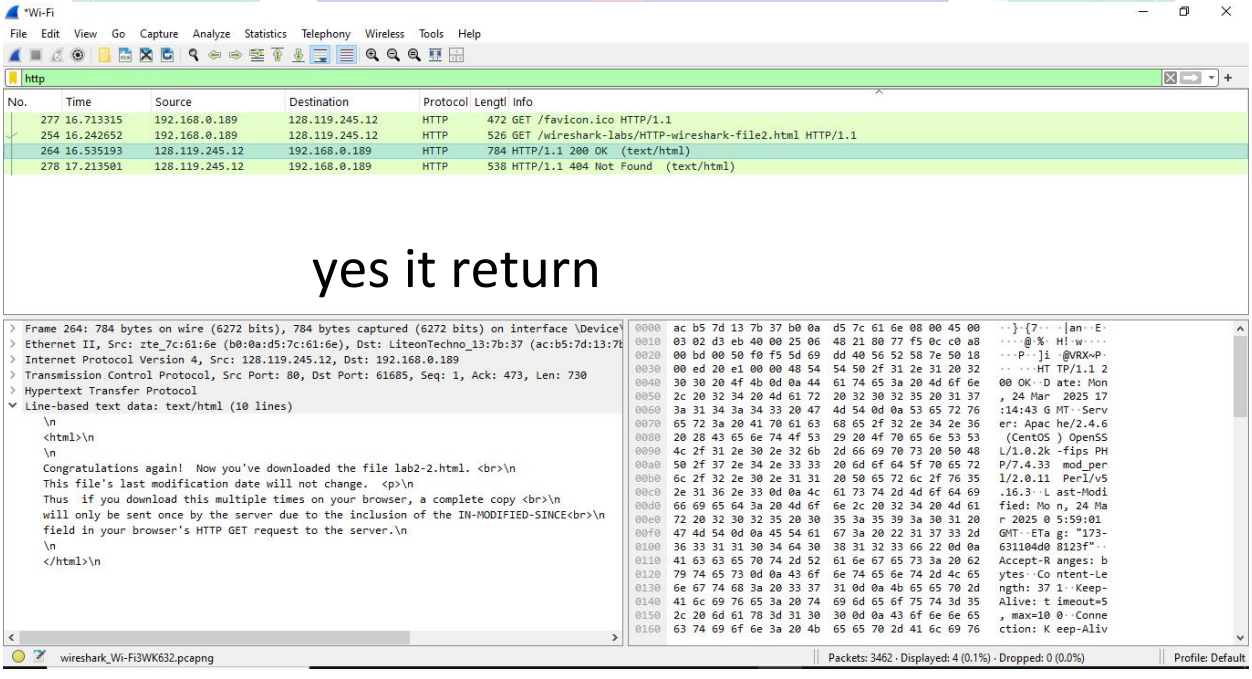


The HTTP CONDITIONAL GET/response interaction

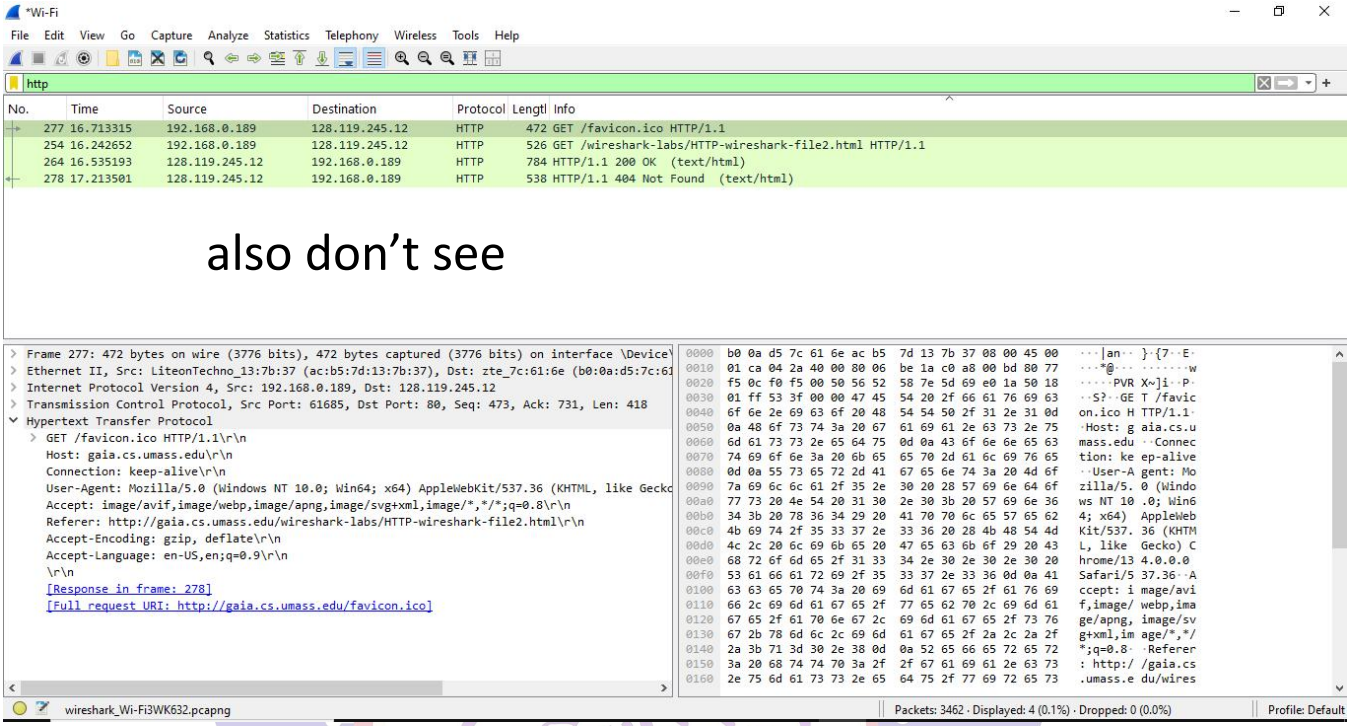
8. Inspect the contents of the first HTTP GET request from your browser to the server. Do you see an "IF-MODIFIED-SINCE" line in the HTTP GET?



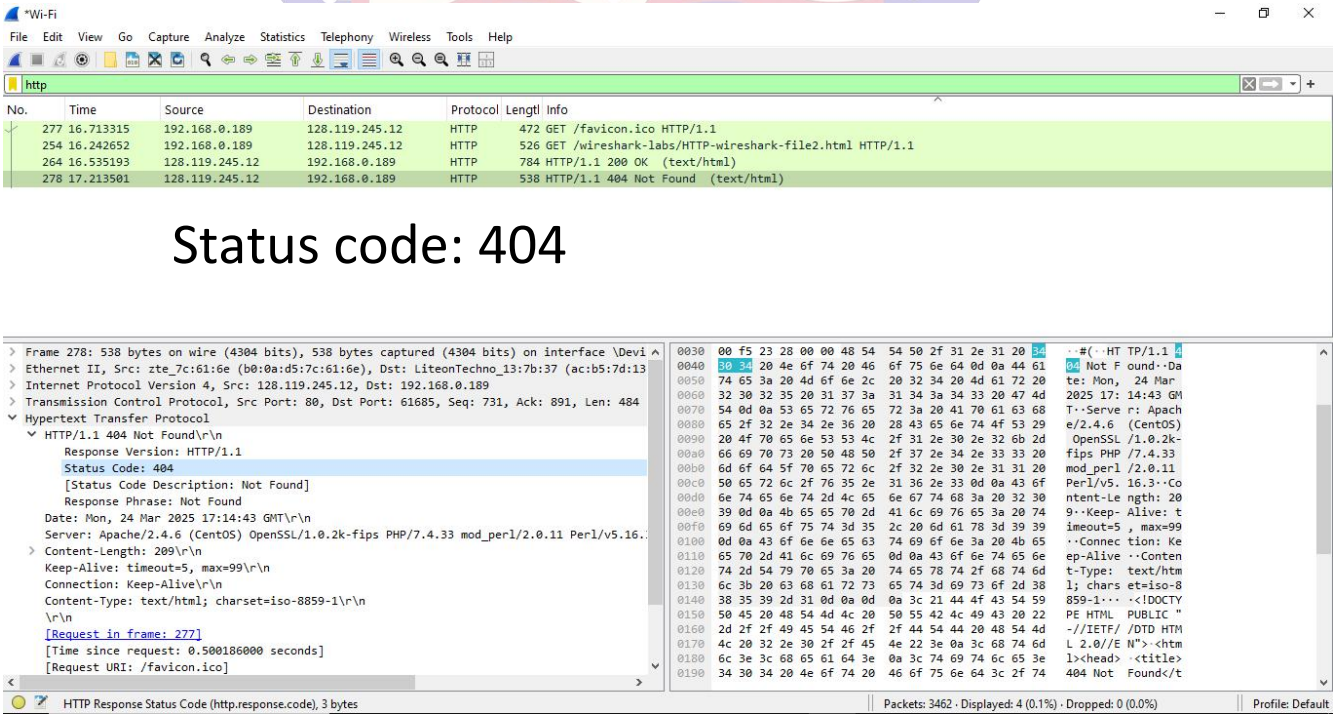
8. Inspect the contents of the server response. Did the server explicitly return the contents of the file? How can you tell?

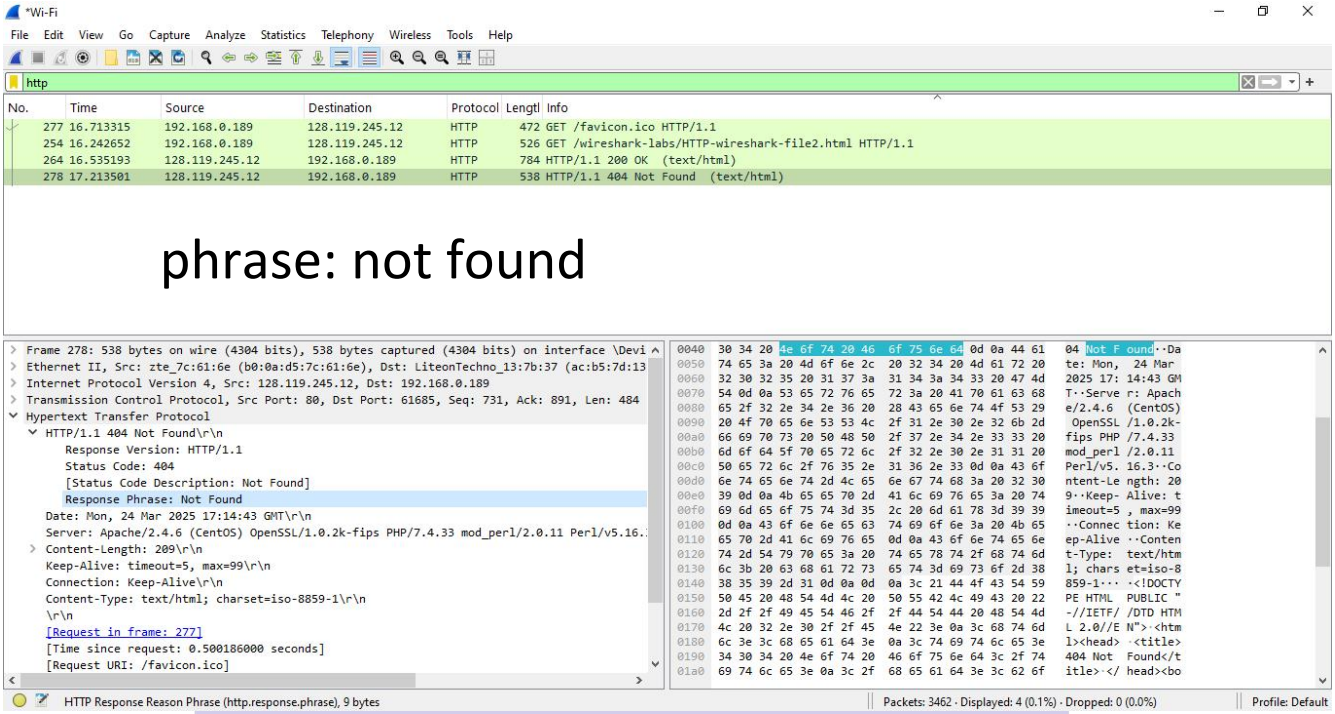


9. Now inspect the contents of the second HTTP GET request from your browser to the server. Do you see an "IF-MODIFIED-SINCE:" line in the HTTP GET? If so, what information follows the "IF-MODIFIED-SINCE:" header?



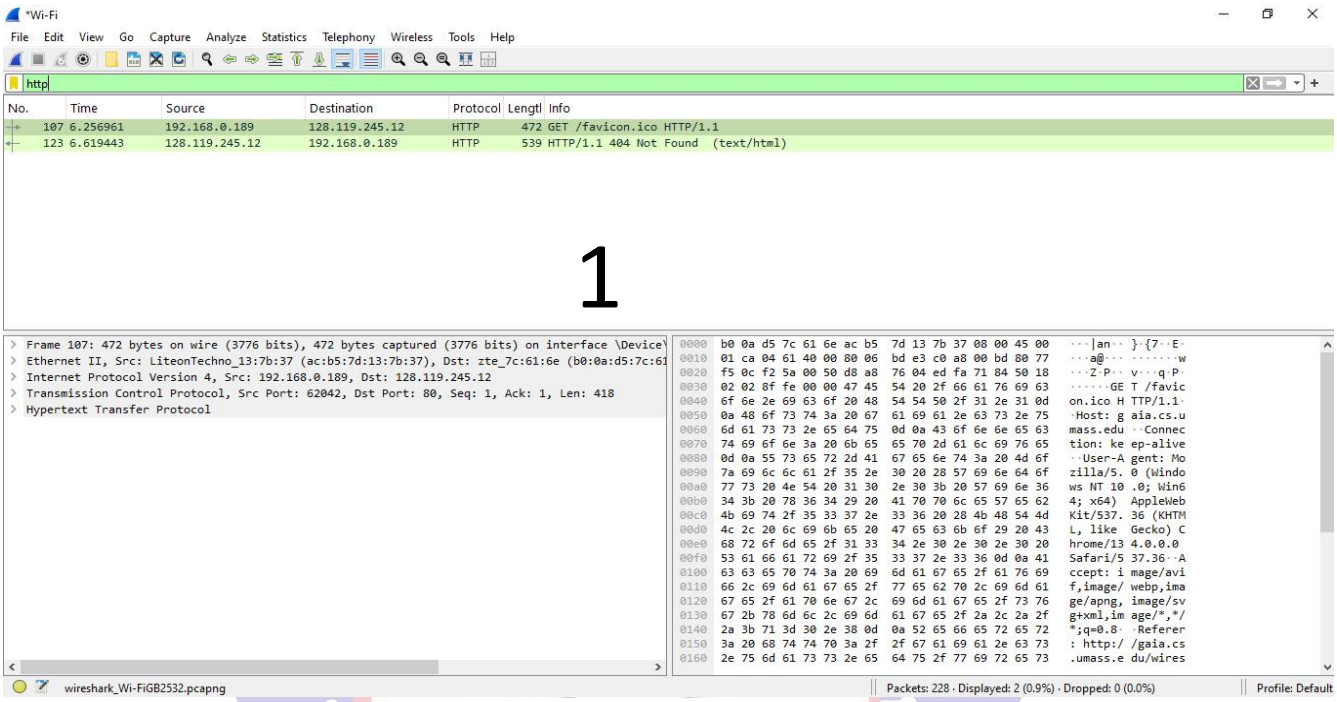
10. What is the HTTP status code and phrase returned from the server in response to this second HTTP GET? Did the server explicitly return the contents of the file? Explain.

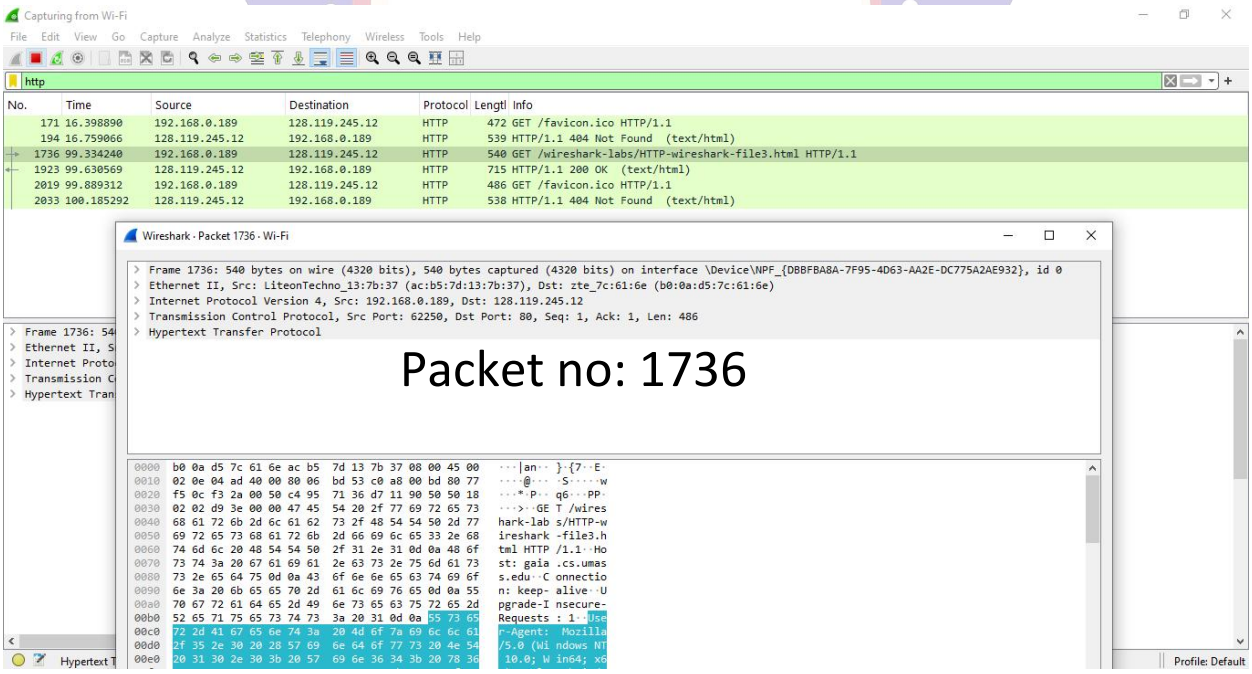



*Wi-Fi
File Edit View Go Capture Analyze Statistics Telephony Wireless Tools Help
http
No. Time Source Destination Protocol Lengtl Info
277 16.713315 192.168.0.189 128.119.245.12 HTTP 472 GET /favicon.ico HTTP/1.1
254 16.242652 192.168.0.189 128.119.245.12 HTTP 526 GET /wireshark-labs/HTTP-wireshark-file2.html HTTP/1.1
264 16.535193 128.119.245.12 192.168.0.189 HTTP 784 HTTP/1.1 200 OK (text/html)
278 17.213501 128.119.245.12 192.168.0.189 HTTP 538 HTTP/1.1 404 Not Found (text/html)
phrase: not found
Frame 278: 538 bytes on wire (4304 bits), 538 bytes captured (4304 bits) on interface \Devi
Ethernet II, Src: zte_7c:61:6e (b0:0a:d5:7c:61:6e), Dst: LiteonTechno_13:7b:37 (ac:b5:7d:13
Internet Protocol Version 4, Src: 128.119.245.12, Dst: 192.168.0.189
Transmission Control Protocol, Src Port: 80, Dst Port: 61685, Seq: 731, Ack: 891, Len: 484
Hypertext Transfer Protocol
HTTP/1.1 404 Not Found\r\n
Response Version: HTTP/1.1
Status Code: 404
[Status Code Description: Not Found]
Response Phrase: Not Found
Date: Mon, 24 Mar 2025 17:14:43 GMT\r\n
Server: Apache/2.4.6 (CentOS) OpenSSL/1.0.2k-fips PHP/7.4.33 mod_perl/2.0.11 Perl/v5.16.
Content-Length: 209\r\n
Keep-Alive: timeout=5, max=99\r\n
Connection: Keep-Alive\r\n
Content-Type: text/html; charset=iso-8859-1\r\n
\r\n
[Request in frame: 277]
[Time since request: 0.500186000 seconds]
[Request URI: /favicon.ico]
0040 30 34 20 4e 6f 74 20 46 6f 75 6e 64 0d 0a 44 61 04 Not F ound··Da
0050 74 65 3a 20 4d 6f 6e 2c 20 32 34 20 4d 61 72 20 te: Mon, 24 Mar
0060 32 30 32 35 20 31 37 3a 31 34 3a 34 33 20 47 4d 2025 17: 14:43 GM
0070 54 0d 0a 53 65 72 76 65 72 3a 20 41 70 61 63 68 T··Serve r: Apach
0080 65 2f 32 2e 34 2e 36 20 28 43 65 6e 74 4f 53 29 e/2.4.6 (CentOS)
0090 20 4f 70 65 6e 53 53 4c 2f 31 2e 30 2e 32 6b 2d OpenSSL /1.0.2k-
00a0 66 69 70 73 20 50 48 50 2f 37 2e 34 2e 33 33 20 fips PHP /7.4.33
00b0 6d 6f 64 5f 70 65 72 6c 2f 32 2e 30 2e 31 31 20 mod_perl /2.0.11
00c0 50 65 72 6c 2f 76 35 2e 31 36 2e 33 0d 0a 43 6f Perl/v5. 16.3··Co
00d0 6e 74 65 6e 74 2d 4c 65 6e 67 74 68 3a 20 32 30 ntent-Le ngth: 20
00e0 39 0d 0a 4b 65 65 70 2d 41 6c 69 76 65 3a 20 74 9··Keep- Alive: t
00f0 69 6d 65 6f 75 74 3d 35 2c 20 6d 61 78 3d 39 39 imeout=5 , max=99
0100 0d 0a 43 6f 6e 6e 65 63 74 69 6f 6e 3a 20 4b 65 ··Connec tion: Ke
0110 65 70 2d 41 6c 69 76 65 0d 0a 43 6f 6e 74 65 6e ep-Alive ··Conten
0120 74 2d 54 79 70 65 3a 20 74 65 78 74 2f 68 74 6d t-Type: text/htm
0130 6c 3b 20 63 68 61 72 73 65 74 3d 69 73 6f 2d 38 l; chars et=iso-8
0140 38 35 39 2d 31 0d 0a 0d 0a 3c 21 44 4f 43 54 59 859-1··· ·<!DOCTY
0150 50 45 20 48 54 4d 4c 20 50 55 42 4c 49 43 20 22 PE HTML PUBLIC "
0160 2d 2f 2f 49 45 54 46 2f 2f 44 54 44 20 48 54 4d -//IETF/ /DTD HTM
0170 4c 20 32 2e 30 2f 2f 45 4e 22 3e 0a 3c 68 74 6d L 2.0//E N">·<htm
0180 6c 3e 3c 68 65 61 64 3e 0a 3c 74 69 74 6c 65 3e l><head> ·<title>
0190 34 30 34 20 4e 6f 74 20 46 6f 75 6e 64 3c 2f 74 404 Not Found</t
01a0 69 74 6c 65 3e 0a 3c 2f 68 65 61 64 3e 3c 62 6f itle>·</ head><bo
HTTP Response Reason Phrase (http.response.phrase), 9 bytes
Packets: 3462 · Displayed: 4 (0.1%) · Dropped: 0 (0.0%)
Profile: Default
*Wi-Fi
File Edit View Go Capture Analyze Statistics Telephony Wireless Tools Help
http
No. Time Source Destination Protocol Lengtl Info
277 16.713315 192.168.0.189 128.119.245.12 HTTP 472 GET /favicon.ico HTTP/1.1
254 16.242652 192.168.0.189 128.119.245.12 HTTP 526 GET /wireshark-labs/HTTP-wireshark-file2.html HTTP/1.1
264 16.535193 128.119.245.12 192.168.0.189 HTTP 784 HTTP/1.1 200 OK (text/html)
278 17.213501 128.119.245.12 192.168.0.189 HTTP 538 HTTP/1.1 404 Not Found (text/html)
not return
Frame 278: 538 bytes on wire (4304 bits), 538 bytes captured (4304 bits) on interface \Device
Ethernet II, Src: zte_7c:61:6e (b0:0a:d5:7c:61:6e), Dst: LiteonTechno_13:7b:37 (ac:b5:7d:13:7b
Internet Protocol Version 4, Src: 128.119.245.12, Dst: 192.168.0.189
Transmission Control Protocol, Src Port: 80, Dst Port: 61685, Seq: 731, Ack: 891, Len: 484
Hypertext Transfer Protocol
Line-based text data: text/html (7 lines)
<!DOCTYPE HTML PUBLIC "-//IETF//DTD HTML 2.0//EN">\n
<html><head>\n
<title>404 Not Found</title>\n
</head><body>\n
<h1>Not Found</h1>\n
The requested URL /favicon.ico was not found on this server. \n
</body></html>\n
00b0 6d 6f 64 5f 70 65 72 6c 2f 32 2e 30 2e 31 31 20 mod_perl /2.0.11
00c0 50 65 72 6c 2f 76 35 2e 31 36 2e 33 0d 0a 43 6f Perl/v5. 16.3··Co
00d0 6e 74 65 6e 74 2d 4c 65 6e 67 74 68 3a 20 32 30 ntent-Le ngth: 20
00e0 39 0d 0a 4b 65 65 70 2d 41 6c 69 76 65 3a 20 74 9··Keep- Alive: t
00f0 69 6d 65 6f 75 74 3d 35 2c 20 6d 61 78 3d 39 39 imeout=5 , max=99
0100 0d 0a 43 6f 6e 6e 65 63 74 69 6f 6e 3a 20 4b 65 ··Connec tion: Ke
0110 65 70 2d 41 6c 69 76 65 0d 0a 43 6f 6e 74 65 6e ep-Alive ··Conten
0120 74 2d 54 79 70 65 3a 20 74 65 78 74 2f 68 74 6d t-Type: text/htm
0130 6c 3b 20 63 68 61 72 73 65 74 3d 69 73 6f 2d 38 l; chars et=iso-8
0140 38 35 39 2d 31 0d 0a 0d 0a 3c 21 44 4f 43 54 59 859-1··· ·<!DOCTY
0150 50 45 20 48 54 4d 4c 20 50 55 42 4c 49 43 20 22 PE HTML PUBLIC "
0160 2d 2f 2f 49 45 54 46 2f 2f 44 54 44 20 48 54 4d -//IETF/ /DTD HTM
0170 4c 20 32 2e 30 2f 2f 45 4e 22 3e 0a 3c 68 74 6d L 2.0//E N">·<htm
0180 6c 3e 3c 68 65 61 64 3e 0a 3c 74 69 74 6c 65 3e l><head> ·<title>
0190 34 30 34 20 4e 6f 74 20 46 6f 75 6e 64 3c 2f 74 404 Not Found</t
01a0 69 74 6c 65 3e 0a 3c 2f 68 65 61 64 3e 3c 62 6f itle>·</ head><bo
01b0 64 79 3e 0a 3c 68 31 3e 4e 6f 74 20 46 6f 75 6e dy>·<h1> Not Foun
01c0 64 3c 2f 68 31 3e 0a 3c 70 3e 54 68 65 20 72 65 d</h1>·< p>The re
01d0 71 75 65 73 74 65 64 20 55 52 4c 20 2f 66 61 76 quested URL /fav
01e0 69 63 6f 6e 2e 69 63 6f 20 77 61 73 20 6e 6f 74 icon.ico was not
01f0 20 66 6f 75 6e 64 20 6f 6e 20 74 68 69 73 20 73 found o n this s
0200 65 72 76 65 72 2e 3c 2f 70 3e 0a 3c 2f 62 6f 64 erver.</ p>·</bod
0210 79 3e 3c 2f 68 74 6d 6c 3e 0a y></html >·
Text item (text), 29 bytes
Packets: 3462 · Displayed: 4 (0.1%) · Dropped: 0 (0.0%)
Profile: Default

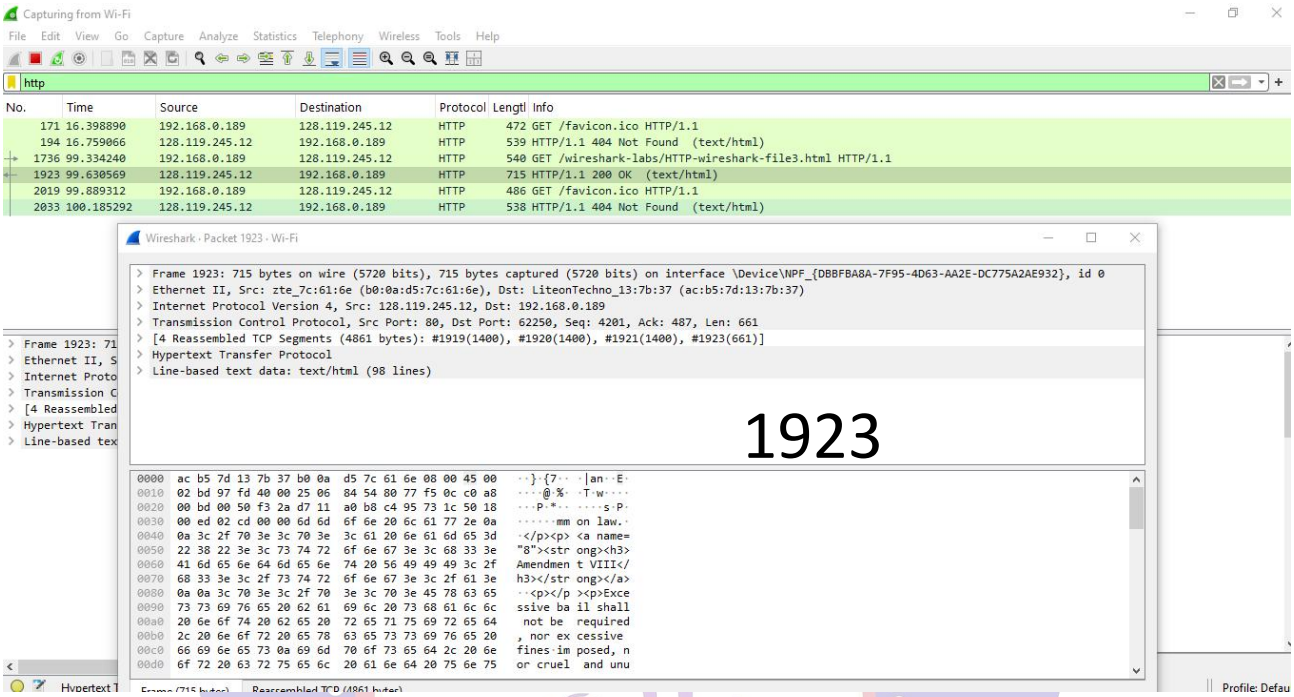
Retrieving Long Documents:

11. How many HTTP GET request messages did your browser send? Which packet number in the trace contains the GET message for the Bill or Rights?

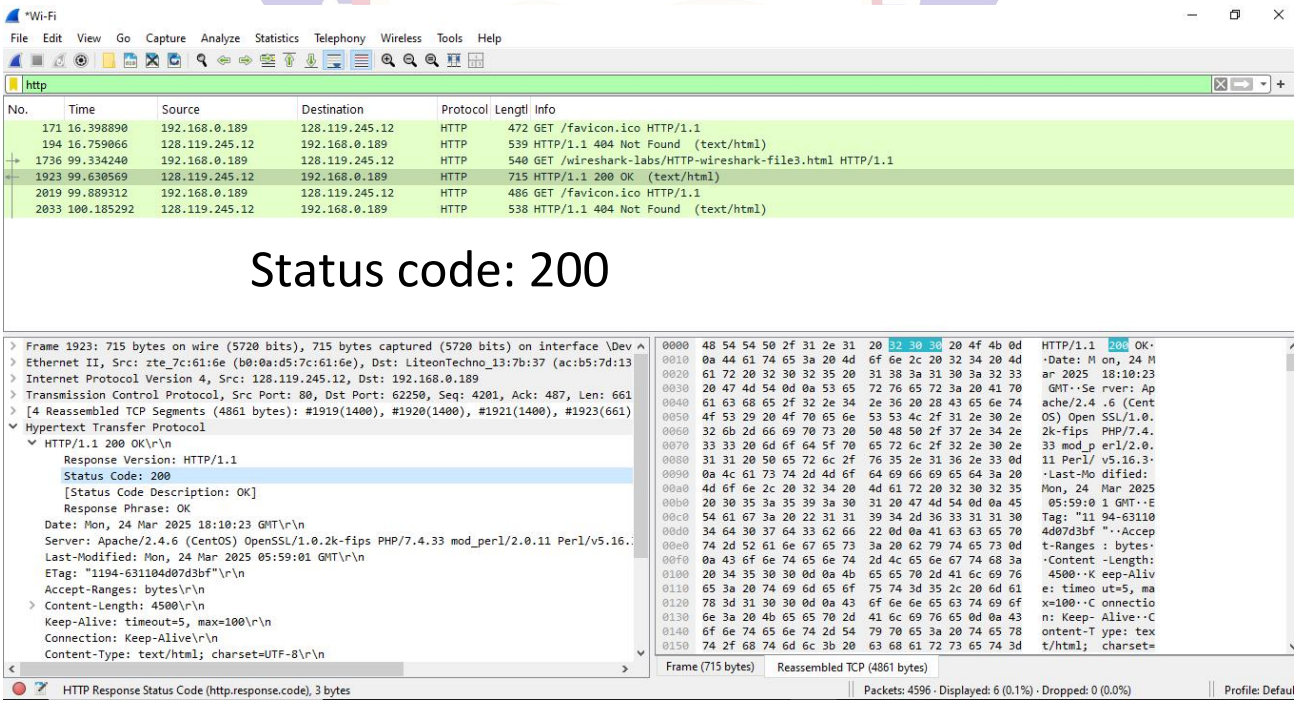


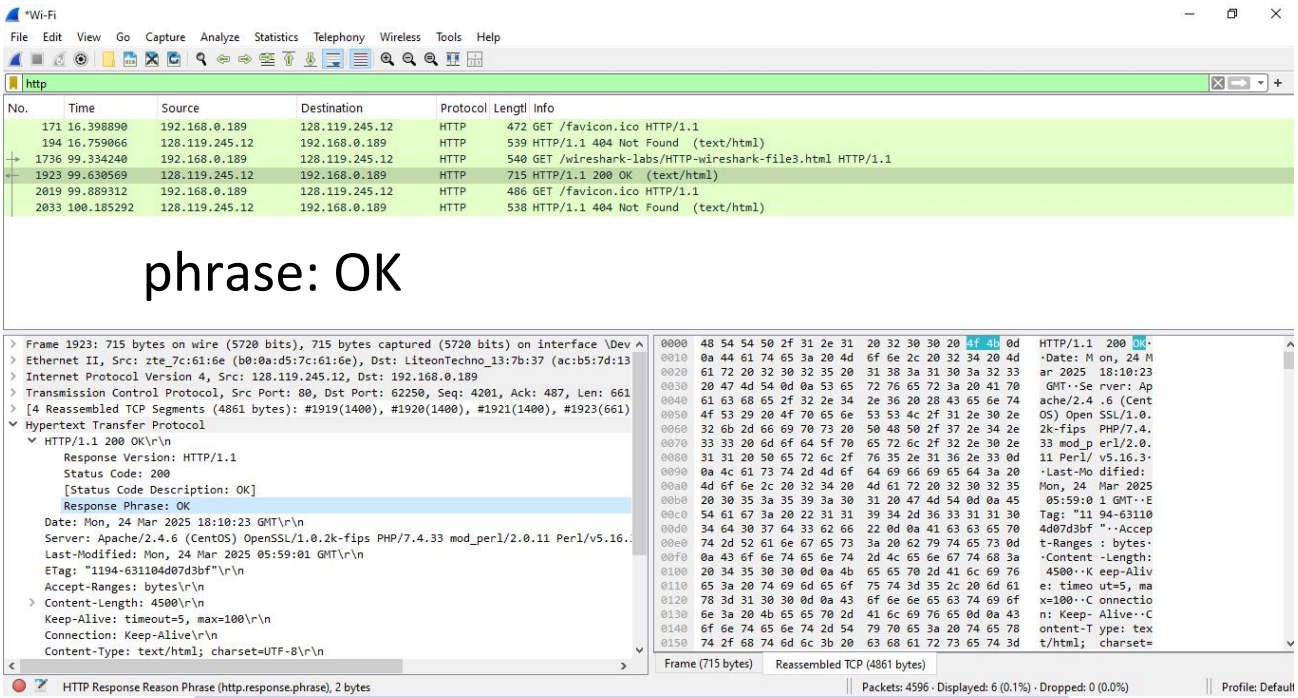


12. Which packet number in the trace contains the status code and phrase associated with the response to the HTTP GET request?

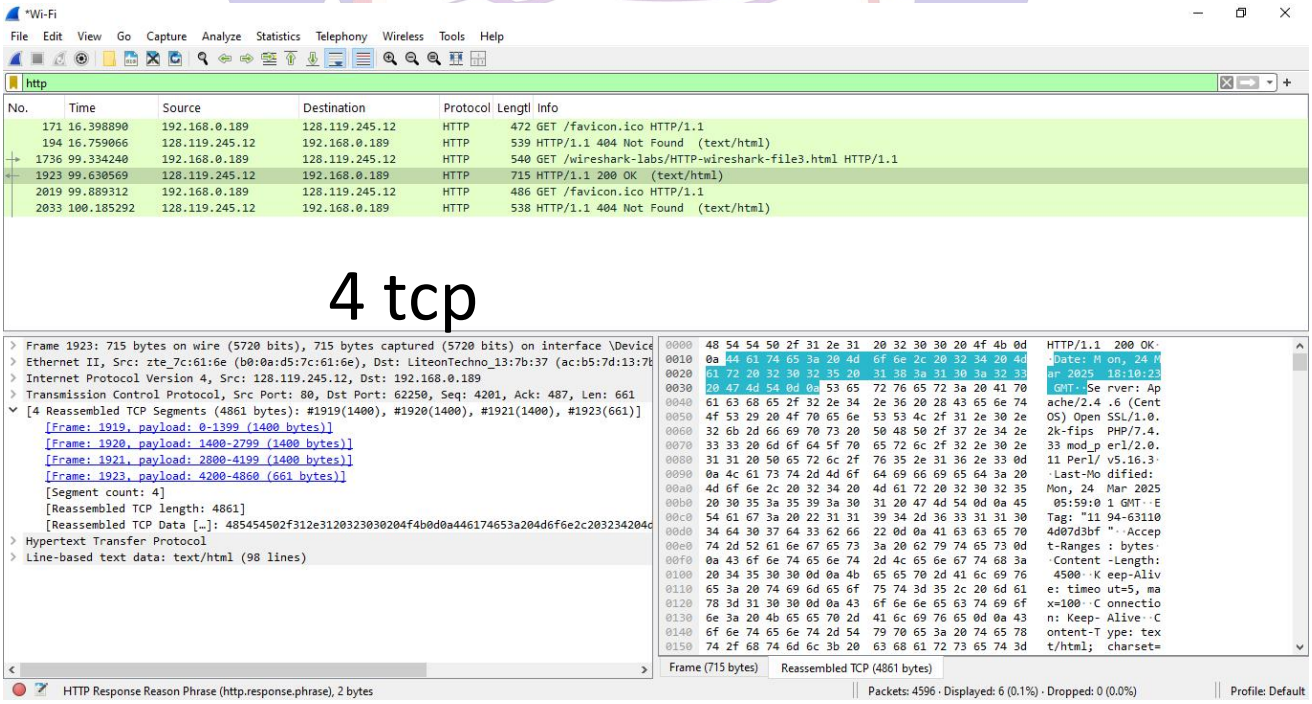


13. What is the status code and phrase in the response?



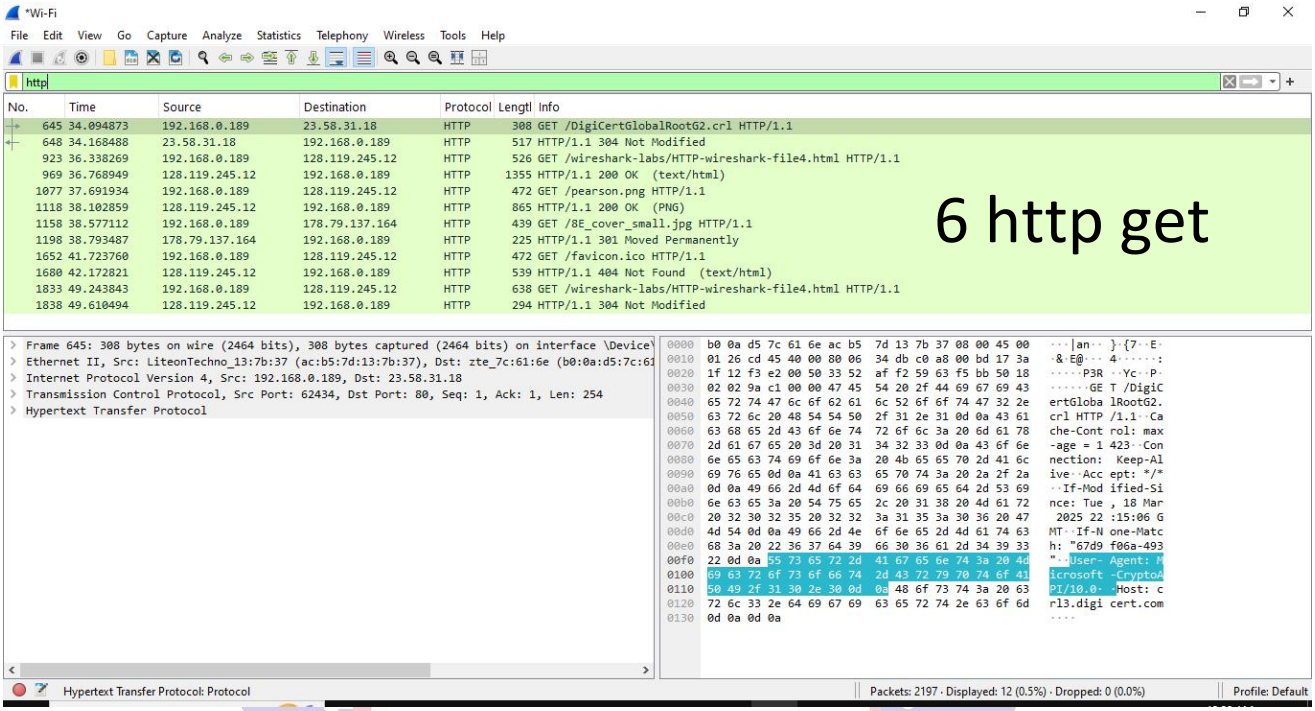


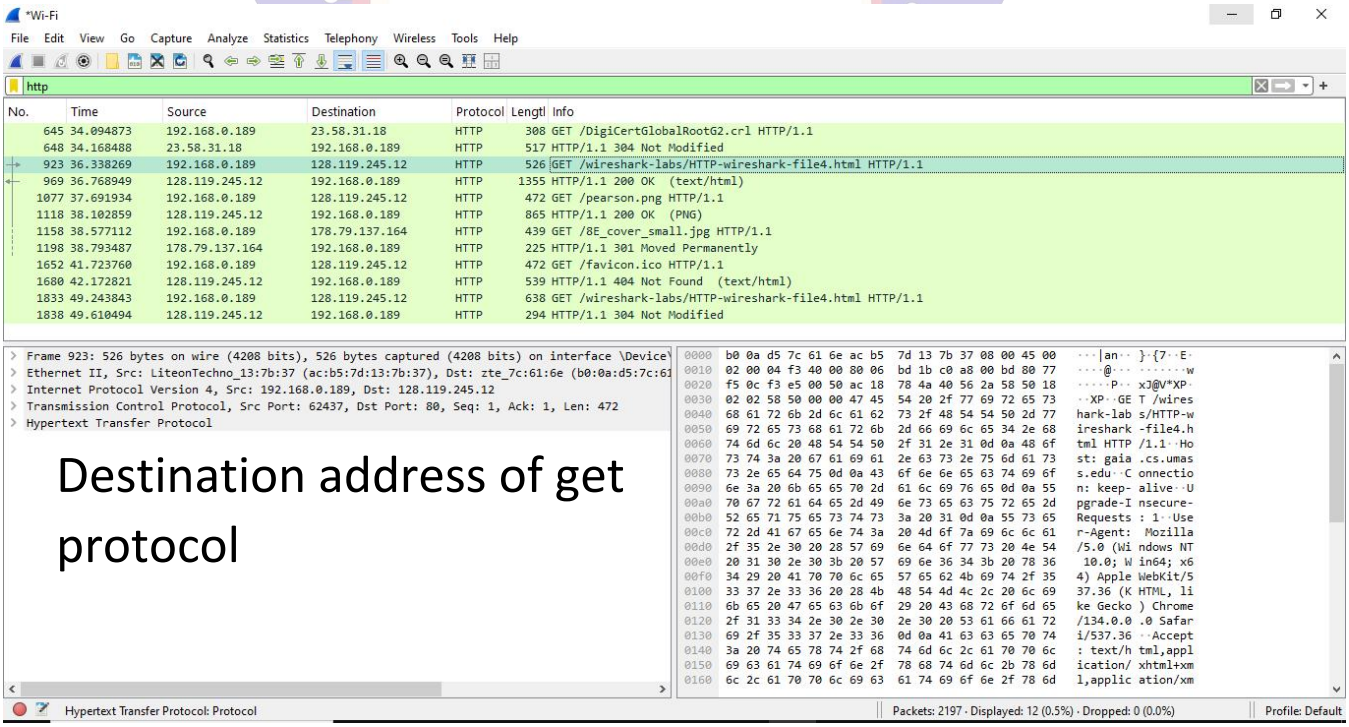
14. How many data-containing TCP segments were needed to carry the single HTTP response and the text of the Bill of Rights?



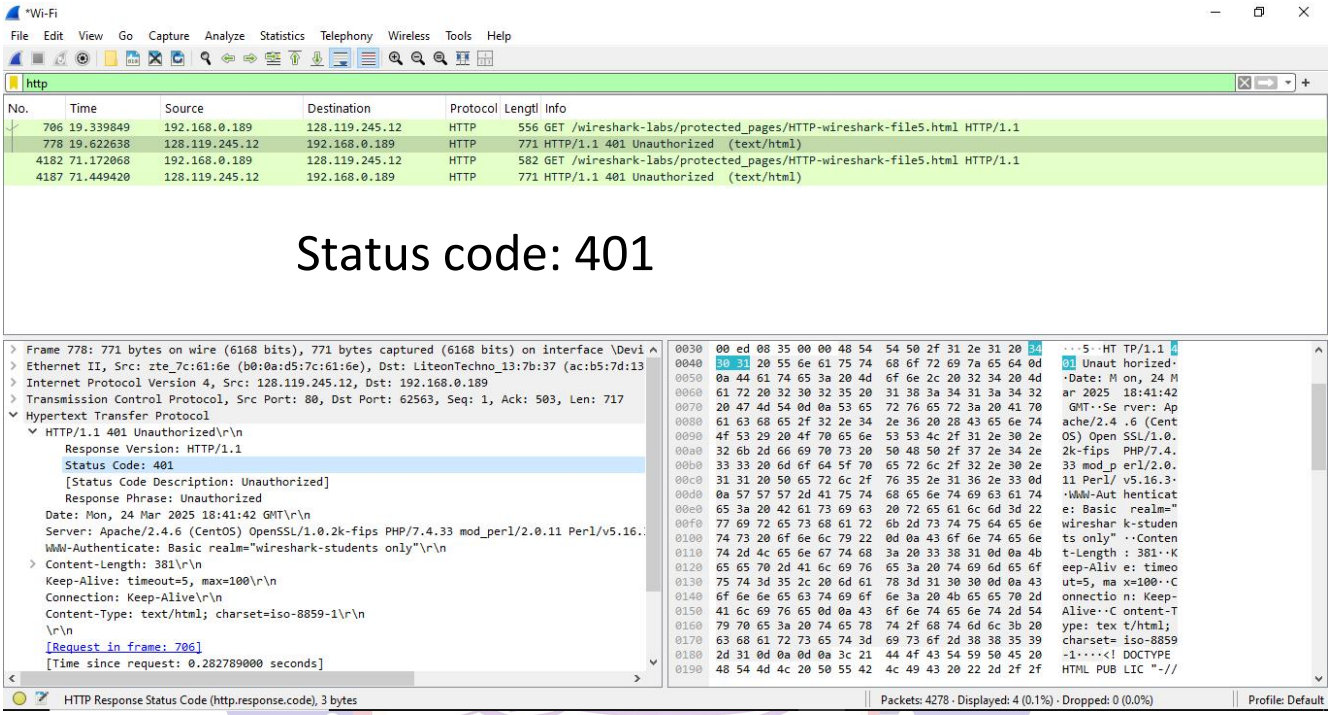
HTML Documents with Embedded Objects

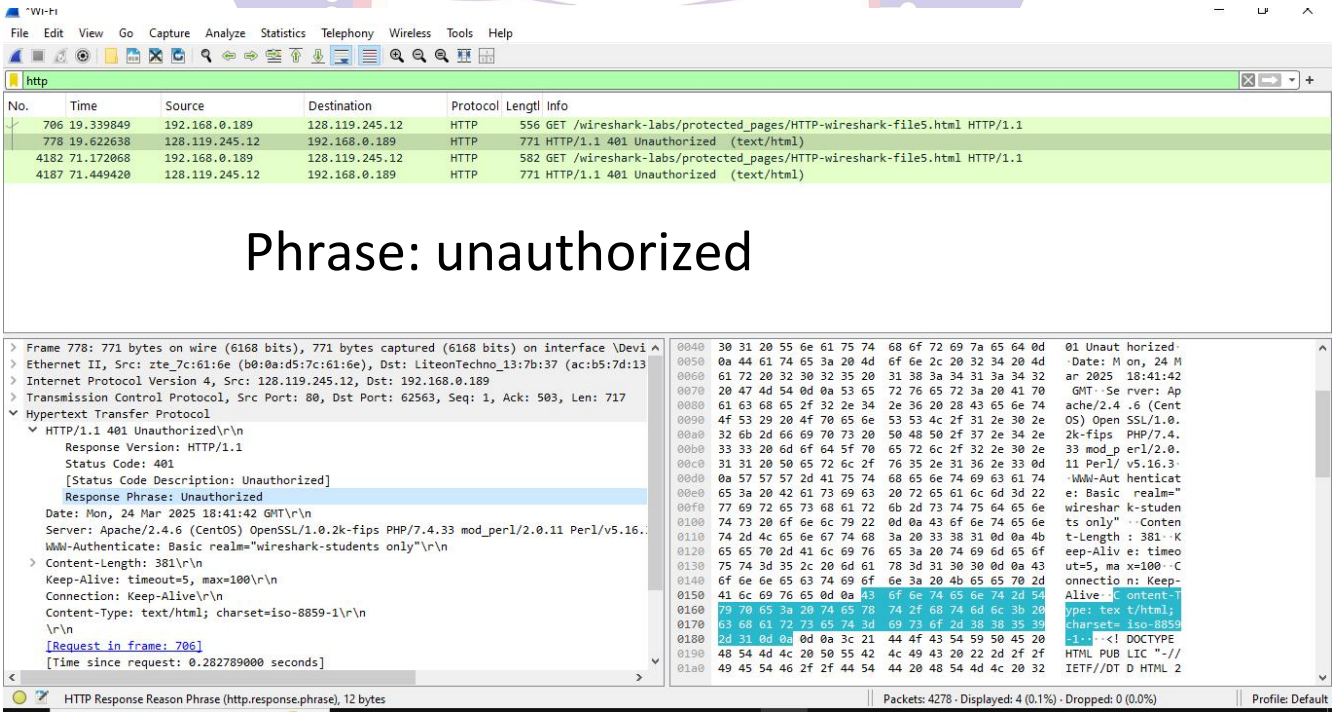
15. How many HTTP GET request messages did your browser send? To which Internet addresses were these GET requests sent?



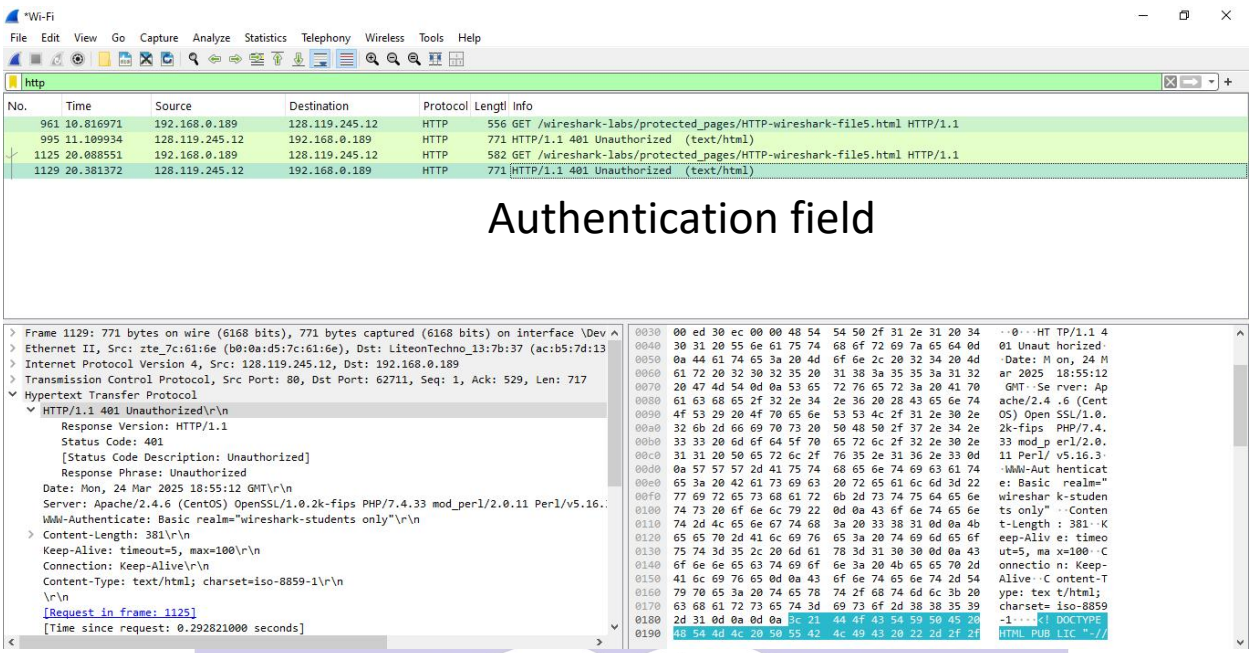


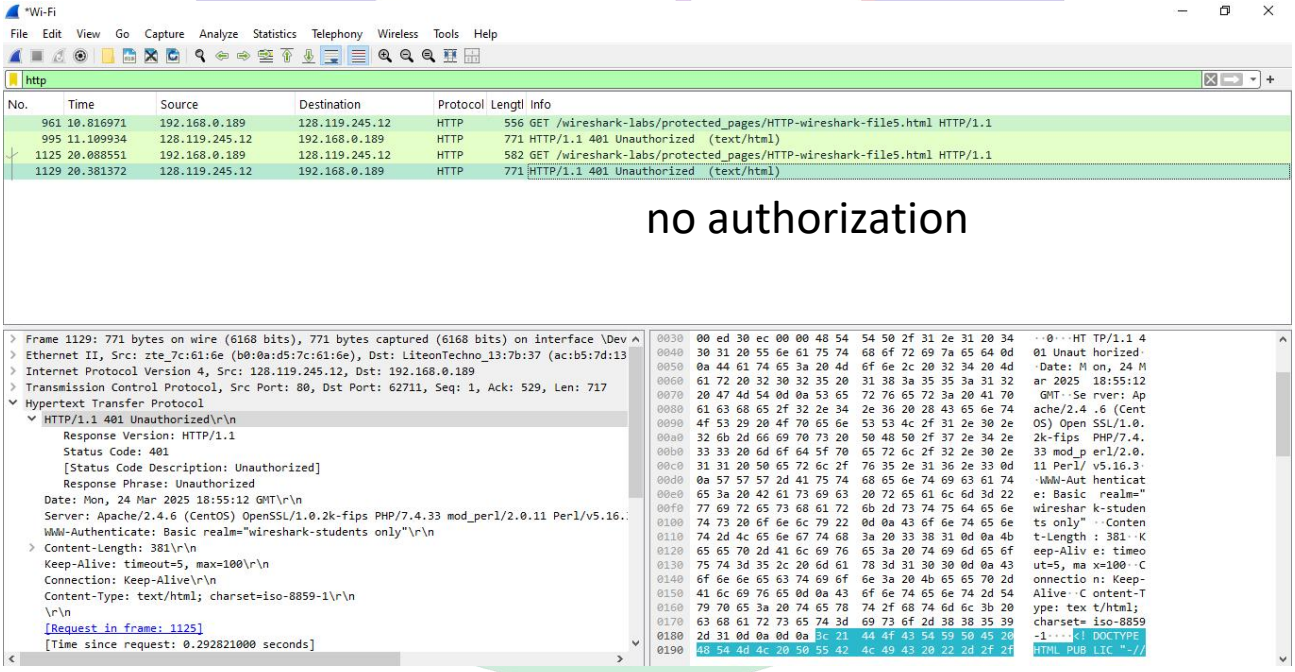
18. What is the server's response (status code and phrase) in response to the initial HTTP GET message from your browser?





19. When your browser's sends the HTTP GET message for the second time, what new field is included in the HTTP GET message?





Thank You