

## Part 01:

Here we have 7 questions. The answer of this question are given below...

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

**Answer: both of the browser and server are running HTTP version 1.1.**

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

**Answer: en-US**

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

**Answer: my IP: 10.0.2.15  
gaia.cs.umass.edu IP: 128.119.245.12**

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

**Answer: 200**

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

**Answer: Mon, 14 Aug 2017 05:59:01 GMT**

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

**Answer: 128**

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.

**Answer: no**

Wireshark interface showing packet details for Frame 17 (391 bytes on wire, 391 bytes captured on interface 0). The packet is a Linux cooked capture of an Internet Protocol Version 4 packet from 10.0.2.15 to 128.119.245.12. The Hypertext Transfer Protocol section is expanded, showing a GET request for /wireshark-labs/HTTP-wireshark-file1.html. The status bar indicates 56 packets displayed, 6 (10.7%) shown, and 0 (0.0%) dropped.

http

Frame 17: 391 bytes on wire (3128 bits), 391 bytes captured (3128 bits) on interface 0

Linux cooked capture

Internet Protocol Version 4, Src: 10.0.2.15, Dst: 128.119.245.12

- 0100 .... = Version: 4
- .... 0101 = Header Length: 20 bytes (5)
- Differentiated Services Field: 0x00 (DSCP: CS0, ECN: Not-ECT)
- Total Length: 375
- Identification: 0x7147 (28999)
- Flags: 0x02 (Don't Fragment)
- Fragment offset: 0
- Time to live: 64
- Protocol: TCP (6)
- Header checksum: 0x46a7 [validation disabled]
- [Header checksum status: Unverified]
- Source: 10.0.2.15
- Destination: 128.119.245.12
- [Source GeoIP: Unknown]
- [Destination GeoIP: AS1249 Five Colleges Network, Amherst, MA, United States, 42.367199, -72.518501]

Transmission Control Protocol, Src Port: 51864, Dst Port: 80, Seq: 1, Ack: 1, Len: 335

Hypertext Transfer Protocol

- GET /wireshark-labs/HTTP-wireshark-file1.html HTTP/1.1\r\n
- Host: gaia.cs.umass.edu\r\n
- User-Agent: Mozilla/5.0 (X11; Ubuntu; Linux x86\_64; rv:47.0) Gecko/20100101 Firefox/47.0\r\n
- Accept: text/html,application/xhtml+xml,application/xml;q=0.9,\*/\*;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
- \r\n
- [Full request URI: <http://gaia.cs.umass.edu/wireshark-labs/HTTP-wireshark-file1.html>]
- [HTTP request 1/3]

Hypertext Transfer Protocol (http), 335 bytes

Packets: 56 · Displayed: 6 (10.7%) · Dropped: 0 (0.0%) · Profile: Default

Wireshark interface showing packet details for Frame 21 (542 bytes on wire, 542 bytes captured on interface 0). The packet is a Linux cooked capture of an Internet Protocol Version 4 packet from 128.119.245.12 to 10.0.2.15. The Hypertext Transfer Protocol section is expanded, showing an HTTP 1.1 200 OK response. The status bar indicates 56 packets displayed, 6 (10.7%) shown, and 0 (0.0%) dropped.

http

Frame 21: 542 bytes on wire (4336 bits), 542 bytes captured (4336 bits) on interface 0

Linux cooked capture

Internet Protocol Version 4, Src: 128.119.245.12, Dst: 10.0.2.15

Transmission Control Protocol, Src Port: 80, Dst Port: 51864, Seq: 1, Ack: 336, Len: 486

Hypertext Transfer Protocol

- HTTP/1.1 200 OK\r\n
- Date: Mon, 14 Aug 2017 11:54:00 GMT\r\n
- Server: Apache/2.4.6 (CentOS) OpenSSL/1.0.1e-fips PHP/5.4.16 mod\_perl/2.0.10 Perl/v5.16.3\r\n
- Last-Modified: Mon, 14 Aug 2017 05:59:01 GMT\r\n
- ETag: "80-556b05c03700c"\r\n
- Accept-Ranges: bytes\r\n
- Content-Length: 128\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 1/3]
- [Time since request: 0.386622863 seconds]
- [Request in frame: 17]
- [Next request in frame: 23]
- [Next response in frame: 25]
- File Data: 128 bytes

Line-based text data: text/html

```
<html>\nCongratulations. You've downloaded the file \nhttp://gaia.cs.umass.edu/wireshark-labs/HTTP-wireshark-file1.html!\n</html>\n
```

Hypertext Transfer Protocol (http), 358 bytes

Packets: 56 · Displayed: 6 (10.7%) · Dropped: 0 (0.0%) · Profile: Default

## part 02:

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?

**Answer: No “IF-MODIFIED-SINCE” line.**

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

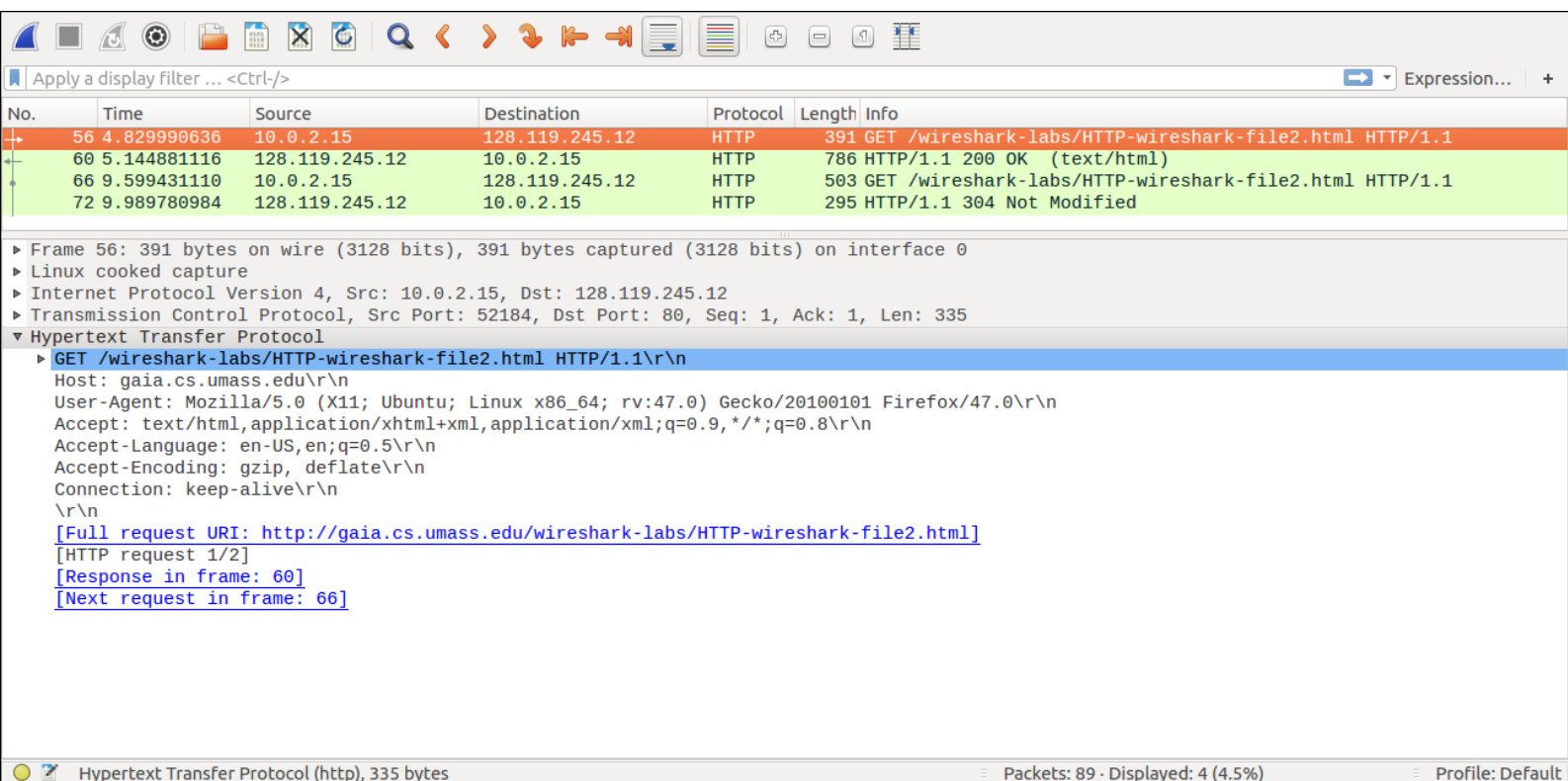
**Answer: yes, server return the contents of the file.**

10. Now inspect the contents of the second HTTP GET request from your browser to the server. Do you see an “IF-MODIFIED-SINCE:” header?

**Answer: yes.**

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

**Answer: No, the file has not been modified, so the text of the file is not returned in the HTTP message.**



The image shows a Wireshark network traffic capture. The top toolbar includes icons for file operations, network analysis, and display filters. Below the toolbar is a filter bar with the text "Apply a display filter ... <Ctrl-/>". The main packet list table has columns for No., Time, Source, Destination, Protocol, Length, and Info. It contains four entries: a GET request (No. 56), an OK response (No. 60), a GET request (No. 66), and a 304 Not Modified response (No. 72). The packet details pane on the right shows the structure of the selected packet (No. 56), including Ethernet II, Internet Protocol Version 4, Transmission Control Protocol, and Hypertext Transfer Protocol. The HTTP section is expanded, showing the request line, host, user-agent, accept, accept-language, accept-encoding, and connection headers. The status bar at the bottom indicates "Hypertext Transfer Protocol (http), 335 bytes", "Packets: 89 · Displayed: 4 (4.5%)", and "Profile: Default".

No.	Time	Source	Destination	Protocol	Length	Info
56	4.829990636	10.0.2.15	128.119.245.12	HTTP	391	GET /wireshark-labs/HTTP-wireshark-file2.html HTTP/1.1
60	5.144881116	128.119.245.12	10.0.2.15	HTTP	786	HTTP/1.1 200 OK (text/html)
66	9.599431110	10.0.2.15	128.119.245.12	HTTP	503	GET /wireshark-labs/HTTP-wireshark-file2.html HTTP/1.1
72	9.989780984	128.119.245.12	10.0.2.15	HTTP	295	HTTP/1.1 304 Not Modified

Frame 56: 391 bytes on wire (3128 bits), 391 bytes captured (3128 bits) on interface 0  
Linux cooked capture  
Internet Protocol Version 4, Src: 10.0.2.15, Dst: 128.119.245.12  
Transmission Control Protocol, Src Port: 52184, Dst Port: 80, Seq: 1, Ack: 1, Len: 335  
Hypertext Transfer Protocol  
GET /wireshark-labs/HTTP-wireshark-file2.html HTTP/1.1\r\nHost: gaia.cs.umass.edu\r\nUser-Agent: Mozilla/5.0 (X11; Ubuntu; Linux x86\_64; rv:47.0) Gecko/20100101 Firefox/47.0\r\nAccept: text/html,application/xhtml+xml,application/xml;q=0.9,\*/\*;q=0.8\r\nAccept-Language: en-US,en;q=0.5\r\nAccept-Encoding: gzip, deflate\r\nConnection: keep-alive\r\n\r\n[Full request URI: http://gaia.cs.umass.edu/wireshark-labs/HTTP-wireshark-file2.html]  
[HTTP request 1/2]  
[Response in frame: 60]  
[Next request in frame: 66]

Hypertext Transfer Protocol (http), 335 bytes      Packets: 89 · Displayed: 4 (4.5%)      Profile: Default

Apply a display filter ... <Ctrl-/> Expression...

No.	Time	Source	Destination	Protocol	Length	Info
56	4.829990636	10.0.2.15	128.119.245.12	HTTP	391	GET /wireshark-labs/HTTP-wireshark-file2.html HTTP/1.1
60	5.144881116	128.119.245.12	10.0.2.15	HTTP	786	HTTP/1.1 200 OK (text/html)
66	9.599431110	10.0.2.15	128.119.245.12	HTTP	503	GET /wireshark-labs/HTTP-wireshark-file2.html HTTP/1.1
72	9.989780984	128.119.245.12	10.0.2.15	HTTP	295	HTTP/1.1 304 Not Modified

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 1/2]  
[Time since request: 0.314890480 seconds]  
[Request in frame: 56]  
[Next request in frame: 66]  
[Next response in frame: 72]  
File Data: 371 bytes

Line-based text data: text/html

```
\n<html>\n\nCongratulations again! Now you've downloaded the file lab2-2.html. <br>\nThis file's last modification date will not change. <p>\nThus if you download this multiple times on your browser, a complete copy <br>\nwill only be sent once by the server due to the inclusion of the IN-MODIFIED-SINCE<br>\nfield in your browser's HTTP GET request to the server.\n\n</html>
```

Hypertext Transfer Protocol (http), 359 bytes Packets: 89 · Displayed: 4 (4.5%) Profile: Default

Apply a display filter ... <Ctrl-/> Expression...

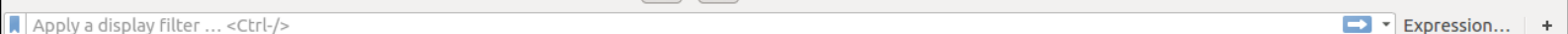
No.	Time	Source	Destination	Protocol	Length	Info
56	4.829990636	10.0.2.15	128.119.245.12	HTTP	391	GET /wireshark-labs/HTTP-wireshark-file2.html HTTP/1.1
60	5.144881116	128.119.245.12	10.0.2.15	HTTP	786	HTTP/1.1 200 OK (text/html)
66	9.599431110	10.0.2.15	128.119.245.12	HTTP	503	GET /wireshark-labs/HTTP-wireshark-file2.html HTTP/1.1
72	9.989780984	128.119.245.12	10.0.2.15	HTTP	295	HTTP/1.1 304 Not Modified

Frame 66: 503 bytes on wire (4024 bits), 503 bytes captured (4024 bits) on interface 0  
Linux cooked capture  
Internet Protocol Version 4, Src: 10.0.2.15, Dst: 128.119.245.12  
Transmission Control Protocol, Src Port: 52184, Dst Port: 80, Seq: 336, Ack: 731, Len: 447

Hypertext Transfer Protocol

GET /wireshark-labs/HTTP-wireshark-file2.html HTTP/1.1\r\nHost: gaia.cs.umass.edu\r\nUser-Agent: Mozilla/5.0 (X11; Ubuntu; Linux x86\_64; rv:47.0) Gecko/20100101 Firefox/47.0\r\nAccept: text/html,application/xhtml+xml,application/xml;q=0.9,\*/\*;q=0.8\r\nAccept-Language: en-US,en;q=0.5\r\nAccept-Encoding: gzip, deflate\r\nConnection: keep-alive\r\nIf-Modified-Since: Mon, 14 Aug 2017 05:59:01 GMT\r\nIf-None-Match: "173-556b05c03683c"\r\nCache-Control: max-age=0\r\n\r\n[Full request URI: http://gaia.cs.umass.edu/wireshark-labs/HTTP-wireshark-file2.html]  
[HTTP request 2/2]  
[Prev request in frame: 56]  
[Response in frame: 72]

Request line (http.request.line), 50 bytes Packets: 89 · Displayed: 4 (4.5%) Profile: Default



iii)				
5	75	225	4	6
1	1	1	1	1
2	2	4	2	2
3	3	9	3	3
4	4	16	4	4
5	5	25	5	5
6	6	36	6	6
7	7	49	7	7
8	8	64	8	8
9	9	81	9	9
10	10	100	10	10
11	11	121	11	11
12	12	144	12	12
13	13	169	13	13
14	14	196	14	14
15	15	225	15	15
16	16	256	16	16
17	17	289	17	17
18	18	324	18	18
19	19	361	19	19
20	20	400	20	20
21	21	441	21	21
22	22	484	22	22
23	23	529	23	23
24	24	576	24	24
25	25	625	25	25
26	26	676	26	26
27	27	729	27	27
28	28	784	28	28
29	29	841	29	29
30	30	900	30	30
31	31	961	31	31
32	32	1024	32	32
33	33	1089	33	33
34	34	1156	34	34
35	35	1225	35	35
36	36	1296	36	36
37	37	1369	37	37
38	38	1444	38	38
39	39	1521	39	39
40	40	1600	40	40
41	41	1681	41	41
42	42	1764	42	42
43	43	1849	43	43
44	44	1936	44	44
45	45	2025	45	45
46	46	2116	46	46
47	47	2209	47	47
48	48	2304	48	48
49	49	2401	49	49
50	50	2500	50	50
51	51	2601	51	51
52	52	2704	52	52
53	53	2809	53	53
54	54	2916	54	54
55	55	3025	55	55
56	56	3136	56	56
57	57	3249	57	57
58	58	3364	58	58
59	59	3481	59	59
60	60	3600	60	60
61	61	3721	61	61
62	62	3844	62	62
63	63	3969	63	63
64	64	4096	64	64
65	65	4225	65	65
66	66	4356	66	66
67	67	4489	67	67
68	68	4624	68	68
69	69	4761	69	69
70	70	4900	70	70
71	71	5041	71	71
72	72	5184	72	72
73	73	5329	73	73
74	74	5476	74	74
75	75	5625	75	75
76	76	5776	76	76
77	77	5929	77	77
78	78	6084	78	78
79	79	6241	79	79
80	80	6400	80	80
81	81	6561	81	81
82	82	6724	82	82
83	83	6889	83	83
84	84	7056	84	84
85	85	7225	85	85
86	86	7396	86	86
87	87	7569	87	87
88	88	7744	88	88
89	89	7921	89	89
90	90	8100	90	90
91	91	8281	91	91
92	92	8464	92	92
93	93	8649	93	93
94	94	8836	94	94
95	95	9025	95	95
96	96	9216	96	96
97	97	9409	97	97
98	98	9604	98	98
99	99	9801	99	99
100	100	10000	100	100

## ▼ Hypertext Transfer Protocol

Server: Apache/2.4.6 (CentOS) OpenSSL/1.0.1e-fips PHP/5.4.16 mod\_perl/2.0.10 Perl/v5.16.3\r\n

## Part 03:

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

**Answer: 1 HTTP GET request. In my case, packet number 13 contains the GET message.**

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

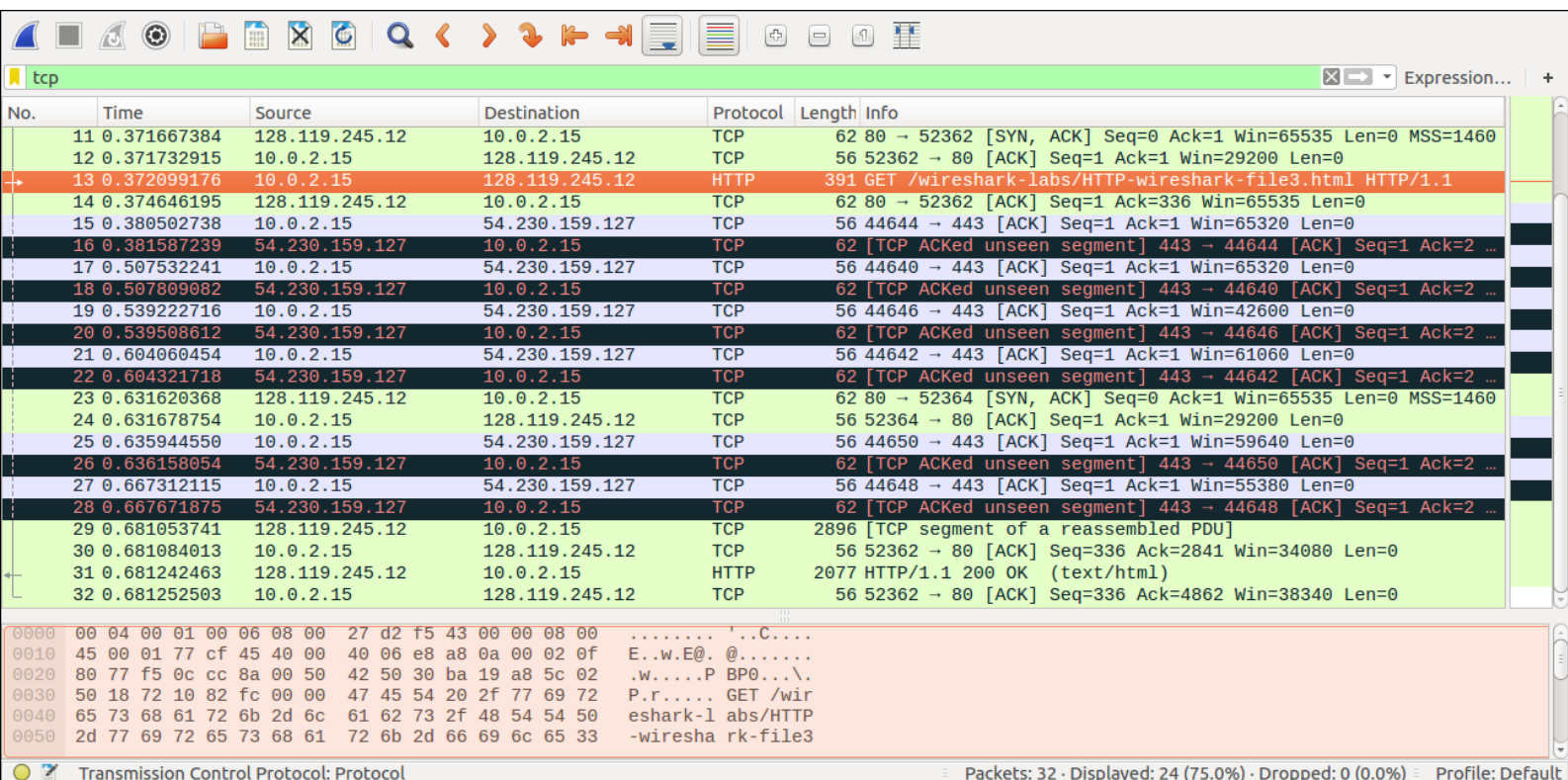
**Answer: packet number 31.**

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

**Answer: 200 OK.**

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

**Answer: 3 TCP segments needed. They are in packet 14,23,29.**



The image shows a Wireshark packet capture interface. The top pane displays a list of 32 packets. The bottom pane shows the detailed view of packet 31, which is an HTTP 200 OK response.

No.	Time	Source	Destination	Protocol	Length	Info
11	0.371667384	128.119.245.12	10.0.2.15	TCP	62	80 → 52362 [SYN, ACK] Seq=0 Ack=1 Win=65535 Len=0 MSS=1460
12	0.371732915	10.0.2.15	128.119.245.12	TCP	56	52362 → 80 [ACK] Seq=1 Ack=1 Win=29200 Len=0
13	0.372099176	10.0.2.15	128.119.245.12	HTTP	391	GET /wireshark-labs/HTTP-wireshark-file3.html HTTP/1.1
14	0.374646195	128.119.245.12	10.0.2.15	TCP	62	80 → 52362 [ACK] Seq=1 Ack=336 Win=65535 Len=0
15	0.380502738	10.0.2.15	54.230.159.127	TCP	56	44644 → 443 [ACK] Seq=1 Ack=1 Win=65320 Len=0
16	0.381587239	54.230.159.127	10.0.2.15	TCP	62	[TCP ACKed unseen segment] 443 → 44644 [ACK] Seq=1 Ack=2 ...
17	0.507532241	10.0.2.15	54.230.159.127	TCP	56	44640 → 443 [ACK] Seq=1 Ack=1 Win=65320 Len=0
18	0.507809082	54.230.159.127	10.0.2.15	TCP	62	[TCP ACKed unseen segment] 443 → 44640 [ACK] Seq=1 Ack=2 ...
19	0.539222716	10.0.2.15	54.230.159.127	TCP	56	44646 → 443 [ACK] Seq=1 Ack=1 Win=42600 Len=0
20	0.539508612	54.230.159.127	10.0.2.15	TCP	62	[TCP ACKed unseen segment] 443 → 44646 [ACK] Seq=1 Ack=2 ...
21	0.604060454	10.0.2.15	54.230.159.127	TCP	56	44642 → 443 [ACK] Seq=1 Ack=1 Win=61060 Len=0
22	0.604321718	54.230.159.127	10.0.2.15	TCP	62	[TCP ACKed unseen segment] 443 → 44642 [ACK] Seq=1 Ack=2 ...
23	0.631620368	128.119.245.12	10.0.2.15	TCP	62	80 → 52364 [SYN, ACK] Seq=0 Ack=1 Win=65535 Len=0 MSS=1460
24	0.631678754	10.0.2.15	128.119.245.12	TCP	56	52364 → 80 [ACK] Seq=1 Ack=1 Win=29200 Len=0
25	0.635944550	10.0.2.15	54.230.159.127	TCP	56	44650 → 443 [ACK] Seq=1 Ack=1 Win=59640 Len=0
26	0.636158054	54.230.159.127	10.0.2.15	TCP	62	[TCP ACKed unseen segment] 443 → 44650 [ACK] Seq=1 Ack=2 ...
27	0.667312115	10.0.2.15	54.230.159.127	TCP	56	44648 → 443 [ACK] Seq=1 Ack=1 Win=55380 Len=0
28	0.667671875	54.230.159.127	10.0.2.15	TCP	62	[TCP ACKed unseen segment] 443 → 44648 [ACK] Seq=1 Ack=2 ...
29	0.681053741	128.119.245.12	10.0.2.15	TCP	2896	[TCP segment of a reassembled PDU]
30	0.681084013	10.0.2.15	128.119.245.12	TCP	56	52362 → 80 [ACK] Seq=336 Ack=2841 Win=34080 Len=0
31	0.681242463	128.119.245.12	10.0.2.15	HTTP	2077	HTTP/1.1 200 OK (text/html)
32	0.681252503	10.0.2.15	128.119.245.12	TCP	56	52362 → 80 [ACK] Seq=336 Ack=4862 Win=38340 Len=0

0000	00 04 00 01 00 06 08 00	27 d2 f5 43 00 00 08 00	..... 'C....
0010	45 00 01 77 cf 45 40 00	40 06 e8 a8 0a 00 02 0f	E..w.E@. @.....
0020	80 77 f5 0c cc 8a 00 50	42 50 30 ba 19 a8 5c 02	.w....P BP0...\.
0030	50 18 72 10 82 fc 00 00	47 45 54 20 2f 77 69 72	P.r.... GET /wir
0040	65 73 68 61 72 6b 2d 6c	61 62 73 2f 48 54 54 50	eshark-l abs/HTTP
0050	2d 77 69 72 65 73 68 61	72 6b 2d 66 69 6c 65 33	-wiresha rk-file3

Transmission Control Protocol: Protocol      Packets: 32 · Displayed: 24 (75.0%) · Dropped: 0 (0.0%)      Profile: Default

## part 04

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

**Answer: There are 4 HTTP GET request messages that my browser send.**

**First one sent to: 128.119.245.12**

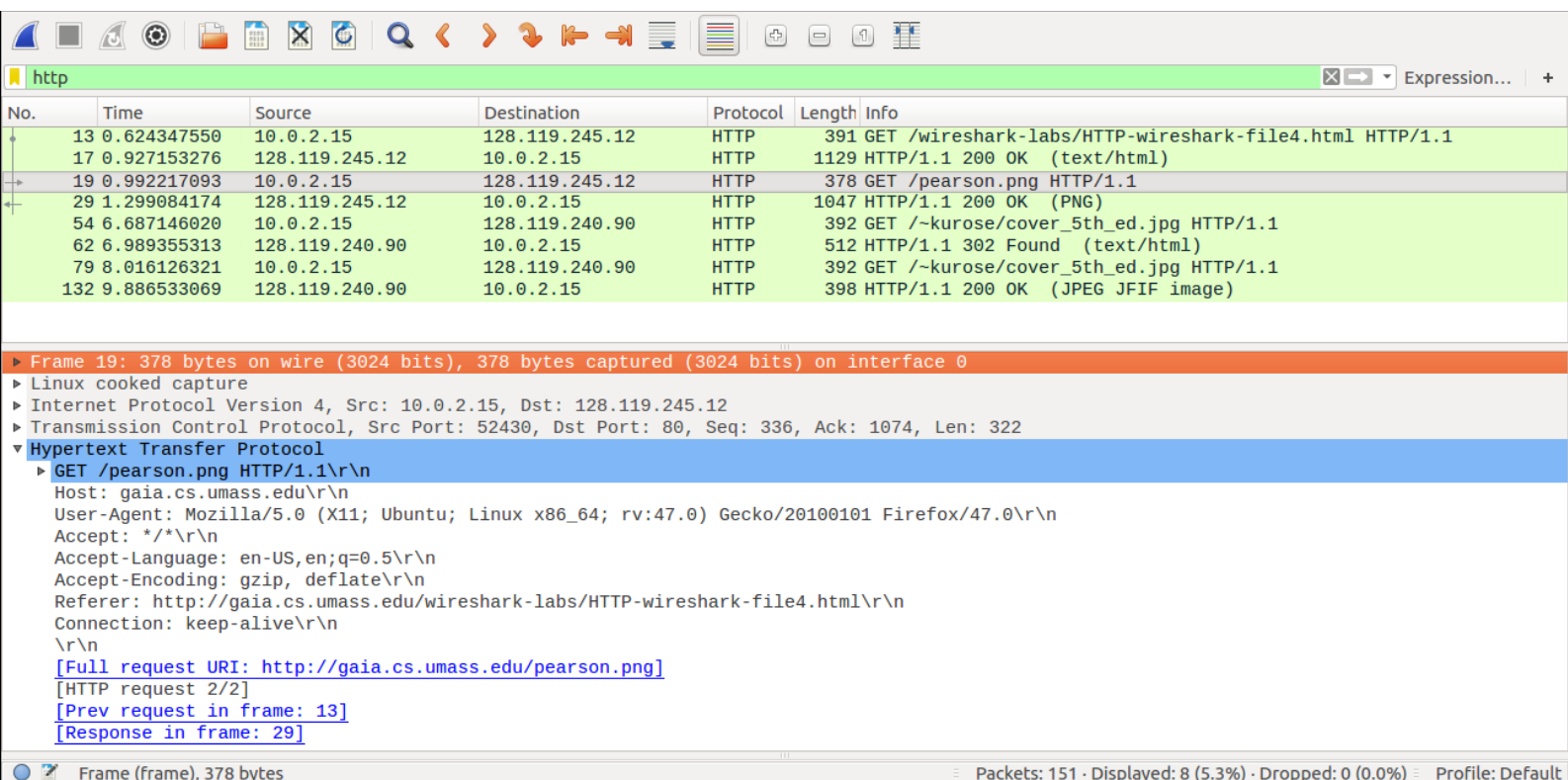
**second one sent to: 128.119.245.12**

**third one sent to : 128.119.240.90**

**fourth one sent to: 128.119.240.90**

17. Can you tell whether your browser downloaded the two images serially, or whether they were downloaded from the two web sites in parallel? Explain.

**Answer: The downloads occurred in serially. Here we see, first request for image in packet 19 and its response in packet 29. After that second request for image in packet 54 and its response in packet 62. So, after downloading first image, second image is downloaded. So, here downloads occurred in serially.**



The image shows a Wireshark network traffic capture. The top toolbar contains various icons for file operations, editing, and analysis. Below the toolbar is a green filter bar with the text 'http'. The main packet list table shows the following data:

No.	Time	Source	Destination	Protocol	Length	Info
13	0.624347550	10.0.2.15	128.119.245.12	HTTP	391	GET /wireshark-labs/HTTP-wireshark-file4.html HTTP/1.1
17	0.927153276	128.119.245.12	10.0.2.15	HTTP	1129	HTTP/1.1 200 OK (text/html)
19	0.992217093	10.0.2.15	128.119.245.12	HTTP	378	GET /pearson.png HTTP/1.1
29	1.299084174	128.119.245.12	10.0.2.15	HTTP	1047	HTTP/1.1 200 OK (PNG)
54	6.687146020	10.0.2.15	128.119.240.90	HTTP	392	GET /~kurose/cover_5th_ed.jpg HTTP/1.1
62	6.989355313	128.119.240.90	10.0.2.15	HTTP	512	HTTP/1.1 302 Found (text/html)
79	8.016126321	10.0.2.15	128.119.240.90	HTTP	392	GET /~kurose/cover_5th_ed.jpg HTTP/1.1
132	9.886533069	128.119.240.90	10.0.2.15	HTTP	398	HTTP/1.1 200 OK (JPEG JFIF image)

Below the packet list, the details pane shows the selected packet (19) expanded. It displays the following information:

- Frame 19: 378 bytes on wire (3024 bits), 378 bytes captured (3024 bits) on interface 0
- Linux cooked capture
- Internet Protocol Version 4, Src: 10.0.2.15, Dst: 128.119.245.12
- Transmission Control Protocol, Src Port: 52430, Dst Port: 80, Seq: 336, Ack: 1074, Len: 322
- Hypertext Transfer Protocol
  - GET /pearson.png HTTP/1.1\r\n
  - Host: gaia.cs.umass.edu\r\n
  - User-Agent: Mozilla/5.0 (X11; Ubuntu; Linux x86\_64; rv:47.0) Gecko/20100101 Firefox/47.0\r\n
  - Accept: \*/\*\r\n
  - Accept-Language: en-US,en;q=0.5\r\n
  - Accept-Encoding: gzip, deflate\r\n
  - Referer: http://gaia.cs.umass.edu/wireshark-labs/HTTP-wireshark-file4.html\r\n
  - Connection: keep-alive\r\n
  - \r\n
  - [Full request URI: http://gaia.cs.umass.edu/pearson.png]
  - [HTTP request 2/2]
  - [Prev request in frame: 13]
  - [Response in frame: 29]

The bottom status bar shows: Frame (frame), 378 bytes | Packets: 151 · Displayed: 8 (5.3%) · Dropped: 0 (0.0%) | Profile: Default



# Part 05

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

**Answer: First HTTP GET request in the packet 23. In the packet 27 server response with status code 401 and phrase Unauthorized.**

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

**Answer: The HTTP GET includes the *Authorization: Basic: field***

The image shows a Wireshark packet capture of an HTTP transaction. The packet list at the top shows four packets:

No.	Time	Source	Destination	Protocol	Length	Info
23	2.150076960	10.0.2.15	128.119.245.12	HTTP	407	GET /wireshark-labs/protected_pages/HTTP-wireshark-file5.html H...
27	2.485225895	128.119.245.12	10.0.2.15	HTTP	773	HTTP/1.1 401 Unauthorized (text/html)
54	17.557253446	10.0.2.15	128.119.245.12	HTTP	466	GET /wireshark-labs/protected_pages/HTTP-wireshark-file5.html H...
58	17.887130186	128.119.245.12	10.0.2.15	HTTP	546	HTTP/1.1 200 OK (text/html)

The packet details pane for packet 54 (the second GET request) is expanded, showing the Hypertext Transfer Protocol section. The request line is:

```
GET /wireshark-labs/protected_pages/HTTP-wireshark-file5.html HTTP/1.1\r\n
```

The Host field is:

```
Host: gaia.cs.umass.edu\r\n
```

The User-Agent field is:

```
User-Agent: Mozilla/5.0 (X11; Ubuntu; Linux x86_64; rv:47.0) Gecko/20100101 Firefox/47.0\r\n
```

The Accept field is:

```
Accept: text/html,application/xhtml+xml,application/xml;q=0.9,*/*;q=0.8\r\n
```

The Accept-Language field is:

```
Accept-Language: en-US,en;q=0.5\r\n
```

The Accept-Encoding field is:

```
Accept-Encoding: gzip, deflate\r\n
```

The Connection field is:

```
Connection: keep-alive\r\n
```

The Authorization field is:

```
Authorization: Basic d2lyZXNoYXJrLXN0dWRlbnRzM5ldHdvcms=\r\n
```

The Credentials field is:

```
Credentials: wireshark-students:network
```

The packet bytes pane shows the full request URI:

```
[Full request URI: http://gaia.cs.umass.edu/wireshark-labs/protected_pages/HTTP-wireshark-file5.html]
```

The packet bytes pane also shows the HTTP request 1/1 and the response in frame 58.

The status bar at the bottom shows:

Credentials (http.authbasic) Packets: 76 · Displayed: 4 (5.3%) · Dropped: 0 (0.0%) Profile: Default