

VIETNAM NATIONAL UNIVERSITY, HO CHI MINH CITY
UNIVERSITY OF TECHNOLOGY
FACULTY OF COMPUTER SCIENCE AND ENGINEERING



Computer Network Lab (CO3094)

Assignment

Computer Network Lab 1b

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1 The Basic HTTP GET/response interaction

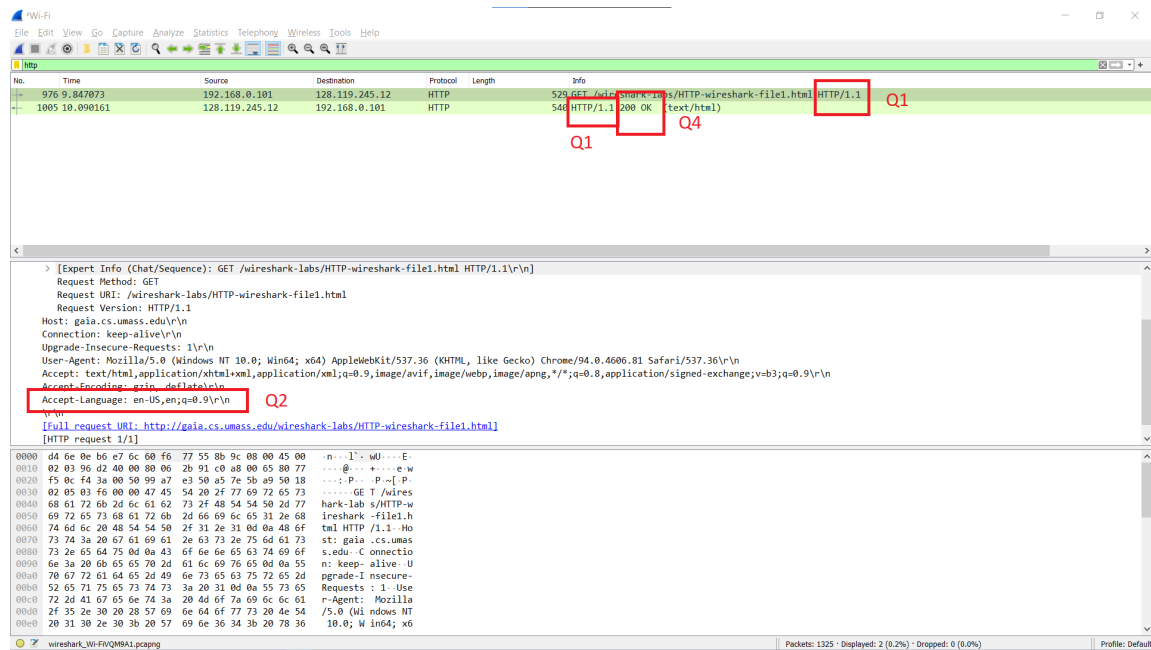


Figure 1: Question 1, 2, 4

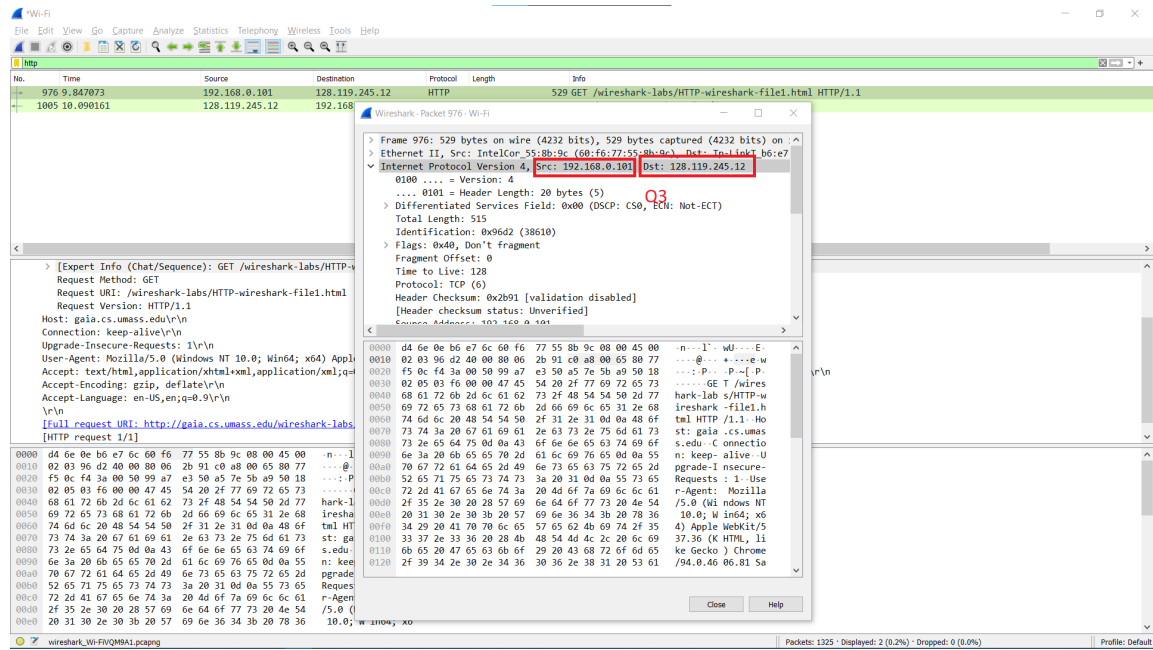


Figure 2: Question 3

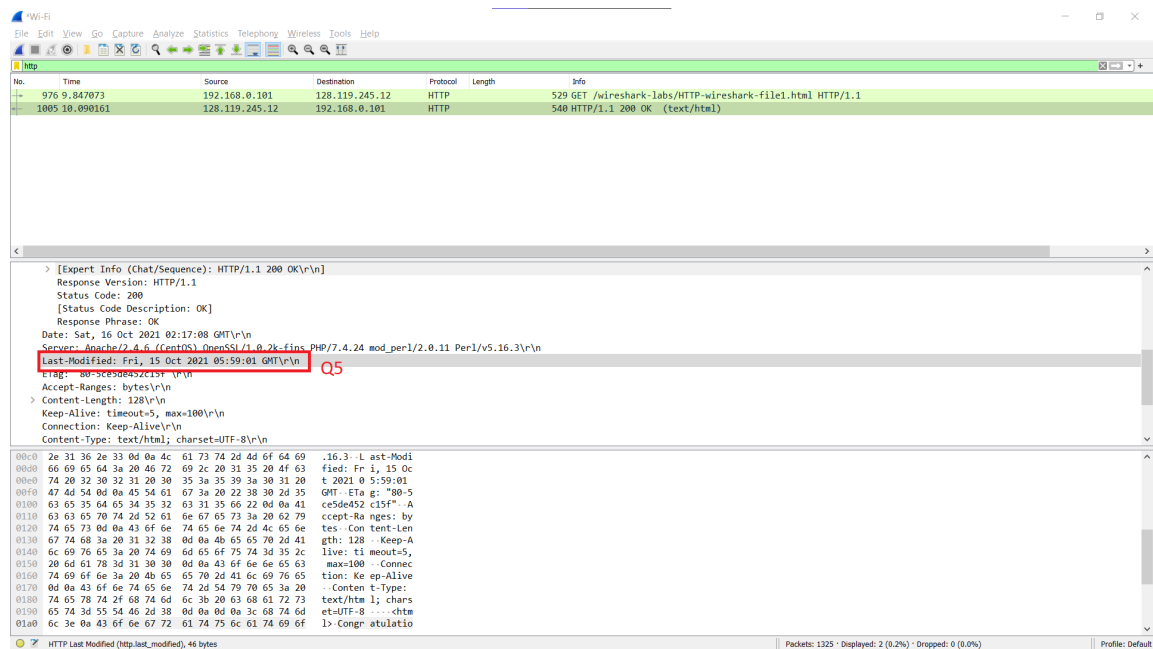


Figure 3: Question 5

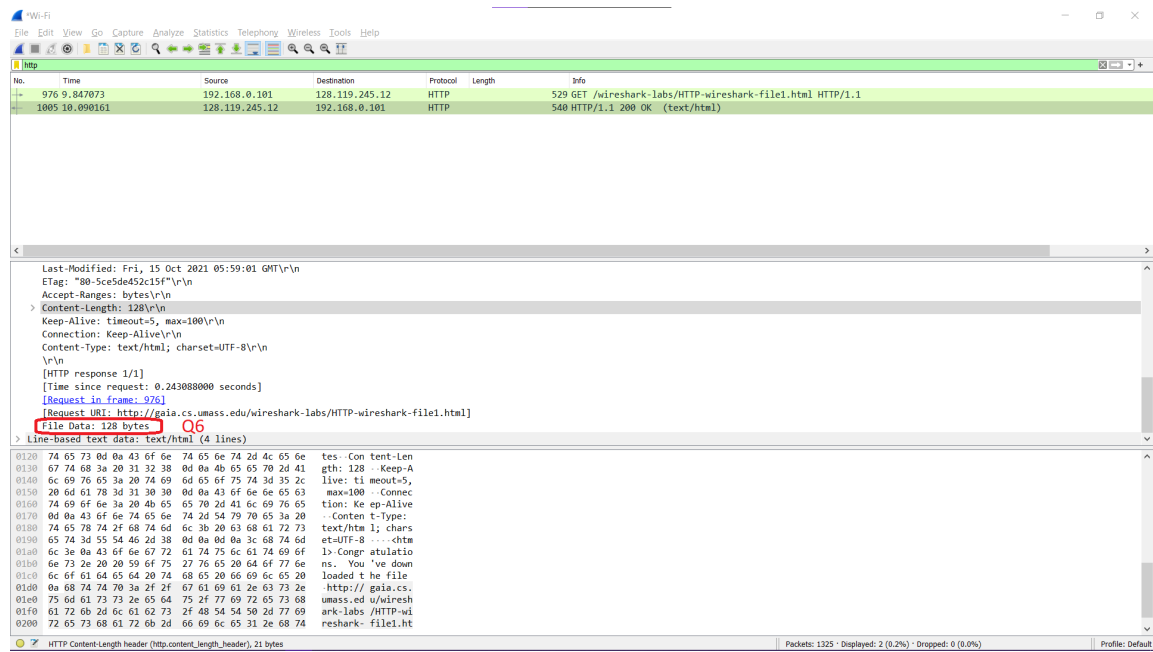


Figure 4: Question 6

Question 7: No



2 The HTTP CONDITIONAL GET/response interaction

Question 8: The first GET request has no IF-MODIFIED-SINCE line

Question 9: Yes

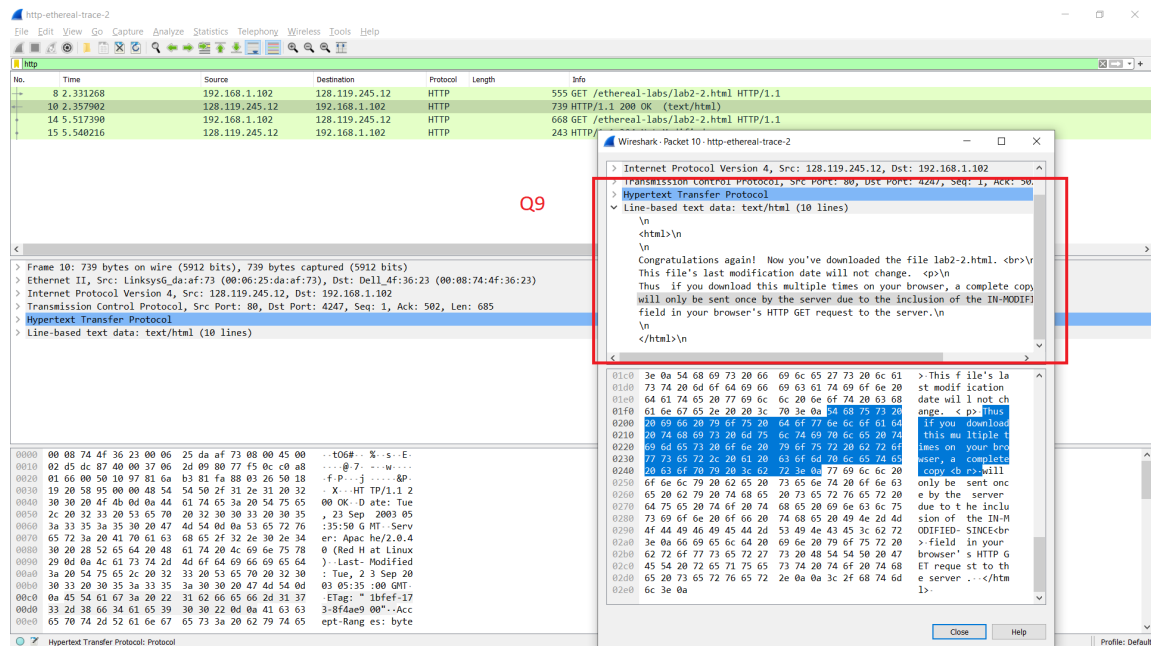


Figure 5: Question 9



Wi-Fi

File Edit View Go Capture Analyze Statistics Telephony Wireless Tools Help

No.	Time	Source	Destination	Protocol	Length	Info
246	2.953386	192.168.0.101	128.119.245.12	HTTP	641	GET /wireshark-labs/HTTP-wireshark-file2.html HTTP/1.1
260	3.189900	128.119.245.12	192.168.0.101	HTTP	294	HTTP/1.1 304 Not Modified
391	4.978783	192.168.0.101	128.119.245.12	HTTP	641	GET /wireshark-labs/HTTP-wireshark-file2.html HTTP/1.1
443	5.215430	128.119.245.12	192.168.0.101	HTTP	293	HTTP/1.1 304 Not Modified

Connection: keep-alive\r\n
Cache-Control: max-age=0\r\n
Upgrade-Insecure-Requests: 1\r\n
User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/94.0.4606.81 Safari/537.36\r\n
Accept: text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,image/webp,image/apng,*/*;q=0.8,application/signed-exchange;v=b3;q=0.9\r\n
Accept-Encoding: gzip, deflate\r\n
Accept-Language: en-US,en;q=0.9\r\n
If-None-Match: "173-5ce5de452b98f"\r\n
If-Modified-Since: Fri, 15 Oct 2021 05:59:01 GMT\r\n
[Request URI: http://gaia.cs.umass.edu/wireshark-labs/HTTP-wireshark-file2.html]
[HTTP request 2/2]
[Prev request in frame: 246]
[Response in frame: 443]

01a0 69 6d 61 67 65 2f 77 65 62 70 2c 69 6d 61 67 65 image/webp,image
01b0 2f 61 70 6e 67 2c 2a 2f 2a 3b 71 3d 30 2e 38 2c /apng,*/*;q=0.8,
01c0 61 70 70 6c 69 63 61 74 69 6f 6e 2f 73 69 67 6e applicat ion/sign
01d0 65 64 2d 65 78 63 68 61 6e 67 65 3b 76 3d 62 33 ed-excha nge;v=b3
01e0 3b 71 3d 30 2e 39 0d 0a 41 63 63 65 70 74 2d 45 ;q=0.9- Accept-E
01f0 6e 63 6f 64 69 6e 67 3a 20 67 7a 69 70 2c 20 64 ncoding: gzip, d
0200 65 66 6c 61 74 65 0d 0a 41 63 63 65 70 74 2d 4c eflate- Accept-L
0210 61 6e 67 75 61 67 65 3a 20 65 6e 2d 55 53 2c 65 anguage: en-US,e
0220 6e 3b 71 3d 30 2e 39 0d 0a 49 66 2d 4e 6f 6e 65 n;q=0.9- If-None
0230 2d 4d 61 74 63 68 3a 20 22 31 37 33 2d 35 63 65 -Match: "173-5ce
0240 35 64 65 34 35 32 62 39 38 66 22 0d 0a 49 66 2d 5de452b9 8f"- If-
0250 4d 6f 64 69 66 69 65 64 2d 53 69 6e 63 65 3a 20 Modified-Since:
0260 46 72 69 2c 20 31 35 20 4f 63 74 20 32 30 32 31 Fri, 15 Oct 2021
0270 20 30 35 3a 35 39 3a 30 31 20 47 4d 54 0d 0a 0c 05:59:0 1 GMT-
0280 3a

Figure 6: Question 10, 11

Question 11: The server do not return the content explicitly because nothing has changed.



3 Retrieving Long Documents

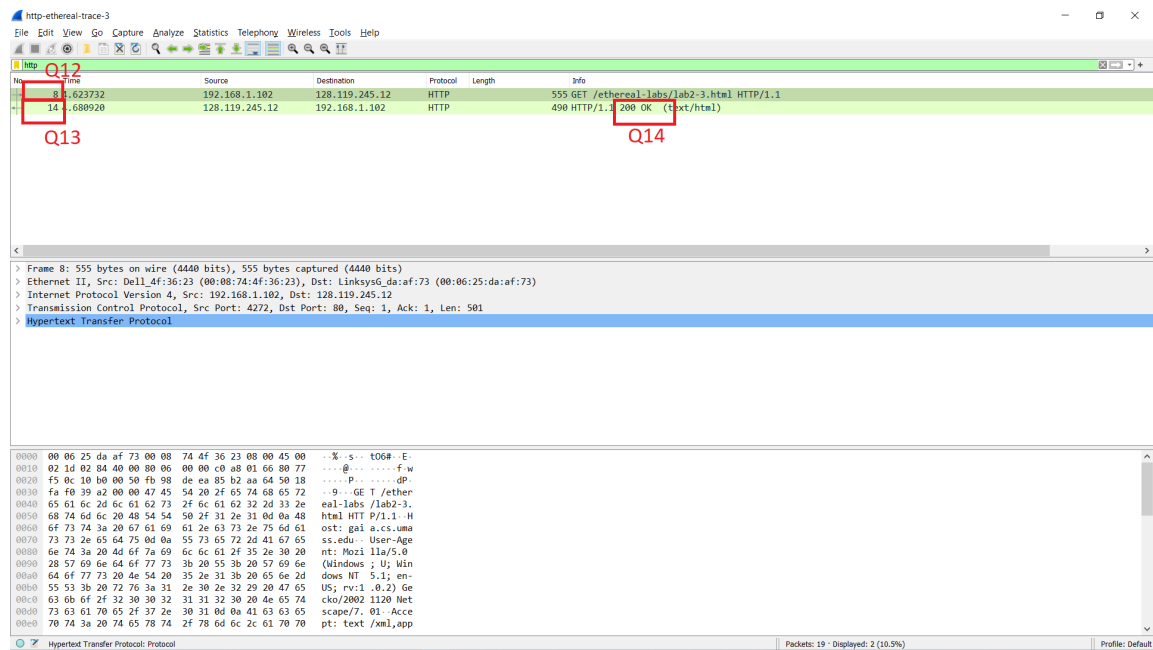


Figure 7: Question 12, 13, 14

Question 12: My browser send 1 HTTP GET request messages, numbered 8.

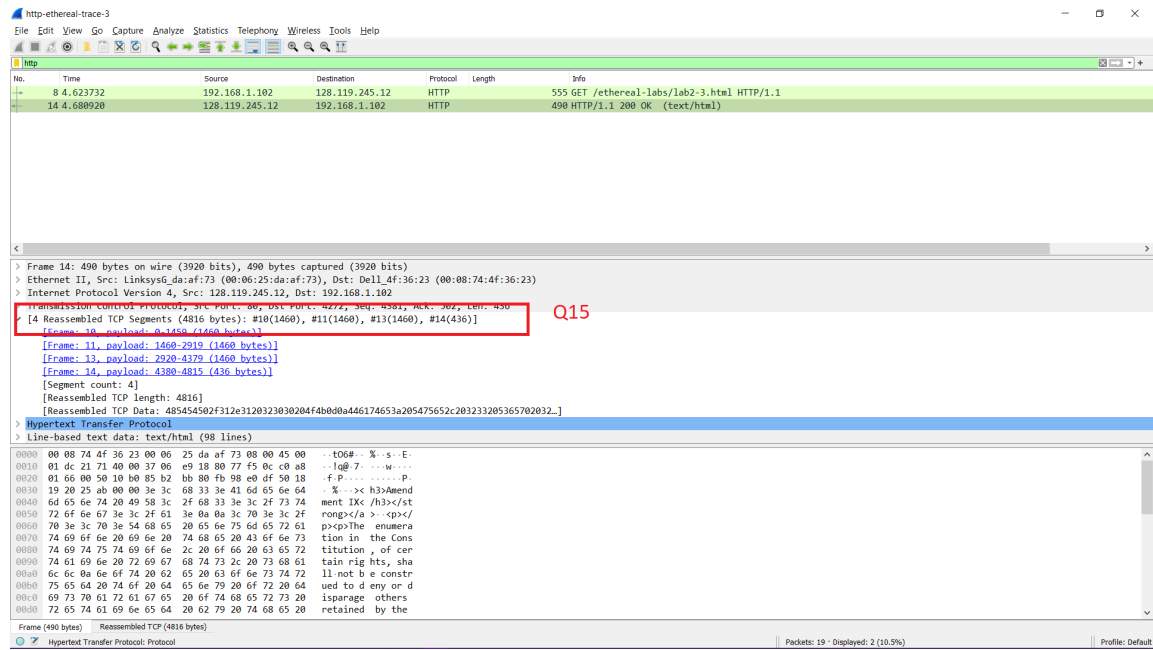


Figure 8: Question 15



4 HTML Documents with Embedded Objects

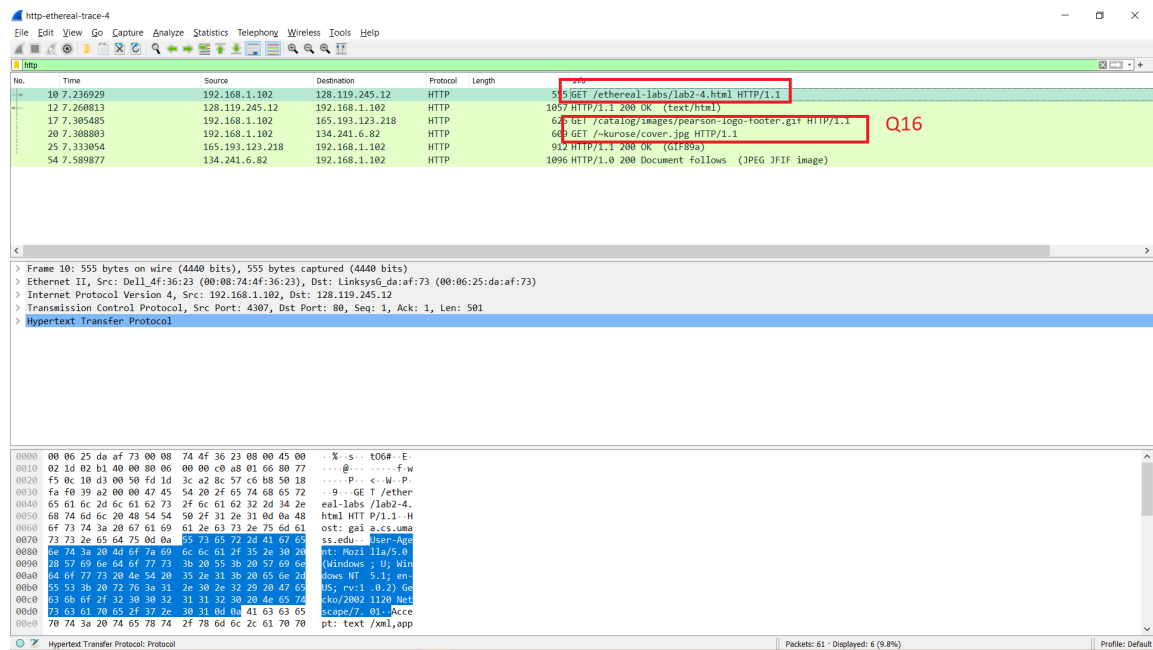


Figure 9: Question 16

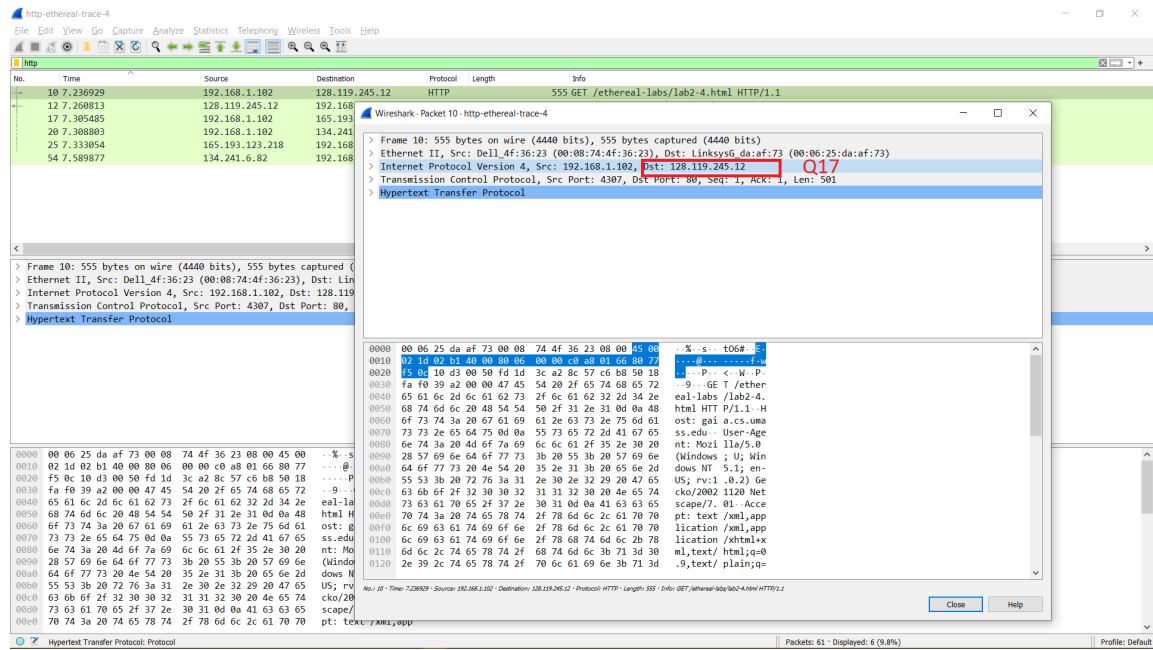


Figure 10: Question 17



5 HTTP Authentication

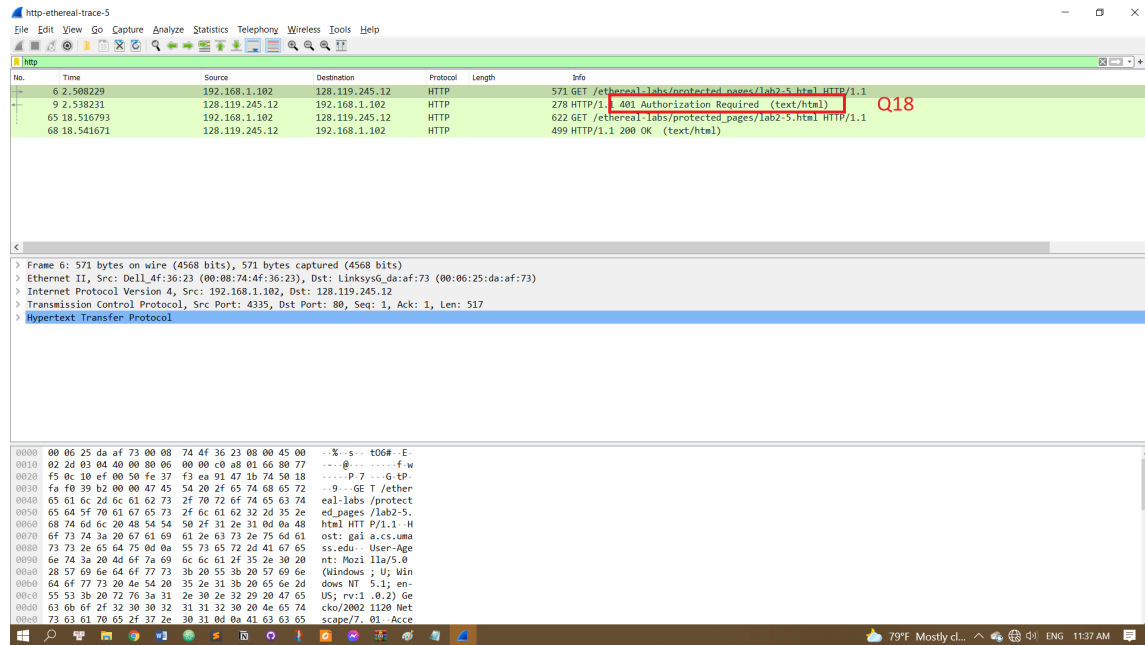


Figure 11: Question 18

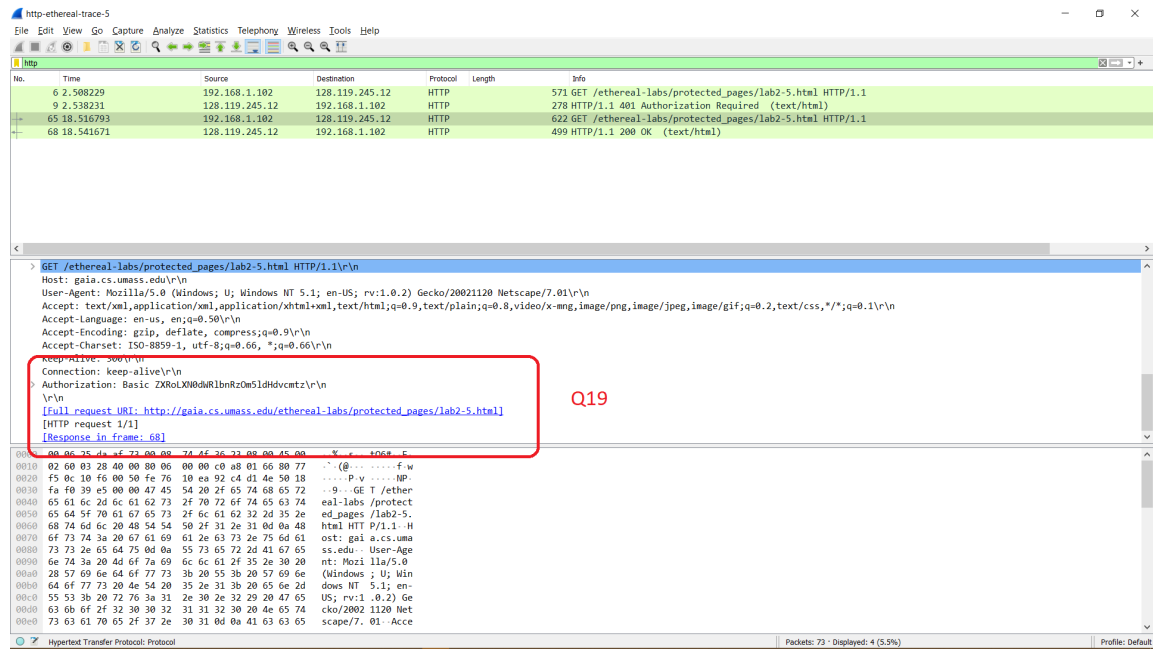


Figure 12: Question 19