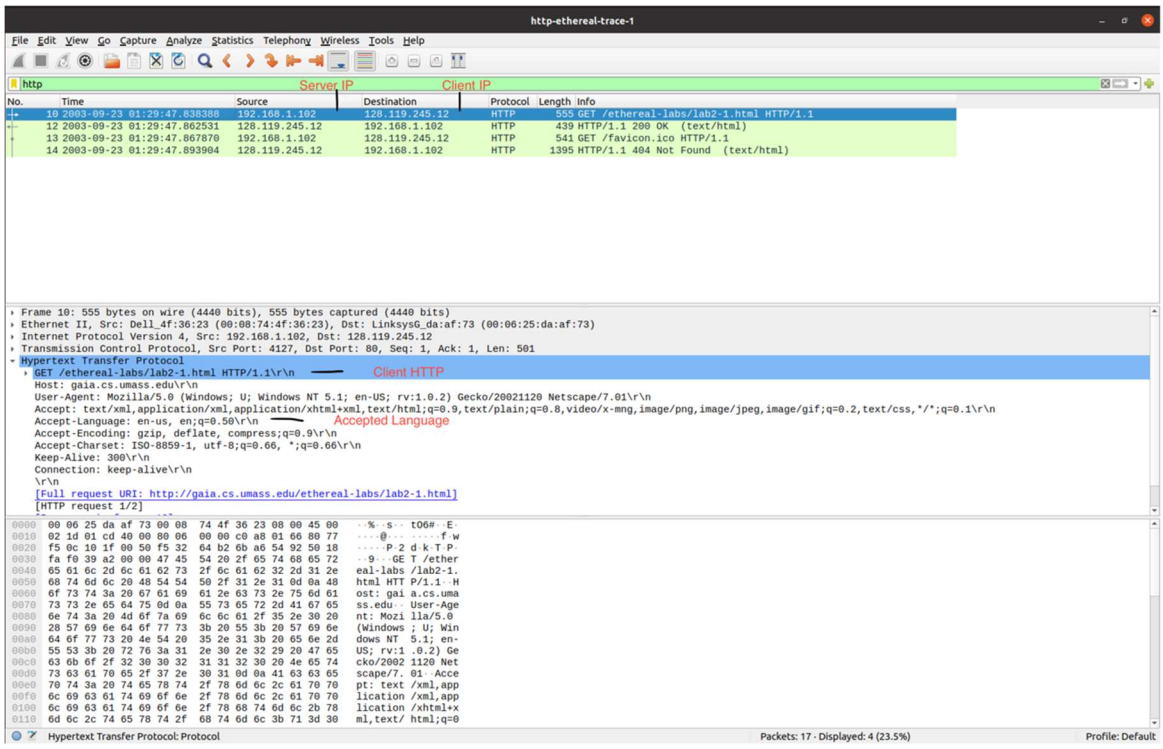
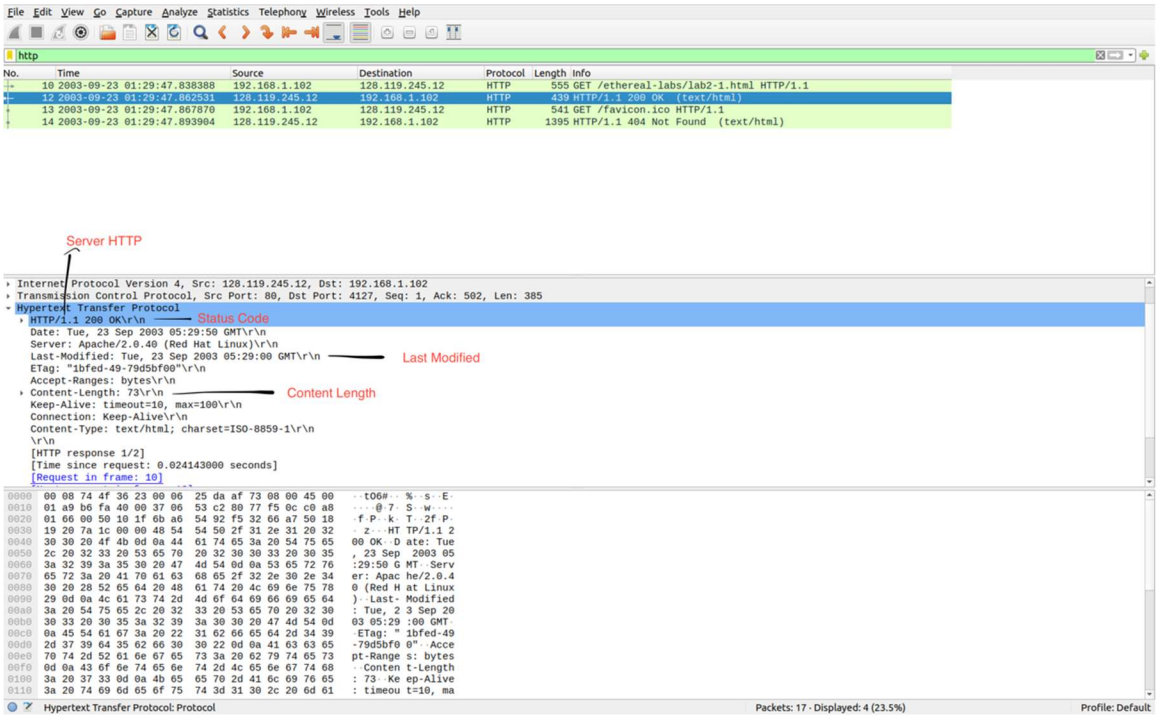
COMPUTER NETWORKS LAB2

Achintya Bhavaraju
SE20UARI020

1. The Basic HTTP GET/response interaction





Q1) My browser on HTTP/1.1 and server is also running HTTP/1.1

Q2)The browser can accept en-US

Q3)IP Address of my computer 128.119.245.12

IP Address of gaia Server 172.16.98.128

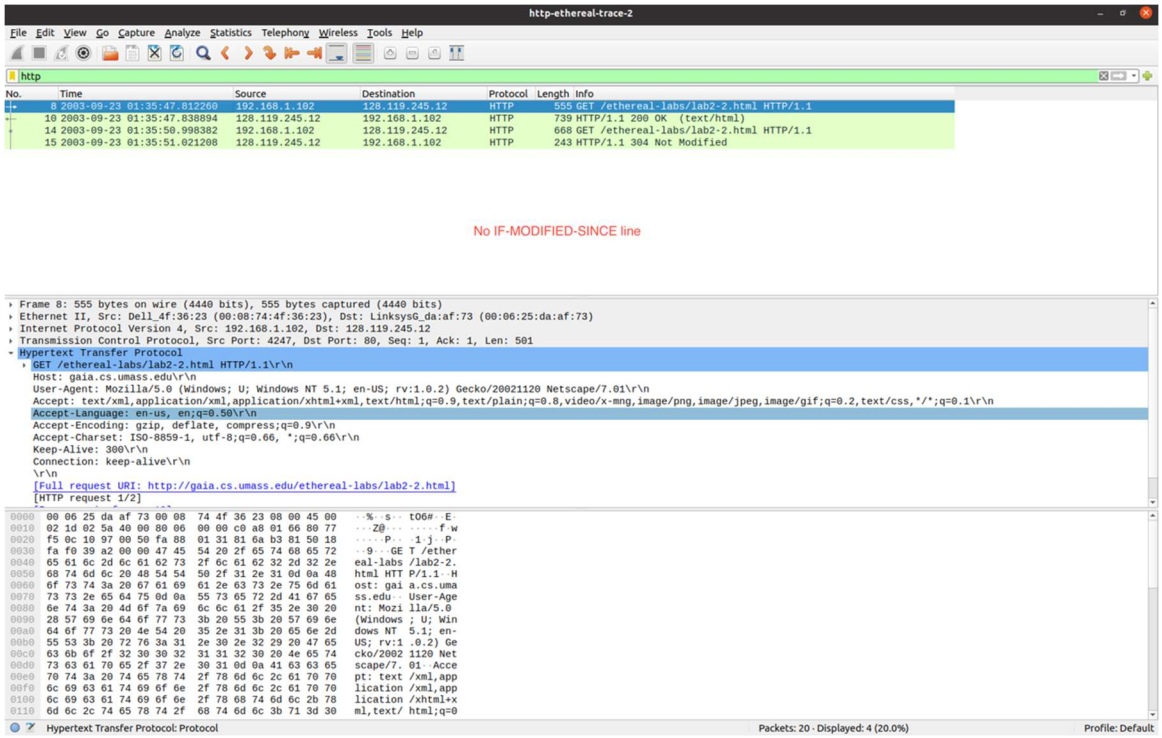
Q4)Status Code – 200 :OK (passed)

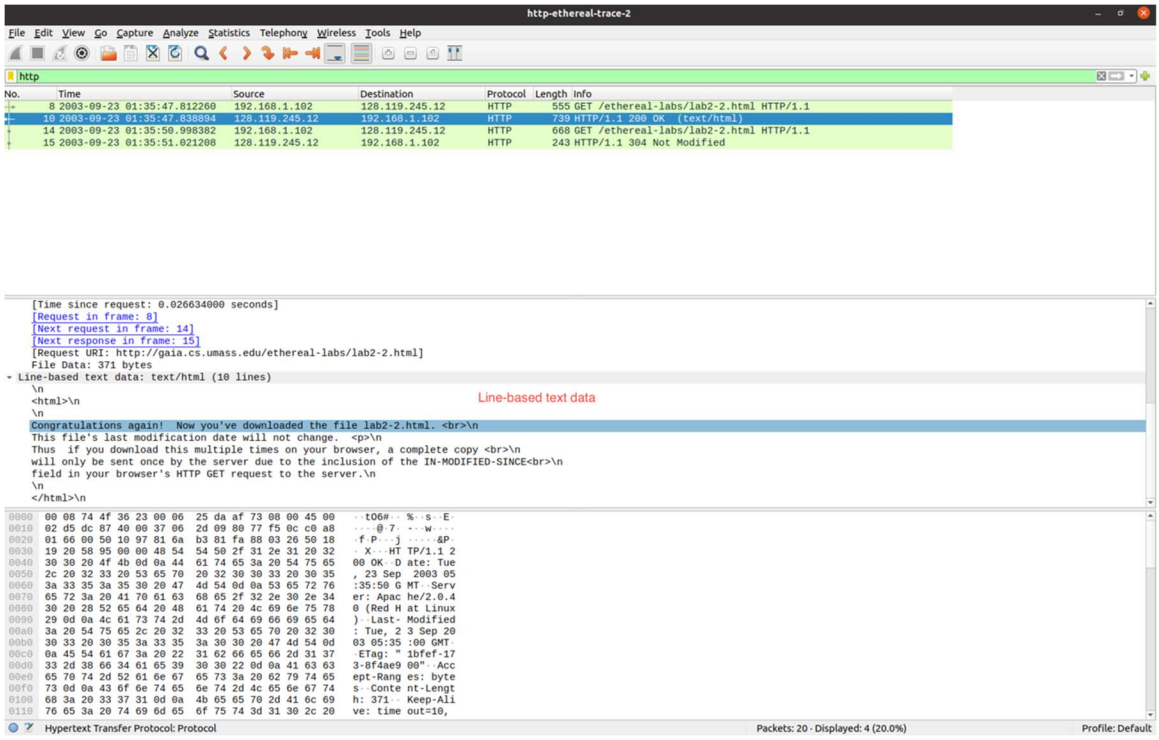
Q5) Last Modified – Tue, 23 September 2003 05:29:00 GMT (old document)

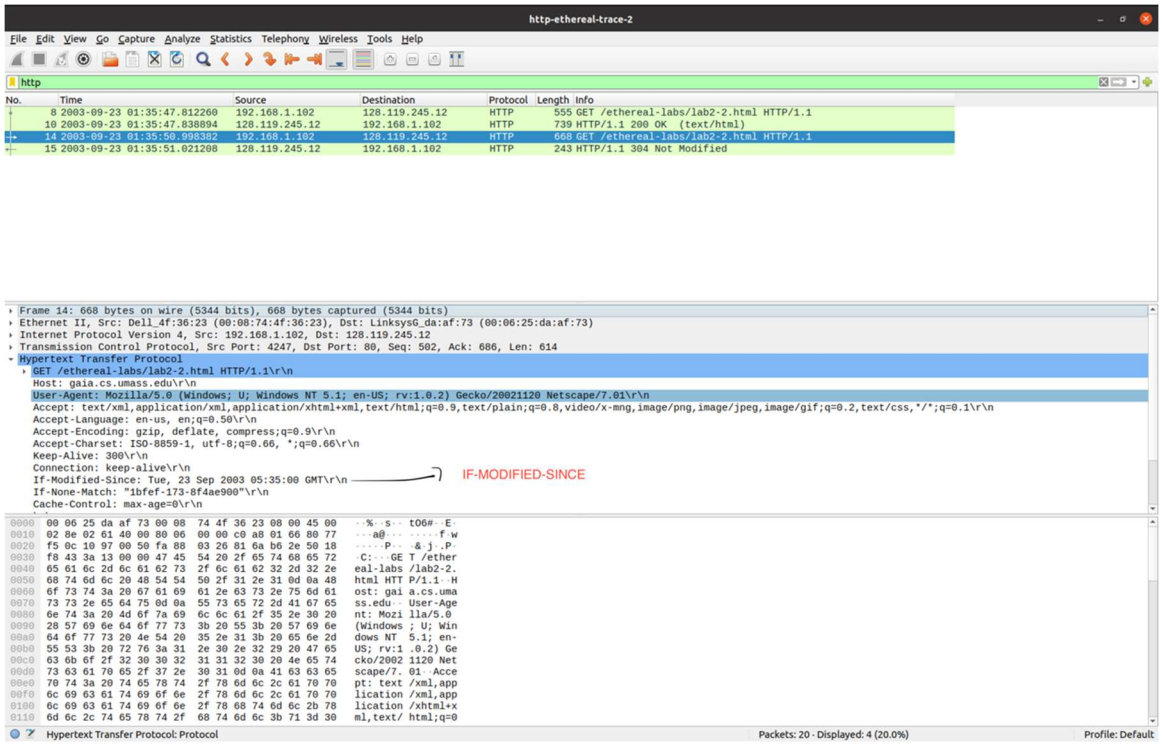
Q6)73 Bytes

Q7) No headers present

2. The HTTP CONDITIONAL GET/response interaction




http-ethereal-trace-2
File Edit View Go Capture Analyze Statistics Telephony Wireless Tools Help
http
No. Time Source Destination Protocol Length Info
8 2003-09-23 01:35:47.812260 192.168.1.102 128.119.245.12 HTTP 555 GET /ethereal-labs/lab2-2.html HTTP/1.1
10 2003-09-23 01:35:47.838894 128.119.245.12 192.168.1.102 HTTP 739 HTTP/1.1 200 OK (text/html)
14 2003-09-23 01:35:50.998382 192.168.1.102 128.119.245.12 HTTP 668 GET /ethereal-labs/lab2-2.html HTTP/1.1
15 2003-09-23 01:35:51.021208 128.119.245.12 192.168.1.102 HTTP 243 HTTP/1.1 304 Not Modified
[Time since request: 0.026634000 seconds]
[Request in frame: 8]
[Next request in frame: 14]
[Next response in frame: 15]
[Request URI: http://gaia.cs.umass.edu/ethereal-labs/lab2-2.html]
File Data: 371 bytes
Line-based text data: text/html (10 lines)
Line-based text data
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
Hypertext Transfer Protocol: Protocol
Packets: 20 · Displayed: 4 (20.0%)
Profile: Default


http-ethereal-trace-2
File Edit View Go Capture Analyze Statistics Telephony Wireless Tools Help
http
No. Time Source Destination Protocol Length Info
8 2003-09-23 01:35:47.812260 192.168.1.102 128.119.245.12 HTTP 555 GET /ethereal-labs/lab2-2.html HTTP/1.1
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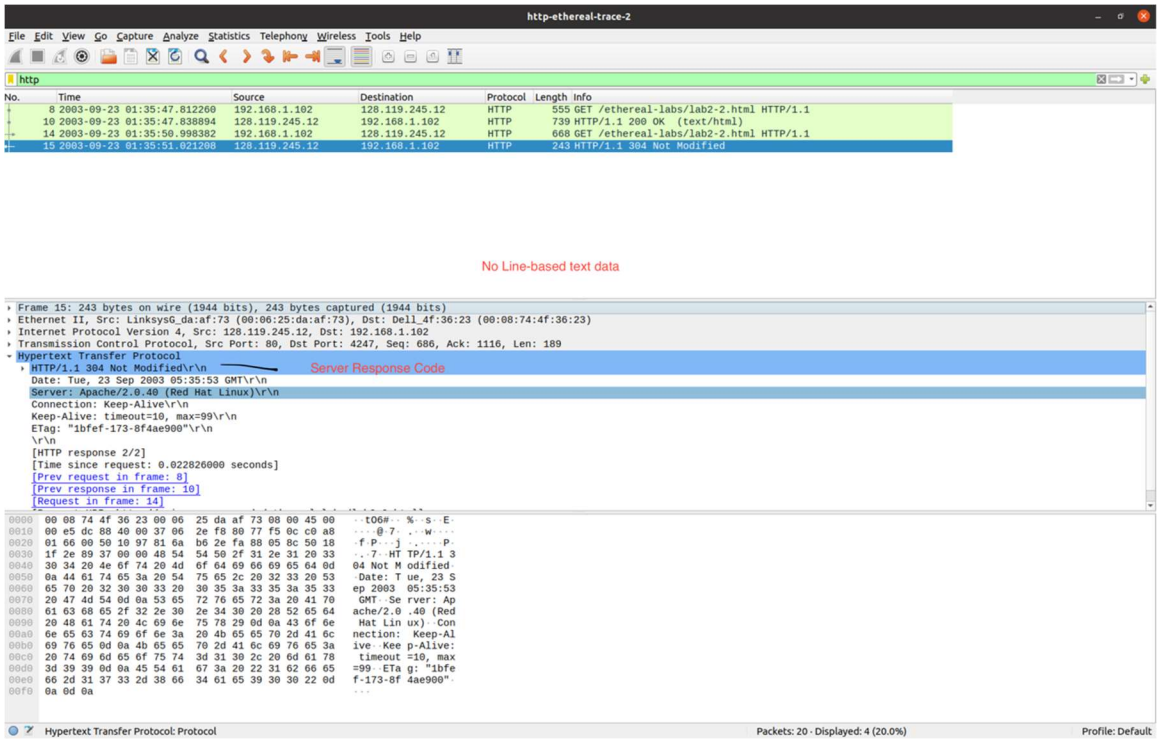
15 2003-09-23 01:35:51.021208 128.119.245.12 192.168.1.102 HTTP 243 HTTP/1.1 304 Not Modified
Frame 14: 668 bytes on wire (5344 bits), 668 bytes captured (5344 bits)
Ethernet II, Src: Dell_4f:36:23 (00:08:74:4f:36:23), Dst: LinksysG_da:af:73 (00:06:25:da:af:73)
Internet Protocol Version 4, Src: 192.168.1.102, Dst: 128.119.245.12
Transmission Control Protocol, Src Port: 4247, Dst Port: 80, Seq: 502, Ack: 686, Len: 614
Hypertext Transfer Protocol
GET /ethereal-labs/lab2-2.html HTTP/1.1\r\n
Host: gaia.cs.umass.edu\r\n
User-Agent: Mozilla/5.0 (Windows; U; Windows NT 5.1; en-US; rv:1.0.2) Gecko/20021120 Netscape/7.01\r\n
Accept: text/xml,application/xml,application/xhtml+xml,text/html;q=0.9,text/plain;q=0.8,video/x-mng,image/png,image/jpeg,image/gif;q=0.2,text/css,*/*;q=0.1\r\n
Accept-Language: en-us, en;q=0.50\r\n
Accept-Encoding: gzip, deflate, compress;q=0.9\r\n
Accept-Charset: ISO-8859-1, utf-8;q=0.66, *;q=0.66\r\n
Keep-Alive: 300\r\n
Connection: keep-alive\r\n
If-Modified-Since: Tue, 23 Sep 2003 05:35:00 GMT\r\n
IF-MODIFIED-SINCE
If-None-Match: "1bfef-173-8f4ae900"\r\n
Cache-Control: max-age=0\r\n
Hypertext Transfer Protocol: Protocol
Packets: 20 · Displayed: 4 (20.0%)
Profile: Default



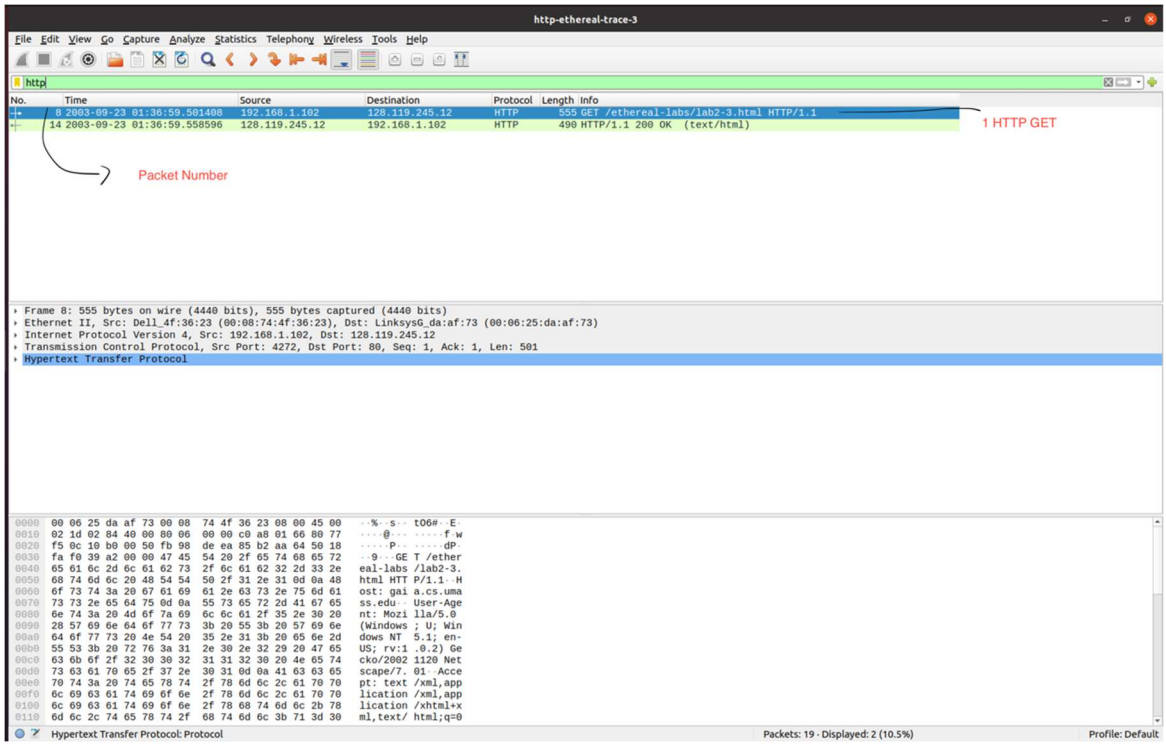
Q8) No I do not see and IF-MODIFIED-SINCE line

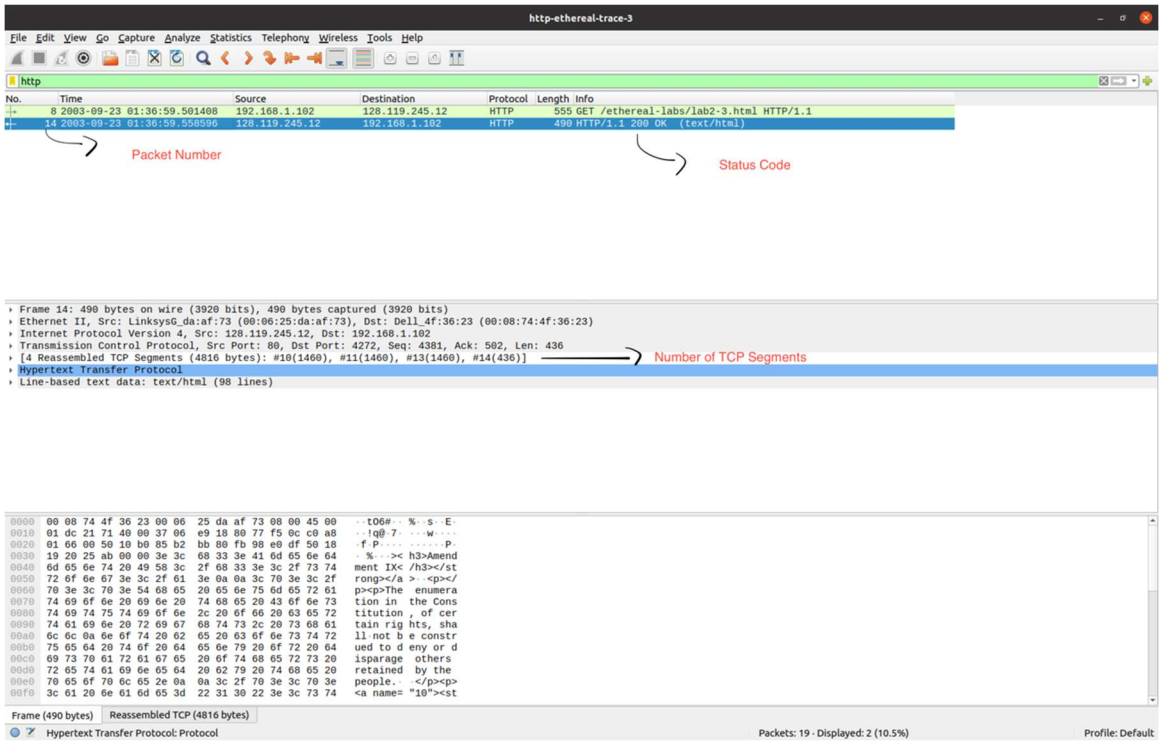
Q9) Yes and I can tell because of the Line-based text data field

Q10) Yes, I see an IF-MODIFIED-SINCE line in the second HTTP GET.
IF-MODIFIED-SINCE: Tue, 23 Sep 2003 05:35:00 GMT

Q11) Status Code in 2nd HTTP GET – 304 Not Modified
No, the server did not return the contents of the file since it already exists in the cache

3. Retrieving Long Documents





Q12) The browser sent only 1 HTTP GET message

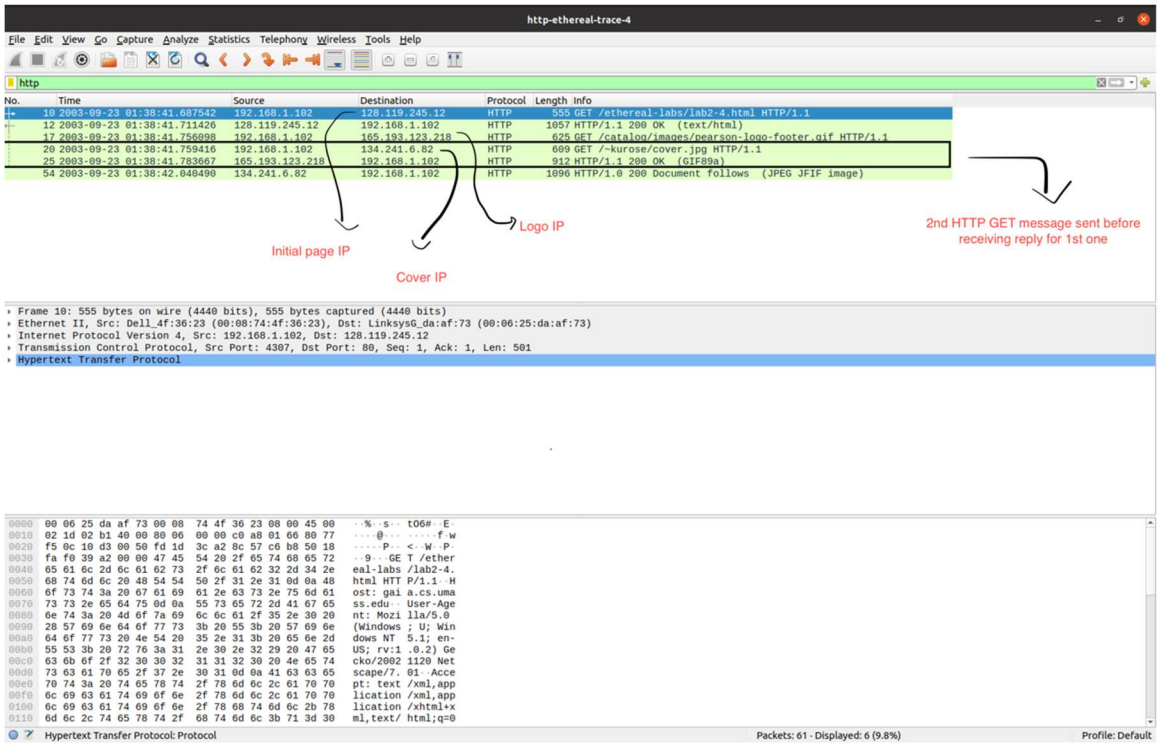
The packet number – **8**

Q13) The packet number **14** which contains the status code and phrase associated with the response to the HTTP GET request

Q14)Status code and phrase – 200 OK

Q15) The data was sent in 4 TCP segments

4. HTML Documents with Embedded Objects



Q16) The browser sent 3 HTTP GET messages

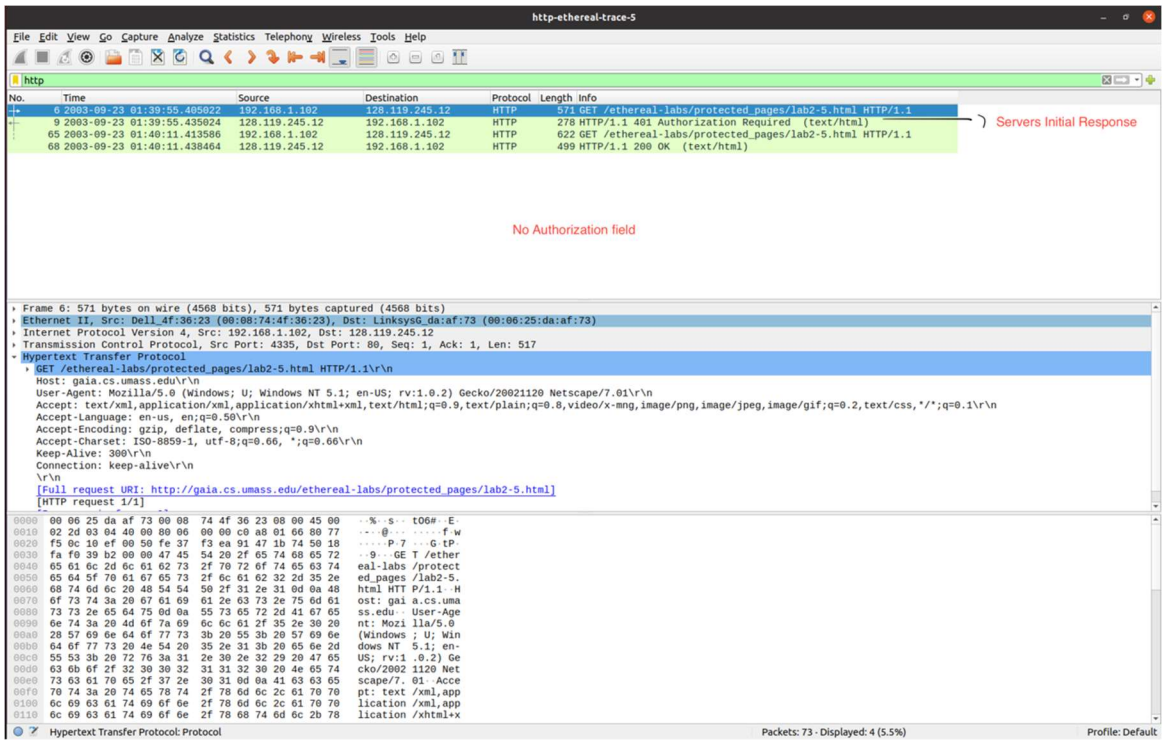
Initial Page address: 128.119.245.12

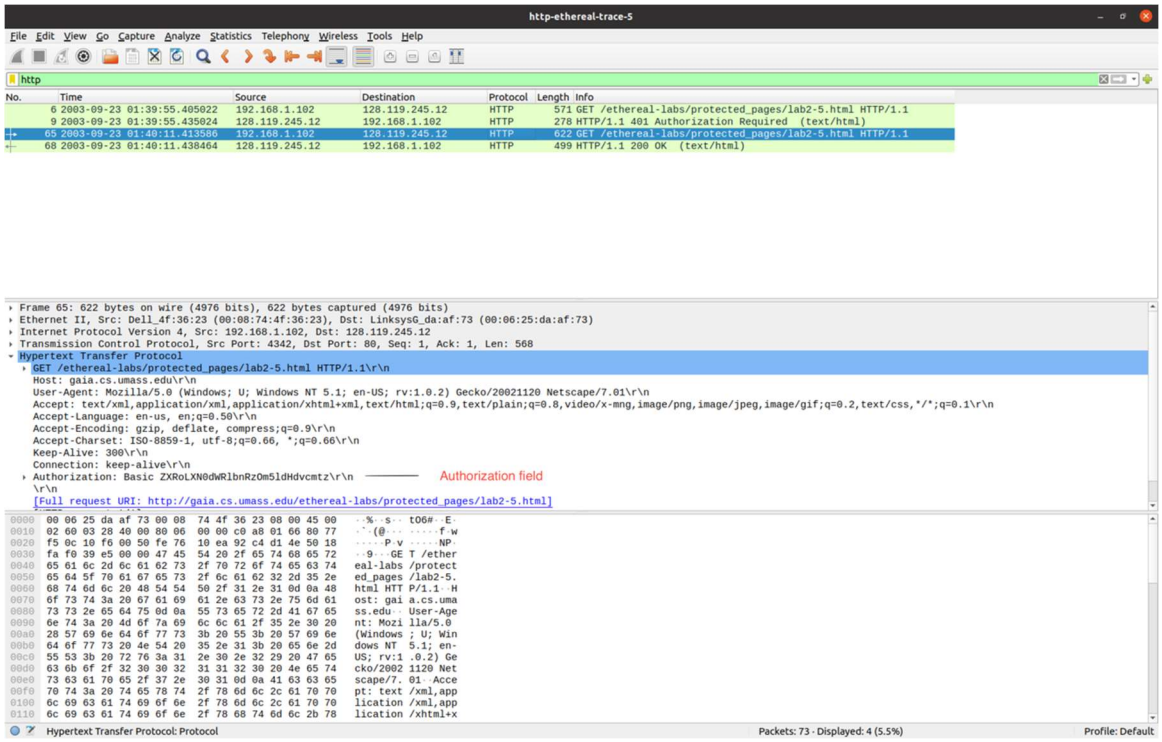
Pearson Logo: 165.193.123.218

Cover : 134.241.6.82

Q17) The downloads occurred in parallel. The 2nd HTTP GET messages was sent before the reply for the 1st image was received

5. HTTP Authentication





Q18) The servers initial response was 401 Authorization Required

Q19) The new field in the 2nd HTTP GET message is Authorization