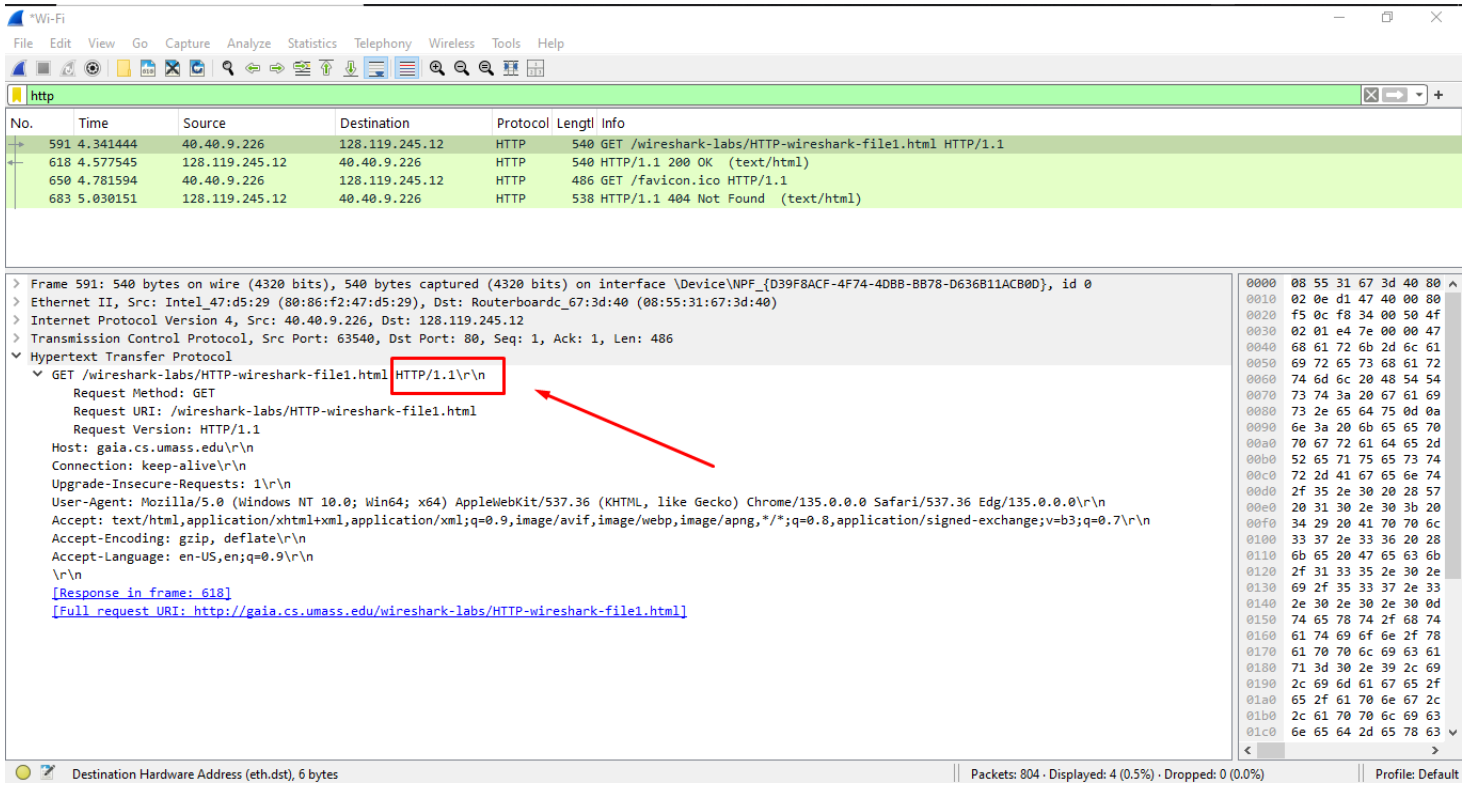
The Basic HTTP GET/response interaction

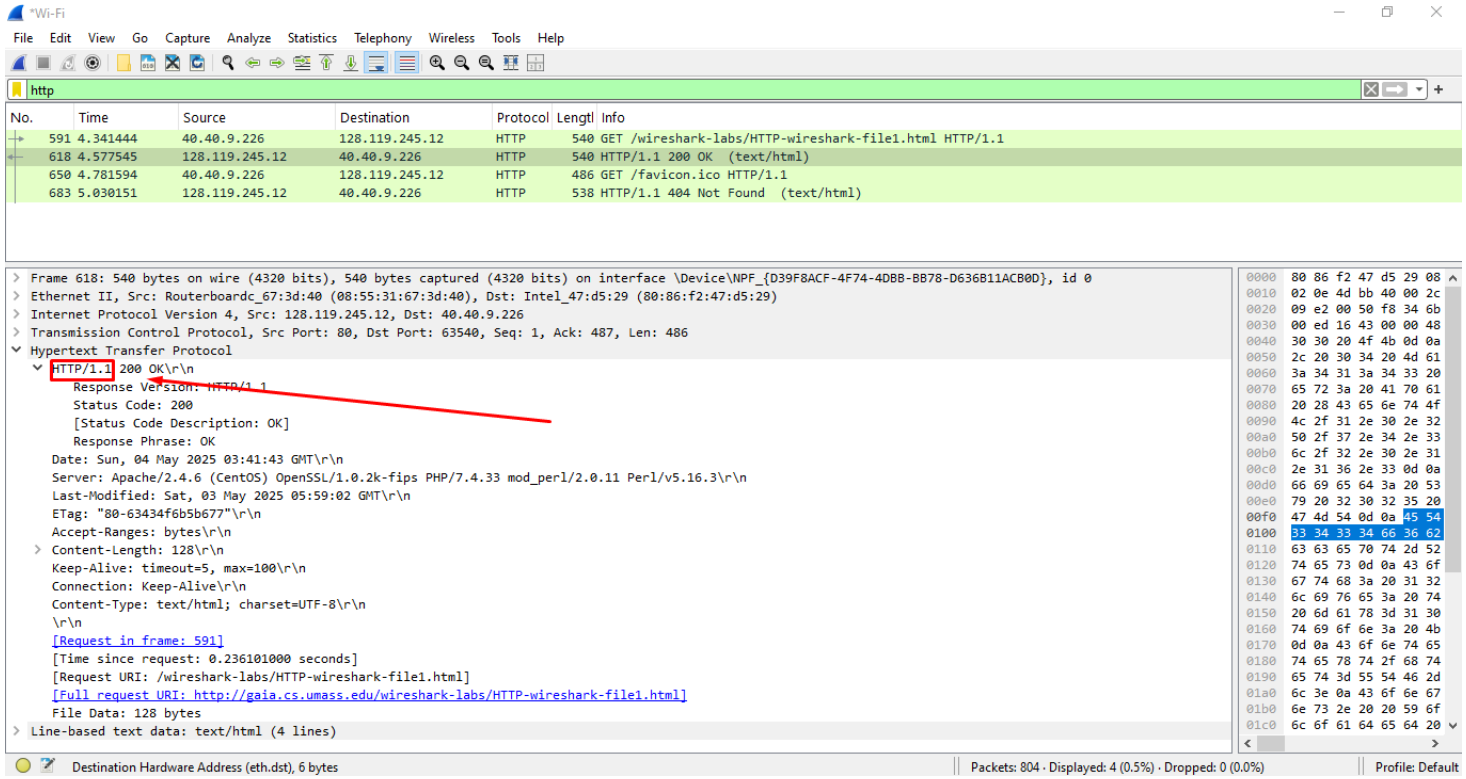
Questions 1 to 7

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

Answer: Browser: HTTP 1.1

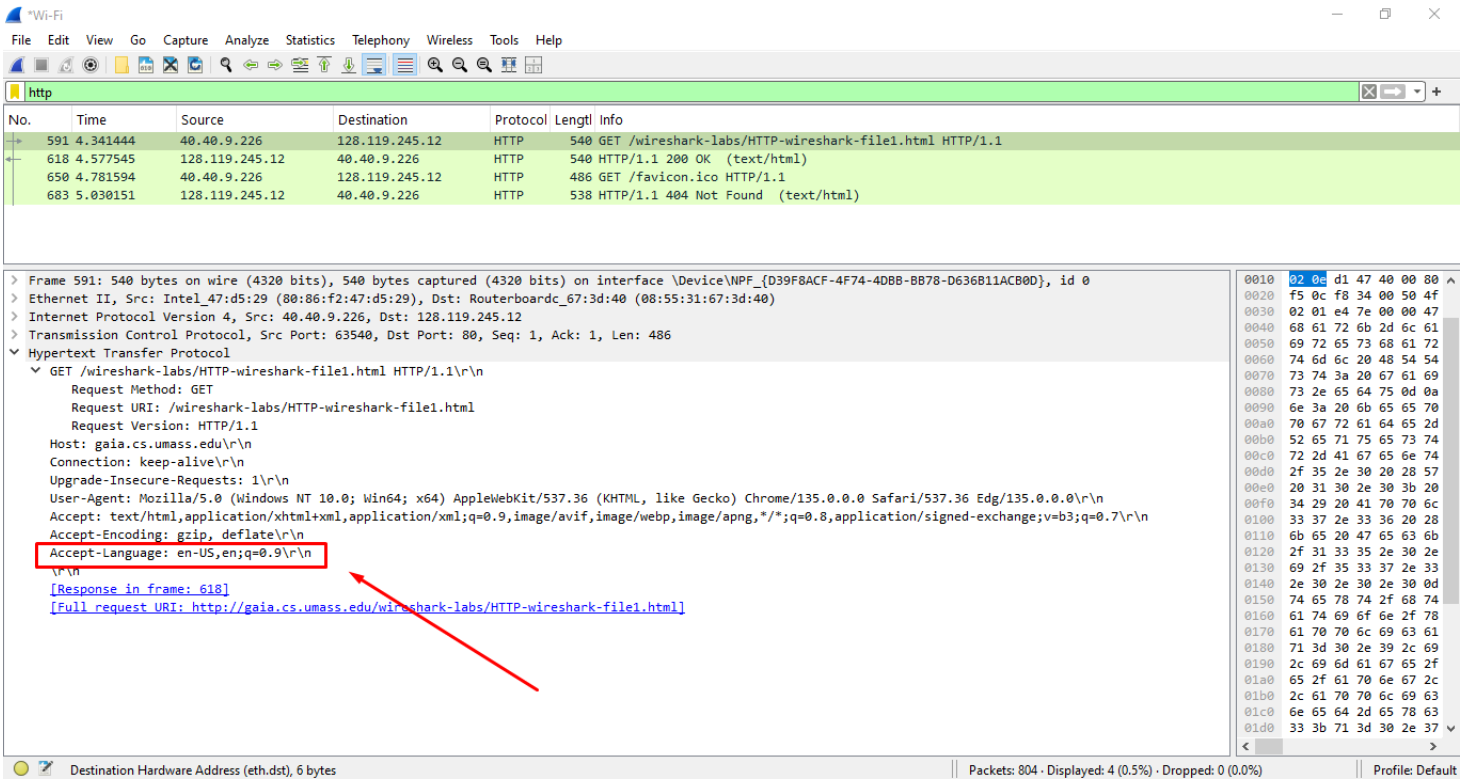


Server: HTTP 1.1



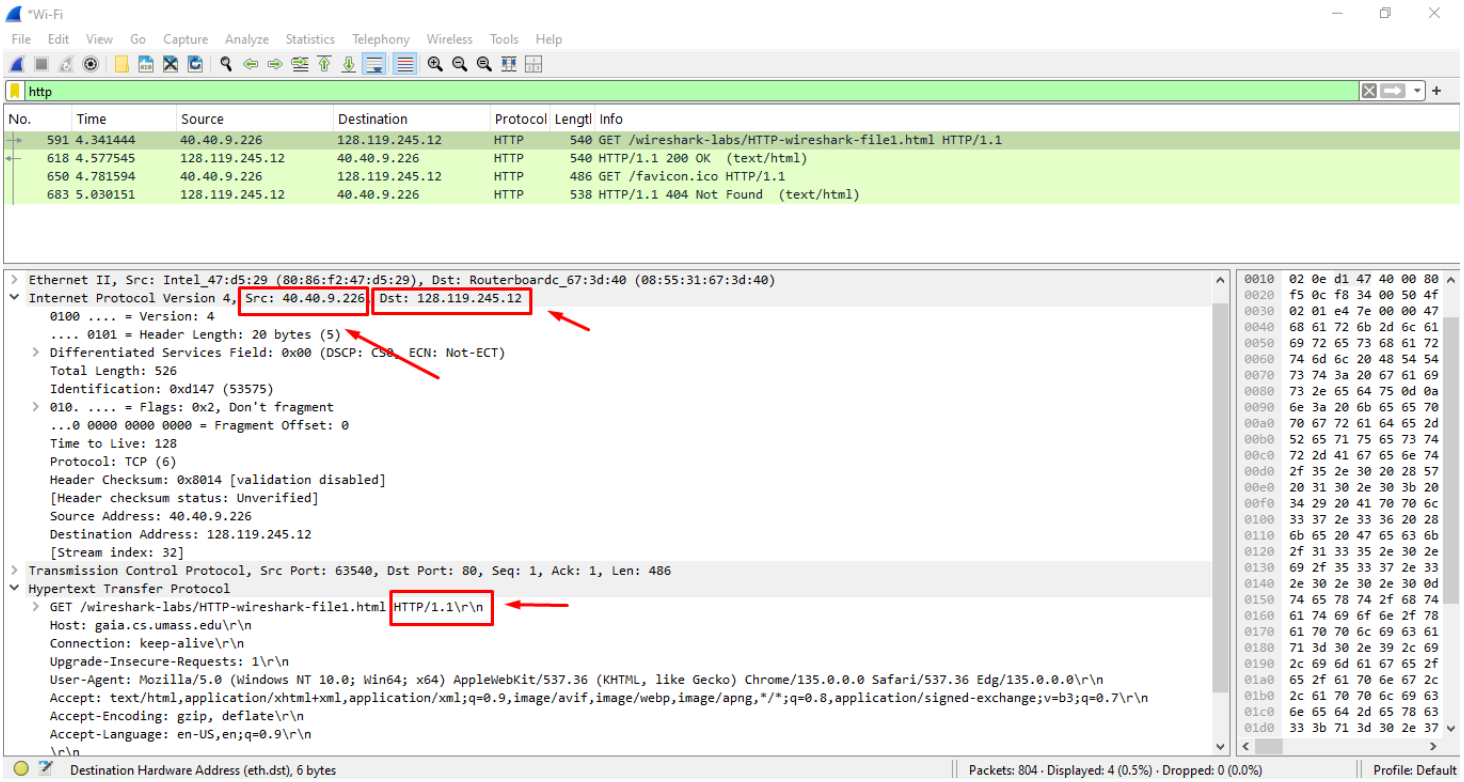
2. **What languages (if any) does your browser indicate that it can accept to the server?**

Answer: Enaglish



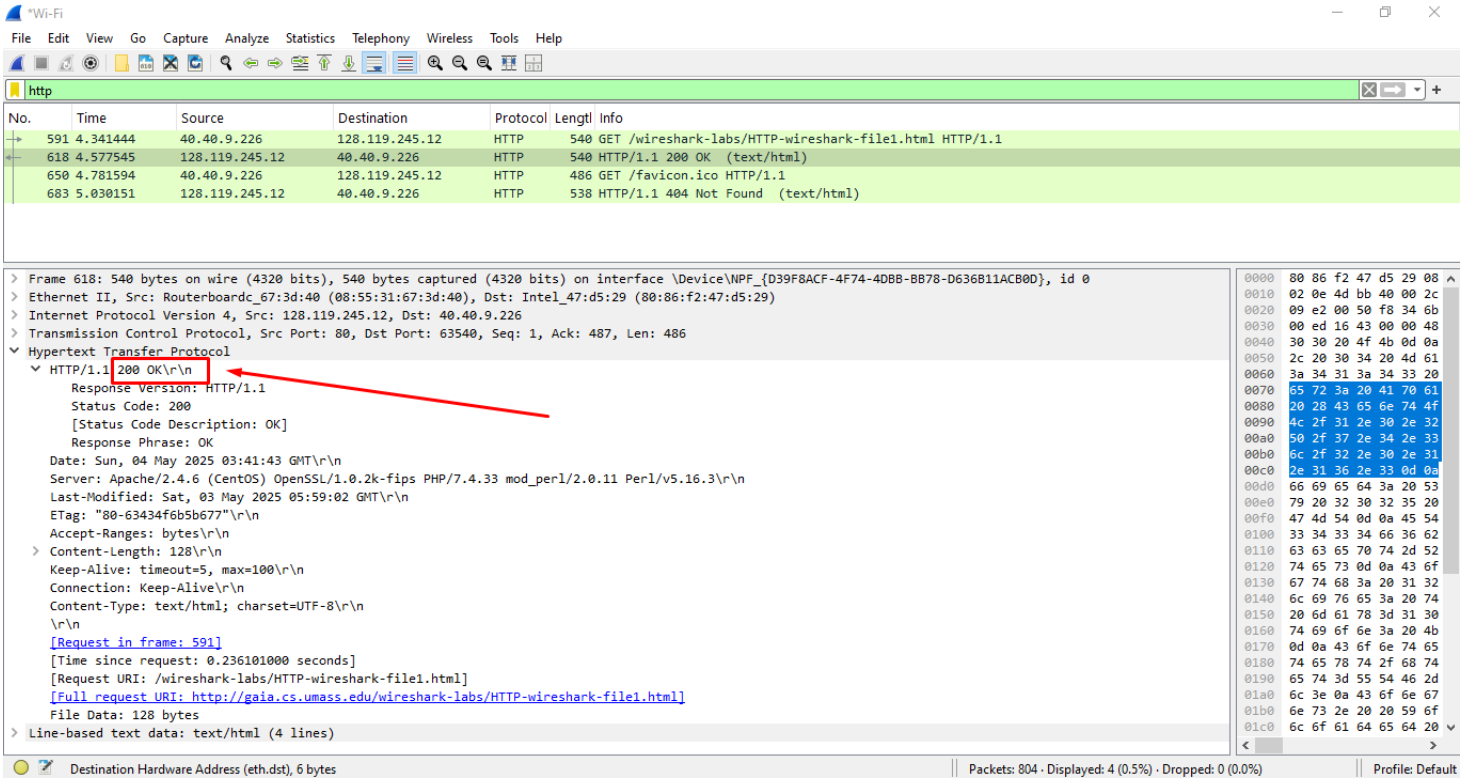
3. **What is the IP address of your computer? Of the gaia.cs.umass.edu server?**

Answer: My PC: 40.40.9.226 & Server: 128.119.245.12



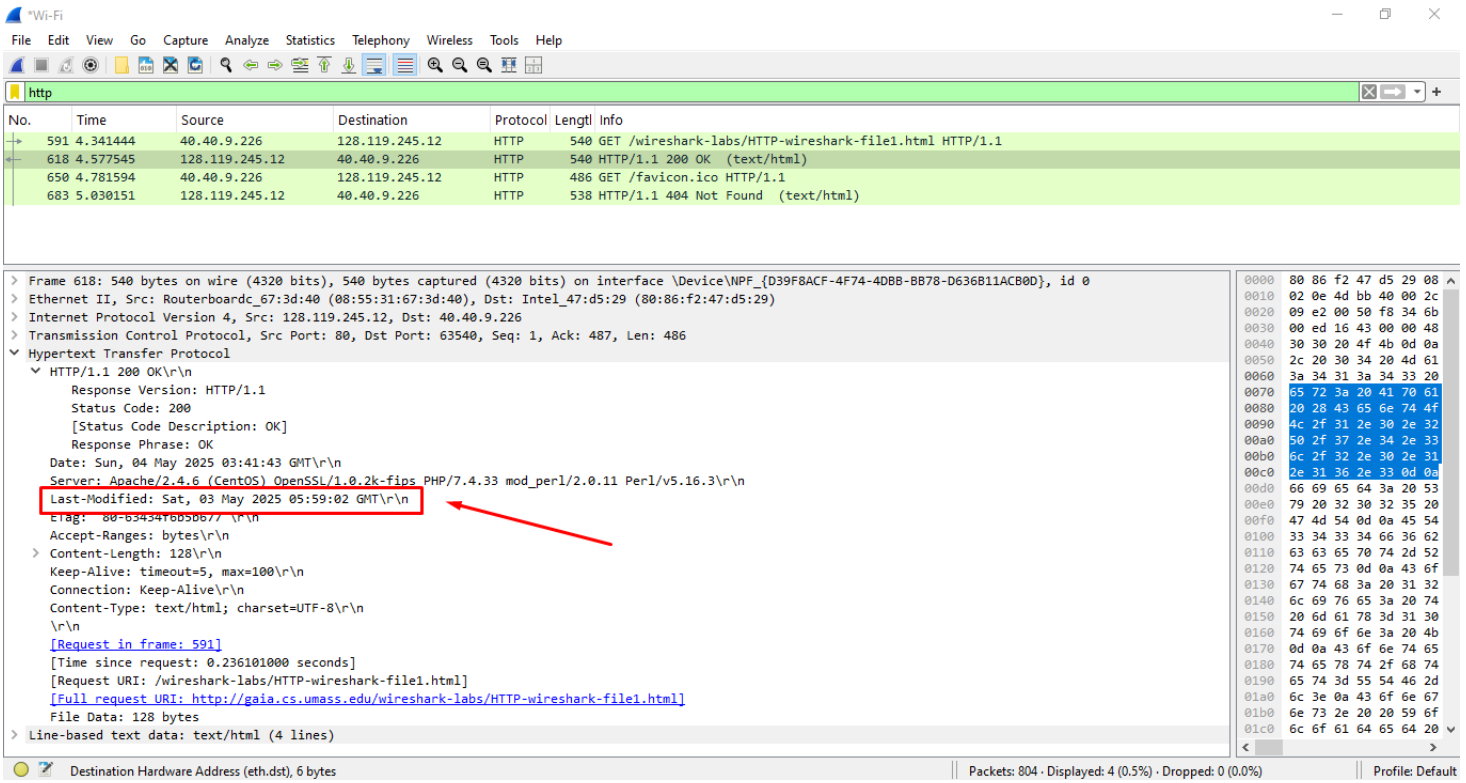
4. **What is the status code returned from the server to your browser?**

Answer: Status Code: 200



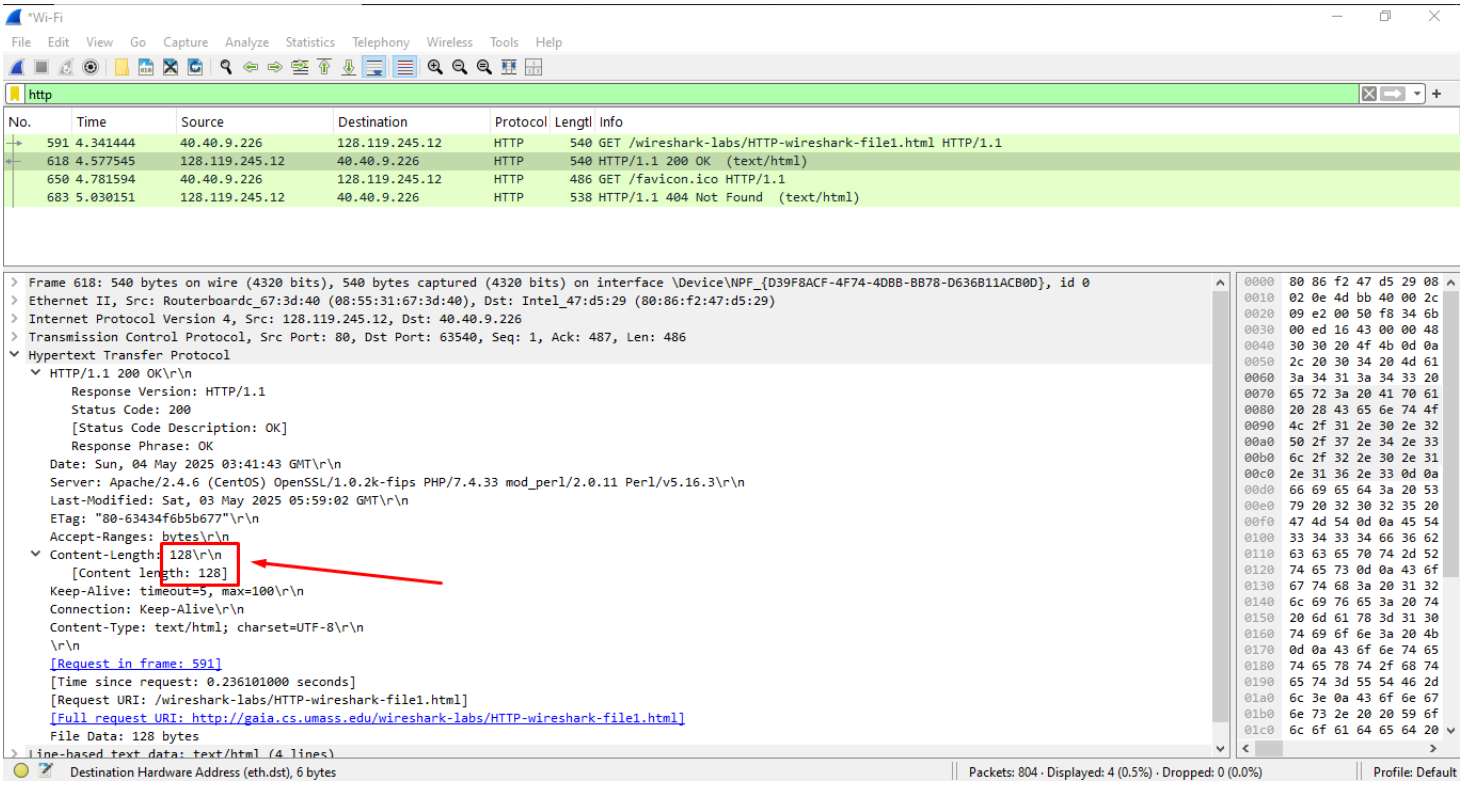
5. **When was the HTML file that you are retrieving last modified at the server?**

Answer: Last Modified: Sat, 03 May 2025 05:59:02 GMT



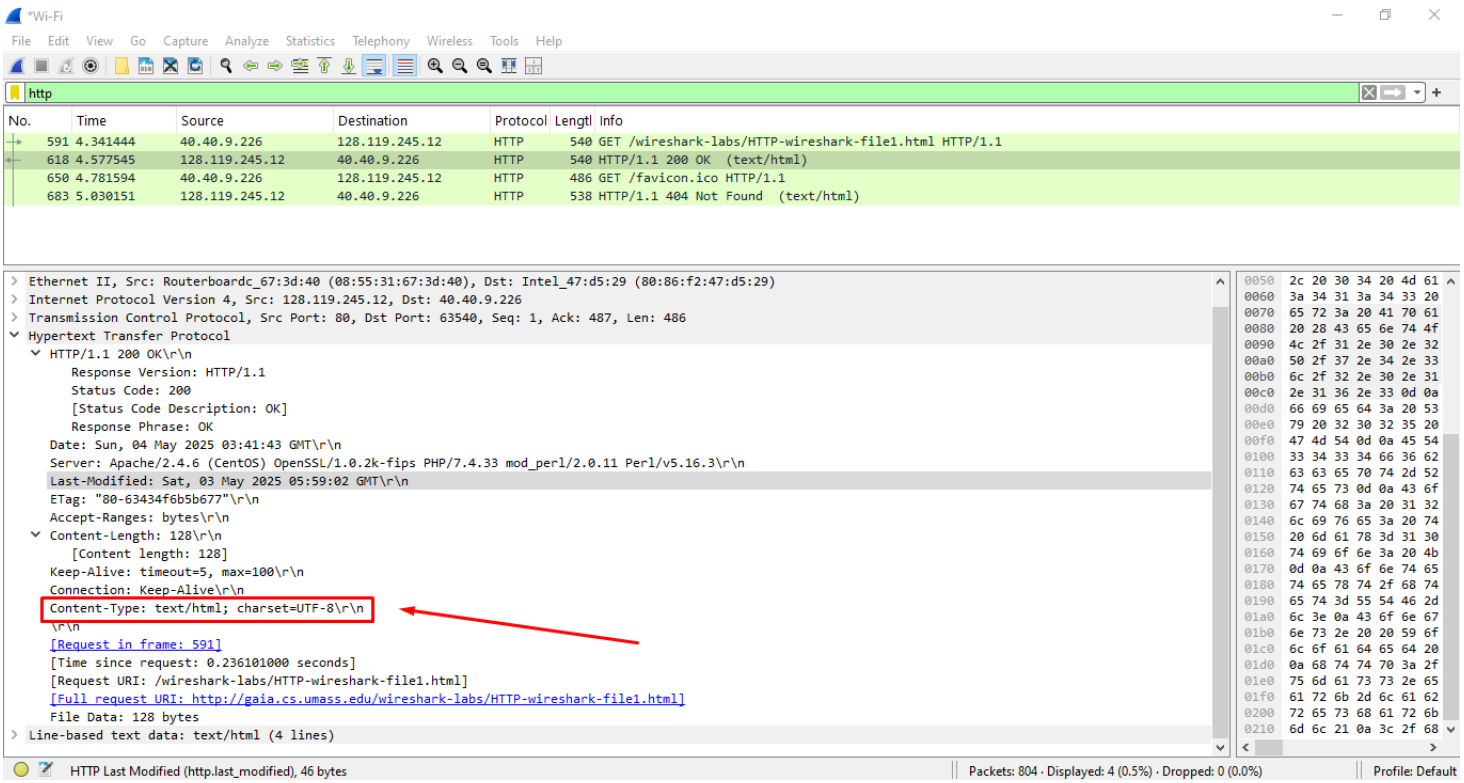
6. **How many bytes of content are being returned to your browser?**

Answer: Bytes: 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: Content-Type: text/html; charset=UTF-8\r\n

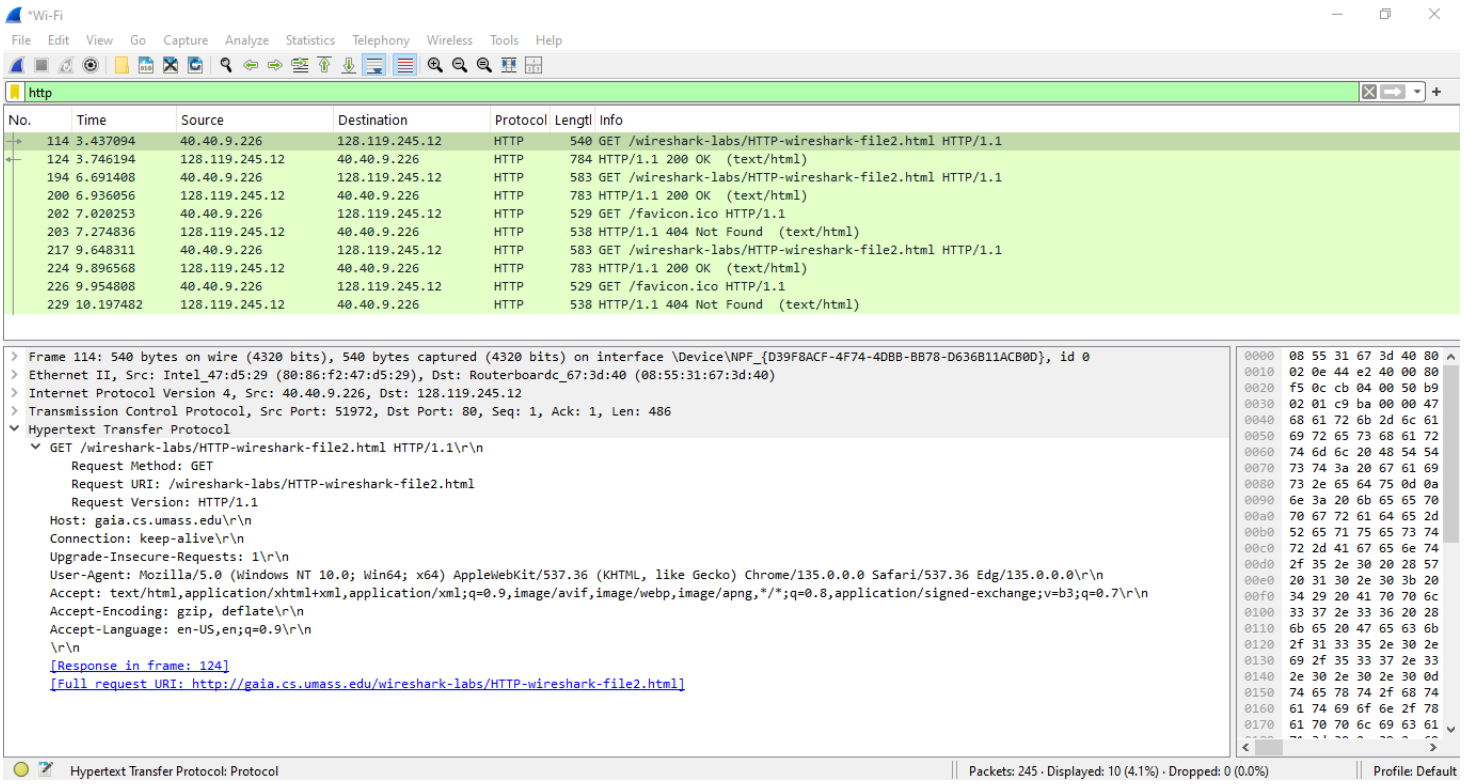


The HTTP CONDITIONAL GET/response interaction

Questions 8 to 11

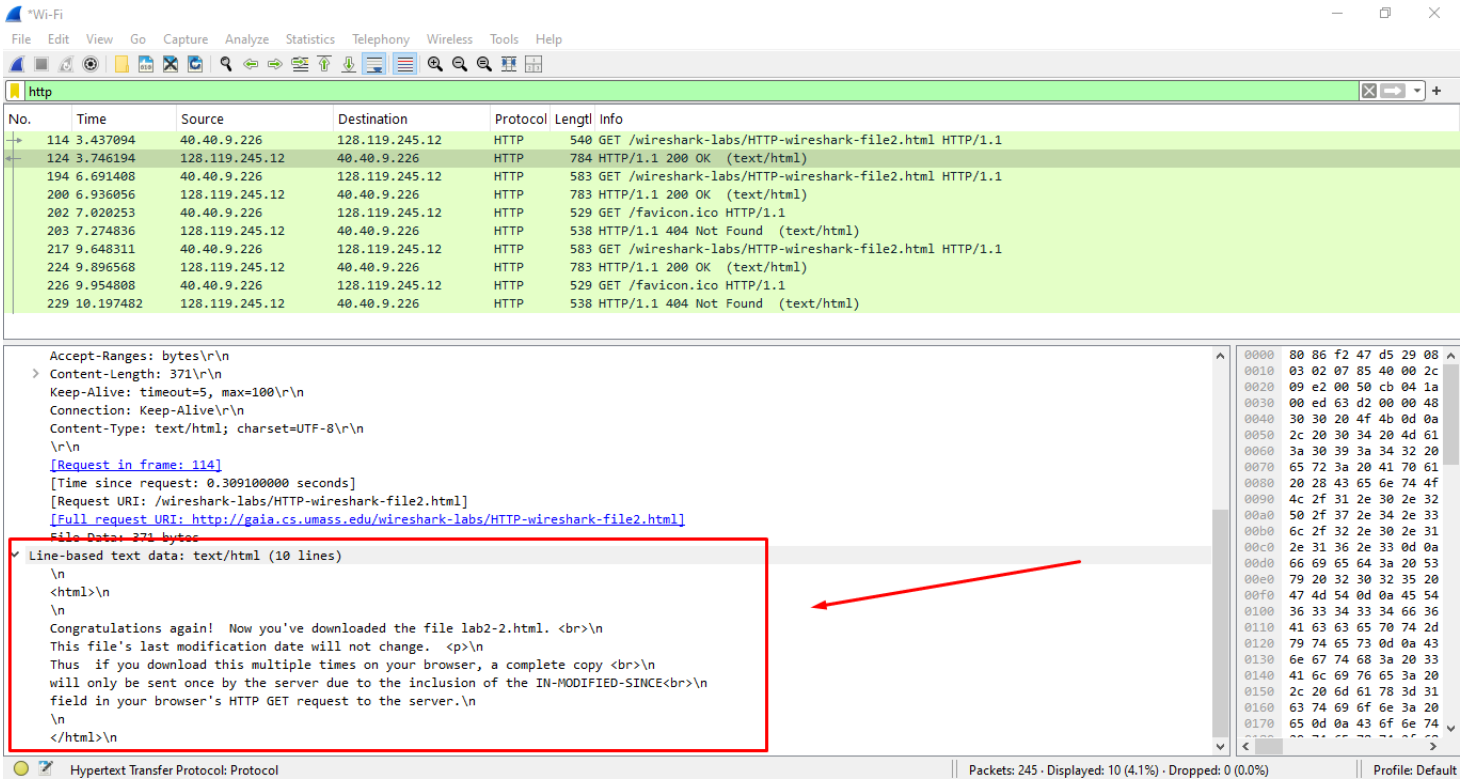
8. **Inspect the contents of the first HTTP GET request from your browser to the server. Do you see an "IF-MODIFIED-SINCE" line in the HTTP GET?**

Answer: No, "IF-MODIFIED-SINCE" line.



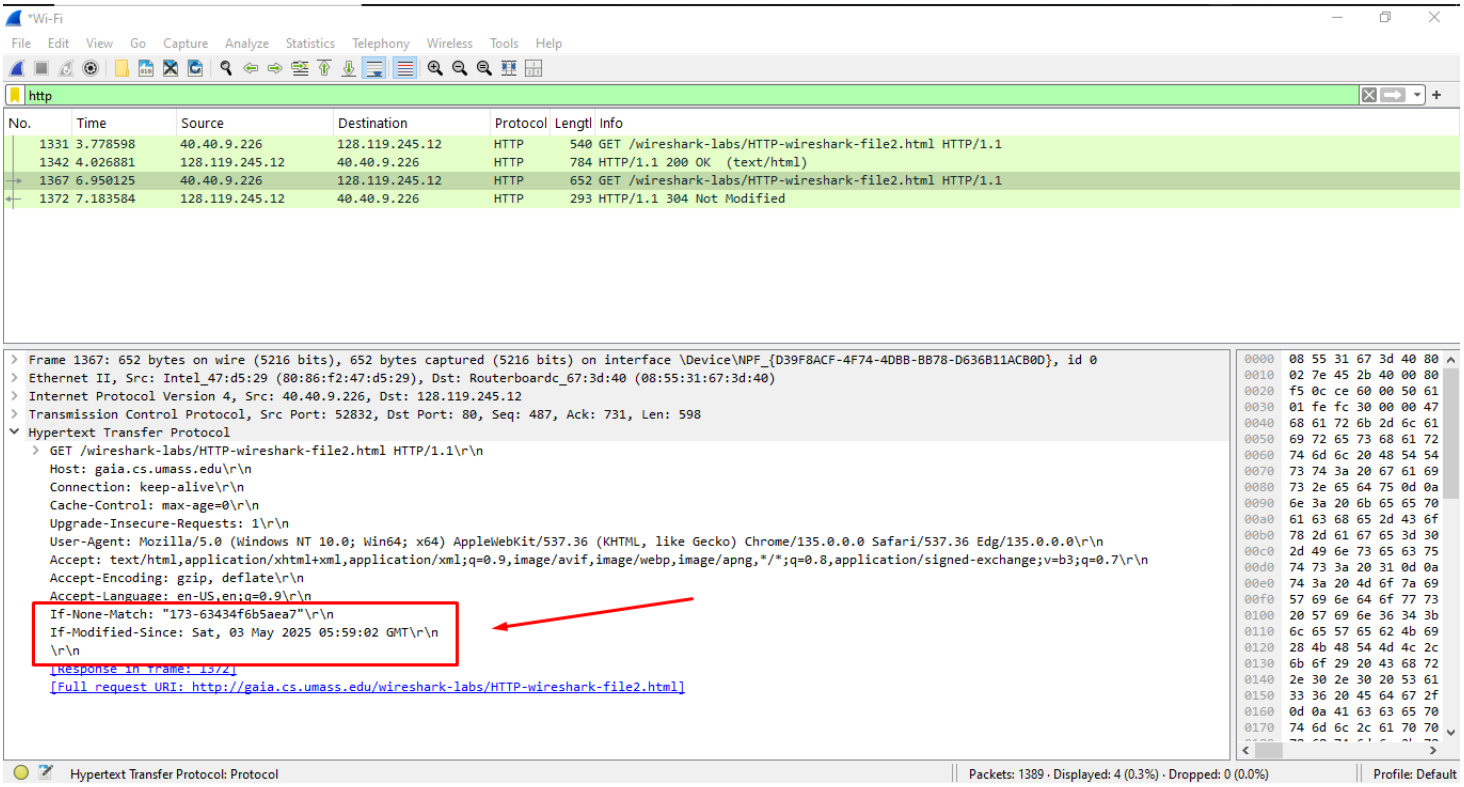
9. **Inspect the contents of the server response. Did the server explicitly return the contents of the file? How can you tell?**

Answer: Text return in response.



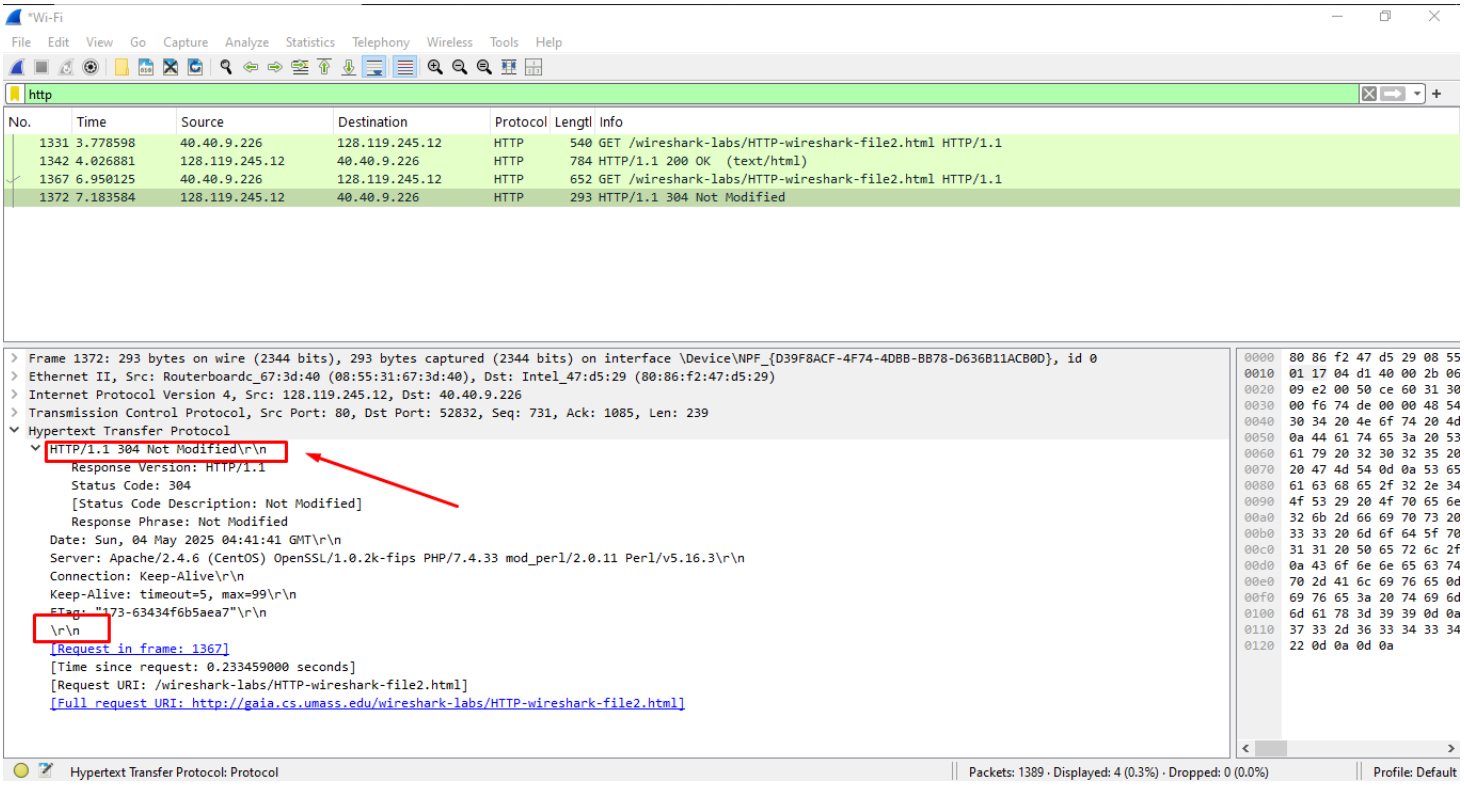
10. **Now inspect the contents of the second HTTP GET request from your browser to the server. Do you see an "IF-MODIFIED-SINCE:" line in the HTTP GET? If so, what information follows the "IF-MODIFIED-SINCE:" header?**

Answer: If-Modified-Since: Sat, 03 2025 05:59:02 GMT\r\n



11. 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.

Answer: 304 Not Modified. The server did not explicitly return the contents.

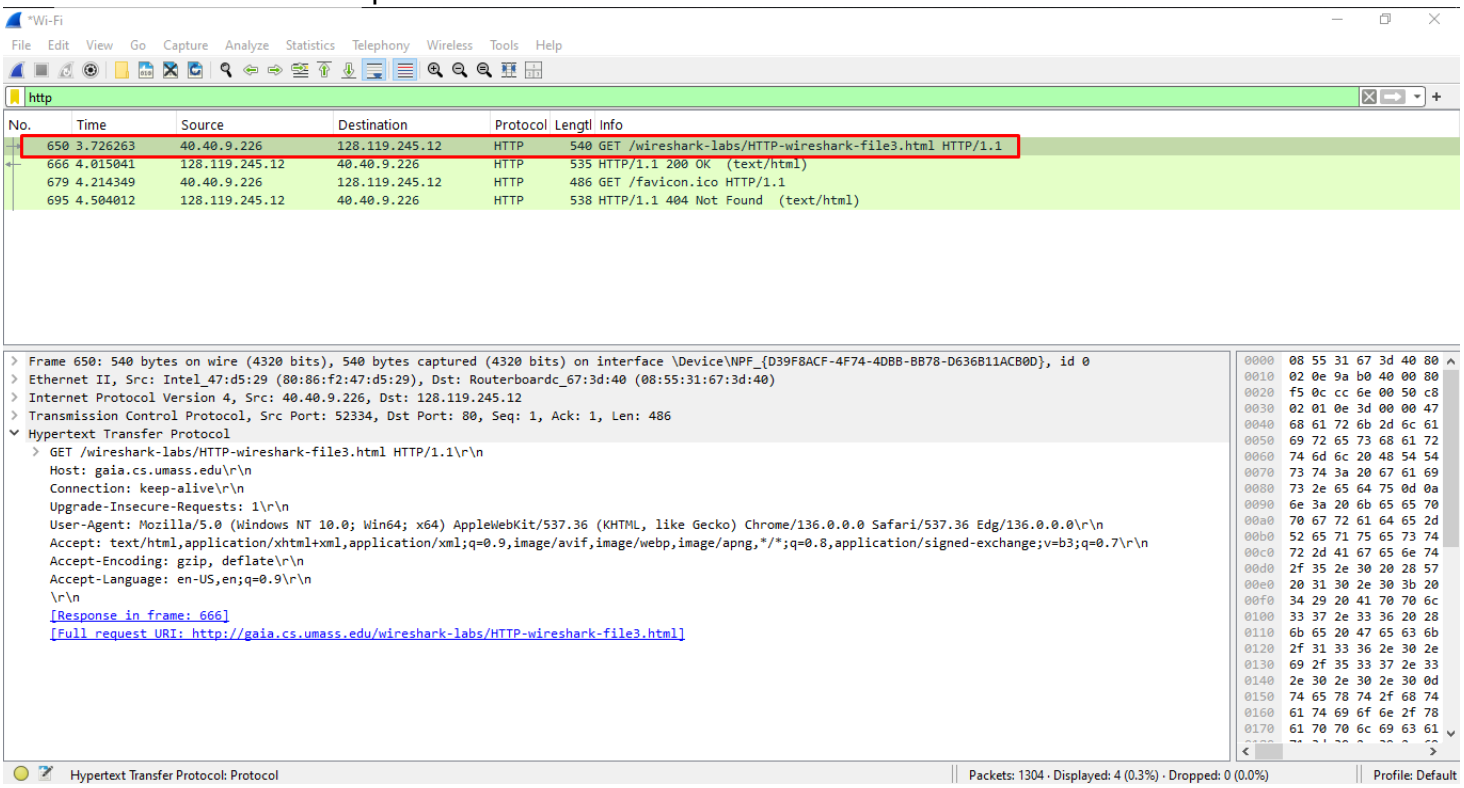


Retrieving Long Documents

Questions 12 to 15

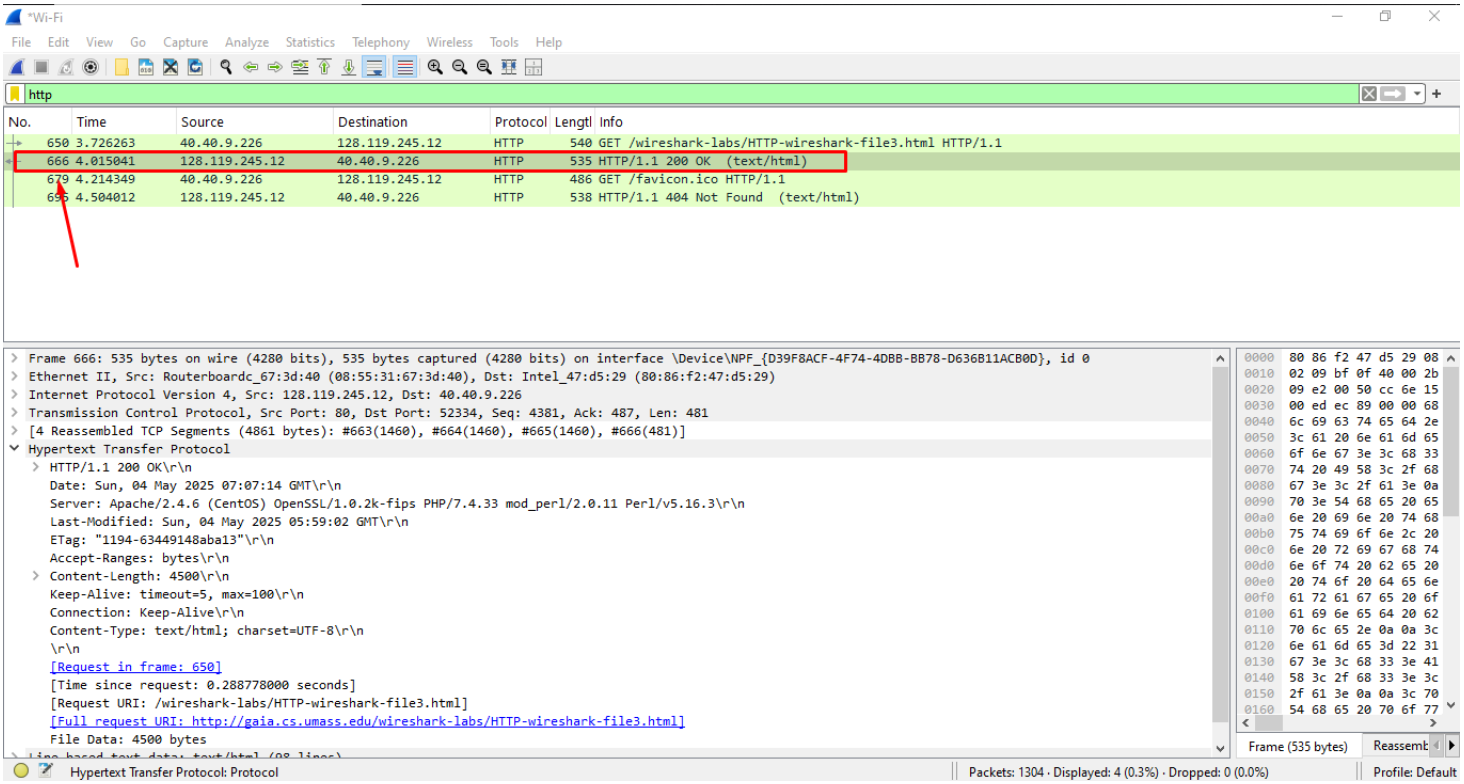
12. **How many HTTP GET request messages did your browser send? Which packet number in the trace contains the GET message for the Bill or Rights?**

Answer: 1 HTTP GET request send & Packet Number is 650.



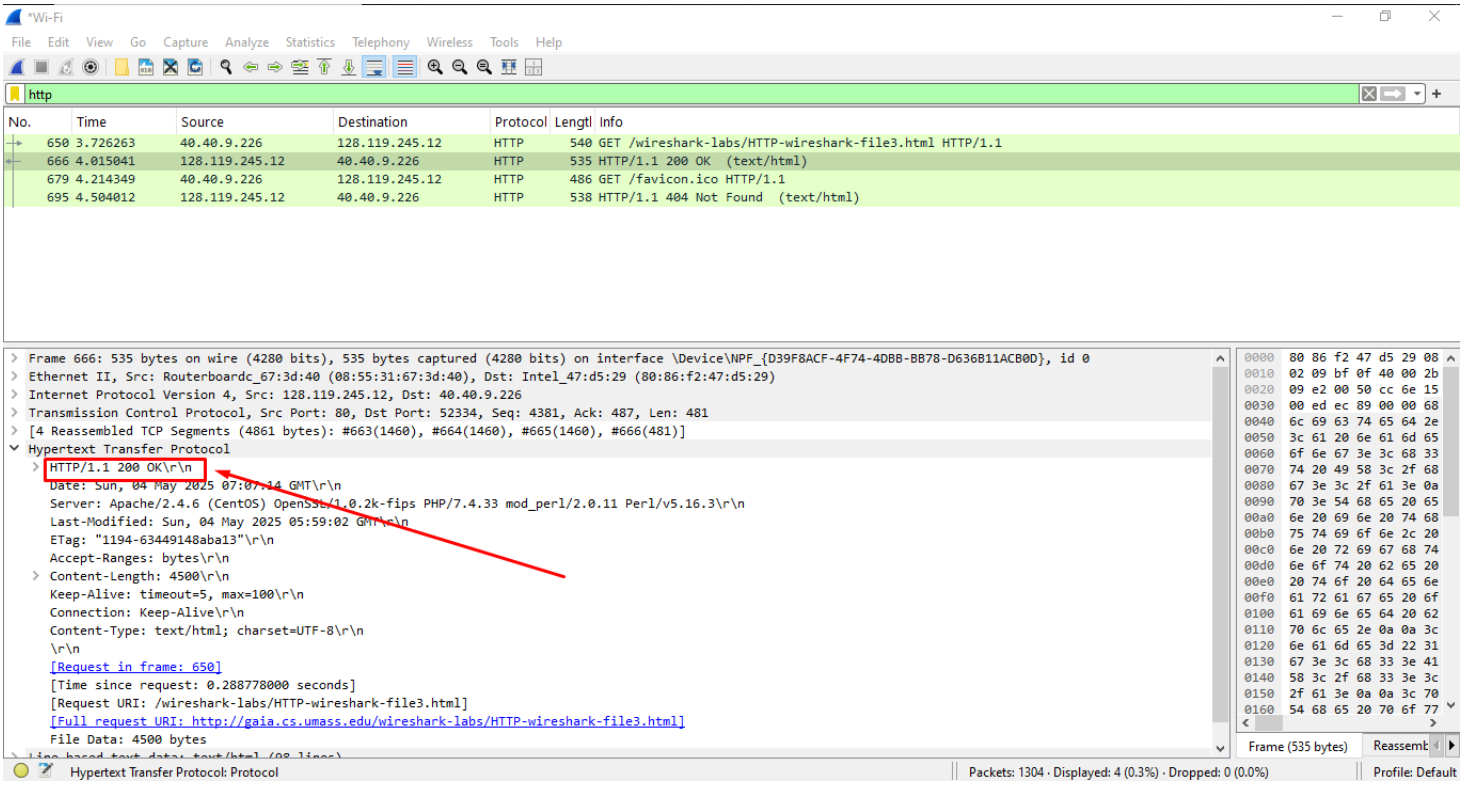
13. **Which packet number in the trace contains the status code and phrase associated with the response to the HTTP GET request?**

Answer: Packet 666



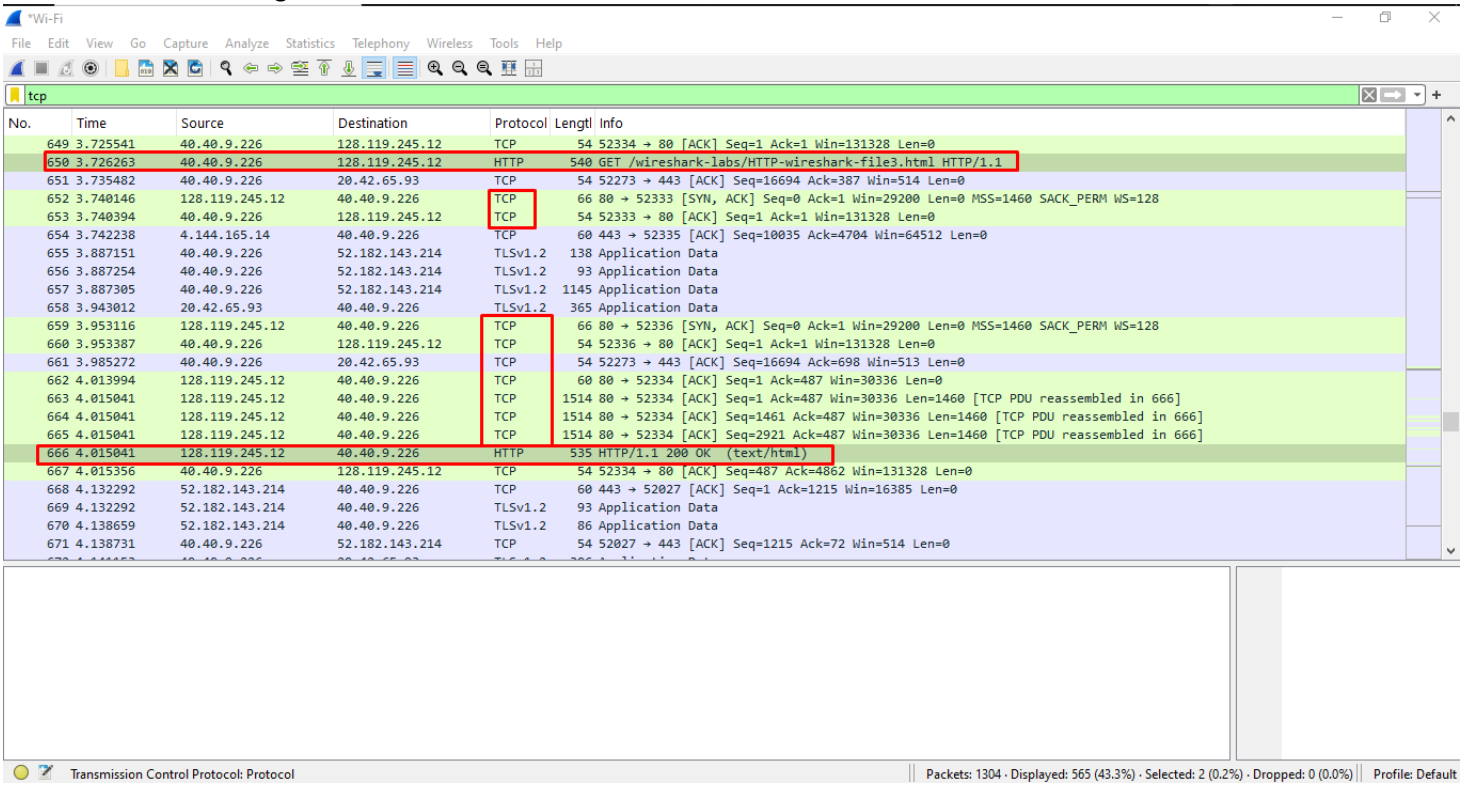
14. **What is the status code and phrase in the response?**

Answer: Status Code: 200



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

Answer: 9 TCP segments.

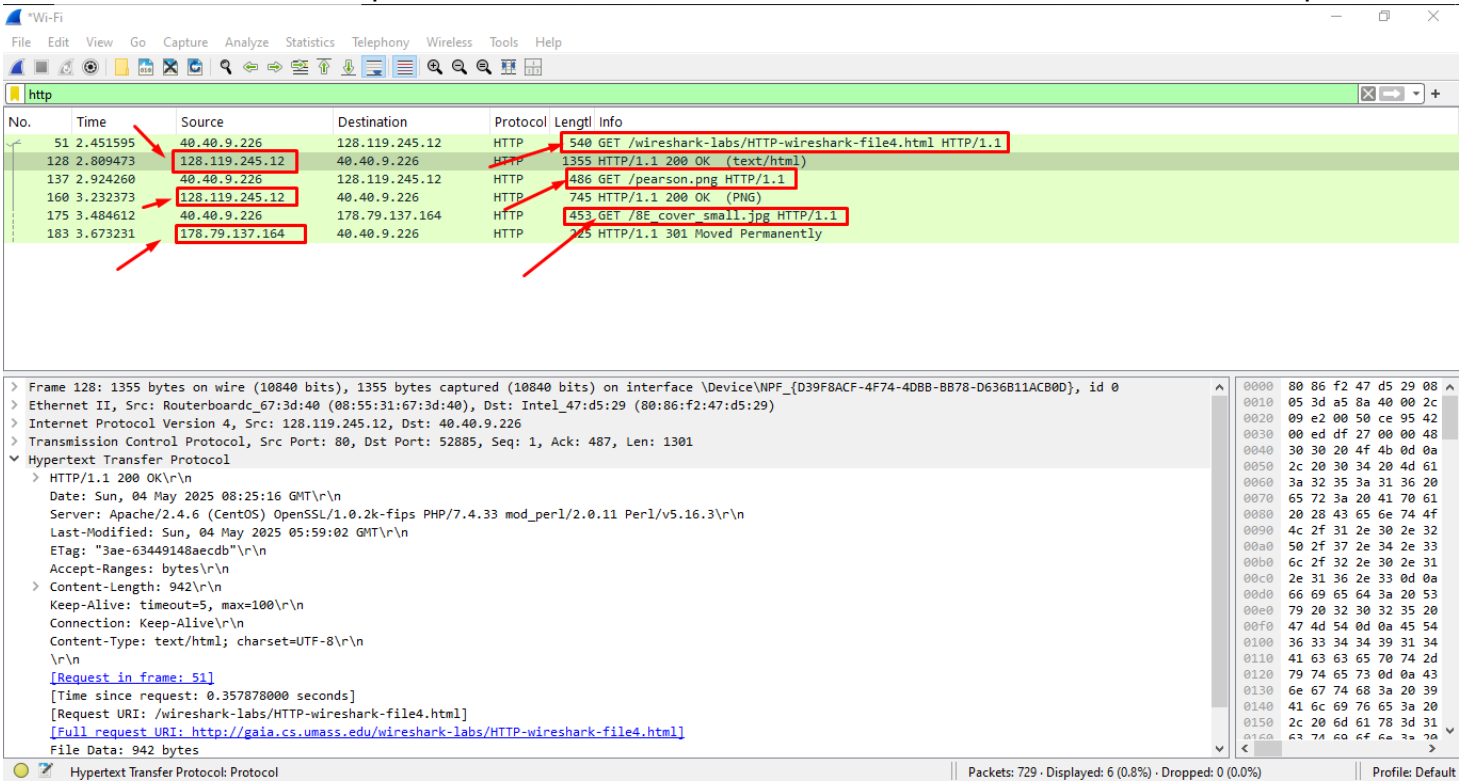


HTML Documents with Embedded Objects

Questions 16 to 17

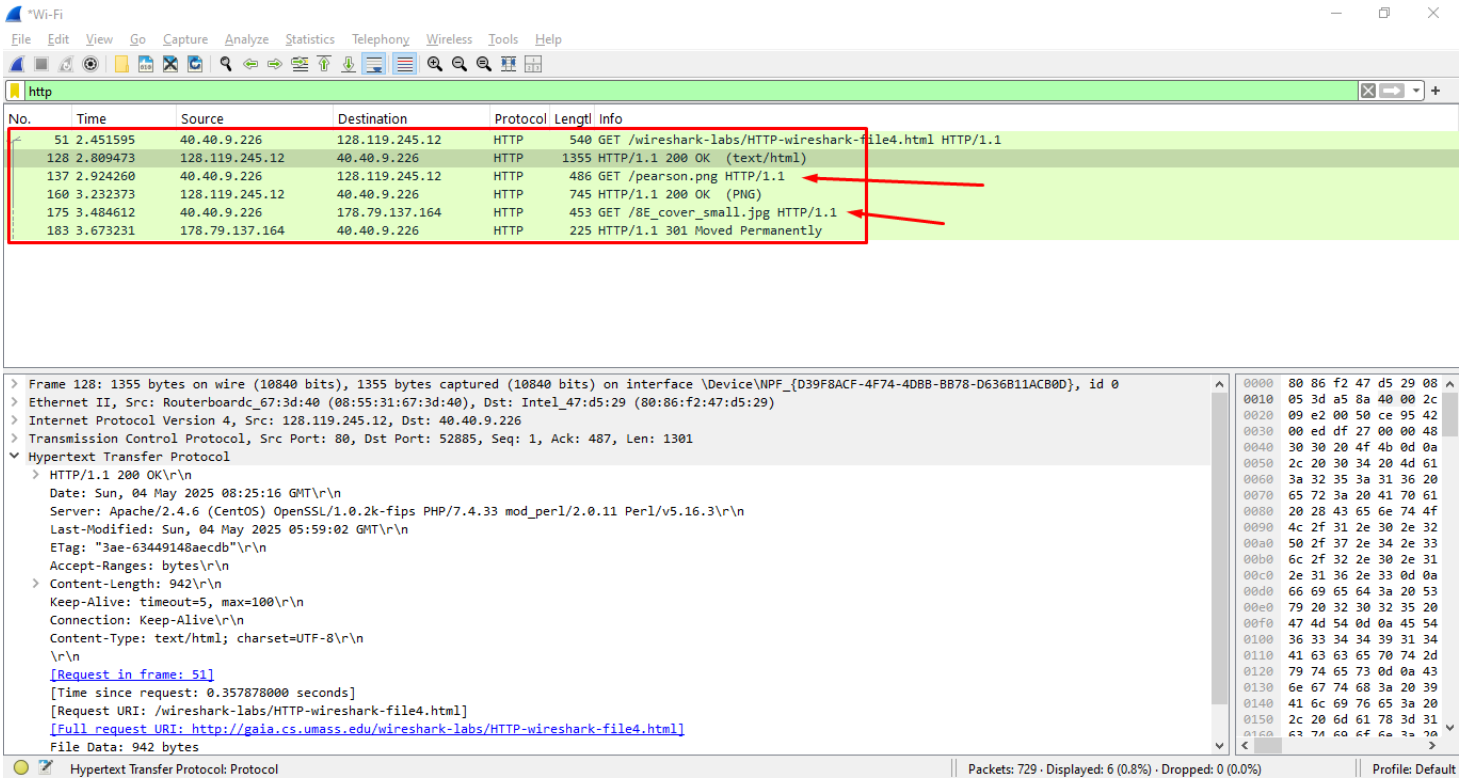
16. **How many HTTP GET request messages did your browser send? To which Internet addresses were these GET requests sent?**

Answer: 3 HTTP GET request & 128.119.245.12 and 178.79.137.164 IP were sent GET request.



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: Download in parallel & browser sent two GET requests to retrieve two images simultaneously.

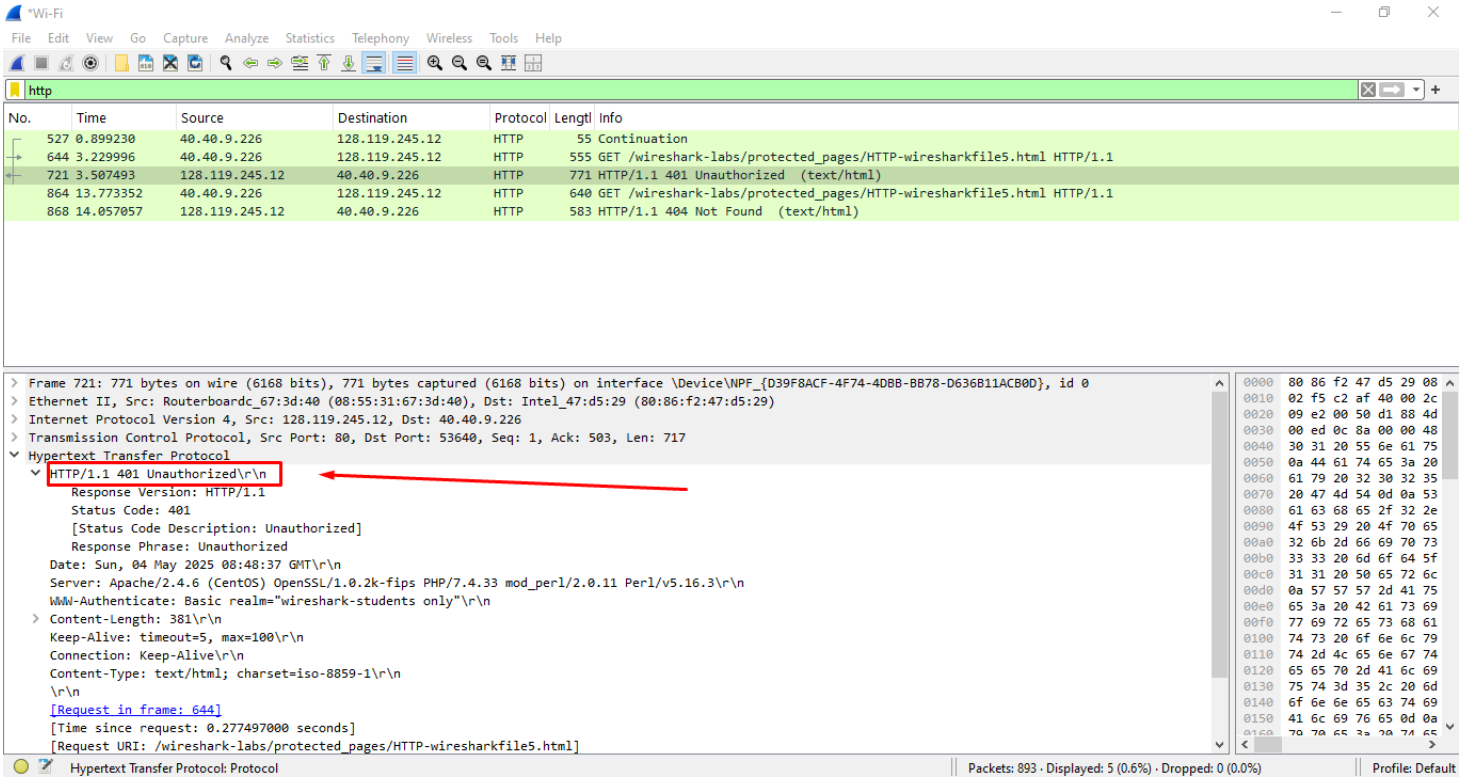


HTTP Authentication

Questions 18 to 19

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

Answer: HTTP/1.1 401 Unauthorized \r\n



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: Authorization: Basic d2lyZXNoYXJrLXN0dWRlbnRzOm5ldHdvcms=\r\n