Austin Hall

1. Is your browser running HTTP version 1.0 or 1.1? What version of HTTP is the server running?
   - Both are running version 1.1. Found under GET /wireshark-labs/HTTP-wireshark-file1.html HTTP/1.1\r\n and the HTTP/1.1 200 OK\r\n tab in request version and response version

2. What languages (if any) does your browser indicate that it can accept to the server?
   - US English is accepted, this is found under the Accept-Language tab

3. What is the IP address of your computer? Of the gaia.cs.umass.edu server
   - My IP address is 10.244.144.238, gaia.cs.umass.edu has the IP address 128.119.245.12 This is found in the source and destination columns of the packet list

4. What is the status code returned from the server to your browser?
   - 200 OK. This is found under the info column of the packet list

5. When was the HTML file that you are retrieving last modified at the server?
   - Mon, 20 Jan 2020 06:59:02 GMT. Found in the response message under Last-Modified

6. How many bytes of content are being returned to your browser?
   - 128 bytes. Found in response message under Content-Length

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.
   - No, I don't see any

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?
   - No, there is 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?
   - Yes, the server explicitly returned the contents of the file, this is found in the Line-Based text data tab in the response message

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?
    - Yes, there is an IF-MODIFIED-SINCE header. The information that follows it is the date and time that I previously requested the file, an IF-NONE-MATCH header that contains the Etag, and a cache-control header.

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.
    - 304 Not Modified is returned. The server did not explicitly return the contents of the files because it isn't necessary to re-download the same file

12. How many HTTP GET request messages were sent by your browser?
    - Only one GET request was sent by my browser
13. How many data-containing TCP segments were needed to carry the single HTTP response?
    - 4 tcp segments were needed. I found this in one of the tabs after clicking the response

14. What is the status code and phrase associated with the response to the HTTP GET request?
    - 200 OK, found in the info column of the packet list
15. Are there any HTTP status lines in the transmitted data associated with a TCP-induced "Continuation"?
    - No

SKIP PART 4

18. What is the server's response (status code and phrase) in response to the initial HTTP GET message from your browser?
    - 401 Unauthorized, found in the info column of the packet list
19. When your browser's sends the HTTP GET message for the second time, what new field is included in the HTTP GET message?
    - The new field is the Authorization field. It gave the login credentials