```
No.
      Time
                      Source
                                            Destination
                                                                   Protocol Length Info
   390 12.081545
                      10.128.151.28
                                            128.119.245.12
                                                                            544
                                                                                   GET /wireshark-labs/protected_pages/HTTP-wireshark-
                                                                   HTTP
file5.html HTTP/1.1
Frame 390: 544 bytes on wire (4352 bits), 544 bytes captured (4352 bits) on interface \Device\NPF_{0A55BDFD-2A6B-40D2-8029-D8967079945C},
id 0
   Section number: 1
   Interface id: 0 (\Device\NPF_{0A55BDFD-2A6B-40D2-8029-D8967079945C})
   Encapsulation type: Ethernet (1)
   Arrival Time: Oct 5, 2024 16:10:36.015610000 SE Asia Standard Time UTC Arrival Time: Oct 5, 2024 09:10:36.015610000 UTC
   Epoch Arrival Time: 1728119436.015610000
   [Time shift for this packet: 0.000000000 seconds]
    [Time delta from previous captured frame: 0.001305000 seconds]
    [Time delta from previous displayed frame: 0.000000000 seconds]
    [Time since reference or first frame: 12.081545000 seconds]
   Frame Number: 390
   Frame Length: 544 bytes (4352 bits)
   Capture Length: 544 bytes (4352 bits)
    [Frame is marked: False]
    [Frame is ignored: False]
    [Protocols in frame: eth:ethertype:ip:tcp:http]
    [Coloring Rule Name: HTTP]
   [Coloring Rule String: http || tcp.port == 80 || http2]
Ethernet II, Src: Intel_ab:40:2d (f4:26:79:ab:40:2d), Dst: HewlettPacka_4d:44:ac (00:26:55:4d:44:ac)
   Destination: HewlettPacka_4d:44:ac (00:26:55:4d:44:ac)
       Address: HewlettPacka_4d:44:ac (00:26:55:4d:44:ac)
       .... .0. .... = LG bit: Globally unique address (factory default)
       .... = IG bit: Individual address (unicast)
   Source: Intel_ab:40:2d (f4:26:79:ab:40:2d)
       Address: Intel_ab:40:2d (f4:26:79:ab:40:2d)
       .....0. .... = LG bit: Globally unique address (factory default)
       .... ...0 .... = IG bit: Individual address (unicast)
   Type: IPv4 (0x0800)
Internet Protocol Version 4, Src: 10.128.151.28, 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: 530
   Identification: 0x121a (4634)
   010. .... = Flags: 0x2, Don't fragment
    ...0 0000 0000 0000 = Fragment Offset: 0
   Time to Live: 128
   Protocol: TCP (6)
   Header Checksum: 0x0000 [validation disabled]
   [Header checksum status: Unverified]
   Source Address: 10.128.151.28
   Destination Address: 128.119.245.12
Transmission Control Protocol, Src Port: 64639, Dst Port: 80, Seq: 1, Ack: 1, Len: 490
Hypertext Transfer Protocol
   GET /wireshark-labs/protected_pages/HTTP-wireshark-file5.html HTTP/1.1\r\n
       [Expert Info (Chat/Sequence): GET /wireshark-labs/protected_pages/HTTP-wireshark-file5.html HTTP/1.1\r\n]
       Request Method: GET
       Request URI: /wireshark-labs/protected_pages/HTTP-wireshark-file5.html
       Request Version: HTTP/1.1
   Host: gaia.cs.umass.edu\r\n
   Connection: keep-alive\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/129.0.0.0 Safari/537.36 Edg/
129.0.0.0\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=0.7\r\n
   Accept-Encoding: gzip, deflate\r\n
   Accept-Language: vi\r\n
   \r\n
    [Full request URI: http://gaia.cs.umass.edu/wireshark-labs/protected_pages/HTTP-wireshark-file5.html]
   [HTTP request 1/1]
   [Response in frame: 463]
                                             Destination
                                                                   Protocol Length Info
   463 13,899889
                      128.119.245.12
                                            10.128.151.28
                                                                  HTTP
                                                                            771
                                                                                  HTTP/1.1 401 Unauthorized (text/html)
Frame 463: 771 bytes on wire (6168 bits), 771 bytes captured (6168 bits) on interface \Device\NPF_{0A55BDFD-2A6B-40D2-8029-D8967079945C},
id 0
   Section number: 1
   Interface id: 0 (\Device\NPF_{0A55BDFD-2A6B-40D2-8029-D8967079945C})
   Encapsulation type: Ethernet (1)
   Arrival Time: Oct 5, 2024 16:10:37.833954000 SE Asia Standard Time
   UTC Arrival Time: Oct 5, 2024 09:10:37.833954000 UTC
   Epoch Arrival Time: 1728119437.833954000
    [Time shift for this packet: 0.000000000 seconds]
    [Time delta from previous captured frame: 0.000020000 seconds]
   [Time delta from previous displayed frame: 1.818344000 seconds]
    [Time since reference or first frame: 13.899889000 seconds]
    Frame Number: 463
   Frame Length: 771 bytes (6168 bits)
   Capture Length: 771 bytes (6168 bits)
    [Frame is marked: False]
    [Frame is ignored: False]
```

```
[Protocols in frame: eth:ethertype:ip:tcp:http:data-text-lines]
   [Coloring Rule Name: HTTP]
   [Coloring Rule String: http || tcp.port == 80 || http2]
Ethernet II, Src: HewlettPacka_4d:44:ac (00:26:55:4d:44:ac), Dst: Intel_ab:40:2d (f4:26:79:ab:40:2d)
   Destination: Intel_ab:40:2d (f4:26:79:ab:40:2d)
       Address: Intel_ab:40:2d (f4:26:79:ab:40:2d)
       .....0. .... = LG bit: Globally unique address (factory default)
       .... = IG bit: Individual address (unicast)
   Source: HewlettPacka_4d:44:ac (00:26:55:4d:44:ac)
       Address: HewlettPacka_4d:44:ac (00:26:55:4d:44:ac)
       .....0. .... = LG bit: Globally unique address (factory default)
       .... = IG bit: Individual address (unicast)
   Type: IPv4 (0x0800)
Internet Protocol Version 4, Src: 128.119.245.12, Dst: 10.128.151.28
   0100 .... = Version: 4
    .... 0101 = Header Length: 20 bytes (5)
   Differentiated Services Field: 0x20 (DSCP: CS1, ECN: Not-ECT)
   Total Length: 757
   Identification: 0xea41 (59969)
   010. .... = Flags: 0x2, Don't fragment
   ...0 0000 0000 0000 = Fragment Offset: 0
   Time to Live: 35
   Protocol: TCP (6)
   Header Checksum: 0x5381 [validation disabled]
   [Header checksum status: Unverified]
   Source Address: 128.119.245.12
   Destination Address: 10.128.151.28
Transmission Control Protocol, Src Port: 80, Dst Port: 64639, Seq: 1, Ack: 491, Len: 717
Hypertext Transfer Protocol
   HTTP/1.1 401 Unauthorized\r\n
       [Expert Info (Chat/Sequence): HTTP/1.1 401 Unauthorized\r\n]
       Response Version: HTTP/1.1
       Status Code: 401
       [Status Code Description: Unauthorized]
       Response Phrase: Unauthorized
   Date: Sat, 05 Oct 2024 09:09:59 GMT\r\n
   Server: Apache/2.4.6 (CentOS) OpenSSL/1.0.2k-fips PHP/7.4.33 mod_perl/2.0.11 Perl/v5.16.3\r\n
   WWW-Authenticate: Basic realm="wireshark-students only"\r\n
   Content-Length: 381\r\n
   Keep-Alive: timeout=5, max=100\r\n
   Connection: Keep-Alive\r\n
   Content-Type: text/html; charset=iso-8859-1\r\n
   [HTTP response 1/1]
   [Time since request: 1.818344000 seconds]
   [Request in frame: 390]
   [Request URI: http://gaia.cs.umass.edu/wireshark-labs/protected_pages/HTTP-wireshark-file5.html]
   File Data: 381 bytes
Line-based text data: text/html (12 lines)
                                                                Protocol Length Info
No.
      Time
                     Source
                                           Destination
  1860 71.120852
                      10.128.151.28
                                           128.119.245.12
                                                                HTTP
                                                                         629
                                                                                GET /wireshark-labs/protected_pages/HTTP-wireshark-
file5.html HTTP/1.1
Frame 1860: 629 bytes on wire (5032 bits), 629 bytes captured (5032 bits) on interface \Device\NPF_{0A55BDFD-2A6B-40D2-8029-D8967079945C},
id 0
   Section number: 1
   Interface id: 0 (\Device\NPF_{0A55BDFD-2A6B-40D2-8029-D8967079945C})
   Encapsulation type: Ethernet (1)
   Arrival Time: Oct 5, 2024 16:11:35.054917000 SE Asia Standard Time
   UTC Arrival Time: Oct 5, 2024 09:11:35.054917000 UTC
   Epoch Arrival Time: 1728119495.054917000
   [Time shift for this packet: 0.000000000 seconds]
   [Time delta from previous captured frame: 0.000185000 seconds]
   [Time delta from previous displayed frame: 57.220963000 seconds]
   [Time since reference or first frame: 71.120852000 seconds]
   Frame Number: 1860
   Frame Length: 629 bytes (5032 bits)
   Capture Length: 629 bytes (5032 bits)
   [Frame is marked: False]
   [Frame is ignored: False]
   [Protocols in frame: eth:ethertype:ip:tcp:http]
   [Coloring Rule Name: HTTP]
   [Coloring Rule String: http || tcp.port == 80 || http2]
Ethernet II, Src: Intel_ab:40:2d (f4:26:79:ab:40:2d), Dst: HewlettPacka_4d:44:ac (00:26:55:4d:44:ac)
   Destination: HewlettPacka_4d:44:ac (00:26:55:4d:44:ac)
       Address: HewlettPacka_4d:44:ac (00:26:55:4d:44:ac)
       .....0. .... = LG bit: Globally unique address (factory default)
       .... = IG bit: Individual address (unicast)
   Source: Intel ab:40:2d (f4:26:79:ab:40:2d)
       Address: Intel_ab:40:2d (f4:26:79:ab:40:2d)
       ......0. .... = LG bit: Globally unique address (factory default)
       .... = IG bit: Individual address (unicast)
   Type: IPv4 (0x0800)
Internet Protocol Version 4, Src: 10.128.151.28, 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: 615
   Identification: 0x1230 (4656)
   010. .... = Flags: 0x2, Don't fragment
    ...0 0000 0000 0000 = Fragment Offset: 0
   Time to Live: 128
   Protocol: TCP (6)
   Header Checksum: 0x0000 [validation disabled]
   [Header checksum status: Unverified]
   Source Address: 10.128.151.28
   Destination Address: 128.119.245.12
Transmission Control Protocol, Src Port: 64653, Dst Port: 80, Seq: 1, Ack: 1, Len: 575
Hypertext Transfer Protocol
   GET /wireshark-labs/protected_pages/HTTP-wireshark-file5.html HTTP/1.1\r\n
       [Expert Info (Chat/Sequence): GET /wireshark-labs/protected_pages/HTTP-wireshark-file5.html HTTP/1.1\r\n]
       Request Method: GET
       Request URI: /wireshark-labs/protected_pages/HTTP-wireshark-file5.html
       Request Version: HTTP/1.1
   Host: gaia.cs.umass.edu\r\n
   Connection: keep-alive\r\n
   Cache-Control: max-age=0\r\n
   Authorization: Basic d2lyZXNoYXJrLXN0dWRlbnRzOm5ldHdvcms=\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/129.0.0.0 Safari/537.36 Edg/
129.0.0.0\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=0.7\r\n
   Accept-Encoding: gzip, deflate\r\n
   Accept-Language: vi\r\n
   \r\n
   [Full request URI: http://gaia.cs.umass.edu/wireshark-labs/protected_pages/HTTP-wireshark-file5.html]
   [HTTP request 1/1]
   [Response in frame: 1884]
       Time
                      Source
                                            Destination
                                                                  Protocol Length Info
  1884 71.448383
                      128.119.245.12
                                            10.128.151.28
                                                                  HTTP
                                                                           544
                                                                                 HTTP/1.1 200 OK (text/html)
Frame 1884: 544 bytes on wire (4352 bits), 544 bytes captured (4352 bits) on interface \Device\NPF_{0A55BDFD-2A6B-40D2-8029-D8967079945C},
id 0
   Section number: 1
   Interface id: 0 (\Device\NPF {0A55BDFD-2A6B-40D2-8029-D8967079945C})
   Encapsulation type: Ethernet (1)
   Arrival Time: Oct 5, 2024 16:11:35.382448000 SE Asia Standard Time
   UTC Arrival Time: Oct 5, 2024 09:11:35.382448000 UTC
   Epoch Arrival Time: 1728119495.382448000
    [Time shift for this packet: 0.000000000 seconds]
    [Time delta from previous captured frame: 0.000727000 seconds]
    [Time delta from previous displayed frame: 0.327531000 seconds]
    [Time since reference or first frame: 71.448383000 seconds]
   Frame Number: 1884
   Frame Length: 544 bytes (4352 bits)
   Capture Length: 544 bytes (4352 bits)
    [Frame is marked: False]
    [Frame is ignored: False]
    [Protocols in frame: eth:ethertype:ip:tcp:http:data-text-lines]
    [Coloring Rule Name: HTTP]
    [Coloring Rule String: http || tcp.port == 80 || http2]
Ethernet II, Src: HewlettPacka_4d:44:ac (00:26:55:4d:44:ac), Dst: Intel_ab:40:2d (f4:26:79:ab:40:2d)
   Destination: Intel_ab:40:2d (f4:26:79:ab:40:2d)
       Address: Intel_ab:40:2d (f4:26:79:ab:40:2d)
       .... .0. .... = LG bit: Globally unique address (factory default)
       .... = IG bit: Individual address (unicast)
   Source: HewlettPacka_4d:44:ac (00:26:55:4d:44:ac)
       Address: HewlettPacka_4d:44:ac (00:26:55:4d:44:ac)
       .....0. .... = LG bit: Globally unique address (factory default)
        .... ...0 .... .... = IG bit: Individual address (unicast)
   Type: IPv4 (0x0800)
Internet Protocol Version 4, Src: 128.119.245.12, Dst: 10.128.151.28
   0100 .... = Version: 4
    .... 0101 = Header Length: 20 bytes (5)
   Differentiated Services Field: 0x20 (DSCP: CS1, ECN: Not-ECT)
   Total Length: 530
   Identification: 0x56a5 (22181)
   010. .... = Flags: 0x2, Don't fragment
    ...0 0000 0000 0000 = Fragment Offset: 0
   Time to Live: 43
   Protocol: TCP (6)
   Header Checksum: 0xe000 [validation disabled]
   [Header checksum status: Unverified]
   Source Address: 128.119.245.12
   Destination Address: 10.128.151.28
Transmission Control Protocol, Src Port: 80, Dst Port: 64653, Seq: 1, Ack: 576, Len: 490
Hypertext Transfer Protocol
   HTTP/1.1 200 OK\r\n
       [Expert Info (Chat/Sequence): HTTP/1.1 200 OK\r\n]
       Response Version: HTTP/1.1
       Status Code: 200
       [Status Code Description: OK]
       Response Phrase: OK
```

No.

Date: Sat, 05 Oct 2024 09:10:56 GMT\r\n

Last-Modified: Sat, 05 Oct 2024 05:59:02 GMT\r\n $\,$

ETag: "84-623b47c0613c0"\r\n
Accept-Ranges: bytes\r\n
Content-Length: 132\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 1/1]

[Time since request: 0.327531000 seconds]

[Request in frame: 1860]

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

File Data: 132 bytes

Line-based text data: text/html (6 lines)