```
##### PART 1 ####
No.
        Time
                                             Destination
                                                                   Protocol Length Info
                       Source
     93 8.125239000
                       155.41.59.11
                                             128.119.245.12
                                                                    HTTP
                                                                             513
     /wireshark-labs/HTTP-wireshark-file1.html HTTP/1.1
Frame 93: 513 bytes on wire (4104 bits), 513 bytes captured (4104 bits) on interface 0
Ethernet II, Src: IntelCor 67:9c:0b (e8:b1:fc:67:9c:0b), Dst: Cisco 9f:f0:66 (00:00:0c:9f:f0:66)
Internet Protocol Version 4, Src: 155.41.59.11 (155.41.59.11), Dst: 128.119.245.12
(128.119.245.12)
Transmission Control Protocol, Src Port: 51194 (51194), Dst Port: 80 (80), Seq: 1, Ack: 1, Len:
Hypertext Transfer Protocol
    GET /wireshark-labs/HTTP-wireshark-file1.html HTTP/1.1\r\n
    Host: gaia.cs.umass.edu\r\n
    Connection: keep-alive\r\n
    Pragma: no-cache\r\n
    Cache-Control: no-cache\r\n
    Accept: text/html,application/xhtml+xml,application/xml;q=0.9,image/webp,*/*;q=0.8\r\n
    Upgrade-Insecure-Requests: 1\r\n
    User-Agent: Mozilla/5.0 (Windows NT 10.0; WOW64) AppleWebKit/537.36 (KHTML, like Gecko)
    Chrome/45.0.2454.101 Safari/537.36\r\n
    Accept-Encoding: gzip, deflate, sdch\r\n
    Accept-Language: en-US, en; q=0.8\r\n
    \r\n
    [Full request URI: http://gaia.cs.umass.edu/wireshark-labs/HTTP-wireshark-file1.html]
    [HTTP request 1/1]
    [Response in frame: 95]
No.
        Time
                       Source
                                             Destination
                                                                   Protocol Length Info
     95 8.132700000
                       128.119.245.12
                                                                             542
                                             155.41.59.11
                                                                    HTTP
                                                                                    HTTP/1.1 200
     OK (text/html)
Frame 95: 542 bytes on wire (4336 bits), 542 bytes captured (4336 bits) on interface 0
Ethernet II, Src: Cisco 30:a1:c0 (fc:fb:fb:30:a1:c0), Dst: IntelCor 67:9c:0b (e8:b1:fc:67:9c:0b)
Internet Protocol Version 4, Src: 128.119.245.12 (128.119.245.12), Dst: 155.41.59.11
(155.41.59.11)
Transmission Control Protocol, Src Port: 80 (80), Dst Port: 51194 (51194), Seq: 1, Ack: 460,
Len: 488
Hypertext Transfer Protocol
    HTTP/1.1 200 OK\r\n
    Date: Tue, 13 Oct 2015 20:21:52 GMT\r\n
    Server: Apache/2.4.6 (CentOS) OpenSSL/1.0.1e-fips PHP/5.4.16 mod perl/2.0.9dev
    Perl/v5.16.3\r\n
    Last-Modified: Tue, 13 Oct 2015 05:59:01 GMT\r\n
    ETag: "80-521f6247d0cb4"\r\n
    Accept-Ranges: bytes\r\n
    Content-Length: 128\r\n
    Keep-Alive: timeout=5, max=100\r\n
    Connection: Keep-Alive\r\n
    Content-Type: text/html; charset=UTF-8\r\n
    [HTTP response 1/1]
    [Time since request: 0.007461000 seconds]
    [Request in frame: 93]
Line-based text data: text/html
#### PART 2 ####
      1 0.000000
                                                                          518
                    192.168.2.9
                                          128.119.245.12
                                                                HTTP
                                                                                 GET
      /wireshark-labs/HTTP-wireshark-file2.html HTTP/1.1
Frame 1: 518 bytes on wire (4144 bits), 518 bytes captured (4144 bits)
Ethernet II, Src: HonHaiPr c1:6b:ad (10:08:b1:c1:6b:ad), Dst: BelkinIn 98:a4:90
(ec:1a:59:98:a4:90)
Internet Protocol Version 4, Src: 192.168.2.9 (192.168.2.9), Dst: 128.119.245.12 (128.119.245.12)
Transmission Control Protocol, Src Port: 45012 (45012), Dst Port: 80 (80), Seq: 1, Ack: 1, Len:
```

```
452
Hypertext Transfer Protocol
   GET /wireshark-labs/HTTP-wireshark-file2.html HTTP/1.1\r\n
   Host: gaia.cs.umass.edu\r\n
   Connection: keep-alive\r\n
   Pragma: no-cache\r\n
   Cache-Control: no-cache\r\n
   Accept: text/html,application/xhtml+xml,application/xml;q=0.9,image/webp,*/*;q=0.8\r\n
   User-Agent: Mozilla/5.0 (X11; Linux x86 64) AppleWebKit/537.36 (KHTML, like Gecko) Ubuntu
   Chromium/37.0.2062.120 Chrome/37.0.2062.120 Safari/537.36\r\n
   Accept-Encoding: gzip, deflate, sdch\r\n
   Accept-Language: en-US, en; q=0.8\r\n
    \r\n
    [Full request URI: http://gaia.cs.umass.edu/wireshark-labs/HTTP-wireshark-file2.html]
    [HTTP request 1/2]
    [Response in frame: 2]
    [Next request in frame: 3]
      2 0.016372
                   128.119.245.12
                                          192.168.2.9
                                                                 HTTP
                                                                          798
                                                                                 HTTP/1.1 200
     OK (text/html)
Frame 2: 798 bytes on wire (6384 bits), 798 bytes captured (6384 bits)
Ethernet II, Src: BelkinIn 98:a4:90 (ec:1a:59:98:a4:90), Dst: HonHaiPr c1:6b:ad
(10:08:b1:c1:6b:ad)
Internet Protocol Version 4, Src: 128.119.245.12 (128.119.245.12), Dst: 192.168.2.9 (192.168.2.9)
Transmission Control Protocol, Src Port: 80 (80), Dst Port: 45012 (45012), Seq: 1, Ack: 453,
Len: 732
Hypertext Transfer Protocol
   HTTP/1.1 200 OK\r\n
   Date: Tue, 13 Oct 2015 16:17:17 GMT\r\n
   Server: Apache/2.4.6 (CentOS) OpenSSL/1.0.1e-fips PHP/5.4.16 mod perl/2.0.9dev
   Perl/v5.16.3\r\n
   Last-Modified: Tue, 13 Oct 2015 05:59:01 GMT\r\n
   ETag: "173-521f6247d04e4"\r\n
   Accept-Ranges: bytes\r\n
   Content-Length: 371\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 1/2]
    [Time since request: 0.016372000 seconds]
    [Request in frame: 1]
    [Next request in frame: 3]
    [Next response in frame: 4]
Line-based text data: text/html
      3 3.001949
                    192.168.2.9
                                          128.119.245.12
                                                                HTTP
                                                                          587
                                                                                 GET
      /wireshark-labs/HTTP-wireshark-file2.html HTTP/1.1
Frame 3: 587 bytes on wire (4696 bits), 587 bytes captured (4696 bits)
Ethernet II, Src: HonHaiPr c1:6b:ad (10:08:b1:c1:6b:ad), Dst: BelkinIn 98:a4:90
(ec:1a:59:98:a4:90)
Internet Protocol Version 4, Src: 192.168.2.9 (192.168.2.9), Dst: 128.119.245.12 (128.119.245.12)
Transmission Control Protocol, Src Port: 45012 (45012), Dst Port: 80 (80), Seq: 453, Ack: 733,
Len: 521
Hypertext Transfer Protocol
   GET /wireshark-labs/HTTP-wireshark-file2.html HTTP/1.1\r\n
   Host: gaia.cs.umass.edu\r\n
   Connection: keep-alive\r\n
   Cache-Control: max-age=0\r\n
   Accept: text/html,application/xhtml+xml,application/xml;q=0.9,image/webp,*/*;q=0.8\r\n
   User-Agent: Mozilla/5.0 (X11; Linux x86 64) AppleWebKit/537.36 (KHTML, like Gecko) Ubuntu
   Chromium/37.0.2062.120 Chrome/37.0.2062.120 Safari/537.36\r\n
   Accept-Encoding: gzip, deflate, sdch\r\n
   Accept-Language: en-US, en; q=0.8\r\n
```

```
C:\Users\Erik\Documents\school\CS455-Homework\Lab02\Wireshark Outputs.txt
                                                                                Tuesday, October 13, 2015 4:24 PM
    If-None-Match: "173-521f6247d04e4"\r\n
    If-Modified-Since: Tue, 13 Oct 2015 05:59:01 GMT\r\n
    \r\n
    [Full request URI: http://gaia.cs.umass.edu/wireshark-labs/HTTP-wireshark-file2.html]
    [HTTP request 2/2]
    [Prev request in frame: 1]
    [Response in frame: 4]
      4 3.014225
                    128.119.245.12
                                         192.168.2.9
                                                                 HTTP
                                                                           307
                                                                                HTTP/1.1 304
      Not Modified
Frame 4: 307 bytes on wire (2456 bits), 307 bytes captured (2456 bits)
Ethernet II, Src: BelkinIn 98:a4:90 (ec:1a:59:98:a4:90), Dst: HonHaiPr c1:6b:ad
(10:08:b1:c1:6b:ad)
Internet Protocol Version 4, Src: 128.119.245.12 (128.119.245.12), Dst: 192.168.2.9 (192.168.2.9)
Transmission Control Protocol, Src Port: 80 (80), Dst Port: 45012 (45012), Seq: 733, Ack: 974,
Len: 241
Hypertext Transfer Protocol
    HTTP/1.1 304 Not Modified\r\n
    Date: Tue, 13 Oct 2015 16:17:20 GMT\r\n
    Server: Apache/2.4.6 (CentOS) OpenSSL/1.0.1e-fips PHP/5.4.16 mod perl/2.0.9dev
    Perl/v5.16.3\r\n
    Connection: Keep-Alive\r\n
    Keep-Alive: timeout=5, max=99\r\n
    ETag: "173-521f6247d04e4"\r\n
    \r\n
    [HTTP response 2/2]
    [Time since request: 0.012276000 seconds]
    [Prev request in frame: 1]
    [Prev response in frame: 2]
    [Request in frame: 3]
#### Part 3 ####
     65 3.502995000
                       155.41.59.11
                                              128.119.245.12
                                                                    HTTP
                                                                              513
                                                                                     GET
     /wireshark-labs/HTTP-wireshark-file3.html HTTP/1.1
Frame 65: 513 bytes on wire (4104 bits), 513 bytes captured (4104 bits) on interface 0
Ethernet II, Src: IntelCor 67:9c:0b (e8:b1:fc:67:9c:0b), Dst: Cisco 9f:f0:66 (00:00:0c:9f:f0:66)
Internet Protocol Version 4, Src: 155.41.59.11 (155.41.59.11), Dst: 128.119.245.12
(128.119.245.12)
Transmission Control Protocol, Src Port: 59150 (59150), Dst Port: 80 (80), Seq: 1, Ack: 1, Len:
Hypertext Transfer Protocol
    GET /wireshark-labs/HTTP-wireshark-file3.html HTTP/1.1\r\n
    Host: gaia.cs.umass.edu\r\n
    Connection: keep-alive\r\n
    Pragma: no-cache\r\n
    Cache-Control: no-cache\r\n
    Accept: text/html,application/xhtml+xml,application/xml;q=0.9,image/webp,*/*;q=0.8\r\n
    Upgrade-Insecure-Requests: 1\r\n
    User-Agent: Mozilla/5.0 (Windows NT 10.0; WOW64) AppleWebKit/537.36 (KHTML, like Gecko)
    Chrome/45.0.2454.101 Safari/537.36\r\n
    Accept-Encoding: gzip, deflate, sdch\r\n
    Accept-Language: en-US, en; q=0.8\r\n
    \r\n
    [Full request URI: http://gaia.cs.umass.edu/wireshark-labs/HTTP-wireshark-file3.html]
    [HTTP request 1/1]
    [Response in frame: 70]
     70 3.508161000
                       128.119.245.12
                                              155.41.59.11
                                                                    HTTP
                                                                              537
                                                                                     HTTP/1.1 200
     OK (text/html)
```

Frame 70: 537 bytes on wire (4296 bits), 537 bytes captured (4296 bits) on interface 0 Ethernet II, Src: Cisco 30:a1:c0 (fc:fb:fb:30:a1:c0), Dst: IntelCor 67:9c:0b (e8:b1:fc:67:9c:0b) Internet Protocol Version 4, Src: 128.119.245.12 (128.119.245.12), Dst: 155.41.59.11

```
(155.41.59.11)
Transmission Control Protocol, Src Port: 80 (80), Dst Port: 59150 (59150), Seq: 4381, Ack: 460,
Len: 483
[4 Reassembled TCP Segments (4863 bytes): #67(1460), #68(1460), #69(1460), #70(483)]
    [Frame: 67, payload: 0-1459 (1460 bytes)]
    [Frame: 68, payload: 1460-2919 (1460 bytes)]
    [Frame: 69, payload: 2920-4379 (1460 bytes)]
    [Frame: 70, payload: 4380-4862 (483 bytes)]
    [Segment count: 4]
    [Reassembled TCP length: 4863]
    [Reassembled TCP Data: 485454502f312e3120323030204f4b0d0a446174653a2054...]
Hypertext Transfer Protocol
   HTTP/1.1 200 OK\r\n
   Date: Tue, 13 Oct 2015 20:09:47 GMT\r\n
   Server: Apache/2.4.6 (CentOS) OpenSSL/1.0.1e-fips PHP/5.4.16 mod perl/2.0.9dev
   Perl/v5.16.3\r\n
   Last-Modified: Tue, 13 Oct 2015 05:59:01 GMT\r\n
   ETag: "1194-521f6247cca4c"\r\n
   Accept-Ranges: bytes\r\n
   Content-Length: 4500\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: 0.005166000 seconds]
    [Request in frame: 65]
Line-based text data: text/html
#### Part 4 ####
     1 0.000000
                   192.168.2.9
                                          128.119.245.12
                                                                HTTP
                                                                          518
                                                                                 GET
      /wireshark-labs/HTTP-wireshark-file4.html HTTP/1.1
Frame 1: 518 bytes on wire (4144 bits), 518 bytes captured (4144 bits)
Ethernet II, Src: HonHaiPr c1:6b:ad (10:08:b1:c1:6b:ad), Dst: BelkinIn 98:a4:90
(ec:1a:59:98:a4:90)
Internet Protocol Version 4, Src: 192.168.2.9 (192.168.2.9), Dst: 128.119.245.12 (128.119.245.12)
Transmission Control Protocol, Src Port: 48402 (48402), Dst Port: 80 (80), Seq: 1, Ack: 1, Len:
452
Hypertext Transfer Protocol
   GET /wireshark-labs/HTTP-wireshark-file4.html HTTP/1.1\r\n
   Host: gaia.cs.umass.edu\r\n
   Connection: keep-alive\r\n
   Pragma: no-cache\r\n
   Cache-Control: no-cache\r\n
   Accept: text/html,application/xhtml+xml,application/xml;q=0.9,image/webp,*/*;q=0.8\r\n
   User-Agent: Mozilla/5.0 (X11; Linux x86_64) AppleWebKit/537.36 (KHTML, like Gecko) Ubuntu
   Chromium/37.0.2062.120 Chrome/37.0.2062.120 Safari/537.36\r\n
   Accept-Encoding: gzip, deflate, sdch\r\n
   Accept-Language: en-US, en; q=0.8\r\n
    [Full request URI: http://gaia.cs.umass.edu/wireshark-labs/HTTP-wireshark-file4.html]
    [HTTP request 1/1]
    [Response in frame: 2]
                   128.119.245.12
      2 0.018701
                                         192.168.2.9
                                                                HTTP
                                                                          1168
                                                                                HTTP/1.1 200
     OK (text/html)
Frame 2: 1168 bytes on wire (9344 bits), 1168 bytes captured (9344 bits)
Ethernet II, Src: BelkinIn 98:a4:90 (ec:1a:59:98:a4:90), Dst: HonHaiPr c1:6b:ad
(10:08:b1:c1:6b:ad)
Internet Protocol Version 4, Src: 128.119.245.12 (128.119.245.12), Dst: 192.168.2.9 (192.168.2.9)
Transmission Control Protocol, Src Port: 80 (80), Dst Port: 48402 (48402), Seq: 1, Ack: 453,
Len: 1102
Hypertext Transfer Protocol
   HTTP/1.1 200 OK\r\n
```

```
Date: Tue, 13 Oct 2015 15:41:41 GMT\r\n
    Server: Apache/2.4.6 (CentOS) OpenSSL/1.0.1e-fips PHP/5.4.16 mod perl/2.0.9dev
    Perl/v5.16.3\r\n
    Last-Modified: Tue, 13 Oct 2015 05:59:01 GMT\r\n
    ETag: "2e5-521f6247cf92c"\r\n
    Accept-Ranges: bytes\r\n
    Content-Length: 741\r\n
    Keep-Alive: timeout=5, max=100\r\n
    Connection: Keep-Alive\r
    Content-Type: text/html; charset=UTF-8\r\n
    \r\rangle
    [HTTP response 1/1]
    [Time since request: 0.018701000 seconds]
    [Request in frame: 1]
Line-based text data: text/html
      3 0.271070
                    192.168.2.9
                                          128.119.240.90
                                                                 HTTP
                                                                          525
                                                                                 GET
      /~kurose/cover 5th ed.jpg HTTP/1.1
Frame 3: 525 bytes on wire (4200 bits), 525 bytes captured (4200 bits)
Ethernet II, Src: HonHaiPr c1:6b:ad (10:08:b1:c1:6b:ad), Dst: BelkinIn 98:a4:90
(ec:1a:59:98:a4:90)
Internet Protocol Version 4, Src: 192.168.2.9 (192.168.2.9), Dst: 128.119.240.90 (128.119.240.90)
Transmission Control Protocol, Src Port: 42886 (42886), Dst Port: 80 (80), Seq: 1, Ack: 1, Len:
Hypertext Transfer Protocol
    GET /~kurose/cover 5th ed.jpg HTTP/1.1\r\n
    Host: manic.cs.umass.edu\r\n
    Connection: keep-alive\r\n
    Pragma: no-cache\r\n
    Cache-Control: no-cache\r\n
    Accept: image/webp, */*; q=0.8\r\n
    User-Agent: Mozilla/5.0 (X11; Linux x86 64) AppleWebKit/537.36 (KHTML, like Gecko) Ubuntu
    Chromium/37.0.2062.120 Chrome/37.0.2062.120 Safari/537.36\r\n
    Referer: http://gaia.cs.umass.edu/wireshark-labs/HTTP-wireshark-file4.html\r\n
    Accept-Encoding: gzip,deflate,sdch\r\n
    Accept-Language: en-US, en; q=0.8\r\n
    \r\n
    [Full request URI: http://manic.cs.umass.edu/~kurose/cover 5th ed.jpg]
    [HTTP request 1/1]
    [Response in frame: 4]
                                                                                HTTP/1.1 302
      4 0.288352
                   128.119.240.90
                                         192.168.2.9
                                                                          522
                                                                 HTTP
      Found (text/html)
Frame 4: 522 bytes on wire (4176 bits), 522 bytes captured (4176 bits)
Ethernet II, Src: BelkinIn 98:a4:90 (ec:1a:59:98:a4:90), Dst: HonHaiPr c1:6b:ad
(10:08:b1:c1:6b:ad)
Internet Protocol Version 4, Src: 128.119.240.90 (128.119.240.90), Dst: 192.168.2.9 (192.168.2.9)
Transmission Control Protocol, Src Port: 80 (80), Dst Port: 42886 (42886), Seq: 1, Ack: 460,
Hypertext Transfer Protocol
    HTTP/1.1 302 Found \r\n
    Date: Tue, 13 Oct 2015 15:41:41 GMT\r\n
    Server: Apache\r\n
    Location: http://caite.cs.umass.edu/~kurose/cover 5th ed.jpg\r\n
    Content-Length: 234\r\n
    Connection: close\r\n
    Content-Type: text/html; charset=iso-8859-1\r\n
    \r\rangle
    [HTTP response 1/1]
    [Time since request: 0.017282000 seconds]
    [Request in frame: 3]
Line-based text data: text/html
                   192.168.2.9
      5 0.295224
                                          165.193.140.14
                                                                 HTTP
                                                                          566
                                                                                 GET
```

```
/assets/hip/us/hip us pearsonhighered/images/pearson logo.gif HTTP/1.1
Frame 5: 566 bytes on wire (4528 bits), 566 bytes captured (4528 bits)
Ethernet II, Src: HonHaiPr c1:6b:ad (10:08:b1:c1:6b:ad), Dst: BelkinIn 98:a4:90
(ec:1a:59:98:a4:90)
Internet Protocol Version 4, Src: 192.168.2.9 (192.168.2.9), Dst: 165.193.140.14 (165.193.140.14)
Transmission Control Protocol, Src Port: 56764 (56764), Dst Port: 80 (80), Seq: 1, Ack: 1, Len:
Hypertext Transfer Protocol
    GET /assets/hip/us/hip us pearsonhighered/images/pearson logo.gif HTTP/1.1\r\n
    Host: www.pearsonhighered.com\r\n
    Connection: keep-alive\r\n
    Pragma: no-cache\r\n
    Cache-Control: no-cache\r\n
    Accept: image/webp, */*; q=0.8\r\n
    User-Agent: Mozilla/5.0 (X11; Linux x86 64) AppleWebKit/537.36 (KHTML, like Gecko) Ubuntu
    Chromium/37.0.2062.120 Chrome/37.0.2062.120 Safari/537.36\r\n
    Referer: http://gaia.cs.umass.edu/wireshark-labs/HTTP-wireshark-file4.html\r\n
    Accept-Encoding: gzip, deflate, sdch\r\n
    Accept-Language: en-US, en; q=0.8\r\n
    \r\n
    [Full request URI:
    http://www.pearsonhighered.com/assets/hip/us/hip us pearsonhighered/images/pearson logo.gifl
    [HTTP request 1/1]
      6 0.352544
                   192.168.2.9
                                          128.119.240.90
                                                                HTTP
                                                                          525
                                                                                 GET
      /~kurose/cover 5th ed.jpg HTTP/1.1
Frame 6: 525 bytes on wire (4200 bits), 525 bytes captured (4200 bits)
Ethernet II, Src: HonHaiPr c1:6b:ad (10:08:b1:c1:6b:ad), Dst: BelkinIn 98:a4:90
(ec:1a:59:98:a4:90)
Internet Protocol Version 4, Src: 192.168.2.9 (192.168.2.9), Dst: 128.119.240.90 (128.119.240.90)
Transmission Control Protocol, Src Port: 42888 (42888), Dst Port: 80 (80), Seq: 1, Ack: 1, Len:
Hypertext Transfer Protocol
    GET /~kurose/cover 5th ed.jpg HTTP/1.1\r\n
    Host: caite.cs.umass.edu\r\n
    Connection: keep-alive\r\n
    Pragma: no-cache\r\n
    Cache-Control: no-cache\r\n
    Accept: image/webp, */*; q=0.8\r\n
    User-Agent: Mozilla/5.0 (X11; Linux x86 64) AppleWebKit/537.36 (KHTML, like Gecko) Ubuntu
    Chromium/37.0.2062.120 Chrome/37.0.2062.120 Safari/537.36\r\n
    Referer: http://gaia.cs.umass.edu/wireshark-labs/HTTP-wireshark-file4.html\r\n
    Accept-Encoding: gzip, deflate, sdch\r\n
    Accept-Language: en-US, en; q=0.8\r\n
    \r\n
    [Full request URI: http://caite.cs.umass.edu/~kurose/cover 5th ed.jpg]
    [HTTP request 1/1]
#### Part 5 ####
                    192.168.2.9
      1 0.000000
                                          128.119.245.12
                                                                          534
                                                                                 GET
      /wireshark-labs/protected pages/HTTP-wireshark-file5.html HTTP/1.1
Frame 1: 534 bytes on wire (4272 bits), 534 bytes captured (4272 bits)
Ethernet II, Src: HonHaiPr c1:6b:ad (10:08:b1:c1:6b:ad), Dst: BelkinIn 98:a4:90
(ec:1a:59:98:a4:90)
Internet Protocol Version 4, Src: 192.168.2.9 (192.168.2.9), Dst: 128.119.245.12 (128.119.245.12)
Transmission Control Protocol, Src Port: 40897 (40897), Dst Port: 80 (80), Seq: 1, Ack: 1, Len:
468
Hypertext Transfer Protocol
    GET /wireshark-labs/protected pages/HTTP-wireshark-file5.html HTTP/1.1\r\n
    Host: gaia.cs.umass.edu\r\n
    Connection: keep-alive\r\n
    Pragma: no-cache\r\n
```

```
Cache-Control: no-cache\r\n
   Accept: text/html,application/xhtml+xml,application/xml;q=0.9,image/webp,*/*;q=0.8\r\n
   User-Agent: Mozilla/5.0 (X11; Linux x86 64) AppleWebKit/537.36 (KHTML, like Gecko) Ubuntu
   Chromium/37.0.2062.120 Chrome/37.0.2062.120 Safari/537.36\r\n
   Accept-Encoding: gzip, deflate, sdch\r\n
   Accept-Language: en-US, en; q=0.8\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: 2]
      2 0.014401
                    128.119.245.12
                                          192.168.2.9
                                                                HTTP
                                                                          785
                                                                                 HTTP/1.1 401
     Unauthorized (text/html)
Frame 2: 785 bytes on wire (6280 bits), 785 bytes captured (6280 bits)
Ethernet II, Src: BelkinIn 98:a4:90 (ec:1a:59:98:a4:90), Dst: HonHaiPr c1:6b:ad
(10:08:b1:c1:6b:ad)
Internet Protocol Version 4, Src: 128.119.245.12 (128.119.245.12), Dst: 192.168.2.9 (192.168.2.9)
Transmission Control Protocol, Src Port: 80 (80), Dst Port: 40897 (40897), Seq: 1, Ack: 469,
Len: 719
Hypertext Transfer Protocol
   HTTP/1.1 401 Unauthorized\r\n
   Date: Tue, 13 Oct 2015 16:11:23 GMT\r\n
   Server: Apache/2.4.6 (CentOS) OpenSSL/1.0.1e-fips PHP/5.4.16 mod perl/2.0.9dev
   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
   \r\n
    [HTTP response 1/1]
    [Time since request: 0.014401000 seconds]
    [Request in frame: 1]
Line-based text data: text/html
      3 34.956193
                   192.168.2.9
                                          128.119.245.12
                                                                HTTP
                                                                          593
                                                                                 GET
      /wireshark-labs/protected pages/HTTP-wireshark-file5.html HTTP/1.1
Frame 3: 593 bytes on wire (4744 bits), 593 bytes captured (4744 bits)
Ethernet II, Src: HonHaiPr c1:6b:ad (10:08:b1:c1:6b:ad), Dst: BelkinIn 98:a4:90
(ec:1a:59:98:a4:90)
Internet Protocol Version 4, Src: 192.168.2.9 (192.168.2.9), Dst: 128.119.245.12 (128.119.245.12)
Transmission Control Protocol, Src Port: 41301 (41301), Dst Port: 80 (80), Seq: 1, Ack: 1, Len:
527
Hypertext Transfer Protocol
   GET /wireshark-labs/protected pages/HTTP-wireshark-file5.html HTTP/1.1\r\n
   Host: gaia.cs.umass.edu\r\n
   Connection: keep-alive\r\n
   Pragma: no-cache\r\n
   Cache-Control: no-cache\r\n
   Authorization: Basic d2lyZXNoYXJrLXN0dWRlbnRzOm5ldHdvcms=\r\n
   Accept: text/html,application/xhtml+xml,application/xml;q=0.9,image/webp,*/*;q=0.8\r\n
   User-Agent: Mozilla/5.0 (X11; Linux x86 64) AppleWebKit/537.36 (KHTML, like Gecko) Ubuntu
   Chromium/37.0.2062.120 Chrome/37.0.2062.120 Safari/537.36\r\n
   Accept-Encoding: gzip, deflate, sdch\r\n
   Accept-Language: en-US, en; q=0.8\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: 4]
      4 34.979177 128.119.245.12
                                         192.168.2.9
                                                                          558
                                                                                 HTTP/1.1 200
                                                                HTTP
     OK (text/html)
```

```
Frame 4: 558 bytes on wire (4464 bits), 558 bytes captured (4464 bits)
Ethernet II, Src: BelkinIn 98:a4:90 (ec:1a:59:98:a4:90), Dst: HonHaiPr c1:6b:ad
(10:08:b1:c1:6b:ad)
Internet Protocol Version 4, Src: 128.119.245.12 (128.119.245.12), Dst: 192.168.2.9 (192.168.2.9)
Transmission Control Protocol, Src Port: 80 (80), Dst Port: 41301 (41301), Seq: 1, Ack: 528,
Hypertext Transfer Protocol
    HTTP/1.1 200 OK\r\n
    Date: Tue, 13 Oct 2015 16:11:58 GMT\r\n
    Server: Apache/2.4.6 (CentOS) OpenSSL/1.0.1e-fips PHP/5.4.16 mod perl/2.0.9dev
    Perl/v5.16.3\r\n
    Last-Modified: Tue, 13 Oct 2015 05:59:01 GMT\r\n
    ETag: "84-521f6247d1c55"\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\rangle
    [HTTP response 1/1]
    [Time since request: 0.022984000 seconds]
    [Request in frame: 3]
Line-based text data: text/html
```