```
Destination
                                                                         Protocol Length Info
                         Source
      2 0.203717800
                         192.168.0.107
                                                128.119.245.12
                                                                         TCP
                                                                                  74
                                                                                          60286 \rightarrow 80 [SYN] Seq=0 Win=64240 Len=0
MSS=1460 SACK_PERM=1 TSval=1756327287 TSecr=0 WS=128
Frame 2: 74 bytes on wire (592 bits), 74 bytes captured (592 bits) on interface wlp1s0, id 0
Ethernet II, Src: IntelCor_0d:b0:06 (f8:63:3f:0d:b0:06), Dst: EFMNetwo_49:70:b4 (88:36:6c:49:70:b4)
Internet Protocol Version 4, Src: 192.168.0.107, Dst: 128.119.245.12
Transmission Control Protocol, Src Port: 60286, Dst Port: 80, Seq: 0, Len: 0
    Source Port: 60286
    Destination Port: 80
    [Stream index: 1]
    [TCP Segment Len: 0]
    Sequence number: 0 (relative sequence number)
Sequence number (raw): 39762632
[Next sequence number: 1 (relative sequence number)
                                  (relative sequence number)]
    Acknowledgment number: 0
    Acknowledgment number (raw): 0
    1010 .... = Header Length: 40 bytes (10)
    Flags: 0x002 (SYN)
    Window size value: 64240
    [Calculated window size: 64240]
    Checksum: 0x975b [unverified]
    [Checksum Status: Unverified]
    Urgent pointer: 0
    Options: (20 bytes), Maximum segment size, SACK permitted, Timestamps, No-Operation (NOP), Window scale
    [Timestamps]
         [Time since first frame in this TCP stream: 0.000000000 seconds]
         [Time since previous frame in this TCP stream: 0.0000000000 seconds]
No.
                                                                         Protocol Length Info
         Time
                         Source
                                                Destination
                                                                                          80 \rightarrow 60286 [SYN, ACK] Seq=0 Ack=1 Win=28960
      5 0.445042616
                         128.119.245.12
                                                 192.168.0.107
                                                                         TCP
                                                                                  74
Len=0 MSS=1460 SACK_PERM=1 TSval=1741273315 TSecr=1756327287 WS=128
Frame 5: 74 bytes on wire (592 bits), 74 bytes captured (592 bits) on interface wlp1s0, id 0
Ethernet II, Src: EFMNetwo_49:70:b4 (88:36:6c:49:70:b4), Dst: IntelCor_0d:b0:06 (f8:63:3f:0d:b0:06)
Internet Protocol Version 4, Src: 128.119.245.12, Dst: 192.168.0.1(7
Transmission Control Protocol, Src Port: 80, Dst Port: 60286, Seq: 0, Ack: 1, Len: 0
    Source Port: 80
    Destination Port: 60286
    [Stream index: 1]
    [TCP Segment Len: 0]
    Sequence number: 0 (relative sequence number)
Sequence number (raw): 2050667101
                                                                         +1
    [Next sequence number: 1
                                  (relative sequence number)]
    Acknowledgment number: 1 (relative ack number)
Acknowledgment number (raw): 39762633
1010 .... = Header Length: 40 bytes (10)
    Flags: 0x012 (SYN, ACK)
    Window size value: 28960
    [Calculated window size: 28960]
    Checksum: 0xd3d5 [unverified]
    [Checksum Status: Unverified]
    Urgent pointer: 0
    Options: (20 bytes), Maximum segment size, SACK permitted, Timestamps, No-Operation (NOP), Window scale
    [SEQ/ACK analysis]
    [Timestamps]
         [Time since first frame in this TCP stream: 0.241324816 seconds]
         [Time since previous frame in this TCP stream: 0.241324816 seconds]
                         Source
                                                Destination
                                                                         Protocol Length Info
      6 0.445100221
                         192.168.0.107
                                                128.119.245.12
                                                                         TCP
                                                                                  66
                                                                                          60286 \rightarrow 80 [ACK] Seq=1 Ack=1 Win=64256 Len=0
TSval=1756327528 TSecr=1741273315
Frame 6: 66 bytes on wire (528 bits), 66 bytes captured (528 bits) on interface wlp1s0, id 0
Ethernet II, Src: IntelCor_0d:b0:06 (f8:63:3f:0d:b0:06), Dst: EFMNetwo_49:70:b4 (88:36:6c:49:70:b4)
Internet Protocol Version 4, Src: 192.168.0.107, Dst: 128.119.245.12
Transmission Control Protocol, Src Port: 60286, Dst Port: 80, Seq: 1, Ack: 1, Len: 0
    Source Port: 60286
    Destination Port: 80
    [Stream index: 1]
    [TCP Segment Len: 0]
    Sequence number: 1
                            (relative sequence number)
    Sequence number (raw): 39762633
                                  (relative sequence number)]
    [Next sequence number: 1
    Acknowledgment number: 1
                                   (relative ack number)
    Acknowledgment number (raw): 2050667102
    1000 .... = Header Length: 32 bytes (8)
    Flags: 0x010 (ACK)
    Window size value: 502
    [Calculated window size: 64256]
    [Window size scaling factor: 128]
    Checksum: 0x70db [unverified]
    [Checksum Status: Unverified]
    Urgent pointer: 0
    Options: (12 bytes), No-Operation (NOP), No-Operation (NOP), Timestamps
    [SEQ/ACK analysis]
    [Timestamps]
         [Time since first frame in this TCP stream: 0.241382421 seconds]
         [Time since previous frame in this TCP stream: 0.000057605 seconds]
                         Source
                                                Destination
                                                                        Protocol Length Info
No.
         Time
                                                                                         60286 → 80 [ACK] Seq=1 Ack=1 Win=64256
      7 0.445710847
                         192.168.0.107
                                                128.119.245.12
                                                                                  1514
Len=1448 TSval=1756327529 TSecr=1741273315
Frame 7: 1514 bytes on wire (12112 bits), 1514 bytes captured (12112 bits) on interface wlp1s0, id 0
Ethernet II, Src: IntelCor_0d:b0:06 (f8:63:3f:0d:b0:06), Dst: EFMNetwo_49:70:b4 (88:36:6c:49:70:b4)
```

```
Internet Protocol Version 4, Src: 192.168.0.107, Dst: 128.119.245.12
Transmission Control Protocol, Src Port: 60286, Dst Port: 80, Seq: 1, Ack: 1, Len: 1448
   Source Port: 60286
   Destination Port: 80
    [Stream index: 1]
    [TCP Seament Len: 1448]
   Sequence number: 1 (relative sequence number)
Sequence number (raw): 39762633
   [Next sequence number: 1449
                               (relative sequence number)]
   Acknowledgment number: 1 (relative ack number)
   Acknowledgment number (raw): 2050667102
   1000 .... = Header Length: 32 bytes (8)
   Flags: 0x010 (ACK)
   Window size value: 502
   [Calculated window size: 64256]
    [Window size scaling factor: 128]
   Checksum: 0x3220 [unverified]
    [Checksum Status: Unverified]
   Urgent pointer: 0
   Options: (12 bytes), No-Operation (NOP), No-Operation (NOP), Timestamps
   [SEQ/ACK analysis]
    [Timestamps]
       [Time since first frame in this TCP stream: 0.241993047 seconds]
       [Time since previous frame in this TCP stream: 0.000610626 seconds]
   TCP payload (1448 bytes)
Data (1448 bytes)
0000
     50 4f 53 54 20 2f 77 69 72 65 73 68 61 72 6b 2d
                                                     POST /wireshark-
0010
     6c 61 62 73 2f 6c 61 62 33 2d 31 2d 72 65 70 6c
                                                     labs/lab3-1-repl
     79 2e 68 74 6d 20 48 54 54 50 2f 31 2e 31 0d 0a
                                                     y.htm HTTP/1.1..
0020
0030
     48 6f 73 74 3a 20 67 61 69 61 2e 63 73 2e 75 6d
                                                     Host: gaia.cs.um
     61 73 73 2e 65 64 75 0d 0a 55 73 65 72 2d 41 67
0040
                                                     ass.edu..User-Aq
0050
     65 6e 74 3a 20 4d 6f 7a 69 6c 6c 61 2f 35 2e 30
                                                     ent: Mozilla/5.0
0060
     20 28 58 31 31 3b 20 4c 69 6e 75 78 20 78 38 36
                                                      (X11; Linux x86
     5f 36 34 3b 20 72 76 3a 38 31 2e 30 29 20 47 65
0070
                                                      64: rv:81.0) Ge
0080
     63 6b 6f 2f 32 30 31 30 30 31 30 31 20 46 69 72
                                                     cko/20100101 Fir
     65 66 6f 78 2f 38 31 2e 30 0d 0a 41 63 63 65 70
0090
                                                     efox/81.0..Accep
00a0
     74 3a 20 74 65 78 74 2f 68 74 6d 6c 2c 61 70 70
                                                     t: text/html,app
00b0
     6c 69 63 61 74 69 6f 6e 2f 78 68 74 6d 6c 2b 78
                                                     lication/xhtml+x
00c0
     6d 6c 2c 61 70 70 6c 69 63 61 74 69 6f 6e 2f 78
                                                     ml, application/x
0000
     6d 6c 3b 71 3d 30 2e 39 2c 69 6d 61 67 65 2f 77
                                                     ml: q=0.9, image/w
                                                     ebp, */*;q=0.8..A
     65 62 70 2c 2a 2f 2a 3b 71 3d 30 2e 38 0d 0a 41
00e0
00f0
     63 63 65 70 74 2d 4c 61 6e 67 75 61 67 65 3a 20
                                                     ccept-Language:
0100
     6b 6f 2d 4b 52 2c 6b 6f 3b 71 3d 30 2e 38 2c 65
                                                     ko-KR, ko; q=0.8, e
0110
     6e 2d 55 53 3b 71 3d 30 2e 35 2c 65 6e 3b 71 3d
                                                     n-US; q=0.5, en; q=
0120
     30 2e 33 0d 0a 41 63 63 65 70 74 2d 45 6e 63 6f
                                                     0.3..Accept-Enco
     64 69 6e 67 3a 20 67 7a 69 70 2c 20 64 65 66 6c
0130
                                                     ding: gzip, defl
0140
     61 74 65 0d 0a 43 6f 6e 74 65 6e 74 2d 54 79 70
                                                     ate..Content-Tvp
0150
     65 3a 20 6d 75 6c 74 69 70 61 72 74 2f 66 6f 72
                                                     e: multipart/for
0160
     6d 2d 64 61 74 61 3b 20 62 6f 75 6e 64 61 72 79
                                                     m-data; boundary
0170
     =-----
0180
     2d 32 31 35 33
0190
     34 31 35 36 36 32 31 35 34 32 38 35 39 38 34 32
                                                     4156621542859842
01a0
     32 39 34 32 30 31 39 34 35 37 0d 0a 43 6f 6e 74
                                                     2942019457..Cont
01b0
     65 6e 74 2d 4c 65 6e 67 74 68 3a 20 31 35 32 33
                                                     ent-Length: 1523
     35 39 0d 0a 4f 72 69 67 69 6e 3a 20 68 74 74 70
01c0
                                                     59..Origin: http
     3a 2f 2f 67 61 69 61 2e 63 73 2e 75 6d 61 73 73
01d0
                                                     ://gaia.cs.umass
01e0
     2e 65 64 75 0d 0a 44 4e 54 3a 20 31 0d 0a 43 6f
                                                      .edu..DNT: 1..Co
01f0
     6e 6e 65 63 74 69 6f 6e 3a 20 6b 65 65 70 2d 61
                                                     nnection: keep-a
0200
     6c 69 76 65 0d 0a 52 65 66 65 72 65 72 3a 20 68
                                                     live..Referer: h
0210
     74 74 70 3a 2f 2f 67 61 69 61 2e 63 73 2e 75 6d
                                                     ttp://gaia.cs.um
     61 73 73 2e 65 64 75 2f 77 69 72 65 73 68 61 72
0220
                                                     ass.edu/wireshar
0230
     6b 2d 6c 61 62 73 2f 54 43 50 2d 77 69 72 65 73
                                                     k-labs/TCP-wires
0240
     68 61 72 6b 2d 66 69 6c 65 31 2e 68 74 6d 6c 0d
                                                     hark-file1.html.
0250
     0a 55 70 67 72 61 64 65 2d 49 6e 73 65 63 75 72
                                                     .Upgrade-Insecur
0260
     65 2d 52 65 71 75 65 73 74 73 3a 20 31 0d 0a 0d
                                                     e-Requests: 1...
                                                     0270
     -----21
0280
     0290
     35 33 34 31 35 36 36 32 31 35 34 32 38 35 39 38
                                                     5341566215428598
     34 32 32 39 34 32 30 31 39 34 35 37 0d 0a 43 6f
02a0
                                                     422942019457..Co
     6e 74 65 6e 74 2d 44 69 73 70 6f 73 69 74 69 6f
02b0
                                                     ntent-Dispositio
02c0
     6e 3a 20 66 6f 72 6d 2d 64 61 74 61 3b 20 6e 61
                                                     n: form-data; na
02d0
     6d 65 3d 22 66 69 6c 65 22 3b 20 66 69 6c 65 6e
                                                     me="file"; filen
02e0
     61 6d 65 3d 22 61 6c 69 63 65 2e 74 78 74 22 0d
                                                     ame="alice.txt".
02f0
     0a 43 6f 6e 74 65 6e 74 2d 54 79 70 65 3a 20 74
                                                     .Content-Type: t
0300
     65 78 74 2f 70 6c 61 69 6e 0d 0a 0d 0a 20 20 20
                                                     ext/plain....
0310
     20 20 20 20 20 20 20 20 20 20 20 20 20 41 4c 49
0320
     43 45 27 53 20 41 44 56 45 4e 54 55 52 45 53 20
                                                     CE'S ADVENTURES
0330
     49 4e 20 57 4f 4e 44 45 52 4c 41 4e 44 0d 0a 0d
                                                     IN WONDERLAND...
0340
     0350
     20 20 20 20 20 20 20 20 20 20 20 4c 65 77 69 73
                                                               Lewis
0360
     20 43 61 72 72 6f 6c 6c 0d 0a 0d 0a 20 20 20 20
                                                      Carroll....
0370
     20 20 20 20 20 20 20 20 20 20 20 54 48 45 20 4d
                                                                THE M
0380
     49 4c 4c 45 4e 4e 49 55 4d 20 46 55 4c 43 52 55
                                                     ILLENNIUM FULCRU
0390
     4d 20 45 44 49 54 49 4f 4e 20 33 2e 30 0d 0a 0d
                                                     M EDITION 3.0...
03a0
     0a 0d 0a 0d 0a 0d 0a 20 20 20 20 20 20 20 20 20
03b0
     20 20 20 43 48 41 50 54 45 52 20 49 0d 0a 0d 0a
                                                        CHAPTER I....
03d0
```

03e0

20 20 20 20 20 20 44 6f 77 6e 20 74 68 65 20 52

Down the R

```
03f0 61 62 62 69 74 2d 48 6f 6c 65 0d 0a 0d 0a 0d 0a
                                                         abbit-Hole.....
0400
     20 20 41 6c 69 63 65 20 77 61 73 20 62 65 67 69
                                                          Alice was begi
0410
      6e 6e 69 6e 67 20 74 6f 20 67 65 74 20 76 65 72
                                                         nning to get ver
0420
     79 20 74 69 72 65 64 20 6f 66 20 73 69 74 74 69
                                                         y tired of sitti
      6e 67 20 62 79 20 68 65 72 20 73 69 73 74 65 72
0430
                                                         ng by her sister
0440
     0d 0a 6f 6e 20 74 68 65 20 62 61 6e 6b 2c 20 61
                                                         ..on the bank, a
                                                         nd of having not
0450
     6e 64 20 6f 66 20 68 61 76 69 6e 67 20 6e 6f 74
0460
     68 69 6e 67 20 74 6f 20 64 6f 3a 20 20 6f 6e 63
                                                         hing to do: onc
0470
     65 20 6f 72 20 74 77 69 63 65 20 73 68 65 20 68
                                                         e or twice she h
      61 64 0d 0a 70 65 65 70 65 64 20 69 6e 74 6f 20
0480
                                                         ad..peeped into
0490
     74 68 65 20 62 6f 6f 6b 20 68 65 72 20 73 69 73
                                                         the book her sis
                                                         ter was reading,
04a0
     74 65 72 20 77 61 73 20 72 65 61 64 69 6e 67 2c
04b0
     20 62 75 74 20 69 74 20 68 61 64 20 6e 6f 0d 0a
                                                          but it had no..
04c0 70 69 63 74 75 72 65 73 20 6f 72 20 63 6f 6e 76
                                                         pictures or conv
04d0
      65 72 73 61 74 69 6f 6e 73 20 69 6e 20 69 74 2c
                                                         ersations in it.
04e0 20 60 61 6e 64 20 77 68 61 74 20 69 73 20 74 68
                                                          `and what is th
04f0
     65 20 75 73 65 20 6f 66 20 61 20 62 6f 6f 6b 2c
                                                         e use of a book.
0500
     27 0d 0a 74 68 6f 75 67 68 74 20 41 6c 69 63 65
                                                          ..thought Alice
0510    20    60    77    69    74    68    6f    75    74    20    70    69    63    74    75    72
                                                          `without pictur
0520
     65 73 20 6f 72 20 63 6f 6e 76 65 72 73 61 74 69
                                                         es or conversati
0530 6f 6e 3f 27 0d 0a 0d 0a 20 20 53 6f 20 73 68 65
                                                         on?'.... So she
0540
     20 77 61 73 20 63 6f 6e 73 69 64 65 72 69 6e 67
                                                          was considering
0550
     20 69 6e 20 68 65 72 20 6f 77 6e 20 6d 69 6e 64
                                                          in her own mind
0560
     20 28 61 73 20 77 65 6c 6c 20 61 73 20 73 68 65
                                                          (as well as she
0570
     20 63 6f 75 6c 64 2c 0d 0a 66 6f 72 20 74 68 65
                                                          could,..for the
0580 20 68 6f 74 20 64 61 79 20 6d 61 64 65 20 68 65
                                                          hot day made he
0590 72 20 66 65 65 6c 20 76 65 72 79 20 73 6c 65 65
                                                         r feel very slee
05a0 70 79 20 61 6e 64 20 73
                                                         py and s
    Data: 504f5354202f77697265736861726b2d6c6162732f6c6162...
    [Length: 1448]
No.
                                                                    Protocol Length Info
       Time
                       Source
                                              Destination
    171 3.210225197
                       128.119.245.12
                                             192.168.0.107
                                                                    TCP
                                                                             66
                                                                                    80 \rightarrow 60286 [ACK] Seq=1 Ack=150593 Win=183296
Len=0 TSval=1741276014 TSecr=1756329988
Frame 171: 66 bytes on wire (528 bits), 66 bytes captured (528 bits) on interface wlp1s0, id 0
Ethernet II, Src: EFMNetwo_49:70:b4 (88:36:6c:49:70:b4), Dst: IntelCor_0d:b0:06 (f8:63:3f:0d:b0:06)
Internet Protocol Version 4, Src: 128.119.245.12, Dst: 192.168.0.107
Transmission Control Protocol, Src Port: 80, Dst Port: 60286, Seq: 1, Ack: 150593, Len: 0
    Source Port: 80
    Destination Port: 60286
    [Stream index: 1]
    [TCP Segment Len: 0]
                          (relative sequence number)
    Sequence number: 1
    Sequence number (raw): 2050667102
    [Next sequence number: 1
                               (relative sequence number)]
    Acknowledgment number: 150593 (relative ack number)
    Acknowledgment number (raw): 39913225
    1000 .... = Header Length: 32 bytes (8)
    Flags: 0x010 (ACK)
    Window size value: 1432
    [Calculated window size: 183296]
    [Window size scaling factor: 128]
    Checksum: 0x0cd0 [unverified]
    [Checksum Status: Unverified]
    Urgent pointer: 0
    Options: (12 bytes), No-Operation (NOP), No-Operation (NOP), Timestamps
    [SEQ/ACK analysis]
    [Timestamps]
```

[Time since first frame in this TCP stream: 3.006507397 seconds]
[Time since previous frame in this TCP stream: 0.000011132 seconds]