20170058 **Keonwoo Kim** · October 29, 2020
CS341 Introduction to Computer Networks

Wireshark #2

1. (UDP) [Refer `/tmp/wireshark_any_20201029172154_pP9xGd.pcapng` below.]

(1) Select one UDP packet from your trace. From this packet, determine how many fields there are in the UDP header. (You shouldn't look in the textbook! Answer these questions directly from what you observe in the packet trace.) Name these fields.

[Answer] There are 4 fields in the UDP header: `Source Port`, `Destination Port`, `Length`, and `Checksum`.

(2) By consulting the displayed information in Wireshark's packet content field for this packet, determine the length (in bytes) of each of the UDP header fields.

[Answer] Each field has a length of 2 bytes.

(3) What is the maximum number of bytes that can be included in a UDP payload? (Hint: the answer to this question can be determined by your answer to 2. above)

[Answer] Since the `Length` field is of length 2 bytes, which is 16 bits, the maximum length of a packet is $2^{16} - 1 = 65535$ [bytes]. Since the UDP header takes 8 bytes (from 1. and 22.), the maximum number of bytes that can be included in a UDP packet is $65535 - 8 =$ 65527 [bytes].

(4) Examine a pair of UDP packets in which your host sends the first UDP packet and the second UDP packet is a reply to this first UDP packet. (Hint: for a second packet to be sent in response to a first packet, the sender of the first packet should be the destination of the second packet). Describe the relationship between the port numbers in the two packets.

[Answer] The source port of the reply packet is the same with the destination port of the first packet, and the destination port of the reply packet is the same with the source port of the first packet.

2. (TCP) [Refer `/tmp/wireshark_wlp1s0_20201029190844_2WuBOQ.pcapng` below.]

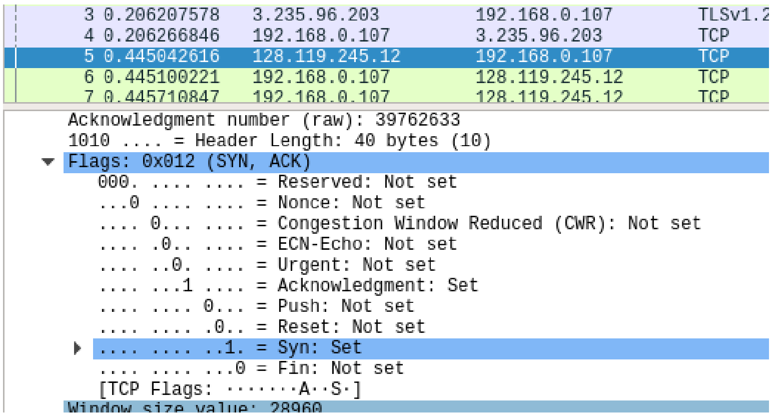
(1) What is the IP address and TCP port number used by your client computer (source) to transfer the file to gaia.cs.umass.edu?

[Answer] The IP address is `192.168.0.107`, and the TCP port number is `60286`.

(2) What is the sequence number of the SYNACK segment sent by gaia.cs.umass.edu to the client computer in reply to the SYN? What is the value of the Acknowledgement field in the SYNACK segment? How did gaia.cs.umass.edu determine that value? What is it in the segment that identifies the segment as a SYNACK segment?

[Answer] The sequence number of the SYNACK segment is `2050667101` (`0x7a3ab25d`,) and the value of the acknowledgement field in the SYNACK segment is `39762633` (`0x025ebac9`.) This value is determined by adding 1 to the sequence number of the SYN segment sent by the client.

The SYNACK segment is realized by the flags set, where the flags `0x12` mean that the acknowledgement flag and Syn flag are set as shown below.



```
    3 0.206207578   3.235.96.203      192.168.0.107     TLSv1.2
    4 0.206266846   192.168.0.107     3.235.96.203      TCP
    5 0.445042616   128.119.245.12    192.168.0.107     TCP
    6 0.445100221   192.168.0.107     128.119.245.12    TCP
    7 0.445710847   192.168.0.107     128.119.245.12    TCP

      Acknowledgment number (raw): 39762633
      1010 .... = Header Length: 40 bytes (10)
    ▾ Flags: 0x012 (SYN, ACK)
         000. .... .... = Reserved: Not set
         ...0 .... .... = Nonce: Not set
         .... 0... .... = Congestion Window Reduced (CWR): Not set
         .... .0.. .... = ECN-Echo: Not set
         .... ..0. .... = Urgent: Not set
         .... ...1 .... = Acknowledgment: Set
         .... .... 0... = Push: Not set
         .... .... .0.. = Reset: Not set
       ▸ .... .... ..1. = Syn: Set
         .... .... ...0 = Fin: Not set
         [TCP Flags: ·······A··S·]
      Window size value: 28960
```

(3) What is the sequence number of the TCP segment containing the HTTP POST command? Note that in order to find the POST command, you'll need to dig into the packet content field at the bottom of the Wireshark window, looking for a segment with a "POST" within its DATA field.

[Answer] The sequence number of the TCP segment containing the HTTP POST command is `39762633` (`0x025ebac9`.)

(4) What is the throughput (bytes transferred per unit time) for the TCP connection? Explain how you calculated this value.

[Answer] The last ACK number of the TCP connection is `39913225`. Therefore, since the TCP segment containing the HTTP POST command is sent, the client have sent $39913225 - 39762633 = 150592$ [bytes]. Note that the time difference between two segments is $3.006507397 - 0.241993047 = 2.76451435$ [seconds]. Therefore, the average throughput of the TCP connection is

$$\begin{aligned} 150592\,[\text{bytes}]/2.76451435\,[\text{seconds}] &= 54473.2205857\,[\text{bytes/second}] \\ &= \underline{435.785764686\,[\text{kbps}].} \end{aligned}$$

/tmp/wireshark_any_20201029172154_pP9xGd.pcapng 107 total packets, 12 shown

```
No.     Time           Source                Destination           Protocol Length Info
     66 15.255652666   127.0.0.1             127.0.0.53            DNS      87     Standard query 0x762d A
colab.research.google.com
Frame 66: 87 bytes on wire (696 bits), 87 bytes captured (696 bits) on interface any, id 0
Linux cooked capture
Internet Protocol Version 4, Src: 127.0.0.1, Dst: 127.0.0.53
User Datagram Protocol, Src Port: 46854, Dst Port: 53
    Source Port: 46854
 4  Destination Port: 53
    Length: 51
    Checksum: 0xfe7a [unverified]
    [Checksum Status: Unverified]
    [Stream index: 0]
    [Timestamps]
        [Time since first frame: 0.000000000 seconds]
        [Time since previous frame: 0.000000000 seconds]
Domain Name System (query)
0000  00 00 03 04 00 06 00 00 00 00 00 00 00 00 08 00   ................
0010  45 00 00 47 6f 60 40 00 40 11 cd 0f 7f 00 00 01   E..Go`@.@.......
0020  7f 00 00 35 b7 06 00 35 00 33 fe 7a 76 2d 01 00   ...5...5.3.zv-..
0030  00 01 00 00 00 00 00 00 05 63 6f 6c 61 62 08 72   .........colab.r
0040  65 73 65 61 72 63 68 06 67 6f 6f 67 6c 65 03 63   esearch.google.c
0050  6f 6d 00 00 01 00 01                              om.....
No.     Time           Source                Destination           Protocol Length Info
     67 15.255962809   127.0.0.53            127.0.0.1             DNS      124    Standard query response 0x762d A
colab.research.google.com CNAME www3.l.google.com A 172.217.25.14
Frame 67: 124 bytes on wire (992 bits), 124 bytes captured (992 bits) on interface any, id 0
Linux cooked capture
Internet Protocol Version 4, Src: 127.0.0.53, Dst: 127.0.0.1
User Datagram Protocol, Src Port: 53, Dst Port: 46854
    Source Port: 53
    Destination Port: 46854
    Length: 88
    Checksum: 0xfe9f [unverified]
    [Checksum Status: Unverified]
    [Stream index: 0]
    [Timestamps]
        [Time since first frame: 0.000310143 seconds]
        [Time since previous frame: 0.000310143 seconds]
Domain Name System (response)
0000  00 00 03 04 00 06 00 00 00 00 00 00 00 00 08 00   ................
0010  45 00 00 6c 11 90 40 00 40 11 2a bb 7f 00 00 35   E..l..@.@.*....5
0020  7f 00 00 01 00 35 b7 06 00 58 fe 9f 76 2d 81 80   .....5...X..v-..
0030  00 01 00 02 00 00 00 00 05 63 6f 6c 61 62 08 72   .........colab.r
0040  65 73 65 61 72 63 68 06 67 6f 6f 67 6c 65 03 63   esearch.google.c
0050  6f 6d 00 00 01 00 01 c0 0c 00 05 00 01 00 00 1c   om..............
0060  01 00 09 04 77 77 77 33 01 6c c0 1b c0 37 00 01   ....www3.l...7..
0070  00 01 00 00 00 a9 00 04 ac d9 19 0e               ............
```

```
No.     Time           Source                Destination           Protocol Length Info
      2 0.203717800    192.168.0.107         128.119.245.12        TCP      74     60286 → 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)]
    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: 0.000000000 seconds]
No.     Time           Source                Destination           Protocol Length Info
      5 0.445042616    128.119.245.12        192.168.0.107         TCP      74     80 → 60286 [SYN, ACK] Seq=0 Ack=1 Win=28960
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: 192.168.0.107
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
    [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]
No.     Time           Source                Destination           Protocol Length Info
      6 0.445100221    192.168.0.107         128.119.245.12        TCP      66     60286 → 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
    [Next sequence number: 1    (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: 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]
No.     Time           Source                Destination           Protocol Length Info
      7 0.445710847    192.168.0.107         128.119.245.12        TCP      1514   60286 → 80 [ACK] Seq=1 Ack=1 Win=64256
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)
```

+1

```
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 Segment 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
0020  79 2e 68 74 6d 20 48 54 54 50 2f 31 2e 31 0d 0a   y.htm HTTP/1.1..
0030  48 6f 73 74 3a 20 67 61 69 61 2e 63 73 2e 75 6d   Host: gaia.cs.um
0040  61 73 73 2e 65 64 75 0d 0a 55 73 65 72 2d 41 67   ass.edu..User-Ag
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
0070  5f 36 34 3b 20 72 76 3a 38 31 2e 30 29 20 47 65   _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
0090  65 66 6f 78 2f 38 31 2e 30 0d 0a 41 63 63 65 70   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
00d0  6d 6c 3b 71 3d 30 2e 39 2c 69 6d 61 67 65 2f 77   ml;q=0.9,image/w
00e0  65 62 70 2c 2a 2f 2a 3b 71 3d 30 2e 38 0d 0a 41   ebp,*/*;q=0.8..A
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
0130  64 69 6e 67 3a 20 67 7a 69 70 2c 20 64 65 66 6c   ding: gzip, defl
0140  61 74 65 0d 0a 43 6f 6e 74 65 6e 74 2d 54 79 70   ate..Content-Typ
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  3d 2d 2d 2d 2d 2d 2d 2d 2d 2d 2d 2d 2d 2d 2d 2d   =---------------
0180  2d 2d 2d 2d 2d 2d 2d 2d 2d 2d 2d 2d 32 31 35 33   ------------2153
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
01c0  35 39 0d 0a 4f 72 69 67 69 6e 3a 20 68 74 74 70   59..Origin: http
01d0  3a 2f 2f 67 61 69 61 2e 63 73 2e 75 6d 61 73 73   ://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
0220  61 73 73 2e 65 64 75 2f 77 69 72 65 73 68 61 72   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  0a 2d 2d 2d 2d 2d 2d 2d 2d 2d 2d 2d 2d 2d 2d 2d   .---------------
0280  2d 2d 2d 2d 2d 2d 2d 2d 2d 2d 2d 2d 2d 2d 32 31   --------------21
0290  35 33 34 31 35 36 36 32 31 35 34 32 38 35 39 38   5341566215428598
02a0  34 32 32 39 34 32 30 31 39 34 35 37 0d 0a 43 6f   422942019457..Co
02b0  6e 74 65 6e 74 2d 44 69 73 70 6f 73 69 74 69 6f   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                ALI
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  0a 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20   .               
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 20 20 20 20 20 20 20 20 20 20 20 20 20                   
03c0  20 20 20 43 48 41 50 54 45 52 20 49 0d 0a 0d 0a      CHAPTER I....
03d0  20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20                   
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
0430  6e 67 20 62 79 20 68 65 72 20 73 69 73 74 65 72   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
0450  6e 64 20 6f 66 20 68 61 76 69 6e 67 20 6e 6f 74   nd of having not
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
0480  61 64 0d 0a 70 65 65 70 65 64 20 69 6e 74 6f 20   ad..peeped into 
0490  74 68 65 20 62 6f 6f 6b 20 68 65 72 20 73 69 73   the book her sis
04a0  74 65 72 20 77 61 73 20 72 65 61 64 69 6e 67 2c   ter was reading,
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.     Time           Source                Destination           Protocol Length Info
    171 3.210225197    128.119.245.12        192.168.0.107         TCP      66     80 → 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]
    Sequence number: 1    (relative sequence number)
    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]
```