0101 = Header Length: 20 bytes (5)

```
Protocol Length Info
            Time
                                    Source
                                                                        Destination
No.
    4111 58.481229
                                    10.16.146.82
                                                                        128.119.245.12
                                                                                                           HTTP
                                                                                                                          527
                                                                                                                                     GET /wireshark-labs/INTRO-wireshark-file1.html
HTTP/1.1
Frame 4111: 527 bytes on wire (4216 bits), 527 bytes captured (4216 bits) on interface \Device\NPF_{FD213752-A3E0-4C1B-9250-
FEC8C7E7DCBB}, id 0
Ethernet II, Src: HP_22:12:1e (48:9e:bd:22:12:1e), Dst: ArubaaHe_de:46:00 (ec:02:73:de:46:00)
Internet Protocol Version 4, Src: 10.16.146.82, Dst: 128.119.245.12
Transmission Control Protocol, Src Port: 64236, Dst Port: 80, Seq: 1, Ack: 1, Len: 473
      Source Port: 64236
      Destination Port: 80
      [Stream index: 17]
      [Conversation completeness: Complete, WITH_DATA (31)]
      [TCP Segment Len: 473]
                                         (relative sequence number)
      Sequence Number: 1
      Sequence Number (raw): 3045703753
      [Next Sequence Number: 474
                                                      (relative sequence number)]
      Acknowledgment Number: 1
                                                   (relative ack number)
      Acknowledgment number (raw): 572797370
      0101 .... = Header Length: 20 bytes (5)
      Flags: 0x018 (PSH, ACK)
            000. .... = Reserved: Not set
            ...0 .... = Accurate ECN: Not set
             .... 0... = Congestion Window Reduced: Not set
             .... .0.. .... = ECN-Echo: Not set
             .... ..0. .... = Urgent: Not set
             .... = Acknowledgment: Set
            .... 1... = Push: Set
            .... .0.. = Reset: Not set
            .... .... ..0. = Syn: Not set
             .... .... 0 = Fin: Not set
            [TCP Flags: ·····AP···]
      Window: 1026
      [Calculated window size: 262656]
      [Window size scaling factor: 256]
      Checksum: 0x13da [unverified]
      [Checksum Status: Unverified]
      Urgent Pointer: 0
      [Timestamps]
             [Time since first frame in this TCP stream: 0.062134000 seconds]
            [Time since previous frame in this TCP stream: 0.045230000 seconds]
      [SEQ/ACK analysis]
             [iRTT: 0.016904000 seconds]
             [Bytes in flight: 473]
            [Bytes sent since last PSH flag: 473]
      TCP payload (473 bytes)
Hypertext Transfer Protocol
      GET /wireshark-labs/INTRO-wireshark-file1.html HTTP/1.1\r\n
      Host: gaia.cs.umass.edu\r\n
      Connection: keep-alive\r\n
      \label{local-problem} \mbox{Upgrade-Insecure-Requests: 1$$\noindent $1$$ in $$\noindent $1$$ in $\noindent $
      User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/117.0.0.0 Safari/537.36\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: en-US,en;q=0.9\r\n
      \r\n
      [Full request URI: http://gaia.cs.umass.edu/wireshark-labs/INTRO-wireshark-file1.html]
      [HTTP request 1/1]
      [Response in frame: 4129]
No.
            Time
                                    Source
                                                                        Destination
                                                                                                            Protocol Length Info
    4129 58.502830
                                    128.119.245.12
                                                                        10.16.146.82
                                                                                                           HTTP
                                                                                                                         492
                                                                                                                                    HTTP/1.1 200 OK (text/html)
Frame 4129: 492 bytes on wire (3936 bits), 492 bytes captured (3936 bits) on interface \Device\NPF_{FD213752-A3E0-4C1B-9250-
FEC8C7E7DCBB}, id 0
Ethernet II, Src: ArubaaHe_de:46:00 (ec:02:73:de:46:00), Dst: HP_22:12:1e (48:9e:bd:22:12:1e)
Internet Protocol Version 4, Src: 128.119.245.12, Dst: 10.16.146.82
Transmission Control Protocol, Src Port: 80, Dst Port: 64236, Seq: 1, Ack: 474, Len: 438
      Source Port: 80
      Destination Port: 64236
      [Stream index: 17]
      [Conversation completeness: Complete, WITH_DATA (31)]
      [TCP Segment Len: 438]
      Sequence Number: 1
                                         (relative sequence number)
      Sequence Number (raw): 572797370
      [Next Sequence Number: 439
                                                      (relative sequence number)]
      Acknowledgment Number: 474
                                                      (relative ack number)
      Acknowledgment number (raw): 3045704226
```

```
Flags: 0x018 (PSH, ACK)
       000. .... = Reserved: Not set
        ...0 .... = Accurate ECN: Not set
        .... 0... = Congestion Window Reduced: Not set
        .... .0.. .... = ECN-Echo: Not set
        .... ..0. .... = Urgent: Not set
        .... = Acknowledgment: Set
        .... 1... = Push: Set
        .... .0.. = Reset: Not set
        .... .... ..0. = Syn: Not set
        .... .... 0 = Fin: Not set
       [TCP Flags: ······AP···]
   Window: 237
    [Calculated window size: 30336]
    [Window size scaling factor: 128]
   Checksum: 0x856c [unverified]
    [Checksum Status: Unverified]
   Urgent Pointer: 0
    [Timestamps]
       [Time since first frame in this TCP stream: 0.083735000 seconds]
        [Time since previous frame in this TCP stream: 0.002504000 seconds]
    [SEQ/ACK analysis]
       [iRTT: 0.016904000 seconds]
        [Bytes in flight: 438]
       [Bytes sent since last PSH flag: 438]
   TCP payload (438 bytes)
Hypertext Transfer Protocol
   HTTP/1.1 200 OK\r\n
   Date: Sat, 23 Sep 2023 15:06:04 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
   Last-Modified: Sat, 23 Sep 2023 05:59:01 GMT\r\n
    ETag: "51-606006bf9439a"\r\n
   Accept-Ranges: bytes\r\n
   Content-Length: 81\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: 0.021601000 seconds]
    [Request in frame: 4111]
    [Request URI: http://gaia.cs.umass.edu/wireshark-labs/INTRO-wireshark-file1.html]
   File Data: 81 bytes
Line-based text data: text/html (3 lines)
```