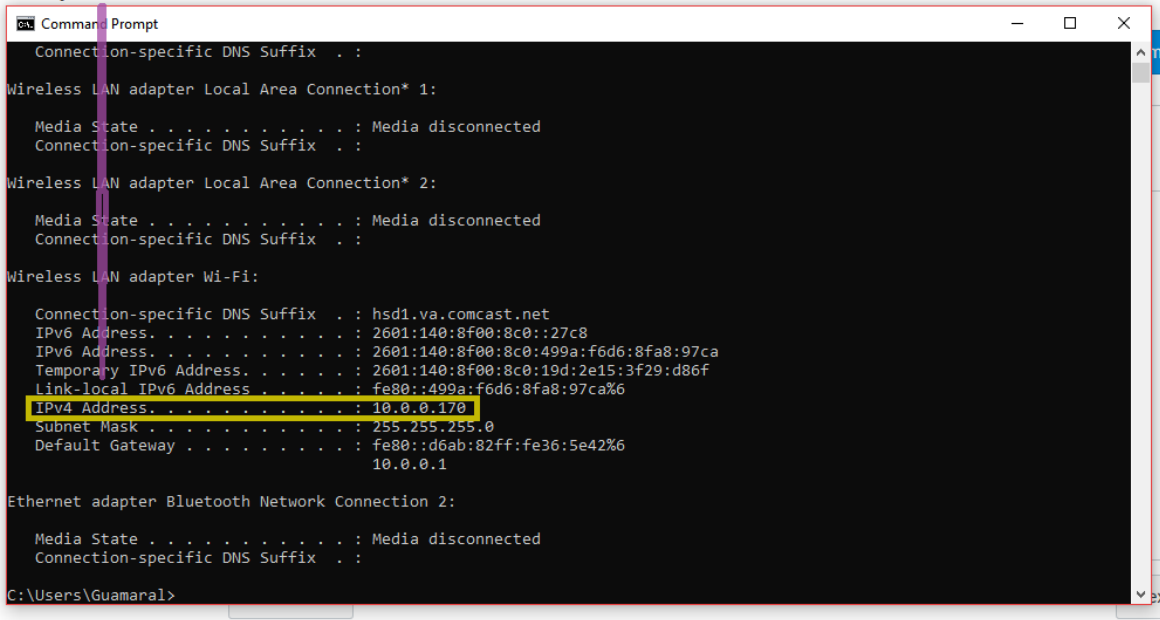
## My IP Address



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| No. | Time | Source | Destination | Protocol | Length | Info |
|---|---|---|---|---|---|---|
| 162 | 17:01:19.111041 | 10.0.0.170 | 128.119.245.12 | HTTP | 529 | POST /wireshark-labs/lab3-1-reply.htm HTTP/1.1 |
| 189 | 17:01:19.145530 | 128.119.245.12 | 10.0.0.170 | HTTP | 831 | HTTP/1.1 200 OK (text/html) |

**TCP number used by my computer**

```
Frame 162: 529 bytes on wire (4232 bits), 529 bytes captured (4232 bits) on interface 0
Ethernet II, Src: LiteonTe_08:af:03 (ac:e0:10:08:af:03), Dst: ArrisGro_36:5e:42 (d4:ab:82:36:5e:42)
Internet Protocol Version 4, Src: 10.0.0.170, Dst: 128.119.245.12
Transmission Control Protocol, Src Port: 64988, Dst Port: 80, Seq: 167102, Ack: 1, Len: 475
    Source Port: 64988
    Destination Port: 80
    [Stream index: 5]
    [TCP Segment Len: 475]
    Sequence number: 167102    (relative sequence number)
    [Next sequence number: 167577    (relative sequence number)]
    Acknowledgment number: 1    (relative ack number)
    0101 .... = Header Length: 20 bytes (5)
  > Flags: 0x018 (PSH, ACK)
    Window size value: 256
    [Calculated window size: 65536]
    [Window size scaling factor: 256]
```

```
0000  d4 ab 82 36 5e 42 ac e0  10 08 af 03 08 00 45 00   ···6^B·· ····..E·
0010  02 03 6b a5 40 00 80 06  0d 22 0a 00 00 aa 80 77   ··k·@··· ·"·····w
```

Frame (529 bytes) | Reassembled TCP (167576 bytes)

Hypertext Transfer Protocol: Protocol | Packets: 235 · Displayed: 2 (0.9%) · Dropped: 0 (0.0%) | Profile: Default

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http

| No. | Time | Source | Destination | Protocol | Length | Info |
|---|---|---|---|---|---|---|
| 162 | 17:01:19.111041 | 10.0.0.170 | 128.119.245.12 | HTTP | 529 | POST /wireshark-labs/lab3-1-reply.htm HTTP/1.1 |
| 189 | 17:01:19.145530 | 128.119.245.12 | 10.0.0.170 | HTTP | 831 | HTTP/1.1 200 OK (text/html) |

**TCP number used by gaia.cs.umass.edu**

```
Frame 189: 831 bytes on wire (6648 bits), 831 bytes captured (6648 bits) on interface 0
Ethernet II, Src: ArrisGro_36:5e:42 (d4:ab:82:36:5e:42), Dst: LiteonTe_08:af:03 (ac:e0:10:08:af:03)
Internet Protocol Version 4, Src: 128.119.245.12, Dst: 10.0.0.170
Transmission Control Protocol, Src Port: 80, Dst Port: 64988, Seq: 1, Ack: 167577, Len: 777
    Source Port: 80
    Destination Port: 64988
    [Stream index: 5]
    [TCP Segment Len: 777]
    Sequence number: 1    (relative sequence number)
    [Next sequence number: 778    (relative sequence number)]
    Acknowledgment number: 167577    (relative ack number)
    0101 .... = Header Length: 20 bytes (5)
  > Flags: 0x018 (PSH, ACK)
    Window size value: 2466
    [Calculated window size: 315648]
    [Window size scaling factor: 128]
    Checksum: 0x9458 [unverified]
```

```
0000  ac e0 10 08 af 03 d4 ab  82 36 5e 42 08 00 45 00   ........ .6^B..E.
0010  03 31 46 93 40 00 2f 06  82 06 80 77 f5 0c 0a 00   .1F.@./. ...w....
0020  00 aa 00 50 fd dc a9 e0  57 cf 0c 82 f0 1c 50 18   ...P.... W.....P.
0030  09 a2 94 58 00 00 48 54  54 50 2f 31 2e 31 20 32   ...X..HT TP/1.1 2
```

Hypertext Transfer Protocol: Protocol | Packets: 235 · Displayed: 2 (0.9%) · Dropped: 0 (0.0%) | Profile: Default

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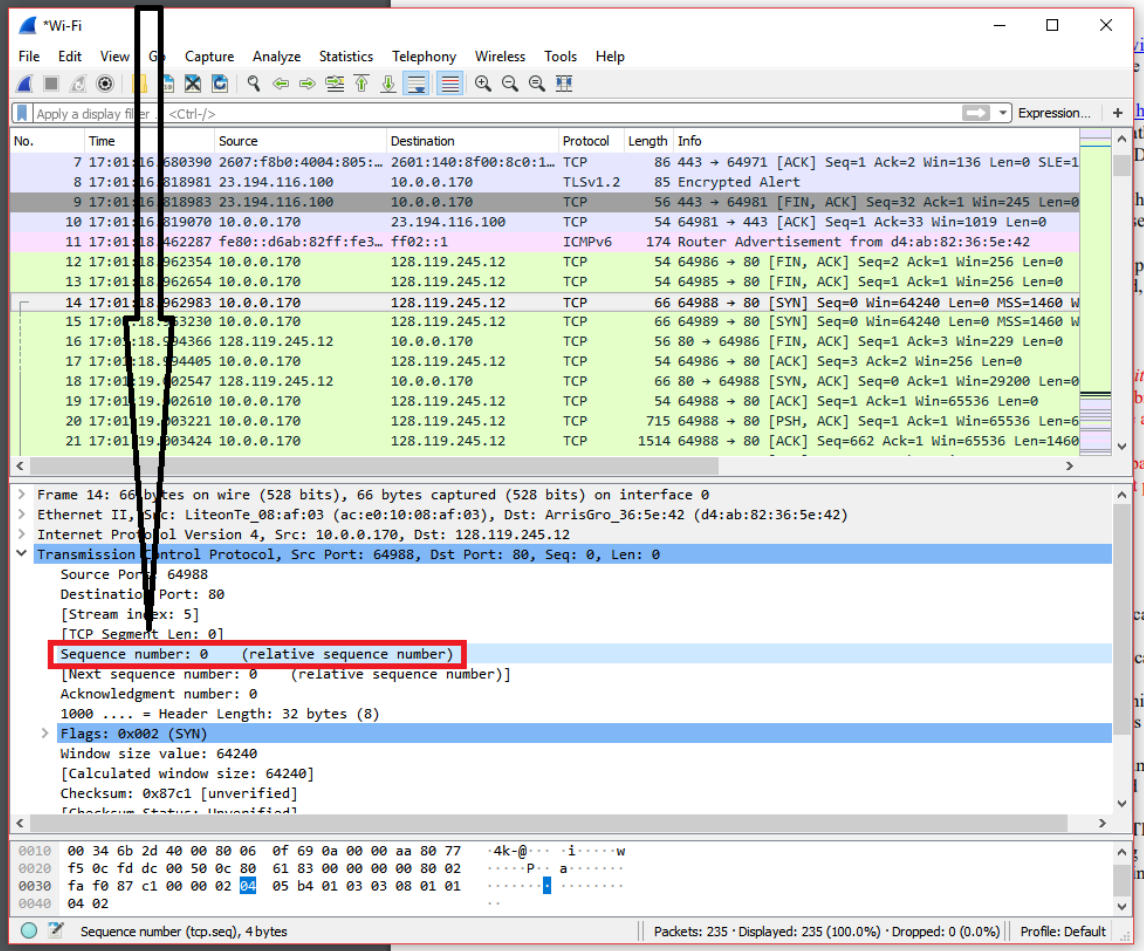
**Seq. Number of the TCP SYN**

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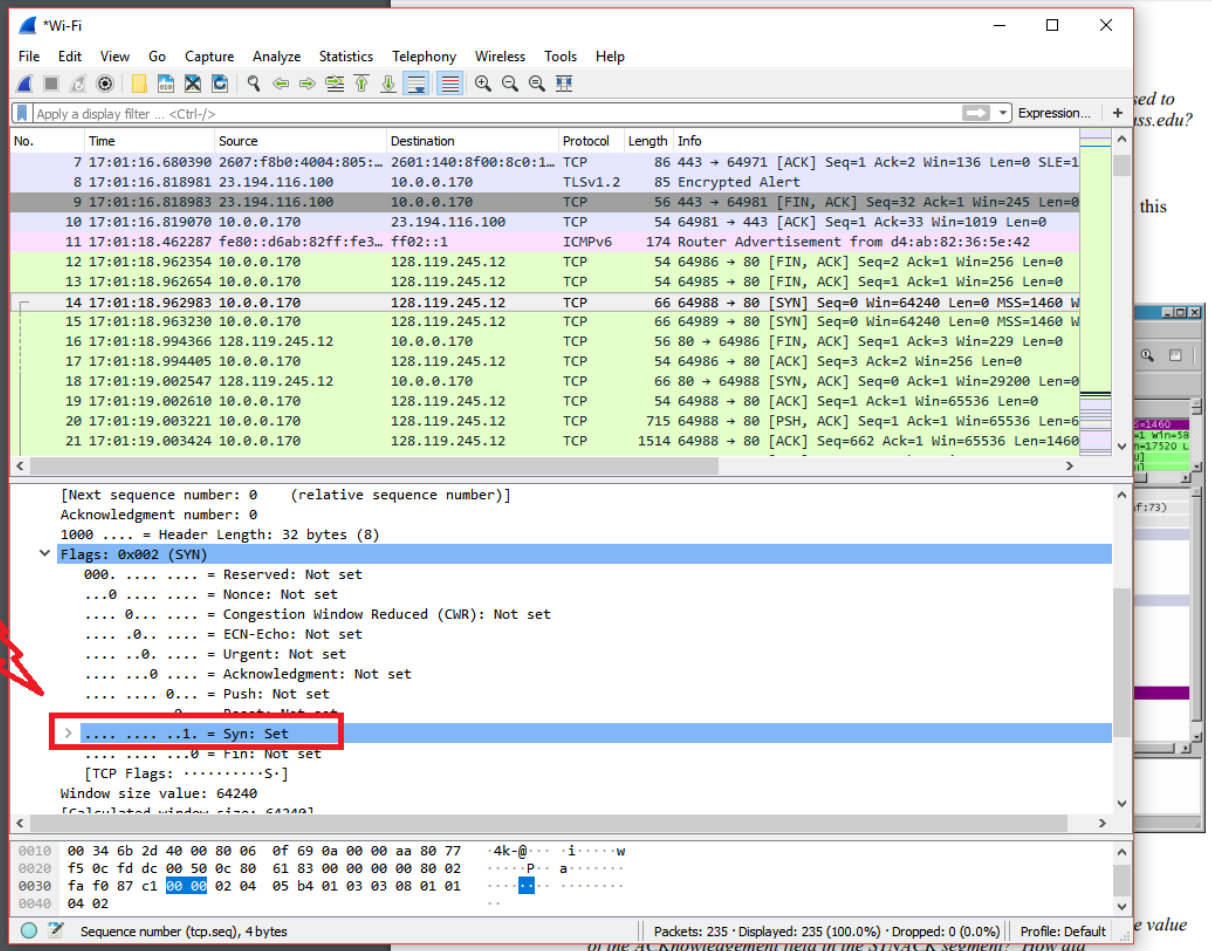


SYN flag is set to 1

*this*

*e 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?*

Solution: Sequence number of the SYNACK segment from gaia.cs.umass.edu to the

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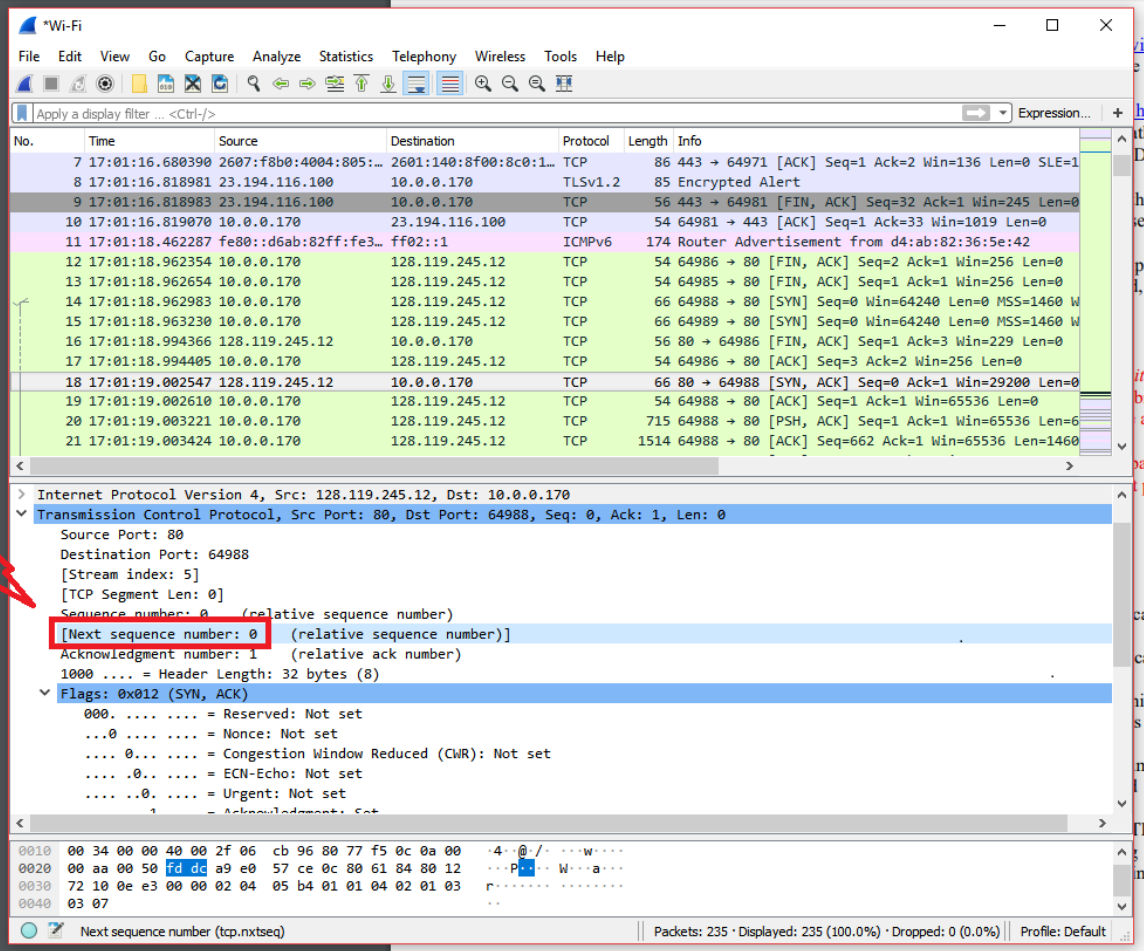


**Sequnece number of the SYNACK**

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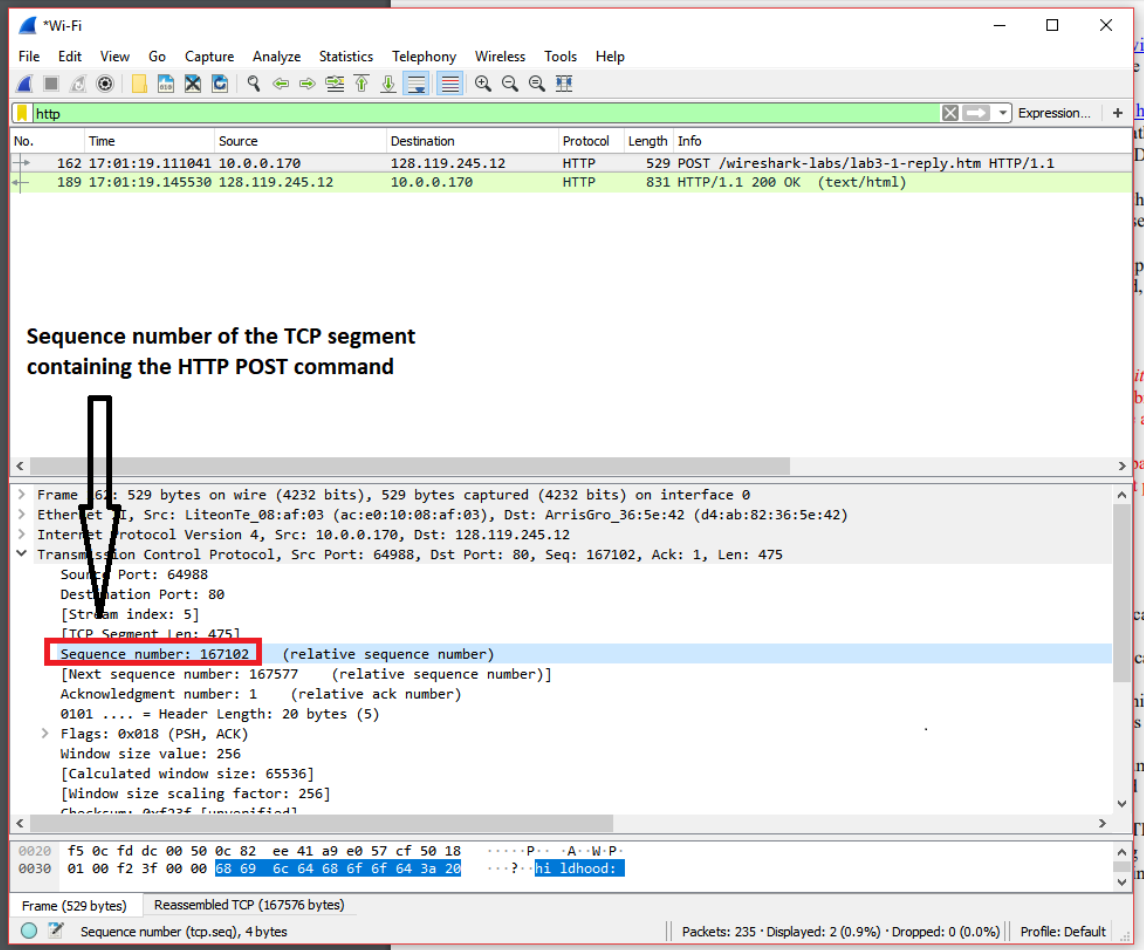

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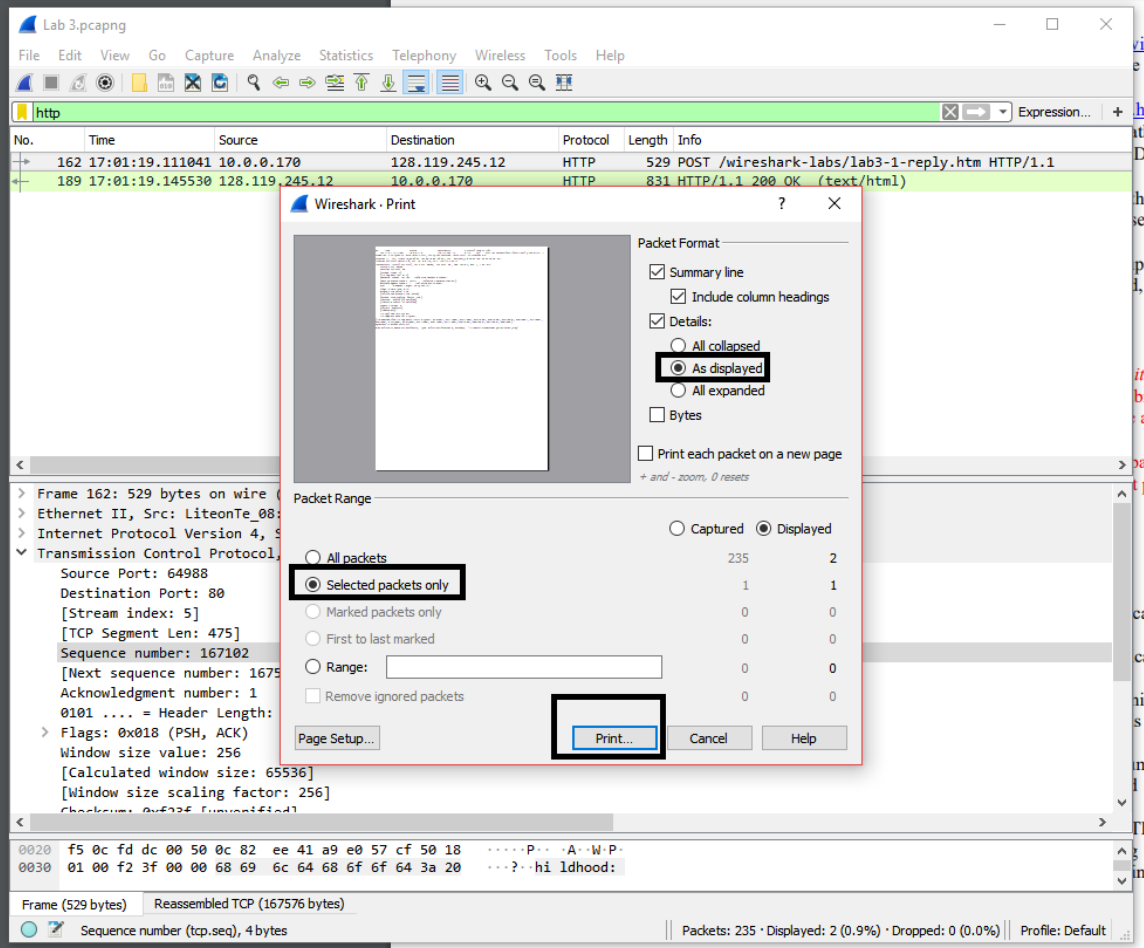


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No.     Time               Source                Destination           Protocol Length Info
    162 17:01:19.111041    10.0.0.170            128.119.245.12        HTTP     529    POST /wireshark-labs/lab3-1-reply.htm HTTP/1.1
Frame 162: 529 bytes on wire (4232 bits), 529 bytes captured (4232 bits) on interface 0
Ethernet II, Src: LiteonTe_08:af:03 (ac:e0:10:08:af:03), Dst: ArrisGro_36:5e:42 (d4:ab:82:36:5e:42)
Internet Protocol Version 4, Src: 10.0.0.170, Dst: 128.119.245.12
Transmission Control Protocol, Src Port: 64988, Dst Port: 80, Seq: 167102, Ack: 1, Len: 475
    Source Port: 64988
    Destination Port: 80
    [Stream index: 5]
    [TCP Segment Len: 475]
    Sequence number: 167102    (relative sequence number)
    [Next sequence number: 167577    (relative sequence number)]
    Acknowledgment number: 1    (relative ack number)
    0101 .... = Header Length: 20 bytes (5)
    Flags: 0x018 (PSH, ACK)
    Window size value: 256
    [Calculated window size: 65536]
    [Window size scaling factor: 256]
    Checksum: 0xf23f [unverified]
    [Checksum Status: Unverified]
    Urgent pointer: 0
    [SEQ/ACK analysis]
    [Timestamps]
    TCP payload (475 bytes)
    TCP segment data (475 bytes)
[116 Reassembled TCP Segments (167576 bytes): #20(661), #21(1460), #22(1460), #23(1460), #24(1460), #25(1460), #26(1460), #27(1460),
#28(1460), #29(1460), #34(1460), #35(1460), #36(1460), #37(1460), #38(1460), #40(1460), #41(1460), #44(1460)]
Hypertext Transfer Protocol
MIME Multipart Media Encapsulation, Type: multipart/form-data, Boundary: "----WebKitFormBoundaryBLTA1Cu81HkjO7Ry"
```