```
000d 65d2 4ae0 0022 19ad 59d9 0800 4510
006c 8dbc 4000 4006 719c 81ba d728 81ba
6086 0016 fb95 70bf 5990 6f67 8ccd 5018
ffff 3b82 0000 8e33 3cd8 2194 d0d5 9776
b8cc 40d8 3f8e 2f24 d5ac c021 8998 ff4d
b4d4 81a7 e3b1 345f 566f 2652 189d 930d
6727 465f 500a 78bf 09bb c841 429c 4ca7
606d a0db 5442 b08d 5f6c
```

DA = 00:0d:65:d2:4a:e0, SA = 00:22:19:ad:59:d9
Type = 0x800
Paylaod = IP
The IP protocol is version 4.
The length of the IP header is 20 bytes.
The length of the payload is 108 bytes.
The identifier is 36284.
Flags are 0 1 0.
Offset is 0.
TTL is 64.
The upper-layer protocol handling this packet is TCP.
Source port number: 22
Destination port number: 64405
Sequence number: 8145296
Acknowledgement number: 7732429
Length of the TCP header: 20 bytes
Acknowledgement Number is Valid
Data Should be Pushed to the Application
Window size: 65535 bytes
Checksum for TCP: 15234
The checksum for IP is 29084.
The IP address of the sender is 129.186.215.40
The IP address of the destination is 129.186.96.134

```
0022 19ad 59d9 000d 65d2 4ae0 0800 4500
0028 6d43 4000 7d06 5569 81ba 6086 81ba
d728 fb95 0016 6f67 8ccd 70bf 59d4 5010
4328 6f14 0000 0000 0000 0000
```

DA = 00:22:19:ad:59:d9, SA = 00:0d:65:d2:4a:e0
Type = 0x800
Paylaod = IP
The IP protocol is version 4.
The length of the IP header is 20 bytes.
The length of the payload is 40 bytes.
The identifier is 27971.
Flags are 0 1 0.
Offset is 0.
TTL is 125.
The upper-layer protocol handling this packet is TCP.
Source port number: 64405
Destination port number: 22

Sequence number: 7732429
Acknowledgement number: 8145364
Length of the TCP header: 20 bytes
Acknowledgement Number is Valid
Window size: 17192 bytes
Checksum for TCP: 28436
The checksum for IP is 21865.
The IP address of the sender is 129.186.96.134
The IP address of the destination is 129.186.215.40

```
ffff ffff ffff 0013 d4b1 cbf4 0806 0001
0800 0604 0001 0013 d4b1 cbf4 81ba d734
0000 0000 0000 81ba d72b ffff ffff ffff
ffff ffff ffff ffff ffff ffff
```

DA = ff:ff:ff:ff:ff:ff, SA = 00:13:d4:b1:cb:f4
Type = 0x806
Payload = ARP
The ARP protocol is used on Ethernet.
IP protocol is using the ARP protocol.
The length of the hardware address fields is 6 bytes.
The length of the upper-layer protocol address is 4 bytes.
This is a request packet.
Hardware address of the sender-00:13:d4:b1:cb:f4
IP address of the sender:129.186.215.52
Hardware address of the target device-00:00:00:00:00:00
IP address of the target:129.186.215.43

```
0180 c200 0000 0001 63bf 5704 0026 4242
0300 0000 0000 8000 0001 63bf 5700 0000
0000 8000 0001 63bf 5700 8010 0000 1400
0200 0f00 0000 0000 0000 0000
```

DA = 01:80:c2:00:00:00, SA = 00:01:63:bf:57:04
Len = 38

```
0022 19ad 59d9 0022 19ad 5a0b 0800 4510
003c 2a0e 4000 4006 5ed7 81ba d729 81ba
d728 fa30 0050 5bbe f3eb 0000 0000 a002
ffff 27a0 0000 0204 05b4 0103 0303 0402
080a 4a45 da2c 0000 0000
```

DA = 00:22:19:ad:59:d9, SA = 00:22:19:ad:5a:0b
Type = 0x800
Paylaod = IP
The IP protocol is version 4.
The length of the IP header is 20 bytes.
The length of the payload is 60 bytes.
The identifier is 10766.
Flags are 0 1 0.
Offset is 0.
TTL is 64.

The upper-layer protocol handling this packet is TCP.
Source port number: 64048
Destination port number: 80
Sequence number: 6804459
Acknowledgement number: 0
Length of the TCP header: 40 bytes
Sychronize Packet
Window size: 65535 bytes
Checksum for TCP: 10144
Options:
02 04 05 b4 01 03 03 03 04 02 08 0a 4a 45 da 2c 00 00 00 00
HTTP payload:

The checksum for IP is 24279.
The IP address of the sender is 129.186.215.41
The IP address of the destination is 129.186.215.40

        0022 19ad 5a0b 0022 19ad 59d9 0800 4500
        003c 8dbd 4000 4006 fb37 81ba d728 81ba
        d729 0050 fa30 fa79 3a62 5bbe f3ec a012
        ffff b1f5 0000 0204 05b4 0103 0303 0402
        080a 083b 7fbb 4a45 da2c

DA = 00:22:19:ad:5a:0b, SA = 00:22:19:ad:59:d9
Type = 0x800
Paylaod = IP
The IP protocol is version 4.
The length of the IP header is 20 bytes.
The length of the payload is 60 bytes.
The identifier is 36285.
Flags are 0 1 0.
Offset is 0.
TTL is 64.
The upper-layer protocol handling this packet is TCP.
Source port number: 80
Destination port number: 64048
Sequence number: 16894562
Acknowledgement number: 6804460
Length of the TCP header: 40 bytes
Acknowledgement Number is Valid
Sychronize Packet
Window size: 65535 bytes
Checksum for TCP: 45557
Options:
02 04 05 b4 01 03 03 03 04 02 08 0a 08 3b 7f bb 4a 45 da 2c
HTTP payload:

The checksum for IP is 64311.
The IP address of the sender is 129.186.215.40
The IP address of the destination is 129.186.215.41

        0022 19ad 59d9 0022 19ad 5a0b 0800 4510

3

```
       0034 2a0f 4000 4006 5ede 81ba d729 81ba
       d728 fa30 0050 5bbe f3ec fa79 3a63 8010
       2086 78fe 0000 0101 080a 4a45 da2c 083b
       7fbb
```

DA = 00:22:19:ad:59:d9, SA = 00:22:19:ad:5a:0b
Type = 0x800
Paylaod = IP
The IP protocol is version 4.
The length of the IP header is 20 bytes.
The length of the payload is 52 bytes.
The identifier is 10767.
Flags are 0 1 0.
Offset is 0.
TTL is 64.
The upper-layer protocol handling this packet is TCP.
Source port number: 64048
Destination port number: 80
Sequence number: 6804460
Acknowledgement number: 16894563
Length of the TCP header: 32 bytes
Acknowledgement Number is Valid
Window size: 8326 bytes
Checksum for TCP: 30974
Options:
01 01 08 0a 4a 45 da 2c 08 3b 7f bb
HTTP payload:

The checksum for IP is 24286.
The IP address of the sender is 129.186.215.41
The IP address of the destination is 129.186.215.40

```
       0180 c200 0000 0001 63bf 5704 0026 4242
       0300 0000 0000 8000 0001 63bf 5700 0000
       0000 8000 0001 63bf 5700 8010 0000 1400
       0200 0f00 0000 0000 0000 0000
```

DA = 01:80:c2:00:00:00, SA = 00:01:63:bf:57:04
Len = 38

```
       0022 19ad 59d9 0022 19ad 5a0b 0800 4510
       0039 2a1a 4000 4006 5ece 81ba d729 81ba
       d728 fa30 0050 5bbe f3ec fa79 3a63 8018
       2086 88b3 0000 0101 080a 4a45 e4f7 083b
       7fbb 6765 740d 0a
```

DA = 00:22:19:ad:59:d9, SA = 00:22:19:ad:5a:0b
Type = 0x800
Paylaod = IP
The IP protocol is version 4.
The length of the IP header is 20 bytes.
The length of the payload is 57 bytes.

The identifier is 10778.
Flags are 0 1 0.
Offset is 0.
TTL is 64.
The upper-layer protocol handling this packet is TCP.
Source port number: 64048
Destination port number: 80
Sequence number: 6804460
Acknowledgement number: 16894563
Length of the TCP header: 32 bytes
Acknowledgement Number is Valid
Data Should be Pushed to the Application
Window size: 8326 bytes
Checksum for TCP: 34995
Options:
01 01 08 0a 4a 45 e4 f7 08 3b 7f bb
HTTP payload:
get

The checksum for IP is 24270.
The IP address of the sender is 129.186.215.41
The IP address of the destination is 129.186.215.40

        0022 19ad 5a0b 0022 19ad 59d9 0800 4500
        016e 8dbe 4000 4006 fa04 81ba d728 81ba
        d729 0050 fa30 fa79 3a63 5bbe f3f1 8018
        2086 b327 0000 0101 080a 083b 8a88 4a45
        e4f7 3c21 444f 4354 5950 4520 4854 4d4c
        2050 5542 4c49 4320 222d 2f2f 4945 5446
        2f2f 4454 4420 4854 4d4c 2032 2e30 2f2f
        454e 223e 0a3c 4854 4d4c 3e3c 4845 4144
        3e0a 3c54 4954 4c45 3e35 3031 204d 6574
        686f 6420 4e6f 7420 496d 706c 656d 656e
        7465 643c 2f54 4954 4c45 3e0a 3c2f 4845
        4144 3e3c 424f 4459 3e0a 3c48 313e 4d65
        7468 6f64 204e 6f74 2049 6d70 6c65 6d65
        6e74 6564 3c2f 4831 3e0a 6765 7420 746f
        202f 696e 6465 782e 6874 6d6c 206e 6f74
        2073 7570 706f 7274 6564 2e3c 503e 0a49
        6e76 616c 6964 206d 6574 686f 6420 696e
        2072 6571 7565 7374 2067 6574 3c50 3e0a
        3c48 523e 0a3c 4144 4452 4553 533e 4170
        6163 6865 2f31 2e33 2e34 3120 5365 7276
        6572 2061 7420 7370 6f63 6b2e 6565 2e69
        6173 7461 7465 2e65 6475 2050 6f72 7420
        3830 3c2f 4144 4452 4553 533e 0a3c 2f42
        4f44 593e 3c2f 4854 4d4c 3e0a

DA = 00:22:19:ad:5a:0b, SA = 00:22:19:ad:59:d9
Type = 0x800
Paylaod = IP
The IP protocol is version 4.

The length of the IP header is 20 bytes.
The length of the payload is 366 bytes.
The identifier is 36286.
Flags are 0 1 0.
Offset is 0.
TTL is 64.
The upper-layer protocol handling this packet is TCP.
Source port number: 80
Destination port number: 64048
Sequence number: 16894563
Acknowledgement number: 6804465
Length of the TCP header: 32 bytes
Acknowledgement Number is Valid
Data Should be Pushed to the Application
Window size: 8326 bytes
Checksum for TCP: 45863
Options:
01 01 08 0a 08 3b 8a 88 4a 45 e4 f7
HTTP payload:
<!DOCTYPE HTML PUBLIC "-//IETF//DTD HTML 2.0//EN">
<HTML><HEAD>
<TITLE>501 Method Not Implemented</TITLE>
</HEAD><BODY>
<H1>Method Not Implemented</H1>
get to /index.html not supported.<P>
Invalid method in request get<P>
<HR>
<ADDRESS>Apache/1.3.41 Server at spock.ee.iastate.edu Port 80
</ADDRESS>
</BODY></HTML>

The checksum for IP is 64004.
The IP address of the sender is 129.186.215.40
The IP address of the destination is 129.186.215.41

        0022 19ad 5a0b 0022 19ad 59d9 0800 4500
        0034 8dbf 4000 4006 fb3d 81ba d728 81ba
        d729 0050 fa30 fa79 3b9d 5bbe f3f1 8011
        2086 b1ed 0000 0101 080a 083b 8a88 4a45
        e4f7

DA = 00:22:19:ad:5a:0b, SA = 00:22:19:ad:59:d9
Type = 0x800
Paylaod = IP
The IP protocol is version 4.
The length of the IP header is 20 bytes.
The length of the payload is 52 bytes.
The identifier is 36287.
Flags are 0 1 0.
Offset is 0.
TTL is 64.
The upper-layer protocol handling this packet is TCP.

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Source port number: 80
Destination port number: 64048
Sequence number: 16894877
Acknowledgement number: 6804465
Length of the TCP header: 32 bytes
Acknowledgement Number is Valid
Finish Packet
Window size: 8326 bytes
Checksum for TCP: 45549
Options:
01 01 08 0a 08 3b 8a 88 4a 45 e4 f7
HTTP payload:

The checksum for IP is 64317.
The IP address of the sender is 129.186.215.40
The IP address of the destination is 129.186.215.41

        0022 19ad 59d9 0022 19ad 5a0b 0800 4510
        0034 2a1b 4000 4006 5ed2 81ba d729 81ba
        d728 fa30 0050 5bbe f3f1 fa79 3b9e 8010
        205e 624d 0000 0101 080a 4a45 e4f8 083b
        8a88

DA = 00:22:19:ad:59:d9, SA = 00:22:19:ad:5a:0b
Type = 0x800
Paylaod = IP
The IP protocol is version 4.
The length of the IP header is 20 bytes.
The length of the payload is 52 bytes.
The identifier is 10779.
Flags are 0 1 0.
Offset is 0.
TTL is 64.
The upper-layer protocol handling this packet is TCP.
Source port number: 64048
Destination port number: 80
Sequence number: 6804465
Acknowledgement number: 16894878
Length of the TCP header: 32 bytes
Acknowledgement Number is Valid
Window size: 8286 bytes
Checksum for TCP: 25165
Options:
01 01 08 0a 4a 45 e4 f8 08 3b 8a 88
HTTP payload:

The checksum for IP is 24274.
The IP address of the sender is 129.186.215.41
The IP address of the destination is 129.186.215.40

        0022 19ad 59d9 0022 19ad 5a0b 0800 4510
        0034 2a1c 4000 4006 5ed1 81ba d729 81ba

7

```
d728 fa30 0050 5bbe f3f1 fa79 3b9e 8011
2086 6223 0000 0101 080a 4a45 e4f9 083b
8a88
```

DA = 00:22:19:ad:59:d9, SA = 00:22:19:ad:5a:0b
Type = 0x800
Paylaod = IP
The IP protocol is version 4.
The length of the IP header is 20 bytes.
The length of the payload is 52 bytes.
The identifier is 10780.
Flags are 0 1 0.
Offset is 0.
TTL is 64.
The upper-layer protocol handling this packet is TCP.
Source port number: 64048
Destination port number: 80
Sequence number: 6804465
Acknowledgement number: 16894878
Length of the TCP header: 32 bytes
Acknowledgement Number is Valid
Finish Packet
Window size: 8326 bytes
Checksum for TCP: 25123
Options:
01 01 08 0a 4a 45 e4 f9 08 3b 8a 88
HTTP payload:

The checksum for IP is 24273.
The IP address of the sender is 129.186.215.41
The IP address of the destination is 129.186.215.40

```
0022 19ad 5a0b 0022 19ad 59d9 0800 4500
0034 8dc0 4000 4006 fb3c 81ba d728 81ba
d729 0050 fa30 fa79 3b9e 5bbe f3f2 8010
2085 b1ed 0000 0101 080a 083b 8a88 4a45
e4f9
```

DA = 00:22:19:ad:5a:0b, SA = 00:22:19:ad:59:d9
Type = 0x800
Paylaod = IP
The IP protocol is version 4.
The length of the IP header is 20 bytes.
The length of the payload is 52 bytes.
The identifier is 36288.
Flags are 0 1 0.
Offset is 0.
TTL is 64.
The upper-layer protocol handling this packet is TCP.
Source port number: 80
Destination port number: 64048
Sequence number: 16894878

```
Acknowledgement number: 6804466
Length of the TCP header: 32 bytes
Acknowledgement Number is Valid
Window size: 8325 bytes
Checksum for TCP: 45549
Options:
01 01 08 0a 08 3b 8a 88 4a 45 e4 f9
HTTP payload:

The checksum for IP is 64316.
The IP address of the sender is 129.186.215.40
The IP address of the destination is 129.186.215.41

1 packets are broadcast packets.
11 packets are IP packets.
1 packets are ARP packets.
0 packets are ICMP packets.
11 packets are TCP packets.
0 packets are SMTP packets.
0 packets are POP packets.
0 packets are IMAP packets.
0 packets are DNS packets.
9 packets are HTTP packets.

23 packets received by filter
0 packets dropped by kernel
```