My devices Ip address is:

The website ip address is:

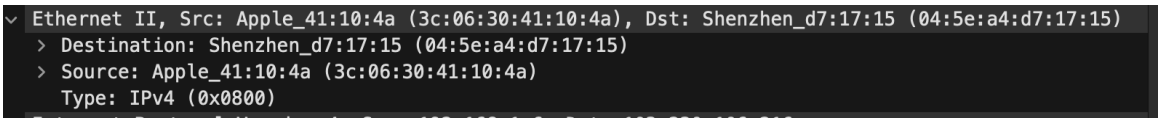
```
loknathsaha@Loknaths-MacBook-Pro ~ % ping cspb.teletalk.com.bd
PING cspb.teletalk.com.bd (103.230.106.216): 56 data bytes
64 bytes from 103.230.106.216: icmp_seq=0 ttl=249 time=12.014 ms
64 bytes from 103.230.106.216: icmp_seq=1 ttl=249 time=24.111 ms
64 bytes from 103.230.106.216: icmp_seq=2 ttl=249 time=11.326 ms
64 bytes from 103.230.106.216: icmp_seq=3 ttl=249 time=14.367 ms
64 bytes from 103.230.106.216: icmp_seq=4 ttl=249 time=19.631 ms
64 bytes from 103.230.106.216: icmp_seq=5 ttl=249 time=7.803 ms
64 bytes from 103.230.106.216: icmp_seq=6 ttl=249 time=10.289 ms
64 bytes from 103.230.106.216: icmp_seq=7 ttl=249 time=15.719 ms
```

Http request is:

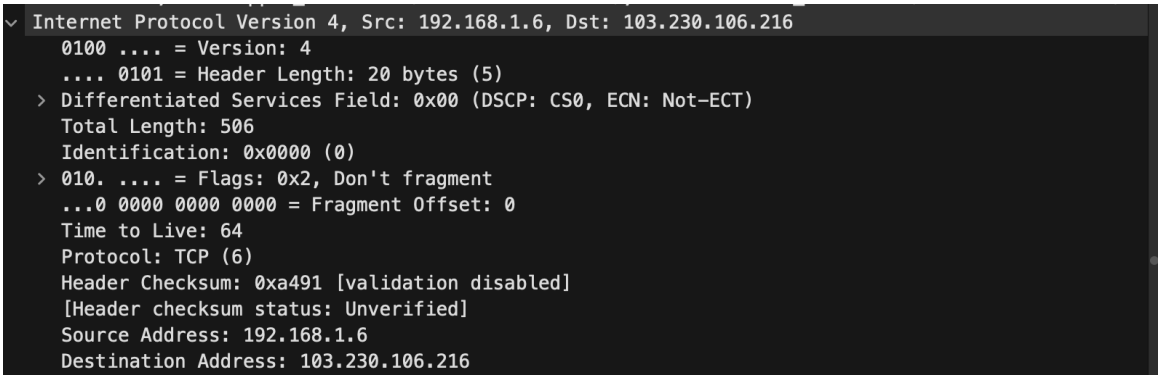
No.	Time	Source	Destination	Protocol	Length	Info
1	0.000000	192.168.1.6	103.230.106.216	HTTP	520	GET /time.php HTTP/1.1

```
Frame 1: 520 bytes on wire (4160 bits), 520 bytes captured (4160 bits) on interface en0, id 0
    Section number: 1
  > Interface id: 0 (en0)
    Encapsulation type: Ethernet (1)
    Arrival Time: Oct 31, 2023 21:47:22.811683000 +06
    [Time shift for this packet: 0.000000000 seconds]
    Epoch Time: 1698767242.811683000 seconds
    [Time delta from previous captured frame: 0.000000000 seconds]
    [Time delta from previous displayed frame: 0.000000000 seconds]
    [Time since reference or first frame: 0.000000000 seconds]
    Frame Number: 1
    Frame Length: 520 bytes (4160 bits)
    Capture Length: 520 bytes (4160 bits)
    [Frame is marked: False]
    [Frame is ignored: False]
    [Protocols in frame: eth:ethertype:ip:tcp:http]
    [Coloring Rule Name: HTTP]
    [Coloring Rule String: http || tcp.port == 80 || http2]
```

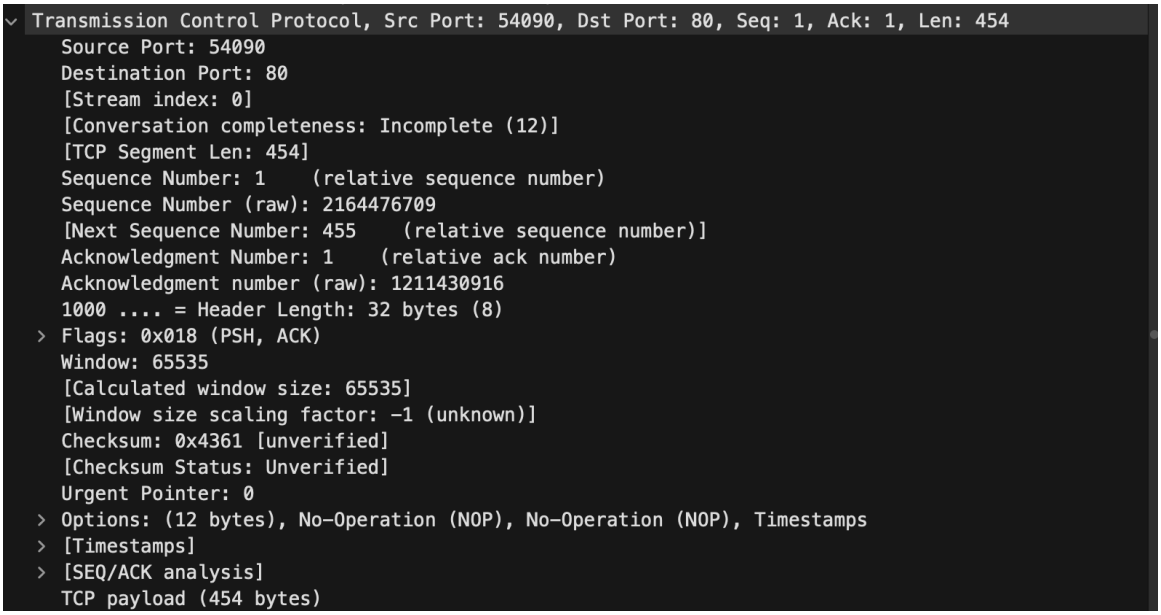
Here, Frame 1 operates at the data-link layer, which is Layer 2. So, Frame 1 belongs to Layer 2, the data-link layer



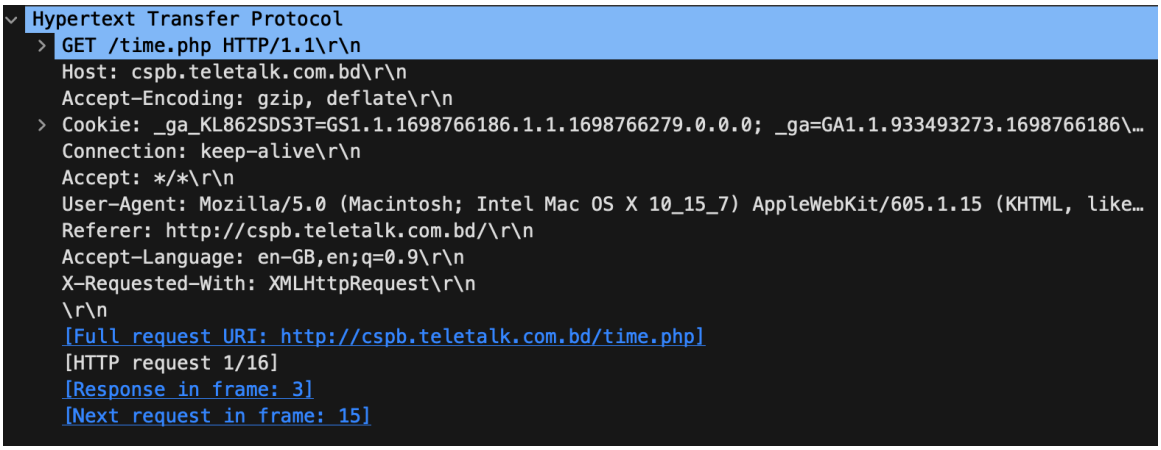
Ethernet II: This is the data-link layer (Layer 2) header, it describes the Ethernet II frame header. It specifies the source and destination MAC addresses (hardware addresses) of the sender and receiver. The frame carries an IPv4 packet (Type: 0x0800) for network communication.



Internet Protocol Version 4 (IPv4): This is the network layer (Layer 3). It deals with routing and addressing packets across networks. In this case, it's an IPv4 packet. This information represents an IPv4 packet. It includes the source and destination IP addresses, with a total length of 506 bytes. The packet has a Time to Live (TTL) of 64, uses the TCP protocol, and is set to not be fragmented (Don't fragment flag is set). The header checksum is 0xa491, and the packet's version is IPv4 (Version: 4).



Transmission Control Protocol (TCP): This is the transport layer (Layer 4) and This packet has source port 54090 and destination port 80, typically used for HTTP. The window size is 65535, This packet is part of an incomplete TCP conversation and facilitates data exchange, with sequence and acknowledgment numbers for reliable data transmission. The checksum is unverified, and there's no urgent data indicated in the packet.



Certainly, let's break down the information provided for the Hypertext Transfer Protocol (HTTP) request:

1. `GET /time.php HTTP/1.1\r\n`: This line indicates an HTTP GET request for the resource "/time.php" using HTTP version 1.1.

2. `Host: cspb.teletalk.com.bd\r\n`: Specifies the "Host" header, which designates the target web server's domain name.

3. `Accept-Encoding: gzip, deflate\r\n`: Informs the server that the client can accept responses compressed with gzip or deflate encoding.

4. `Cookie: ...`: This line shows one or more cookie values that the client includes with the request for maintaining session information.

5. `Connection: keep-alive\r\n`: Suggests that the client wants to keep the TCP connection open for possible future requests, rather than closing it after this request.

6. `Accept: */*\r\n`: The client accepts any media type in the response.

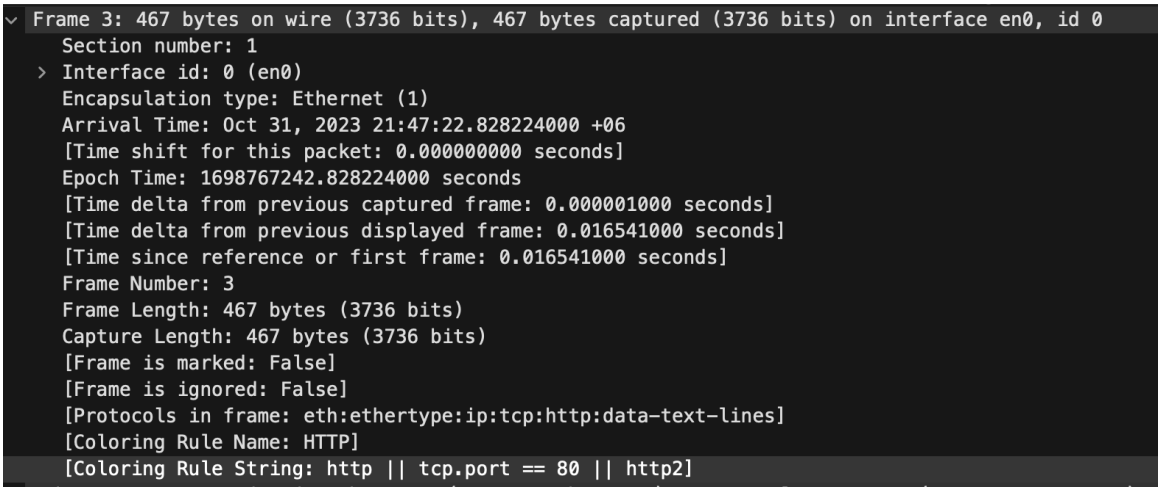
7. `User-Agent: ...`: Specifies the user agent string, indicating the client's browser and operating system.

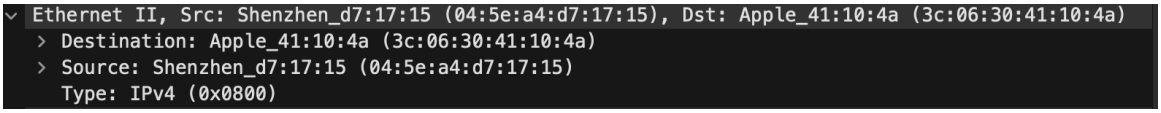
8. `Referer: ...`: Refers to the page from which the client is making the request, in this case, "http://cspb.teletalk.com.bd/".

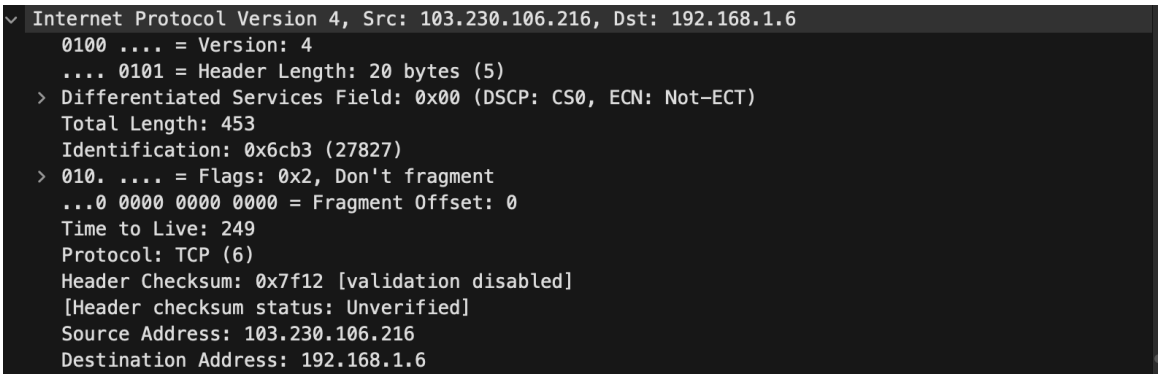
9. `Blank line (ends with \r\n)`: Signifies the end of the HTTP headers and the beginning of the request's body. In this case, there is no request body.

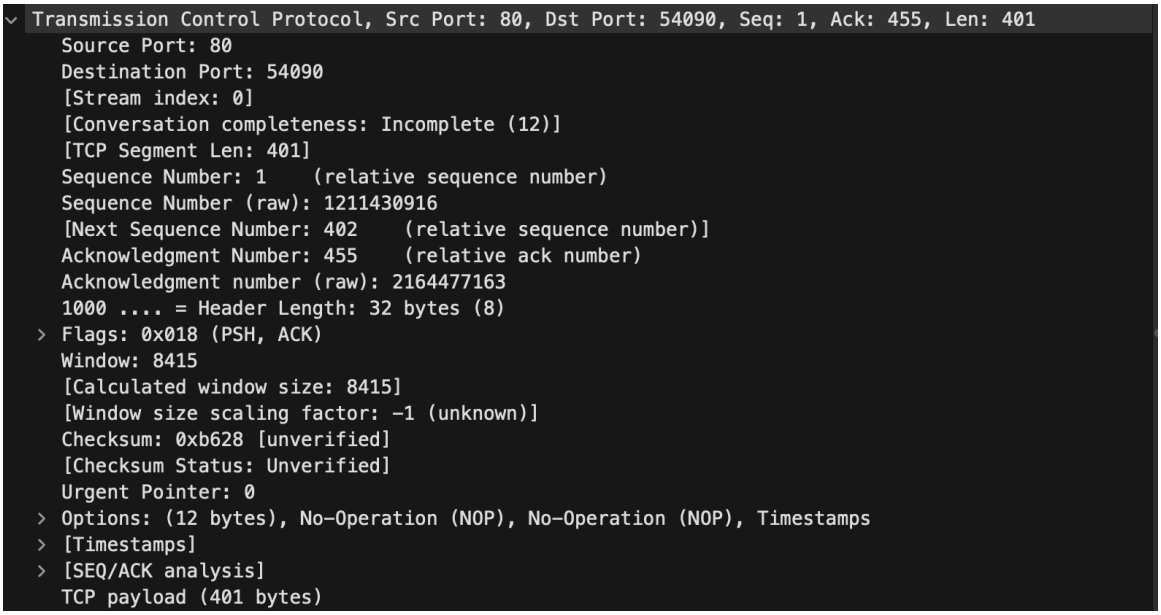
This information represents a typical HTTP request header, used by a client (e.g., a web browser) to request a resource from a web server. And HTTP operates at the application layer (Layer 7).

Http response:

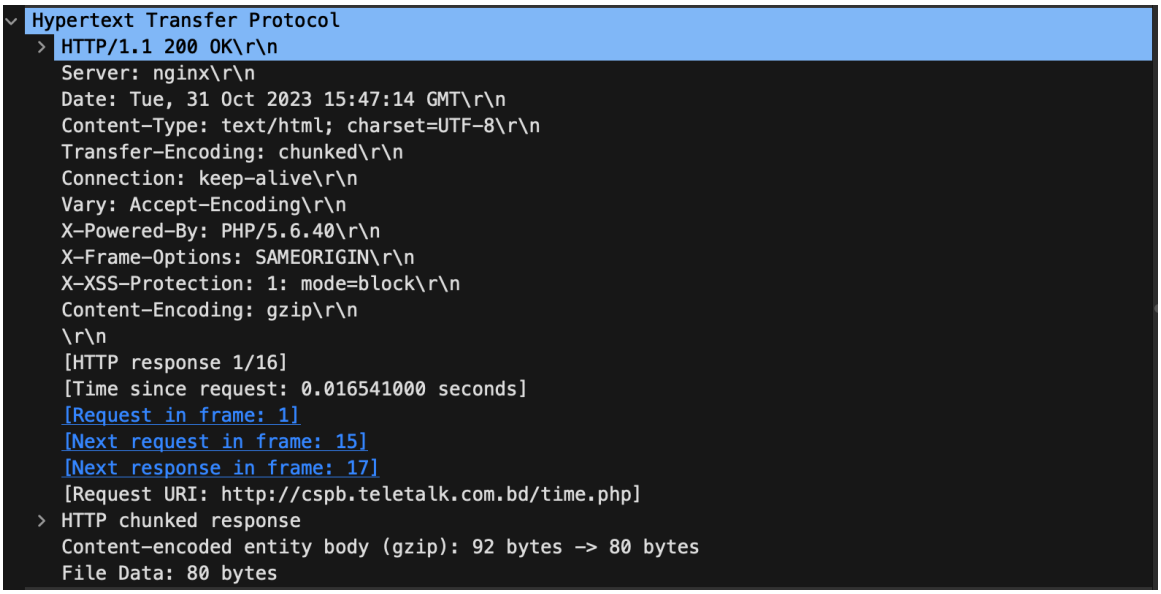








This Four belongs to the same layers as before and also contains similar type of information like the http request.



Let's break down the important lines in the Hypertext Transfer Protocol (HTTP) response:

1. `HTTP/1.1 200 OK\r\n`: This line indicates that the HTTP response uses version 1.1, and the HTTP status code is 200, which means "OK." This implies that the request was successful.

2. `Server: nginx\r\n`: Specifies the web server software being used, in this case, "nginx."

3. `Date: Tue, 31 Oct 2023 15:47:14 GMT\r\n`: Provides the date and time when the response was generated in GMT (Greenwich Mean Time).

4. `Content-Type: text/html; charset=UTF-8\r\n`: Indicates that the response content is in HTML format with a character encoding of UTF-8.

5. `Transfer-Encoding: chunked\r\n`: Suggests that the response body is sent in "chunked" format, where data is divided into chunks for transmission.

6. `Connection: keep-alive\r\n`: Similar to the request, this indicates that the server wants to keep the TCP connection open for potential future requests.

7. `Content-Encoding: gzip\r\n`: Informs that the response content is compressed using the gzip encoding.

So overall, this information provides details about the HTTP response, including the status, server software, content type, and encoding.

The "Line-based text data" belongs to the Application Layer (Layer 7) in the OSI model.

This line-based text data represents an HTML response and includes two lines of information. It displays the current time (31/10/2023, 09:47:14 PM) and the converted time (01/01/1970, 06:04:00 AM) in an HTML format. This data is typically sent as the

payload of an HTTP response, which operates at the application layer, making it Layer 7 in the OSI model.