**1. Difference between HTTP1.1 vs HTTP2**

http 1 loads the website slowly

http 2 loads the website fast

http 1 it requires performance optimisation to load the websites effectively

http 2 does not require any additional optimization

HTTP/1.1 loads resources one after the other, so if one resource cannot be loaded, it blocks all the other resources behind it

HTTP/2 is able to use a single TCP connection to send multiple streams of data at once so that no one resource blocks any other resource http 1

http 1 is less secured when compared with http 2 and http 2 is more secure when compared with http1.1

HTTP2 is binary, whereas HTTP1 is textual.

HTTP2 is fully multiplexed, instead of ordered and blocking.

HTTP2 can, therefore, use one connection for parallelism.

HTP2 uses header compression to reduce overhead.

HTTP2 allows servers to “push” responses proactively into client caches.

HTTP2 is secured by default.

**2. http version history**

HTTP/0.9

Year of release 1991

It is extremely simple requests consist of a single line and start with the only possible method GET followed by the path to the resource.

There were no status or error messages.

HTTP/1.0

Year of release is 1996

Version information is now sent within each request.

A status code is also sent at the beginning of the response.

The HTTP headers has been introduced.

The transfer of other documents than plain HTML files has been added.

HTTP/1.1

Year of release is 1997

A connection can be reused.

Pipelining has been added, allowing to send a second request before the answer for the first one is fully transmitted.

Cache control mechanism have been introduced.

HTTP/2

Year of release is 2015

It is a binary protocol rather than text.

It is a multiplexed protocol. Parallel requests can be handled over the same connection, removing the order and blocking issues of the HTTTP/1.1 protocol.

It compresses headers. As these are often similar among a set of requests, this removes duplication and overhead of data transmitted

**3. List 5 difference between Browser JS(console) vs Nodejs**

In browser “window” is a predefined global object which has functions and attributes, whereas Nodejs doesn’t have it.

In browser “location” is another predefined object, whereas Nodejs doesn’t have it.

In browser “require” is not predefined object, whereas Nodejs has it.

In browser module is not required, where as in Nodejs you have to keep your code inside the module.

In browser “document” is a predefined object, whereas Nodejs doesn’t have it.

**4. what happens when you type a URL in the address bar in the browser?**

You type url into the address bar of your browser.

The browser checks the cache for a DNS record to find the corresponding IP address of the url

If the requested URL is not in the cache, ISP’s DNS server initiates a DNS query to find the IP address of the server that hosts the url

The browser initiates a TCP connection with the server

The browser sends an HTTP request to the webserver

The server handles the request and sends back a response

The server sends out an HTTP response

The browser displays the HTML content (for HTML responses, which is the most common)