1. **Write a blog on Difference between HTTP1.1 vs HTTP2**

HTTP - hypertext transfer protocol

It is used in client-server communication.

Usage :

By using HTTP user sends the request to the server & the server sends the response to the user.

There are several stages of development of HTTP but we will focus mainly on HTTP/1.1 which was created in 1997 & the new one is HTTP/2 which was created in 2015.

Http 1.1 :

HTTP 1.1 provides a persistent connection that allows multiple requests to be batched  to an output.

The underlying Transmission Control Protocol layer can put multiple requests (and responses to requests) into one TCP segment that gets forwarded to the [Internet Protocol](https://www.techtarget.com/searchunifiedcommunications/definition/Internet-Protocol) layer for [packet](https://www.techtarget.com/searchnetworking/definition/packet) transmission. Because the number of connection and disconnection requests for a sequence of "get a file" requests is reduced, fewer packets need to flow across the Internet. Since requests are pipelined, TCP segments are more efficient. The overall result is less Internet traffic and faster performance for the user. Http 1.1 compresses the data by itself.

Drawbacks of Http 1.1 :

 Http 1.1 –

1.Transfer all the requests & responses in the plain text message form.

2. Head of line blocking in which TCP connection is blocked all other requests until the response does not receive.

Http 2 :

HTTP 2 works on the binary framing layer instead of textual that converts all the messages in binary format. it works on fully multiplexed that is one TCP connection is used for multiple requests. HTTP 2 uses HPACK which is used to split data from header. it compresses the header. The server sends all the other files like CSS & JS without the request of the client using the PUSH frame.

* Binary: Meaning commands use 1s and 0s and not text
* Multiplex: Permits multiple requests and responses to be sent at the same time
* Compression: Compresses headers that have been requested previously to make things more efficient
* Stream prioritization: This allows for the exchange of successive streams at one time
* Server push: The server can send additional information needed for a request before it is requested
* Increased security: HTTP/2 is supported through encrypted connections

Drawbacks of Http2 :

1.It is not very fast

2. Encryption is not required

3. Cookie is an issue