HTTP- Hypertext transfer protocol

- HTTP is a set of rules for transferring files (images,text,video,audio) over the web .
- The HTTP is an application protocol for distributed information systems that allows users to communicate data on the world wide web.
- HTTP works as a request-response protocol.

Difference between HTTP1.1 vs HTTP2

HTTP1.1

- It supports connection reuse i.e. for every TCP connection there could be multiple requests and responses, and pipelining where the client can request several resources from the server at once.
- However, pipelining was hard to implement due to issues such as head-of-line blocking and was not a feasible solution.
- It is relatively secure to use digest authentication.
- HTTP 1.1 defines 24 status code error reports and is fast and efficient.
- HTTP 1.1,which keeps all requests and responses in plain text.

HTTP2

- Uses multiplexing, where over a single TCP connection resources to be delivered are interleaved and arrive at the client almost at the same time. It is done using streams which can be prioritized, can have dependencies and individual flow control.
- It also provides a feature called server push that allows the server to send data that the client will need but has not yet requested.
- Security concerns from previous versions will continue to be seen in HTTP/2 . however inadequate security.
- Semantics of HTTP such as headers ,status codes remain the same.
- HTTP/2 uses the binary framing layer to encapsulate all messages in binary format, while still maintaining HTTP semantics, such as verbs, methods, and headers.