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

**HTTP/1.1**

The first standardized version of HTTP was introduced in 1997. It presented significant performance optimizations and transformed the way requests and responses were exchanged between clients and servers.

Key features

It allowed multiple requests/responses per TCP connection. It was no longer required for each connection to be terminated immediately after every request was served with a response

The header was used to priorities the request from the client that made it possible to switch to a more preferred protocol if found appropriate by the server.

It provided support for chunk transfers that allowed streaming of content dynamically as chunks and for additional headers to be sent after the message body.

Other features that reinforced its stability were introduced such as:

* pipelining
* content negotiation
* cache control

**HTTP/2**

At the beginning of 2010, Google introduced an experimental protocol, SPDY, which supported multiplexing (multiple requests/responses sent and received asynchronously over a single TCP connection) but as it gained traction IETF’s HTTP Working Group came up with HTTP/2 in 2015, which is based on the SPDY protocol.

Key Features of HTTP/2:

It introduces the concept of a server push where the server anticipates the resources that will be required by the client and pushes them prior to the client making requests.

Introduces the concept of multiplexing that interleaves the requests and responses without head-of-line blocking and does so over a single TCP connection

It is a binary protocol The binary framing layer divides the message into frames that are segregated based on their type – Data or Header. This feature greatly increases efficiency in terms of security, compression, and multiplexing.

HTTP/2 uses HPACK header compression algorithm that is resilient to attacks like CRIME and utilizes static Huffman encoding.