Zen Task Day 1

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

Difference	HTTP 1.1	HTTP 2.0
Year	1997	2015
Key features	It supports connection reuse i.e. for every TCP connection there could be multiple requests and responses, and pipe lining where the client can request several resources from the server at once.	Uses multiplexing, where over a single TCP connection resources to be delivered are interleaved and arrive at the client almost at the same time.
Status code	Introduces a warning header field to carry additional information about the status of a message. Can define 24 status codes, error reporting is quicker and more efficient.	Underlying semantics of HTTP such as headers, status codes remains the same.
Authentication Mechanism	It is relatively secure since it uses digest authentication, NTLM authentication.	Security concerns from previous versions will continue to be seen in HTTP/2. However, it is better equipped to deal with them due to new TLS features like connection error of type Inadequate Security.
Caching	Expands on the caching support by using additional headers like cache-control, conditional headers like If-Match and by using entity tags.	HTTP/2 does not change much in terms of caching. With the server push feature if the client finds the resources are already present in the cache, it can cancel the pushed stream.
Web Traffic	TCP starts slowly and with domain sharing (resources can be downloaded simultaneously by using multiple domains), connection reuse and pipe lining, there is an increased risk of network congestion.	HTTP/2 utilizes multiplexing and server push to effectively reduce the page load time by a greater margin along with being less sensitive to network delays.
Reliability	Slower but reliable transfers	Faster but non reliable transfers.
Applications	Email, Web browsing	Music Streaming
Casting	Unicast	Unicast, Multicast, Broadcast
Acknowledgement	It acknowledges for each response	It doesn’t acknowledge

Zen Task Day 1

3. Write a blog about objects and its internal representation in Javascript?

- In JavaScript, Objects is the most important data-type and forms the building blocks for modern JavaScript. These objects are quite different from JavaScript's primitive data-types (Number, String, Boolean, null, undefined and symbol) in the sense that while these primitive data-types all store a single value each (depending on their types).

- Objects in JavaScript may be defined as an unordered collection of related data, of primitive or reference types, in the form of "key: value" pairs. These keys can be variables or functions and are called properties and methods, respectively, in the context of an object.

- A JavaScript object has properties associated with it. A property of an object can be explained as a variable that is attached to the object. Object properties are basically the same as ordinary JavaScript variables, except for the attachment to objects. The properties of an object define the characteristics of the object. You access the properties of an object with a simple dot-notation: