Task-2

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

HTTP stands for hypertext transfer protocol & it is used in client-server communication. 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. HTTP1.1 which was created in 1997 & the new one is HTTP2 which was created in 2015.

Differences:

HTTP1.1	HTTP2
➢ HTTP1.1 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.	➢ HTTP 2 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.
➢ HTTP1.1 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.
➢ HTTP/1.1 provides faster delivery of web pages and reduces web traffic as compared to HTTP/1.0. However, TCP starts slowly and with domain sharding (resources can be downloaded simultaneously by using multiple domains), connection reuse and pipelining, 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.

2. Write a blog about objects and its internal representation in JavaScript.

Objects are important data types in JavaScript. Objects are different than primitive data types (i.e. number, string, boolean, etc.). Primitive data types contain one value but Objects can hold many values in form of Key: value pair. These keys can be variables or functions and are called properties and methods, respectively, in the context of an object.

Every object has some property associated with some value. These values can be accessed using these properties associated with them.

An object can be created with figure brackets {} with an optional list of properties. A property is a “key: value” pair, where a key is the property name value can be anything.

Example:

Property	Property value
Firstname	Ganesh
Lastname	R
Age	22
Height	170 cm

Syntax:

```
const person = {

  firstName: "Ganesh",

  lastName: "R",

  age: 22,

  height: "170 cm"

};
```