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

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| HTTP 1.1 | HTTP 2 |
| Some methods and response codes are added | Support of paralle request transmission by “stream” (elimination of HTTP HoL Blocking) |
| 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 | Uses multiplexing, where over a single TCP connection resource 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. |
| Syntax and semantics are separated | Addition of server-push funciton(send related file without request) |
| 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. |
| 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. |

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

• Objects in JavaScript are one of the important data types. They are a reference data type as opposed to primitive data types(Number, string, boolean, null and undefined)

• Object are unordered data types. That means entries inside them are not indexed unlike in arrays or strings.

• Objects are complex data types and each object can be a combination of other primitive data types or reference data types.

• JavaScript objects have properties. These properties are variables assinged to other objects. They are called are object keys or simply keys.

• These keys refer to another object(s) known as values(s). These values can be any other data type(primitive or reference)

• All keys in an object are unique or in another way of speaking, a javascript object cannot have duplicate keys.

• Syntax for creating an object in javascript.

let obj = {} //empty object or

let animal = {name: “Lion”, color: “Brown”}

accessing values can be done in following ways:

car.name (evaluates to “Lion”)

car[name] (evaluates to “Lion”)