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

**Ans**:

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| **HTTP 1.1** | **HTTP 2** |
| 1.It was created in 1997. | 1.It was created in 2015 |
| 2. 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. | 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. |
| 3.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. | 3. Underlying semantics of HTTP such as headers, status codes remains the same. |
| 4.It is relatively secure since it uses digest authentication, NTLM authentication. | 4.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. |
| 5.Expands on the caching support by using additional headers like cache-control, conditional headers like If-Match and by using entity tags. | 5.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. |
| 6.HTTP/1.1 provides faster delivery of web pages and reduces web traffic. 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. | 6.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. |
| 7. HTTP/1.1 loads resources one after the other, so if one resource cannot be loaded, it blocks all the other resources behind it | 7. HTTP/2 is able to use a single [TCP](https://www.cloudflare.com/learning/ddos/glossary/tcp-ip/) connection to send multiple streams of data at once so that no one resource blocks any other resource. |

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

**Ans**:

* Objects are a structure of key value K:V pair.
* Object access is easy while compare to array.
* There is no index in object.
* And also accessing the element inside the object.
* We can access the element of the object using by key
* Without key we do not access values

SYNTAX:

var Objectname = {keyname:keyvalue}

For Eg:

Var Studentname = {name:”John doe”,

Age: 32,

Year: 1998,

Address: “San Franscisco”};

Here Objectname also called as reference name.

**Types of Accessing:**

There are 2 types.

1. Dot Method
2. Box Method

**DOT Method**:

SYNTAX:

Objectname.keyname;

For Eg:

Console.log(Studentname.name);

**Box** **Method**:

SYNTAX:

Objectname[“keyname”];

For ex:

Console.log(Studentname[“name”]);

**Insertion**:

Here a new K:V pair will be added at the end of the line. We cannot insert values in middle.

Syntax: Objectname.keyname=value;

For Eg:

1. Studentname.gender=”Male”;

2. Studentname.Attendance = [“Mon”,”Tue”,”Wed”];

**Updation**:

Will be applicable for the key which is already present.

Syntax: Objectname.keyname=value;

For Eg: Studentname.address=”California”;

**Deletion:**

We can delete the middle element also.

Syntax: delete Objectname.keyname;

For Eg: delete studentname.age;