DAY - 1 TASK Date: 19/01/2024

1. Write a blog on Difference between HTTP1.1 vs HTTP2 (HTTP - Hyper Text Transfer Protocol)

HTTP 1.1	HTTP 2
1 It works on the textual format.	1 It works on the binary protocol.
2 It compresses data by itself.	2 It uses HPACK for data compression.
3 It uses requests resources inlining for use	3 It uses PUSH frame by server that collects
getting multiple passes.	all multiple pages.
4 There is head of the line blocking all the	4 It allows multiplexing, so one TCP
requests behind it until it doesn't get its all	connection is required for multiple requests.
resources.	
5 There is a problem which is creating a	5 Using bottleneck layer partition the client
persistent connection between server and	and the server problem is resolved.
client.	
6 There are other problems, such as plain text	6 It enables client to prioritise, allowing more
header being sent that are large, especially	critical resources to be fetched and rendered
when cookies are in use.	first.
7 It doesn't offer a way to prioritise requests,	7 It relies on the same underlying protocol in
which could lead to less critical resources	order to operate : TCP.
blocking more important ones.	
8 In the document are likely various assets.	8 In this it works differently using multiplexing
things like images, stylesheets(CSS file),	the browser effectively requests the assets
and javascript assets (js files).	together. and then receives in same way.
9 These limitations often lead to inefficient	9 Server can proactively push resources to the
use of network resources, as subsequent	clients cache before they requested, to
requests had to wait for the previous	reduce latency and improve overall user
request to complete.	experience.
10 Lack of prioritization.	10 Improved in prioritization.

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

what is an object in javascript?

An object is a collection of properties, and a property is an association between a name and a value. A properties value can be a function, in which case the property is known as a method. Objects in JavaScript, just as in many other programming languages, can be compared to objects in real life.

1. Objects are a fundamental data type in JavaScript. They are used to store data and functions together. Objects are created using curly braces, and the properties are listed inside the curly braces, separated by commas.

```
for example: const person = {

name: "Aishwarya",

degree: "BCA"

};
```

2. The properties of an object can be accessed using the dot notation only. To access the name property of the person object we would use dot operator.

for example: console.log(person.name); //Aishwarya

3. Objects can also contain functions. These functions are called methods. Methods are defined inside the object, just like properties. To call a method, you use the dot notation, followed by the method name and parentheses.

for example: **person.greet();** //"Hello, my name is Aishwarya!"

- Objects are a powerful way to organize data and functions in JavaScript. They are used in almost every JavaScript application.
- Objects are important data types in javascript, Objects are different than primitive datatypes (i.e. number, string, boolean, etc.).
- Primitive data types contain one value but Objects can hold many values in the 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.