Task 1

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

HTTP stands for Hypertext Transfer Protocol. It is an application protocol that is used to transfer data over the web. It basically transfers the data from client i.e. browser to web server. Thus forming a request-response cycle. It was created with HTML to enable interactive webpages. It also uses specific request methods in order to perform various tasks. Some of the methods include, GET, POST etc. There are different types in HTTP versions such as HTTP/1, HTTP/1.1, HTTP2 and HTTP/3.

Working of HTTP:

HTTP works based on the request response cycle, which is demonstrated below.



1. Request



2. Response 

HTTP 1.1:

* It was introduced in 1997 and the browser makes several parallel requests.
* A feature like ‘keep alive’ was introduced in this update. This option enables re-using of the same TCP connection for multiple HTTP requests.
* In this, HOL blocking occurs.
* Repetition of header data occurs.

HTTP 2:

* It was introduced in 2015. Here only single secured TCP connection is used.
* In this streams are created for different requests, so it is faster compared to HTTP 1.1
* HTTP2 compresses HTTP headers and eliminates the HOL blocking.
* Header data is separated from request data thus reducing HTTP request size.

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

Objects are one of the crucial data types used in JavaScript. Objects are combinations of other data types such as number, Boolean, string, null etc. Most of these data types store only a single value depending on its type.

In simpler terms, objects are defined as an unordered collection of related data, of primitive data types in the form of “key :value” pairs. A property is a “key:value” pair where a key is a string also called a “property name” and the value can be anything.

**Syntax:**

let object\_name = {

key\_name : value,

...

}

**Example:**

const student = {

name: 'John',

age: 17

}

**Objects and properties:**

An object in JavaScript has properties associated with it. A variable attached to the object is called property that defines the characteristics of the object. The properties of the object can be accessed as follows:

“ObjectName.propertyName”

Syntax for deleting property from an object:

“delete objectName.propertyName”

**Creating objects:**

Objects in JavaScript can be created by 4 different ways, they include:

1. Creating JavaScript object with object Literal
2. Creating JavaScript object with Constructor
3. Using JavaScript keyword new
4. Using the object.create method

**Object methods:**

Java Script Object methods are “Methods are actions that can be performed on objects.” Some of the object methods are

* Object.seal()
* Object.values()
* Object.keys()
* Object.isFrozen() etc.

Thus, these are about the objects and its internal representation in JavaScript.