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

| **HTTP/1.1** | **HTTP/2** |
| --- | --- |
| It works on the textual format. | It works on the binary protocol. |
| There is head of line blocking that blocks all the requests behind it until it doesn’t get its all resources. | It allows multiplexing so one TCP connection is required for multiple requests. |
| It uses requests resource Inlining for use getting multiple pages | It uses PUSH frame by server that collects all multiple pages |
| It compresses data by itself. | It uses HPACK for data compression. |

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

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 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.  The objects are most important data-type and forms the building blocks for modern JavaScript. Internally, JavaScript engines use various data structures to represent objects efficiently. One common approach is using a hash table or a similar structure to store the object’s properties and their corresponding values. This allows for fast access and manipulation of properties.

1. Write a blog about objects and its internal representation in Javascript
2. **codekata practice**

completed codekata section & practiced

1. **Read about IP address, port, HTTP methods, MAC address**

**IP address** stands for “Internet Protocol address.” The Internet Protocol is a set of rules for communication over the internet, such as sending mail, streaming video, or connecting to a website. An IP address identifies a network or device on the internet.

**Ports** are an integral part of the Internet's communication model. All communication over the Internet is exchanged via ports. Every IP address contains two kinds of ports, UDP and TCP ports, and there are up to 65,535 of each for any given IP address.

The primary or most commonly-used **HTTP methods** are POST, GET, PUT, PATCH, and DELETE. These methods correspond to create, read, update, and delete (or CRUD) operations, respectively. There are a number of other methods, too, but they are utilized less frequently.

The **MAC address** is known as the hardware id number. In particular, each computer's NIC (network interface card), including a Bluetooth, Wi-Fi card or Ethernet card, has an unchanged MAC address inserted by the manufacturer at the time of production.