| **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 on Difference between HTTP1.1 vs HTTP2**

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

**Internal Representation & Objects:-**

* **In Memory**: Internally, JavaScript objects are stored in the heap memory space because they are dynamically sized.
* **Property Access**: When you access a property, JavaScript engines use a hash table to quickly find the property value.
* **Hidden Classes**: Modern JavaScript engines optimize property access using hidden classes. Instead of a straightforward hash table, similar objects share a hidden class to speed up property access.
* **Property Storage**: Properties are stored in two ways:
  + **Simple Properties**: Stored directly on the object if they are accessed frequently.
  + **Complex Properties**: Stored separately and a reference is kept on the object.

**3.Codekata practice**

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

**1.** **IP Address :** An IP Address or Internet Protocol Address, is a unique number that identifies a device on the internet or a local network. IP Addresses are typically assigned by an internet service provider(ISP)

**2.**  **Port :** A port in computer networking is a number that identifies a connection endpoint and directs data to a specific service. They help computers sort the network traffic they receive.

**3. HTTP Methods :** The HTTP is a collection of request methods that specify what action to perform on a specific resource. The most commonly used HTTP methods are GET,POST,PUT,PATCH,DELETE. These methods correspond to create, read, update, delete(CRUD) operations.

**4. MAC Address :** A MAC Address(Media Access Address) is a 12-character alphanumeric identifier that uniquely identifies a network interface controller(NIC).