

TASK 1

1)Difference between HTTP1.1 vs HTTP2

HTTP stands for Hypertext Transfer Protocol. The key differences HTTP2 has to HTTP1.1 are as follows:

- a) It uses binary commands to complete requests, instead of textual commands.
- b) Fully multiplexed i.e can send multiple requests , instead of ordered and blocking.
- c) It can use one connection for parallelism.
- d) It uses header compression to reduce overhead
- e) It allows the server pushing to add responses proactively into the browser cache.

2)HTTP version history

Year	Version
1991	0.9
1996	1.0
1997	1.1
2015	2.0

3)List 5 differences between Browser JS vs Node JS.

1. JS is a programming language whereas NodeJS is runtime environment
2. JS runs in any engine like Spider Monkey, V8 etc. Node runs only in V8(Chrome)
3. JS is used for client side activity whereas Node JS is used for backend.
4. Node.js utilizes JavaScript as its scripting language, and achieves high throughput via non-blocking I/O and a single-threaded event loop.
5. Node.js contains a built-in HTTP server library, making it possible to run a web server without the use of external software.

4)What happens when you type a URL in the address bar in the browser?

The browser checks the cache for a DNS record to find the corresponding IP address. If the URL is not cache, the ISP's DNS server initiates a query to find the IP address. The browser initiates a TCP connection with the server. The browser sends a HTTP request to the server. The server handles a request and sends back a HTTP response. The browser displays the HTML content.