**TASK - 1**

**HTTP**

The Hyper Text Transfer Protocol - HTTP is a data communications protocol and acts as the foundation of the World Wide Web.

**Difference between HTTP/1.1 vs HTTP/2**

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| **S.No** | **HTTP/1.1** | **HTTP/2** |
| 1 | It published in “1997” | It published in “2015” |
| 2 | It works on the “Textual format” | It works on the “Binary protocol” |
| 3 | 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. |
| 4 | It uses requests resources inlining for use getting multiple pages. | It uses PUSH frame by server that collects all multiple pages. |
| 5 | It compresses data by itself. | It uses HPACK for data compression. |

**HTTP/ Motivation and Goals**

One of the motivating factors behind **HTTP/2** was the quest for greater performance. This was necessitated bye the fact that websites were becoming more media-rich, and offered significantly more interaction with the client. Server-side operations and client-side scripts were becoming larger and more complex and as such, were more demanding on resources including bandwidth.

Given that **HTTP/1.1** protocol is still widely deployed, including built in to middleboxes that are not likely to be upgraded in this respect, HTTP is backward compatible and is largely the same, the changes to **HTTP/2** can be primarily regarded as optimizations and bug fixes.