Guvi-Zen-Day1-Tasks

**Question - 1 :**

Write a blog on Difference between HTTP1.1 vs HTTP2

**Answer :**

| **Aspect** | **HTTP/1.1** | **HTTP/2** |
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| **Multiplexing** | Not supported - uses multiple TCP connections to load resources. | Supports multiplexing, allowing multiple streams of data within a single TCP connection. |
| **Header Compression** | Headers are not compressed, leading to higher overhead. | Utilizes HPACK to compress headers, reducing overhead and improving performance. |
| **Resource Loading** | Resources are fetched sequentially, leading to potential slowdowns. | Supports parallel loading of resources, enhancing speed and efficiency. |
| **Server Push** | Not supported - relies on client requests for resources. | Allows servers to push multiple responses to a single client request, reducing latency. |
| **Binary Protocol** | Sends data in plaintext, increasing latency. | Employs binary framing, improving parsing and reducing latency. |
| **Prioritization** | Lacks the ability to prioritize requests, leading to potential bottlenecks. | Supports request prioritization, enabling more efficient resource handling. |
| **Connection Handling** | Requires multiple connections per origin to load resources in parallel. | Single connection allows multiple streams of data, reducing connection overhead. |
| **Backward Compatibility** | Widely supported across various servers and clients. | Requires newer infrastructure support but includes backward compatibility mechanisms. |
| **Header Size** | Headers are larger due to redundancy and textual format. | Header compression decreases overhead, reducing header size. |
| **TLS Usage** | Optional, but increasingly recommended for security. | Encourages the use of TLS, making it a requirement for HTTP/2. |