**7.HTTP Protocol Overview with Request and Response Headers**

**• Theory:**

1. **Introduction to the HTTP protocol and its role in web communication:-** The HyperText Transfer Protocol (HTTP) is the foundation of data communication on the World Wide Web. HTTP is primarily used for retrieving resources, such as web pages, images, and files, from a server to display them to users in their web browsers.

**Role of HTTP in Web Communication:**

1. Enabling Web Browsing:
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3. Supporting Web APIs:
4. Facilitating Communication Between Clients and Servers:
5. Secure Communication:

**2.Explanation of HTTP request and response headers:-**

**1. HTTP Request Headers**

An HTTP request is made when a client (like a browser) requests a resource (e.g., a webpage, an image, or data from an API) from a server. The headers in the request provide information about the client, the request itself, and any specifics the client wishes the server to know about the request.

**2. HTTP Response Headers**

An HTTP response is sent by the server in reply to a client’s request. The response includes the requested data or an error message. Just like request headers, response headers carry metadata about the response, such as the type of content, status codes, caching instructions, and more.