

Theoretical Questions on HTTP

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1 Theoretical Questions

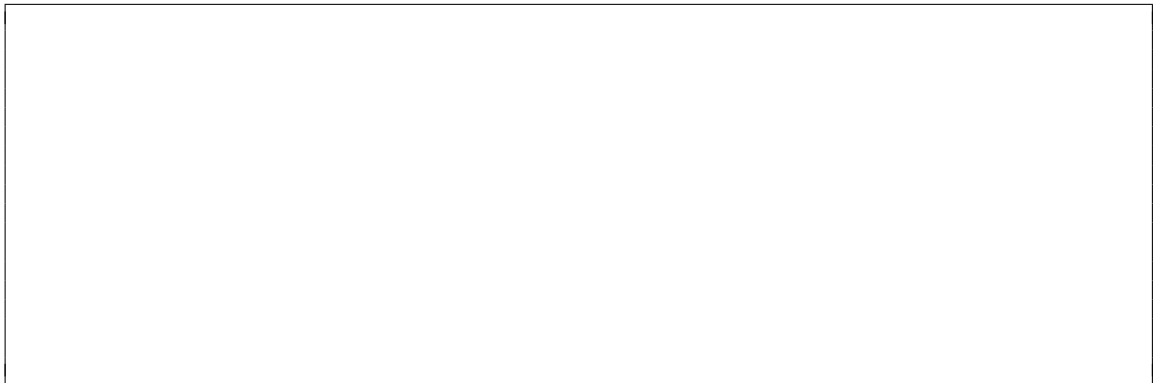
1. What are entity, general and request headers? What type of header is the header `From`?

2. What HTTP authentication mechanisms do you know? Explain the characteristics of each one.

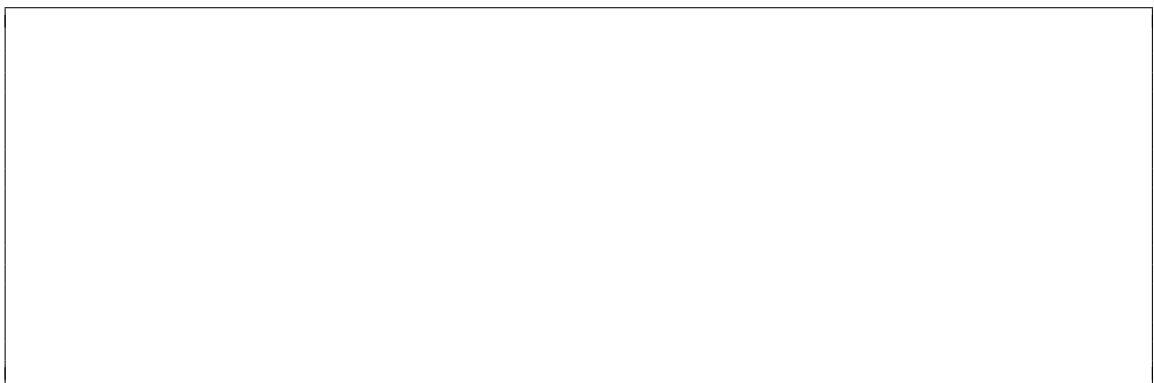
3. In the HTTP protocol, what type of information does the `Date` header provide, and what is its primary function?



4. In HTTP/1.1, if a client makes a GET request for a web page that does not exist on the server, what type of response does the server send? Explain the meaning of this response.



5. In HTTP/1.0, what method is used in the request line to request a document from the server? What information does this line contain?



6. Explain the main improvements introduced by HTTP/1.1 compared to HTTP/1.0.

7. In HTTP/1.1, what type of information does the **Content-Description** header carry? In what requests is it useful?

8. What does the **Host** header allow in HTTP/1.1? Why is it mandatory in this version of the protocol?

9. In HTTP/1.1, what is chunked encoding, and what is its primary purpose? Provide an example of its use.

10. In an HTTP POST request for HTTP/1.0 or HTTP/1.1, what header(s) are mandatory?

11. How does HTTP implement state management? Explain the mechanisms the protocol uses for this purpose.

12. What is the function of the **Connection: Close** header in an HTTP/1.1 request?

13. In HTTP/1.1, what is the purpose of the **Referer** header? Provide an example.

14. What are the differences between the HTTP methods PUT and POST? Provide examples of situations where each method would be most appropriate.

15. In HTTP/1.1, explain how content negotiation works and what headers are used for this purpose.

16. In HTTP/2, what is the purpose of having the Server Push functionality enabled?, how does this affect a client request? Explain the process and its impact on protocol performance.

17. What are the main improvements introduced by HTTP/3 compared to HTTP/2?