1. **http?**

A: HTTP is a protocol which allows the fetching of resources, such as HTML documents. It is the foundation of any data exchange on the Web and it is a client-server protocol, which means requests are initiated by the recipient, usually the Web browser. A complete document is reconstructed from the different sub-documents fetched, for instance text, layout description, images, videos, scripts, and more.

1. **http vs https?**

A: HTTP is a basic client/server protocol for fetching data, but HTTPS is a secured version of HTTP. HTTPS is encrypted so as to increase security when transferring data. HTTPS, is primarily used when handling sensitive data, like login info, email service, or etc. Usually there will be a padlock in the url to signify a website is using HTTPS.

**3)** **who is a client? who is a server?**

A: Client is the user-agent, or user who is using a web browser to search the data. Clients make *requests* to the server. Servers are machines that serve the document requested by the client. The server’s message to a client’s request is called a *response*.

1. **http methods (get, post, delete, put, patch, trace, options)?**

GET: A method that requests a representation of the specified resource.

POST: A method that is used to submit an entity to the specified resource, often causing a change in state or side effects on the server.

DELETE: A method that deletes the specified resource.

PUT: A method that replaces all current representations of the target resource with the request payload.

PATCH: A method that is used to apply partial modifications to a resource.

TRACE: A method that performs a message loop-back test along the path to the target resource.

OPTIONS: A method that is used to describe the communication options for the target resource.

1. **http status codes(100-500)? How will these status codes be helpful between client and server?**

Status codes 100-199: Informational responses

Status codes 200-299: Successful responses

Status codes 300-399: Redirects

Status codes 400-499: Client errors

Status codes 500-599: Server errors