PART ONE:

- What is HTTP?
    - Hypertext Transfer Protocol
    - How browsers and servers communicate
- What is a URL?
    - Uniform Resource Locator
    - A unique identifier used to locate resources on the internet, consists of:
        - Protocol
        - Hostname
        - Port
        - Resource
        - Query
- What is DNS?
    - Domain Name System
    - Takes a hostname and translates it into a corresponding IP address
- What is a query string?
    - Provides extra information for a URL
    - ?x=1&y=2
- What are two HTTP verbs and how are they different?
    - GET
        - Gets data from the server
    - POST
        - Sends data to the server
- What is an HTTP request?
    - Request form from a client to a server which follows the HTTP protocol
- What is an HTTP response?
    - Response from a server to a client which follows the HTTP protocol
- What is an HTTP header? Give a couple examples of request and response headers you have seen.
    - Headers provide additional information about the request and response.
    - Request headers:
        - Host, User-Agent, Accept, Cookie, Cache-Control
    - Response headers:
        - Content-Type, Last-Modified, Set-Cookie, Cache-Control
- What are the processes that happen when you type "http://somesite.com/some/page.html" into a browser?
    - Web browser uses DNS to get IP address and sends request to the server, containing "headers"
    - The Server constructs a web page by retrieving information from Database
    - Once it's ready, a response is sent to the browser typically in the form of html; if successful it sends status code 200
    - The browser makes a DOM from that HTML, and finds any other resources needed (ie, JS, images, CSS)

    - The browser makes separate HTTP requests for those resources and receives response from the server for each

PART TWO:

Curl

- Command line: curl https://icanhazdadjoke.com/search\?term\=pirate

Dig

- Command line: dig https://icanhazdadjoke.com/
- 23.202.231.168