Exercise 1: HTTP

Upload a txt or pdf file named `USPnumber.txt`*, with the answers to the questions.*

These exercises are about understanding how to make different kinds of HTTP. To keep it simple, we're going to make a lot of our requests to the same website: https://httpbin.org. httpbin is a service that accepts HTTP requests and then tells you what request you made. You may use postman, insomnia, cURL, or other tools to make the requests. Using a text editor, include the request and response headers and the body of the answers to each question (if the body is big, put only its beginning). If using postman, use the *console view* to get the text. Remember that some answers need more than the headers and body.

1. Request https://httpbin.org
2. Request https://httpbin.org/anything. httpbin.org/anything will look at your request, parse it, and echo back to you what you requested.
3. Make a POST request to https://httpbin.org/anything
4. Make a GET request to https://httpbin.org/anything, but this time, add some query parameters (set `value=panda`).
5. Request Google's robots.txt file (www.google.com/robots.txt)
6. Make a GET request to https://httpbin.org/anything and set the header `User-Agent: elephant`.
7. Make a DELETE request to https://httpbin.org/anything
8. Make a POST request to https://httpbin.org/anything with the JSON body `{"value": "panda"}`. The Content-Type header must differ from `application/json`. Some tools will fill this header automatically.
9. Make the same POST request as the previous exercise, but set the Content-Type header to `application/json` (because POST requests need a content type that matches their body). Look at the `json` field in the response to see the difference from the previous one.
10. Make a GET request to https://httpbin.org/anything and set the header `Accept-Encoding: gzip` (What happens? Why?)
11. Put a bunch of JSON in a file and then make a POST request to https://httpbin.org/anything with the JSON in that file as the body.
12. Make a PUT request to https://httpbin.org/anything
13. Request https://www.twitter.com. Show the response headers using your tool (postman, cURL, etc). Is the HTML returned the same way you get it in a browser? Why?
14. Make any request to https://httpbin.org/anything and just set some nonsense headers (like panda: elephant). What happens?
15. Request https://httpbin.org/status/404 and https://httpbin.org/status/200.
16. Request https://httpbin.org/anything and set a username and password. Many tools will make it automatic: if the site you are using needs authentication, it can send this information to you. Find out how to do it in the tool you are using.

Exercises based on Julia Evans Curl exercises.