Exercise 7: Node.js

1. Create a simple [Key-value store](https://en.wikipedia.org/wiki/Key-value_database) that saves [JSON](https://www.json.org/json-en.html) values indexed by JSON keys using Node.js. It will have just 3 operations: read, write, and delete:
   * Read: returns the value associated with a key. If the key is not valid, it returns null.
   * Write: receives a key-value pair (both in JSON) and write them in the database.
   * Delete: receives a key and delete the key-value pair that it refers to.

These 3 operations should use the same route: /store. Ex:

http://localhost:8080/store

You should separate them using the appropriate HTTP method for each operation (GET, PUT, POST, or DELETE). Any necessary parameter must be included using the appropriate technique (ex: query strings).

The key-value pairs can be recorded in variables (one or more) on the server. There is no need to use a database or save these variables to disk.

There is no authentication. Any client can read, write, or delete.

**Tips**:

1. Follow the video class up to lesson 9 and you will end with a running server.
2. In [lesson 10](https://www.youtube.com/watch?v=FXQ3ZZh5jh4&list=PLHlHvK2lnJndvvycjBqQAbgEDqXxKLoqn&index=11&t=634s), it explains the REST actions (GET, PUT, POST, and DELETE) and shows how to test the requests using the [Postman tool](http://getpostman.com) (install in lesson 3).
3. After lesson 10, you have a running server that has GET, PUT, and DELETE services.
4. Which services do you need for your system? The server already has operations for these 3 services. For the PUT, it receives the id, but for the GET, it does not. Use the PUT router as a model and modify the GET router to receive an id too. Test.
5. Right now, the server just sends back the status information. Modify the router implementations to store and send back the information you need. Remember that you can only receive and send back text to the client. Use [JSON.parse()](https://www.w3schools.com/js/js_json_parse.asp) and [JSON.stringify()](https://www.w3schools.com/js/js_json_stringify.asp) functions to convert to and from text whenever needed.

(5 pts)

1. Use this Key-value store (from question 1) to implement a database to save the information stored in the user registration system that you developed in the last exercise. This system saved the username, password, email, and address of users in the server memory. Now, you should save this information in the Key-value store. Think about what you are going to use as keys and what are you going to save as values.

(5 pts)

Bom Trabalho!