Questions: *Node.js*

1. What is the difference in the arguments of an asynchronous method and a synchronous method?

The asynchronous method will usually take a callback as the last argument. For example:

* [fs.readFile(file[, options], callback)](https://nodejs.org/api/fs.html#fs_fs_readfile_file_options_callback)
* [fs.readFileSync(file[, options])](https://nodejs.org/api/fs.html#fs_fs_readfilesync_file_options)

1. What is npm?

Npm stands for **node package manager,** and is the Node.js package ecosystem that serves thousands of packages for us to include and use in our project.

1. Given the following text file contents in a file called data.txt, write a program that would print the name and average score per student.

data.txt:

Name Scores

Sashank 10 20 15 13 12

Ishaan 47 89 12 28

Nelson 10

1. **var** fs = require('fs');
2. fs.readFile('data.txt', **function**(err, text) {
3. text = text.toString();
4. **var** lines = text.split("\n");
5. **for** (**var** i = 1; i < lines.length; i++) {
6. **var** student = lines[i].split(" ");
7. **var** total = 0;
8. **for** (**var** j = 1; j < student.length; j++) {
9. total += parseInt(student[j]);
10. }
11. console.log(student[0] + ": " + total / (student.length - 1));
12. }
13. });

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1. If you append “/.json” to any Reddit page, you get a json representation of the page. For example, <https://www.reddit.com/r/UMD/.json> gives you the data for the UMD reddit page in JSON. Write a program that prints the the titles of all the posts on the page.
2. **var** request = require("request");
4. request("https://www.reddit.com/r/UMD/.json", **function**(err, req, body) {
5. body = JSON.parse(body);
6. **var** children = body.data.children;
7. **for** (**var** i **in** children) {
8. console.log(children[i].data.title)
9. }
10. })

Objectives Covered for **Week 4**

* Node.js
* Asynchronous functions
* Reading/writing files
* Making requests
* Writing a server