Homework 1 | Node.js Basics

| **TODO** | 1) **Write a Javascript function that returns the Fibonacci series up to a certain number**   * Example #1   + Input: 8   + Output: [0, 1, 1, 2, 3, 5] * Example #2   + Input: 610   + Output: [0, 1, 1, 2, 3, 5, 8, 13, 21, 34, 55, 89, 144, 233, 377]   2) **Write a JavaScript function to find the unique elements from two arrays**   * Example #1   + Input: console.log(difference([1, 2, 3], [100, 2, 1, 10]));   + Output: ["3", "10", "100"] * Example #2   + Input: console.log(difference([1, 2, 3, 4, 5], [1, [2], [3, [[4]]],[5,6]]));   + Output: ["6"]   3) **Write a JavaScript function to create a case-insensitive search**   * Example #1   + Input: console.log(caseInsensitiveSearch('JavaScript Exercises', 'exercises'));   + Output: "Matched" * Example #2   + Input: console.log(caseInsensitiveSearch('JavaScript Exercises', 'Exercisess'));   + Output: "Not Matched"   4) **Write a JavaScript function to get a copy of the object where the keys have**  **become the values and the values the keys**  5) **Write a JavaScript function to convert an object into a list of `[key, value]` pairs**  6) **Write a JavaScript function to uncamelize a string**  7) **Write a JavaScript function to count the occurrence of a substring in a string**  8) **Flat an array (use reduce here) and sort it (by ascending)**   * Example #1   + Input: [1, 2, 1000, 300, [400, [3, 10, [11, 12]], [1, 2, [3, 4]], 5, 6]]   + Output: [1, 1, 2, 2, 3, 3, 4, 5, 6, 10, 11, 12, 300, 400, 1000]   9) **Write a function that deletes null and undefined values from the array. The**  **function takes two parameters: array, callback, runs for 5 seconds and then calls a**  **callback function-parameter that displays the result of the execution.**  10) **Write a function that returns Promise, which is resolved after 6 seconds.**  11) **Write a JavaScript program to run a given array of promises in series.** |
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| **NOTES** | Do not use var here. Try to get by with const. If necessary, use let.  Use existing JavaScript methods (for strings, arrays etc.) to complete tasks.   * [*Number*](https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Global_Objects/Number) * [*String*](https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Global_Objects/String) * [*Array*](https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Global_Objects/Array) * [*Object*](https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Global_Objects/Object) * [*Promise*](https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Global_Objects/Promise) * [*Async Function*](https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Statements/async_function) |

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