Extra Assignment – Difficult

You will create a function that will take the following multidimensional array as an argument (copy this array into your code):

var testArray = [ [42, null], ["the quick brown fox jumps over the lazy dog", null], ["fournine", null], [[33,5,67,19], null] ];

To understand this array more easily, let's format it as a table:

|  |  |
| --- | --- |
| 42 | null |
| the quick brown fox jumps over the lazy dog | null |
| fournine | null |
| 33,5,67,19 | null |

As you can see, this array is simply a 2x4 table where the first column is a set of parameters and the second column is all null values. Remember, to access an array with 2 dimensions you will use the format **arr[x][y]** where **arr** is the name of your array, **x** is the first dimension index (row in this case), and **y** is the second dimension index (column in this case).

Your task will be to use the functions you created in the previous function challenge to manipulate the data from column 1 and save it into column 2.

* For the first row, use your function that calculates the square (power 2) of a number
* For the second row, use your function that capitalizes and adds punctuation to a string
* For the third row, use your function that flips the first and second half of a string
* For the fourth row, use your function that finds the average of four numbers

To get you started, here is an example for how part 1 would look:

arr[0,1] = pow2(arr[0][0]);

This example is passing the value at location row 1, column 1 (**arr[0][0]**) into our power of 2 function, and saving the result at location row 1, column 2 (**arr[0][1]**). You must now continue this code for rows 2 – 4. Remember that this code should be wrapped in a new function that you create. Our array **testArray** above should be passed into your function as an argument.

After running your function, print the contents of **testArray** to the console using this line:

console.log(testArray.join(" | "));

If your function worked correctly, you should see all of the null values in the array replaced with the results of your 4 challenge functions.