Assignments:

Write code for the following exercises. Make sure your code works with the Mocha test file (provided). *Add missing tests*. **"Do not modify the given tests in the provided test file".**

1. Write a function, isArrayEqual, that returns true if two arrays have === elements, else returns false.
2. Write a function `addend(arr)` that accepts an array of numbers as parameters and returns the sum of first and last elements of the array.
3. Write a function named `getMiddle` that returns the value of the middle element in an array. If the array has an even number of elements, then this function must return the average of the two middle elements.
4. Write a function to rotate the elements in an array to the left by 1.
5. Write a function to rotate the elements in an array to the right by 1.
6. Modify rotate functions to rotate array right by n times where, n is the second parameter passed in the function.
7. Given an expression array exp, write a program to examine whether the pairs and the orders of “{“, “}”, “(“, “)”, “[“, “]” are correct in exp.
   Example:

   Input: exp = ["(", ")", "[", "{", "}", "]"]
   Output: Balanced

   Input: exp = ["[", "(", "]", ")"]
   Output: Not Balanced

8. Write a function that merges two sorted arrays into one single sorted array. Make use of shift and push array methods.
9. Write a function that transforms a given array as following. Use appropriate array methods.

Input (Array)	Output (String)
['Quick', 'Brown', 'Fox']	"Fox_Brown_Quick"

10. Write a JavaScript function named enhancedIncludes that takes two parameters, an array, and a value to search in the array and return an array result with three values.
    a. First value is boolean representing if the search value exists in the array.
    b. Second value is the first index of value found in the array or -1
    c. Third value is the last index of value found in the array or -1.
11. Write a function that returns reversed copy of a given array. Do this without using reverse method, instead use splice and slice methods.
12. Write a JavaScript program that number input from the user at once as comma separated values and stores it into an array and do following operations
    a. Filters out negative values.
    b. Maps the filtered elements to sum of its digits (optional)

    c. Reduce to get sum of all the elements (optional)
13. Write a function `filterRange(arr, a, b)` that gets an array `arr`, looks for elements with values >= a and values<= b and return a result as an array.
14. Write a function that takes an array of strings and returns array of palindrome strings only.
15. Do matrix addition and print result on matrix format for following:

$$\begin{bmatrix} 0 & 1 & 2 \\ 9 & 8 & 7 \end{bmatrix} + \begin{bmatrix} 6 & 5 & 4 \\ 3 & 4 & 5 \end{bmatrix}$$

From Readings:

1. What is `localeCompare` method for Strings? Why is it needed?