## 2/13/2021

## W2D4 Arrays

Write code for the following exercises. Make sure your code works with the **Mocha test file**, **arrayTests.js**, which is in the Resources > assignments > Mocha test files folder.

- 1. Write a function addend(arr) that accepts an array of numbers as parameters and returns the sum of firs and last elements of the array.
- 2. 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.
- 3. Write a function to rotate the elements in an array to the left by 1.
- 4. Write a function to rotate the elements in an array to the right by 1.
- 5. Modify rotate functions to rotate array by n times where, n is the second parameter passed in the function (optional).
- 6. 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)
- 7. 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.
- 8. Write a function that takes an array of strings and returns array of palindrome strings only.
- 9. 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?