

# Assignments Lab 4

## Assignment 1:

Define an array of numbers [2,1,3,2,7,2,8,4,3,6,10,9,12]

- *Sort them ascending then descending and print the result on console as table.*
- *Filter numbers larger than 5 (use ES6 arrow function )*
- *Display Max and Min Number*
- *Use Array.from function to generate a copy from this array but array elements will be multiplied by 5.*
- *Remove repeated numbers from the array.*
- *Count how many even number exists in the array.*
- *Display the array elements from pervious step as string concatenated with \*.*

Search :

a- **reduce** method : try to sum all array element in one line

b- **find** and **findIndex** methods and the difference between them and (indexOf & includes)

c- **splice**: method

1- try to remove elements from index 2 to index 4

2- try to remove elements from index 2 to index 3 and insert new elements starting form index 2 40,50,60,70,80

3- try to add elements starting from index 3

d- **map** method , try to map all li's elements to array on strings that contains all textContent of all elements

## Assignment 2:

*Write JavaScript function that returns array of numbers length*

*Take the range of randomized numbers from input .*

*example, min:1, max:10, length:6 (should be even number)*

*The values inside the array will be from 1 to 10 and any number should appear in the array twice.*

## Assignment 3:

*Now create another Javascript function that takes the array and shuffle it's values, return the shuffled*

## Assignment 4:

*Create 2 Dimensional array of students' grades in courses.*

*The row contains grades of specified student in all courses*

*The column contains the grades of all students in the course*

*For example if we have 4 students and 5 courses then we create 4 x 5 array*

*Take the grades for each course using prompt fill your array Then display Average grade for each course, total grades for each student*