

Day 2 Lab Assignments

- 1- Make a set that holds student names.
 - a. Try to add repeated names, will the set accept it?
 - b. Print the set values using spread operator and using for...of.
- 2- Make a Map that contains the student name as a key, and object that contains an array of his studied courses and his grade in each course. (The object structure as following:

```
{ Grades:[  
  {CourseName:"JavaScript", Grade:"Excellent"},  
  {CourseName:"Jquery", Grade:"Good"},  
  {CourseName:"CSS", Grade:"V.Good"}]}
```

 - a. Loop in the Map and display each student along with his grades in all courses
- 3- Use this array [1,5,3,4,2,4,6,8,5] Try arrow function:
 - a. With Array.filter() function, to return the odd numbers from an array.
 - b. With array.foreach() to print the even values.
 - c. Print first number > 5
 - d. Make new array with double array value using array.map
- 4- Make a page that displays a tip for user every 3 seconds, as the following:
 - a. Create a generator that has an array of 10 tips, and loops on the array and each time returns the next tip.
 - b. Make a button that loop on the generator and display all tips [Using for...of]
 - c. Make another button that uses setInterval (with arrow function) to display a tip every 3 seconds from the generator.[use next()].
- 5- Alert the sum of 2 numbers, and pass the sum as an argument to alert function (self-invoking function).
- 6- Write a function that takes a string and returns it reversed.
- 7- Create your own function that accepts multiple parameters to generate course information and display it. Assume that the function accepts course information as object that contains courseName, courseDuration, courseOwner.
if any of required field is not set in function call it should have default values as follows: courseName="ES6" ,
courseDuration="3days", courseOwner="JavaScript".
Bonus: through exception if passed object includes properties other than those described above
Note: user is allowed not to pass all of these properties, he can pass needed properties only
- 8- Study new array api methods then create the following methods and apply it on this array

```
var fruits = ["apple", "strawberry", "banana", "orange", "mango"];
```

 - a. test that every element in the given array is a string
 - b. test that some of array elements starts with "a"
 - c. generate new array filtered from the given array with only elements that starts with "b" or "s"
 - d. use forEach to display all elements of the new array from previous point