

## Course JavaScript Programming Language and jQuery

### Module 2

TOPIC: OBJECT. ARRAYS. ARRAY OBJECT. STRINGS.  
STRING OBJECT. DATE OBJECT. MATH OBJECT.  
INTRODUCTION TO OOP

#### Task 1

Create an array of 10 random numbers and write several functions to work with it.

1. The function takes an array and displays it on the screen.
2. The function takes an array and outputs only even elements.
3. The function takes an array and returns the sum of all elements of the array.
4. The function takes an array and returns its maximum element.
5. The function of adding a new element to the array by the specified index.
6. The function of removing an element from an array by the specified index.

#### Task 2

Create another array of 5 random numbers and write the following functions.

1. The function takes 2 arrays and returns a new array, in which all the elements of two arrays are collected without repetitions.

2. The function takes 2 arrays and returns a new array in which common elements are collected (that is, elements that occur in both the first and second arrays) without repetition.
3. The function takes 2 arrays and returns a new array, in which all the elements from the first array are collected which are not in the second array.

### Task 3

Create an array of fruits and sort it alphabetically. Write the following functions.

1. Displaying with `document.write()` as a list (using the `ul` and `li` tags).
2. Search for fruit in the array. The function takes fruit name and returns the index of the element found or -1 if it is not found. The search must be non-case sensitive.