

## 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 a "shopping list" array. Each element of the array is an object that contains product name, the required quantity and whether it is purchased or not. Write several functions to work with such an array.

1. Displaying the entire list on the screen in such a way that first go uncharged products, and then bought.
2. Adding a purchase to the list. Note that when adding a purchase with the already existing product in the list, you need to increase the quantity in the existing purchase instead of adding a new one.
3. Purchase of the product. Function takes product name and marks it as purchased.

#### Task 2

Create an array that describes receipt in a store. Each element of the array consists of the product name, quantity, and price per unit. Write the following functions.

1. Displaying a receipt on the screen.
2. Calculation of the total amount of purchase.
3. Getting the most expensive purchase in the receipt.
4. Calculate the average cost of a single item in the receipt.

### Task 3

Create an array of CSS styles (color, font size, alignment, underline, etc.). Each element of the array is an object consisting of two properties: the style name and the style value.

And write a function that takes an array of styles and text and prints this text using `document.write()` in the `<p>` `</p>` tags, adding the `style` attribute to the opening tag with all the styles listed in the array.

### Task 4

Create an array of the Academy classrooms. The classroom object consists of name, number of seats (from 10 to 20), and name of the department for which it is intended.

And write a few functions to work with it.

1. Display all classrooms.
2. Display classrooms for the specified department.
3. Display only those classrooms that are suitable for the transferred group. The object-group consists of name, number of students, and department name.
4. The function of classroom sorting by number of seats.
5. Function of classroom sorting by name (alphabetically).