

# Lab 3 - arrays

## 1. Arrays

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To copy an array use `array.slice()`

<https://www.geeksforgeeks.org/javascript/how-to-clone-an-array-in-javascript/>

### Exercise 1.1 (1 points)

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Create a variable `array2` holding an array with the words:

`[potato, carrot, onion, leek, cabbage]`. Return the element on position: `1` in `array2`.

Answer with the result.

### Exercise 1.2 (1 points)

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Use the variable `array2`. Concatenate the first item and the last item as a string. Separate the string with `-`.

Answer with the result.

### Exercise 1.3 (1 points)

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Create an array, `array1`, with the items `47, 98, -13, 0, -412, 499, 3, 1200`.

Merge the two arrays, `array1` and `array2`, into a third variable `array3`.

Answer with `array3`.

### Exercise 1.4 (1 points)

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Create a variable `array21` as a copy of `array2`. Sort `array21`.

Answer with the resulting array.

### Exercise 1.5 (1 points)

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Create a variable `array11` as a copy of `array1`. Sort `array11` according to its values. The smallest value comes first and the largest value comes last.

Answer with the resulting array.

### Exercise 1.6 (1 points)

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Create a variable `array22` which holds the same content as `array2` - but all strings are uppercase. Use the built-in Array-function `map()` to solve it.

Answer with the array.

### Exercise 1.7 (1 points)

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Create a new array, `array12`. It should contain all positive numbers from the `array1`. Use the built-in array-function `filter()` to solve it.

Answer with the resulting array.

### Exercise 1.8 (1 points)

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Create a function `arrayAverage()` that takes one array as argument and returns the average of all elements in that array.

Try out the function using `array1` and answer with the rounded integer result.

## 2. Modify arrays

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Learn how to modify arrays.

### Exercise 2.1 (1 points)

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Create a new array `myArray` and make it a copy of `array1`. Switch place on the first and the last element, with the help of built-in array-functions. Use the array-functions `pop()`, `push()`, `shift()` and `unshift()`.

Answer with `myArray`.

### Exercise 2.2 (1 points)

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In `myArray` change the `3rd and 4th` value to the boolean value `false` using built-in array-function `splice()`.

Answer with the resulting array.

### Exercise 2.3 (1 points)

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Remove the 4th and 5th item in 'myArray'. Then insert the string MEGA after the item 3rd. Answer with the resulting array.

## 3. Arrays with loops

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Learn how to loop array elements

### Exercise 3.1 (1 points)

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Create a variable "myString2" that holds an empty string. Create an array "myArray2" that holds 5 values. Manually fill each space in the array with the word "JavaScript". Then concatenate the array elements into "myString2", using a loop. Do not set a specific number to determine the number of loops. Use instead the array-function .length to determine how many times you want to loop.

Answer with the resulting "myString2" variable

### Exercise 3.2 (3 points)

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Create an array "myList" and assign it the following elements 1, 3, 5, 7, 9. Create a variable "search" with the value 5

If the "search" number is in the array, answer "The number is in the array", otherwise "The number is not in the array"

Make a loop that searches through the array. You must check each position in the array against the value.