# **ES Next**

**DEADLINE:** 05/02/2022

#### **FOLDER STRUCTURE**

#### **TASK**

Note: Under the new operators we consider all operators from ECMA Script 6 and higher.

- 1. Create a function which returns max even element in array from array of strings
  - Use Math.max(), reduce and other new operators.

```
const arr = ['1', '3', '4', '2', '5'];
console.log(getMaxEvenElement(arr));
4
```

- 2. Write a code which swap variables values without a temporary variable
  - Please, use destructuring assignment.

```
15
16 let a = 3;
17 let b = 5;
18 // your code
19
20 console.log(a); //5
21 console.log(b); //3
22
```

- 3. Create a function which simply return value when there is some defined value passed and empty text string '-' when it is not defined .
  - Check ES2020 operators, one of them can help here.

```
console.log(getValue(0));
console.log(getValue(4));
console.log(getValue("someText"));
console.log(getValue(null));
console.log(getValue(undefined));

0
4
someText
-
```

4. Create a function which return objects from array of arrays.

```
const arrayOfArrays = [
    ["name", "dan"],
    ["age", "21"],
    ["city", "lviv"],
];

console.log(getObjFromArray(arrayOfArrays));

    **Name: "dan", age: "21", city: "lviv"}
```

- 5. Create function to enhance element with unique id. Here is how function should be invoked:
  - Use Symbol() as a unique identifier

```
addUniqueId({name: 123})
```

As a result, returned object should have extra property - unique identifier.
 Returned object should be copy of the passed parameter. Original object should not contain this id.

```
const obj1 = { name: "nick" };

console.log(addUniqueId(obj1));
console.log(addUniqueId({ name: "buffy" }));

console.log(Object.keys(obj1).includes('id'));

> {name: "nick", id: Symbol()}

> {name: "buffy", id: Symbol()}

false
```

6. Write a function which regroups object properties

· Destruct old object and construct new

```
const oldObj = {
  name: "willow",
  details: { id: 1, age: 47, university: "LNU" },
};

console.log(getRegroupedObject(oldObj));

v[university: "LNU", user: {...}} i
  university: "LNU"

vuser:
  age: 47
  firstName: "willow"
  id: 1
  proto_: Object
  proto_: Object
```

- 7. Create a function which finds unique elements in array
  - Use one of the new data types

```
const arr = [2, 3, 4, 2, 4, "a", "c", "a"];
console.log(getArrayWithUniqueElements(arr));

> (5) [2, 3, 4, "a", "c"]
```

- 8. Create a function which masks phone number, leaves only last 4 digits
  - Use padStart

```
const phoneNumber = "0123456789";
console.log(hideNumber(phoneNumber));
*****6789
```

- 9. Create function which has all parameters always required. If they are not throw error.
  - Use default parameters feature and assign a function to it



```
console.log(add(2, 3));
console.log(add(2));

Uncaught Error: b is required
    at required (<anonymous>:2:9)
    at add (<anonymous>:5:37)
    at <anonymous>:10:13
}
```

10. Use generator function to create an iterable sequence of values:

```
const generatorObject = generateIterableSequence();
for (let value of generatorObject) {
   console.log(value);
}

I
love
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```

#### **RESTRICTIONS**

- Adding task/ folder is forbidden. Do not push it to repository. (Only homework/ folder should be pushed)
- Do not use any external libraries

### **BEFORE SUBMIT**

- Code should be clean, without comments, readable, and tested
- Make sure your GitLab folder structure meets folder structure from this document (without task folder)
- Use linter :
  - In order to use npm package manager you should install nodejs (https://nodejs.org/ )
  - Install eslint to check your code (npm install -g eslint)
  - open a terminal (or cmd)
  - run eslint (i.e. eslint ./js/task1.js)

Code should be without 'errors'



## **SUBMIT**

- The **FL18\_HW6** folder without **task** folder should be uploaded to GitLab repository "**FL-18**" into **main** branch.