**Data types**

**DEADLINE:** 01/03/2023, 18:00

## FOLDER STRUCTURE

|  |  |
| --- | --- |
| COE1\_HW4/ [\*]  ├─ task [\*\*]  ├─ homework/ [\*]  ├─ index.html [\*]  └─ app.js [\*] | [\***]  - required**  **[\*\*] - restricted (no need to submit)** |

## TASK

Write all tasks inside app.js file.

1. Write a JavaScript function that reverse an integer number.

**reverseNumber**(12345) // returns 54321

**reverseNumber**(-56789) // returns -98765

2. Write function, which iterates over array and executes function on each element.

**forEach**([2,5,8], function(el) { console.log(el) }) // logs to console: 2 5 8

3. Write function, which returns transformed array based on function, which is passed as a parameter. Reuse function from task 2.

**map**([2, 5, 8], function(el) { return el + 3; }) // returns [5, 8, 11]

**map**([1, 2, 3, 4, 5], function (el) { return el \* 2; }) // returns [2, 4, 6, 8, 10]

4. Write function, which returns filtered array based on function, which passed as a parameter. Reuse function from task 2.

**filter**([2, 5, 1, 3, 8, 6], function(el) { return el > 3 }) // returns [5, 8, 6]

**filter**([1, 4, 6, 7, 8, 10], function(el) { return el % 2 === 0 }) //returns [4, 6, 8, 10]

5. Write function, which returns array of names of people, who are over 18 and their favorite fruit is apple. Reuse functions from task 3 and 4.

//See input data example in CODE section

**getAdultAppleLovers**(data) // returns [‘Stein’]

6. Write function, which returns array of keys of an object.

**getKeys**({keyOne: 1, keyTwo: 2, keyThree: 3}) // returns [“keyOne”, “keyTwo”, “keyThree”]

7. Write function, which returns array of values of an object.

**getValues**({keyOne: 1, keyTwo: 2, keyThree: 3}) // returns [1, 2, 3]

## RESTRICTIONS

## Using any built–in array or object methods(besides push)

## Using any external libraries

## BEFORE SUBMIT

* Code should be clean, readable, and tested

## SUBMIT

* The folder should be uploaded to gitlab repository “**COE-1**” into **main** branch

## CODE

Input data for task 5.

[

{

"\_id": "5b5e3168c6bf40f2c1235cd6",

"index": 0,

"age": 39,

"eyeColor": "green",

"name": "Stein",

"favoriteFruit": "apple"

},

{

"\_id": "5b5e3168e328c0d72e4f27d8",

"index": 1,

"age": 38,

"eyeColor": "blue",

"name": "Cortez",

"favoriteFruit": "strawberry"

},

{

"\_id": "5b5e3168cc79132b631c666a",

"index": 2,

"age": 2,

"eyeColor": "blue",

"name": "Suzette",

"favoriteFruit": "apple"

},

{

"\_id": "5b5e31682093adcc6cd0dde5",

"index": 3,

"age": 17,

"eyeColor": "green",

"name": "Weiss",

"favoriteFruit": "banana"

}

]

## USEFUL LINKS

* https://developer.mozilla.org/uk/docs/Web/JavaScript/Reference/Global\_Objects/Date
* https://developer.mozilla.org/uk/docs/Web/JavaScript/Reference/Global\_Objects/Array/prototype
* https://developer.mozilla.org/uk/docs/Web/JavaScript/Reference/Global\_Objects/Object/prototype