Assignment Advance JavaScript

MODULE: 2 (Data Types and Objects)

Is array copied? let fruits = ["Apples", "Pear", "Orange"]; // push a new value into the "copy" let shoppingCart = fruits; shoppingCart.push("Banana"); // what's in fruits? alert(fruits.length); // ?

```
let fruits = ["Apples", "Pear", "Orange"];

let shoppingCart = fruits;

shoppingCart.push("Banana");

alert( fruits.length ); // 4

now fruit array length is = 4
```

Map to names let john = { name: "John", age: 25 }; let pete = { name: "Pete", age: 30 }; let mary = { name: "Mary", age: 28 }; let users = [john, pete, mary]; let names = /* ... your code */ alert(names); // John, Pete, Mary

```
let john = { name: "John", age: 25 };
let pete = { name: "Pete", age: 30 };
let mary = { name: "Mary", age: 28 };

let users = [ john, pete, mary ];

let names = users.map(item => item.name);

alert( names );


output=   John, Pete, Mary
```

Map to objects let john = { name: "John", surname: "Smith", id: 1 }; let pete = { name: "Pete", surname: "Hunt", id: 2 }; let mary = { name: "Mary", surname: "Key", id: 3 }; let users = [john, pete, mary]; let usersMapped = /* ... your code ... */ /* usersMapped = [{ fullName: "John Smith", id: 1 }, { fullName: "Pete Hunt", id: 2 }, { fullName: "Mary Key", id: 3 }] */ alert(usersMapped[0].id) // 1 alert(usersMapped[0].fullName) // John Smith

```
let john = { name: "John", surname: "Smith", id: 1 };
let pete = { name: "Pete", surname: "Hunt", id: 2 };
let mary = { name: "Mary", surname: "Key", id: 3 };

let users = [ john, pete, mary ];

let usersMapped = users.map(user => ({
  fullName: `${user.name} ${user.surname}`,
  id: user.id
}));

/*
usersMapped = [
  { fullName: "John Smith", id: 1 },
  { fullName: "Pete Hunt", id: 2 },
  { fullName: "Mary Key", id: 3 }
]
*/

alert( usersMapped[0].id ); // output= 1
alert( usersMapped[0].fullName ); // output=John Smith
```

Sum the properties There is a salaries object with arbitrary number of salaries. Write the function sumSalaries(salaries) that returns the sum of all salaries using Object.values and the for..of loop.If salaries is empty, then the result must be 0. let salaries = { "John": 100, "Pete": 300, "Mary": 250 }; alert(sumSalaries(salaries)); // 650

```javascript
function sumSalaries(salaries) {

  let sum = 0;
  for (let salary of Object.values(salaries)) {
    sum += salary;
  }

  return sum; // 650
}

let salaries = {
  "John": 100,
  "Pete": 300,
  "Mary": 250
};

alert( sumSalaries(salaries) ); // 650
```

Destructuring assignment We have an object: Write the Destructuring assignment that reads: a) Name property into the variable name. b) Year's property into the variable age. c) isAdmin property into the variable isAdmin (false, if no such property) d) let user = { name: "John", years: 30};

```javascript
let user = {
  name: "John",
  years: 30
};

let {name, years: age, isAdmin = false} = user;

alert( name ); // John
alert( age ); // 30
alert( isAdmin ); // false
```