# Exercise ES6

1. **LET & CONST**
   1. Refactor the code:

Which of these variables would you change to let or const ?

var name = "James";

var employeeId = 25;

var eyes = "Blue";

var age = 25

var position = "Developer";

var salary = 2500;

var knowdlege = ['Javascript','PHP','REACT','Angular 4'];

var married = false;

* 1. Refactor the code !!

We have div, and if the user clicks on it, will get a cupcake with an amount to pay and the order number.Refactor the code to meet ES6 standards.

Hint !! read the comments, here is the code.

**Html:**

<div class="cupcake">

Get a random cupcake with a random price

</div>

<div class="orders"></div>

**JS:**

var cupcake = document.querySelector('.cupcake');

var container = document.querySelector('.orders')

var cupcakes = [

{id:1,flavor:'Strawberry'},

{id:2,flavor:'Apple'},

{id:3,flavor:'Banana'}

]

var randomCupcake;

var orderNumber = 0;

var baseAmount = 5;

var finalAmount;

var dicountID = 2;

var dicountAmount = 3;

var message

cupcake.addEventListener("click",function(){

// Select a random cupcake

randomCupcake = Math.floor(Math.random() \* cupcakes.length) + 0;

// Increment the order number, we get a different order with each cupcake.

orderNumber += 1;

// Depending on the "dicountID" variable, this cupcake is on sale or not.

finalAmount = dicountID == cupcakes[randomCupcake].id ? (baseAmount -dicountAmount ):baseAmount;

// Create the message

message = '<div>- You won a ' + cupcakes[randomCupcake].flavor + ' for ' + finalAmount + '$ , your order # is '+ orderNumber + '</div>'

container.insertAdjacentHTML('beforeend',message)

});

1. **Template String**

We have a user profile with a name, lastname, age, profession and salary

And we want to console log everything just like:

*"My name is***xxx xxx***, i'm***xxx***years old. I work as***xxx***and make $***xxx***.*

We have an empty UL in the HTML

<ul class="players"></ul>

An object with of NBA players.

const players = [

{jersey:56,name:"Djounte Murray",position:"Point guard",PPG:2.6},

{jersey:98,name:"Dennis Rodman",position:"Small Forward",PPG:10.8},

{jersey:1,name:"Michael Jordan",position:"Small Forward",PPG:345.6},

{jersey:2,name:"Lebron James",position:"Shooting Guard",PPG:26.7},

{jersey:33,name:"Patrick Ewing",position:"Center",PPG:20.2}

]

Now we need to loop the list , and generate a LI for each and in addition we must round the RPG **down**.

For example:

**“56 - Djounte Murray -- Position: Point guard -- RPP: 2”**

1. **forEach**

We have an array with products, and each product has a name and a price.

var products = [

{name:'Iphone',price:200},

{name:'Motorola',price:70},

{name:'Samsung',price:150},

{name:'Sony',price:98},

{name:'Windows pone',price:10}

];

We want to loop the array and print a div with the name and price, and if it is less than 100 bucks, we want to show an ON SALE.

Here is the HTML and css if you felling lazy :)

<div class="product">

<h1>Name</h1>

<strong>Price: $ xxxx </strong>

<span>On sale !!</span>

</div>

<style>

.product {

border: 1px solid #d2d2d2;

box-sizing: border-box;

padding:20px;

width:250px;

float:left;

margin:10px;

}

.product h1 {

margin: 0 0 10px;

color: #03A9F4;

}

.product span {

background: #F44336;

color: #fff;

padding: 5px;

}

</style>

1. **Map**

We have an array of paintings, we need to loop the array and create a new array with messages like:

***“The Mona lisa is 200 x 200”***

const paintings = [

{name:'Mona lisa',width:200,height:200},

{name:'The scream',width:400,height:600},

{name:'The last supper',width:600,height:700}

]

We have a list of cars with a brand and a price, and need to create a new array, convert the price to a different currency, and return a string like **“Ford is 40000 rupies”.**

const cars = [

{name:'Ford',price:200},

{name:'Nissan',price:400},

{name:'Nissan',price:600}

]

1. **Filter**

We have a list of channels and we want to create a new array only with the premium channels.

const channels = [

{name:'HBO',premium:true},

{name:'LIFE',premium:false},

{name:'Max',premium:true},

{name:'Cooking channel',premium:false},

{name:'WOBI',premium:false}

];

We want to use the channels example, but this time we have a user object, with some setting.So we need to get the NOT premium channels and the PREMIUM CHANNELS whenever we call the methods.

See example below.

const channel = [

{name:'HBO',premium:true},

{name:'LIFE',premium:false},

{name:'Max',premium:true},

{name:'Cooking channel',premium:false},

{name:'WOBI',premium:false}

];

const user = {

name:'Francis',

premium:true,

premiumChannels:function(){

// GET THE PREMIUM CHANNELS IS "PREMIUM" IS true

},

channels:function(){

// GET THE NON-PREMIUM CHANNELS

}

}

console.log(user.premiumChannels())

// brings HBO and MAX

console.log(user.channels())

// brings LIFE, COOCKING CHANNEL AND WOBI

1. **Reduce**

We need to calculate how many Km or Miles the user traveled.

const trips = [

{to:'Brazil',distance:1000},

{to:'Chine',distance: 2500},

{to:'India',distance: 3000}

]

We have an object with computers. And what we want to know, HOW many computer we have with MAC and how many with WINDOWS.

const computers = [

{type:'Laptop',price:124, os:'Windows'},

{type:'Desk',price:124, os:'Mac'},

{type:'Desk',price:124, os:'Windows'},

{type:'Laptop',price:124, os:'Mac'},

{type:'Laptop',price:124, os:'Windows'},

];