

INTERVIEW EXERCISES 1

1. Adivina la salida de los siguientes códigos:

```
// Code 1:

function func1() {
  setTimeout(() => {
    console.log(x);
    console.log(y);
  }, 3000);

  var x = 2;
  let y = 12;
}
func1();

// Code 2:

function func2() {
  for(var i = 0; i < 3; i++) {
    setTimeout(() => console.log(i), 2000);
  }
}
func2();

// Code 3:

(function() {
  setTimeout(() => console.log(1), 2000);
  console.log(2);
  setTimeout(() => console.log(3), 0);
  console.log(4);
})();
```

2. Adivina la salida de los siguientes códigos:

```
// Code 1:

let x = {}, y = {name: "Ronny"}, z = {name: "John"};
x[y] = {name: "Vivek"};
x[z] = {name: "Akki"};
console.log(x[y]);

// Code 2:

function runFunc() {
  console.log("1" + 1);
  console.log("A" - 1);
  console.log(2 + "-2" + "2");
  console.log("Hello" - "World" + 78);
  console.log("Hello" + "78");
}
runFunc();
```

// Code 3:

```
let a = 0;
let b = false;
console.log((a == b));
console.log((a === b));
```

3. Adivina la salida de los siguientes códigos:

```
var x = 23;

(function() {
  var x = 43;
  (function random() {
    x++;
    console.log(x);
    var x = 21;
  })();
})();
```

4. Adivina la salida de los siguientes códigos:

// Code 1

```
let hero = {
  powerLevel: 99,
  getPower() {
    return this.powerLevel;
  }
}

let getPower = hero.getPower;

let hero2 = {powerLevel:42};
console.log(getPower());
console.log(getPower.apply(hero2));
```

// Code 2

```
const a = function() {
  console.log(this);
}

const b = {
  func1: function() {
    console.log(this);
  }
}

const c = {
  func2: () => {
```

```
        console.log(this);
    }
}
```

```
    b.func1();
    c.func2();
}
```

```
a();
```

```
// Code 3
```

```
const b = {
  name: "Vivek",
  f: function() {
    var self = this;
    console.log(this.name);
    (function() {
      console.log(this.name);
      console.log(self.name);
    })();
  }
}
b.f();
```

5. Adivina la salida de los siguientes códigos:

```
// Code 1
```

```
(function(a) {
  return (function() {
    console.log(a);
    a = 23;
  })()
})(45);
```

```
// Code 2
```

```
// Each time bigFunc is called, an array of size 700 is being created,
// Modify the code so that we don't create the same array again and
again
```

```
function bigFunc(element) {
  let newArray = new Array(700).fill('♥');
  return newArray[element];
}
```

```
console.log(bigFunc(599)); // Array is created
console.log(bigFunc(670)); // Array is created again
```

```
// Code 3
```

```
// The following code outputs 2 and 2 after waiting for one second  
// Modify the code to output 0 and 1 after one second.
```

```
function randomFunc() {  
  for(var i = 0; i < 2; i++) {  
    setTimeout(() => console.log(i), 1000);  
  }  
}  
randomFunc();
```

6. Write a function that performs binary search on a sorted array

BIBLIOGRAPHY

<https://www.interviewbit.com/javascript-interview-questions/#output-of-following-code-1>