```
const numbers = [65 , 44 , 12 , 4];
numbers.forEach(myFunction);
console.log(numbers);

function myFunction(item , index , arr){
    arr[index] = item * 10;
}
```

```
var pokemon = ["squirtle", "charmander", "bulbasaur"];
var pokeLength =
   pokemon.reduce(function(previous, current) {
     return previous + current.length;
   }, 0);
console.log(pokeLength);
```

```
const numbers = [5, 10, 15];

const reducer = numbers.reduce((accumulator, item)=>{
   return accumulator + item;
});

console.log(reducer);
```

```
const euros = [29.76, 41.85, 46.5];

const doubled = euros.reduce((total, amount) => {
   total.push(amount * 2);
   return total;
}, []);

console.log(doubled);
```

```
True
False
```

```
const numbers = [1, 2, 3, 4, 5];
console.log(numbers.includes(2));
console.log(numbers.includes(99));
```

## Error Assignment to constant variable

```
const myBoolean = true;
if (myBoolean) {
  const turtles = [
    'leonardo',
    'donatello',
    'michaelangelo',
    'raphael'
  ];
  turtles = turtles.concat('Shredder');
  console.log(turtles);
}
```

```
const names = ['Batman', 'Catwoman', 'Joker', 'Bane'];
const fromIndex = 1;
const removeCount = 2;
const newNames = [
    ...names.slice(0, fromIndex),
    ...names.slice(fromIndex + removeCount)
];
console.log(newNames);
```

[Batman, Bane]

it shows the coordinate of the mouse but is missing the event listener so i added it

number function undefine object object

```
console.log(typeof(NaN));
console.log(typeof(String));
console.log(typeof(undefind));
console.log(typeof(null));
console.log(typeof([5 , 10 , 20]));
```

```
function showCoords(event) {
  document.getElementById("demo").innerHTML =
    ` X = ${event.clientX}
     Y = ${event.clientY}`;
}
```

```
let person = {
  profile: {
    name: "",
    age: 0
  }
};

console.log(person.profile.name || "Anonymous");
console.log(person.profile.age || 18);
console.log(person.profile.name ?? "Anonymous");
console.log(person.profile.age ?? 18);
```

Anonymous

18

0

```
['white', 'black', 'gray']
True
```

```
const colors = ['white', 'black', 'gray'];
const clone = [...colors];
console.log(clone);
console.log(colors === clone);
```

```
let myFunc = (first, last) => ({ firstName: first, lastName: last }),
    testFunc = (first, last) => { firstName: first, lastName: last };

console.log(myFunc('john' , 'doe'));
console.log(testFunc('john' , 'doe'));
```

error syntax cause of arrow func and parentheses

```
function mul(num1){
    return function(num2){
        return function(num3){
            return num1 * num2 * num3;
        }
    }
}
console.log(mul(1)(5)(10));
```

```
let arr = ['john' , 'jack' , 'john' , 'jack'];
let result = arr.reduce((x , y) => {
    if(!x[y]){
        x[y] = 0;
    }
    x[y]++;
    return x;
} , []);
console.log(result)
```

Good Luck 😊

[john: 2, jack: 2]

By: Eng Hesham Mohamed