

# ES6 - Cheat Sheet

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## Arrow Function

```
const sum = (a,b) => a + b;  
console.log(sum(2,6))// prints 8
```

## Default Parameters

```
function print(a = 5) {  
    console.log(a)  
}  
  
print() // prints 5  
print(22) // prints 22
```

# Let Scope

```
let a = 3
```

```
if (true) {
```

```
    let a = 5
```

```
    console.log(a) // prints 5
```

```
}
```

```
console.log(a) // prints 3
```

# Const

```
// can be assigned only once
```

```
const a = 55
```

```
a = 44 // throws an error
```

# Multi-line String

```
console.log(  
  `This is a  
  multi-line string`  
)
```

# Template String

```
const names = "World"  
const message = `Hello ${names}`  
console.log(message)  
  
// prints "Hello World"
```

# Exponent Operator

```
const byte = 2 ** 8
```

```
// expected result = 256
```

```
// Same as: Math.pow(2, 8)
```

# Spread Operator

```
const a = [ 1, 2 ]
```

```
const b = [ 3, 4 ]
```

```
const c = [...a, ...b]
```

```
console.log(c)
```

```
// [1, 2, 3, 4]
```

# String Includes()

```
console.log('scripts'.includes('scripts'))
```

```
// prints true
```

```
console.log('scripts'.includes('prints'))
```

```
// prints false
```

**// The includes() method is case sensitive.**

**For example, the following expression returns false:**

```
console.log('scripts'.includes('Scripts'))
```

```
// prints false
```

## String startsWith()

```
console.log('scripts'.includes('sc'))
```

```
// prints true
```

```
console.log('scripts'.includes('rt'))
```

```
// prints false
```

## String repeat()

```
console.log('st'.repeat(3))
```

```
// prints "ststst"
```

## Destructuring array

```
let [a,b] = [3,7];
```

```
console.log(a); // 3
```

```
console.log(b); // 7
```

# Destructuring object

```
let obj = {  
  a:77,  
  b: 66  
};  
  
let { a,b } = obj;  
  
console.log(a); // 77  
console.log(b); // 66
```

# Object Property Assignment

```
const a= 2  const b= 5  
  
const obj = { a, b }  
  
// Before es6:  
// obj = { a: a, b:b }  
  
console.log(obj)  
  
// prints { a:2, b:5 }
```

# Object.assign()

```
const obj1 = { a: 1 }  
const obj2 = { b: 2 }  
const obj3 = Object.assign({},  
  obj1, obj2)  
console.log(obj3)  
// { a: 1, b: 2 }
```

# Promises with finally

## Promise

```
.then((result) => { ... })  
.catch((error) => { ... })  
.finally(() => {  
  /* logic independent of success/error */  
})
```

**/\* The handler is called when the promise is fulfilled or rejected. \*/**



# Spread Operator

```
const a = {  
  firstName: "FirstName",  
  lastName: "LastName1",  
}
```

```
const b = {  
  ...a,  
  lastName: "LastName2",  
  canSing: true,  
}
```

```
console.log(a)
```

```
//{firstName:"FirstName",lastName:"LastName1"}
```

```
console.log(b)
```

```
/* {firstName: "FirstName", lastName: "LastName2",  
  canSign: true} */
```

```
/* great for modifying objects without side effects/affecting the original */
```

# Destructuring Nested objects

```
const Person = {  
    name: "Rezaul karim",  
    age: 23,  
    sex: "male",  
    maritalstatus: "single",  
    address: {  
        country: "BD",  
        state: "Dhaka",  
        city: "N.Ganj",  
        pincode: "123456",  
    },  
};
```

```
const { address: { state, pincode }, name } = Person;
```

```
console.log(name, state, pincode)
```

```
// Rezaul Karim Dhaka 123456
```

```
console.log(city) // ReferenceError
```

## Object function assignment

```
const obj = {
```

```
  a: 5,
```

```
  b(){
```

```
    console.log('b')
```

```
  }
```

```
}
```

```
obj.b() // prints "b"
```

# Object.entries()

```
const obj = {  
  firstName: "FirstName",  
  lastName: "LastName1",  
  age: 23,  
  country: "Bangladesh",  
};  
  
const entries = Object.entries(obj);  
console.log(entries)  
  
/* prints [  
  ['firstName', 'FirstName'],  
  ['lastName', 'LastName'],  
  ['age', 23],  
  ['country', 'Bangladesh']  
]; */
```