

# JavaScript ES6 Cheat Sheet

@codingtute

## 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
```

## Multiline string

```
console.log(`
  This is a
  multiline string
`)
```

## Template strings

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

## Exponent operator

```
const byte = 2 ** 8
// 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('apple'.includes('pl'))
// prints true
console.log('apple'.includes('tt'))
// prints false
```

## String startsWith()

```
console.log('apple'.startsWith('ap'))
//prints true
console.log('apple'.startsWith('bb'))
//prints false
```

## String repeat()

```
console.log('ab'.repeat(3))
//prints "ababab"
```

## Destructuring array

```
let [a, b] = [3, 7];
console.log(a); // 3
console.log(b); // 7
```

## Destructuring object

```
let obj = {
  a: 55,
  b: 44
};
let { a, b } = obj;
console.log(a); // 55
console.log(b); // 44
```

## 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.*/
```

## Object function assignment

```
const obj = {
  a: 5,
  b() {
    console.log('b')
  }
}
obj.b() // prints "b"
```

## Object.entries()

```
const obj = {
  firstName: 'FirstName',
  lastName: 'LastName',
  age: 24,
  country: 'India',
};
const entries = Object.entries(obj);
/* returns an array of [key, value]
pairs of the object passed */
console.log(entries);
/* prints
[
  ['firstName', 'FirstName'],
  ['lastName', 'LastName'],
  ['age', 24],
  ['country', 'India']
]; */
```

## 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",
canSing: true} */
/* great for modifying objects without side
effects/affecting the original */
```

## Destructuring Nested Objects

```
const Person = {
  name: "Harry Potter",
  age: 29,
  sex: "male",
  materialStatus: "single",
  address: {
    country: "USA",
    state: "Nevada",
    city: "Carson City",
    pinCode: "500014",
  },
};
const { address : { state, pinCode }, name } = Person;
console.log(name, state, pinCode)
// Harry Potter Nevada 500014
console.log(city) // ReferenceError
```

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