

JAVASCRIPT



Destructuring assignment

The **destructuring assignment** syntax is a JavaScript expression that makes it possible to unpack values from arrays, or properties from objects, into distinct variables.

```
1 let a, b, rest;
2 [a, b] = [10, 20];
3
4 console.log(a);
5 // expected output: 10
6
7 console.log(b);
8 // expected output: 20
9 |
10 [a, b, ...rest] = [10, 20, 30, 40, 50];
11
12 console.log(rest);
13 // expected output: Array [30,40,50]
```

```
const obj = { a: 1, b: 2 };
const { a, b } = obj;
// is equivalent to:
// const a = obj.a;
// const b = obj.b;
```

Hoisting in JS

Functions

```
catName("Tiger");

function catName(name) {
  console.log(`My cat's name is ${name}`);
}
```

var hoisting

```
console.log(num); // Returns 'undefined' from hoisted var declaration
(not 6)
var num; // Declaration
num = 6; // Initialization
console.log(num); // Returns 6 after the line with initialization is
executed.
```

let and const hoisting

```
console.log(num); // Throws ReferenceError
value is uninitialized
let num = 6; // Initialization
```

JS Scopes

JavaScript has 3 types of scope:

- Block scope
- Function scope
- Global scope

Block Scope

```
{  
  let x = 2;  
}  
// x can NOT be used here
```

```
function myFunction() {  
  let carName = "Volvo"; // Function Scope  
}
```

Global JavaScript Variables

```
let carName = "Volvo";  
// code here can use carName  
  
function myFunction() {  
  // code here can also use carName  
}
```

Browser Storage

Types of browser storage

- Cookies.
- Local storage.
- Session storage.
- IndexedDB.
- Web SQL.
- Cache storage.

Local Storage

```
localStorage.setItem('myCat', 'Tom');
```

```
const cat = localStorage.getItem('myCat');
```

```
localStorage.removeItem('myCat');
```

```
localStorage.clear();
```

Session Storage

```
// Save data to sessionStorage
```

```
sessionStorage.setItem('key', 'value');
```

```
// Get saved data from sessionStorage
```

```
let data = sessionStorage.getItem('key');
```

```
// Remove saved data from sessionStorage
```

```
sessionStorage.removeItem('key');
```

```
// Remove all saved data from sessionStorage
```

```
sessionStorage.clear();
```

Tasks

<https://stujo-tic-tac-toe-stujo-v1.p.rapidapi.com/XXX-----/X>

Tic Tac Toe suggestions

<https://api.agify.io?name=bella>

<https://api.genderize.io?name=scott>

<https://api.nationalize.io?name=michael>

Show Currencies on Select list where option value must be a currency code

<https://api.coinbase.com/v2/currencies>.

Google Translate

<https://rapidapi.com/googlecloud/api/google-translate1/>