

JS Destructuring

Allows you to extract value from array/objects and assign them to variables using a concise syntax.

Convenient way → Extract specific data from complex Data Structures
Simplify your code.

Powerful feature

Widely used in modern JS frameworks/libraries → to extract

State Variables
↓
Props

React
↓
Vue.js

eg 1) Destructuring Arrays

```
<script>
  const myArray = [1, 2, 3];
  // Destructuring
  const [a, b, c] = myArray;
  console.log(a); // 1
  console.log(b); // 2
  console.log(c); // 3
</script>
```

Console
o/p
1
2
3

eg 2) Destructuring Objects

```
<script>
  const myObj = {
    name: "Codebuster",
    age: 24
  };
  // Destructuring
  const {name, age} = myObj;
  console.log(name); // Codebuster
  console.log(age); // 24
</script>
```

Console o/p

Codebuster
24

Q 3) Nested objects

```
<script>
  const myObj = {
    name: "Codebustler",
    age: 27,
    address: {
      city: "Gulbarga",
      state: "Goa"
    }
  };

```

O/p

Codebustler

27

Gulbarga
Goa

// Destructuring

```
const {name, age, address: {city, state}} = myObj;
```

```
console.log(name);
```

```
console.log(age);
```

```
console.log(city);
```

```
console.log(state);
```

```
</script>
```

Eg 4) Default values

```
<script>
  const myArray = [1, 2];
  // Destructuring
  const [a, b, c = 6] = myArray;
  console.log(a);
  console.log(b);
  console.log(c);
</script>

```

```
<script>
```

```
  const myObj = {
```

```
    name: "Codebustler"
```

```
  };

```

```
// Destructuring
```

```
const {name, age = 27} = myObj;
```

```
console.log(name);
```

```
console.log(age);
```

```
</script>
```


Eg 5) Alternate Name of Object

```
<script>
const myArray = [1, 2, 3];
// Destructuring
const [a, b, c];

const myObj = {
  name: "Codehustler"
};
const {name: myName, age: 27} = myObj;
console.log(myName);
console.log(age);
</script>
```

Console of
Codehustler
27

objects

- 1) In JS, you can rename properties \rightarrow while \rightarrow Destructuring
You cannot rename elements \rightarrow while \rightarrow Destructuring arrays
(Because arrays do not have named properties).
- 2) For objects \rightarrow we \rightarrow rename variables during destructuring.