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Looping through objects in JavaScript

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Once in a while, you may need to loop through Objects in JavaScript. The only way to do so before ES6 is with a for...in loop.

The problem with a <code>for...in</code> loop is that it iterates through properties in the Prototype chain. When you loop through an object with the <code>for...in</code> loop, you need to check if the property belongs to the object. You can do this with <code>hasOwnProperty</code>.

```
for (var property in object) {
  if (object.hasOwnProperty(property)) {
    // Do things here
  }
}
```

We no longer have to rely on for...in and hasOwnProperty now. There's a better way.

A better way to loop through objects

The better way to loop through objects is **first to convert the object into an array. Then, you loop through the array.**

You can convert an object into an array with three methods:

```
    Object.keys
    Object.values
```

3. Object.entries

OBJECT.KEYS

Object.keys creates an array that contains the properties of an object. Here's an example.

```
const fruits = {
  apple: 28,
  orange: 17,
  pear: 54,
}

const keys = Object.keys(fruits)
console.log(keys) // [apple, orange, pear]
```

OBJECT.VALUES

Object.values creates an array that contains the values of every property in an object. Here's an example:

```
const fruits = {
  apple: 28,
  orange: 17,
  pear: 54,
}

const values = Object.values(fruits)
console.log(values) // [28, 17, 54]
```

OBJECT.ENTRIES

Object.entries creates an array of arrays. Each inner array has two item. The first item is the property; the second item is the value.

Here's an example:

```
const fruits = {
  apple: 28,
  orange: 17,
  pear: 54,
}

const entries = Object.entries(fruits)
console.log(entries)
// [
// [apple, 28],
```

```
// [orange, 17],
// [pear, 54]
// ]
```

My favorite of the three is Object.entries because you get both the key and property values.

Looping through the array

Once you've converted the object into an array with <code>Object.keys</code> , <code>Object.values</code> , or <code>Object.entries</code> , you can loop through it as if it was a normal array.

```
// Looping through arrays created from Object.keys
const keys = Object.keys(fruits)
for (const key of keys) {
  console.log(key)
}

// Results:
// apple
// orange
// pear
```

If you use Object.entries you might want to destructure the array into its key and property.

```
for (const [fruit, count] of entries) {
  console.log(`There are ${count} ${fruit}s`)
}
// Result
```

```
// There are 28 apples
// There are 17 oranges
// There are 54 pears
```

Wrapping up

The better way to loop through objects is first convert it into an array with one of these three methods.

- Object.keys
- 2. Object.values
- 3. Object.entries

Then, you loop through the results like a normal array.

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