

# LOOPING THROUGH OBJECTS

JS

## LOOPING THROUGH OBJECTS

For looping through arrays, you have methods like **forEach**, **map** and you can also use **for** statements as each element has an index position in an ordered manner.

How do you loop through objects?

I will show four ways in this post:

- **for...in**: for looping through the keys
- **Object.keys()**: returns the keys in an array
- **Object.values()**: returns the values in an array
- **Object.entries()**: returns an array of arrays

Keep swiping to see more information about each method...



## LOOPING THROUGH OBJECTS

## for...in

This approach is used to loop through the keys of an object.

```
const object = {
  name: "DeeeCode",
  id: "deencode",
  language: "javascript"
}

for (const key in object) {
  const value = object[key]
  console.log("key: " + key)
  console.log("value: " + value)
}

// key: name
// value: DeeeCode
// key: id
// value: deencode
// key: language
// value: javascript
```

By looping through the keys, you can get the value using **object[key]**

## LOOPING THROUGH OBJECTS

## Object.keys()

The **keys** method of the Object constructor returns an array of the keys in an object.

```
const object = {
  name: "DeeCode",
  id: "deencode",
  language: "javascript"
}

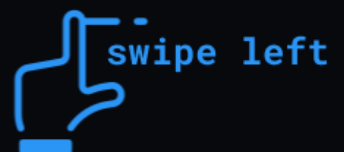
const keys = Object.keys(object)
// [ 'name', 'id', 'language' ]

keys.forEach(function(key) {
  const value = object[key]
  console.log("key: " + key)
  console.log("value: " + value)
})

// key: name
// value: DeeCode
// key: id
// value: deencode
// key: language
// value: javascript
```

With the array of keys, you can then loop through the array using any array approaches.

This example shows using the **forEach** method. And you can get the value of the object key also using **object[key]**



## LOOPING THROUGH OBJECTS

## Object.values()

The **values** method returns an array of the values in an object (opposite of **keys** method).

```
const object = {
  name: "DeeeCode",
  id: "deencode",
  language: "javascript"
}

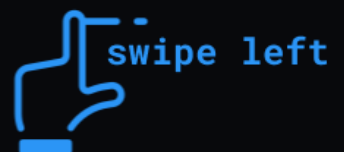
const values = Object.values(object)
// [ 'name', 'id', 'language' ]

values.forEach(function(value) {
  console.log(value)
})

// [ 'DeeeCode',
//   'deencode',
//   'javascript'
// ]
// DeeeCode
// deencode
// javascript
```

With the array of values, you can then loop through the array using any array approaches.

**Note that** you can use a key to get a value directly but you cannot use a value to get a key directly.



## LOOPING THROUGH OBJECTS

## Object.entries()

The **entries** method returns an array of subarrays where each subarray has two items: the first one is the **key** and the second one is the **value**.

```
const object = {
  name: "DeeeCode",
  id: "deeeencode",
  language: "javascript"
}

const entries = Object.entries(object)
// [
//   [ 'name', 'DeeeCode' ],
//   [ 'id', 'deeeencode' ],
//   [ 'language', 'javascript' ]
// ]

entries.forEach(function(entry) {
  const key = entry[0]
  const value = entry[1]

  console.log("key: " + key)
  console.log("value: " + value)
})

// key: name
// value: DeeeCode
// key: id
// value: deeeencode
// key: language
// value: javascript
```

Unlike the **keys** and **values** method, **entries** returns the keys and values of an object in subarrays.

Then you can access them using the **0** and **1** index as shown by the left.