/// mdn web docs\_

# Array.prototype.every()

The every() method of Array instances tests whether all elements in the array pass the test implemented by the provided function. It returns a Boolean value.

## Try it

```
JavaScript Demo: Array.every()

const isBelowThreshold = (currentValue) => currentValue < 40;

const array1 = [1, 30, 39, 29, 10, 13];

console.log(array1.every(isBelowThreshold));

// Expected output: true

Run>

Reset
```

# **Syntax**

```
JS
every(callbackFn)
every(callbackFn, thisArg)
```

#### **Parameters**

#### callbackFn

A function to execute for each element in the array. It should return a <u>truthy</u> value to indicate the element passes the test, and a <u>falsy</u> value otherwise. The function is called with the following arguments:

```
element

The current element being processed in the array.

index

The index of the current element being processed in the array.

array

The array every() was called upon.
```

thisArg Optional

A value to use as this when executing callbackFn. See iterative methods.

#### Return value

true unless callbackFn returns a falsy value for an array element, in which case false is immediately returned.

## Description

The every() method is an <u>iterative method</u>. It calls a provided callbackFn function once for each element in an array, until the callbackFn returns a <u>falsy</u> value. If such an element is found, every() immediately returns false and stops iterating through the array. Otherwise, if callbackFn returns a <u>truthy</u> value for all elements, every() returns true. Read the <u>iterative methods</u> section for more information about how these methods work in general.

every acts like the "for all" quantifier in mathematics. In particular, for an empty array, it returns true. (It is <u>vacuously true</u> that all elements of the <u>empty set</u> satisfy any given condition.)

callbackFn is invoked only for array indexes which have assigned values. It is not invoked for empty slots in sparse arrays.

The every() method is generic. It only expects the this value to have a length property and integer-keyed properties.

## Examples

### Testing size of all array elements

The following example tests whether all elements in the array are 10 or bigger.

```
JS

function isBigEnough(element, index, array) {
    return element >= 10;
}

[12, 5, 8, 130, 44].every(isBigEnough); // false
[12, 54, 18, 130, 44].every(isBigEnough); // true
```

#### Check if one array is a subset of another array

The following example tests if all the elements of an array are present in another array.

```
JS

const isSubset = (array1, array2) =>
    array2.every((element) => array1.includes(element));

console.log(isSubset([1, 2, 3, 4, 5, 6, 7], [5, 7, 6])); // true
console.log(isSubset([1, 2, 3, 4, 5, 6, 7], [5, 8, 7])); // false
```

### Using the third argument of callbackFn

The array argument is useful if you want to access another element in the array. The following example first uses filter() to extract the positive values and then uses every() to check whether the array is strictly increasing.

```
const numbers = [-2, 4, -8, 16, -32];
const isIncreasing = numbers
   .filter((num) => num > 0)
   .every((num, idx, arr) => {
        // Without the arr argument, there's no way to easily access the
        // intermediate array without saving it to a variable.
        if (idx === 0) return true;
        return num > arr[idx - 1];
        });
console.log(isIncreasing); // true
```

Using every() on sparse arrays

every() will not run its predicate on empty slots.

```
JS
console.log([1, , 3].every((x) => x !== undefined)); // true
console.log([2, , 2].every((x) => x === 2)); // true
```

## Calling every() on non-array objects

The every() method reads the length property of this and then accesses each property with a nonnegative integer key less than length until they all have been accessed or callbackFn returns false.

```
const arrayLike = {
  length: 3,
  0: "a",
  1: "b",
  2: "c",
  3: 345, // ignored by every() since length is 3
};
console.log(
  Array.prototype.every.call(arrayLike, (x) => typeof x === "string"),
); // true
```

# **Specifications**

```
Specification

ECMAScript Language Specification

# sec-array.prototype.every
```

# Browser compatibility

Report problems with this compatibility data on GitHub Z



Tip: you can click/tap on a cell for more information.

✓ Full support

#### See also

- Polyfill of Array.prototype.every in core-js ☑
- Indexed collections guide
- <u>Array</u>
- Array.prototype.forEach()