



# Array Interation API

Os **iteration methods** quando invocados  
iteram sobre os elementos do array

- **forEach**: Executa a função passada por parâmetro para cada elemento
- **filter**: Retorna um novo array contendo somente os elementos que retornaram true na função passada por parâmetro
- **find**: Retorna o primeiro elemento que retornou true na função passada por parâmetro
- **some**: Retorna true se um ou mais elementos retornaram true na função passada por parâmetro
- **every**: Retorna true se todos os elementos retornaram true na função passada por parâmetro
- **map**: Retorna um novo array com base no retorno da função passada por parâmetro
- **reduce**: Retorna um valor com base no retorno da função passada por parâmetro

A screenshot of a macOS desktop environment. On the left is a code editor window titled "array\_iteration\_api\_1.js — javascriptmasterclass". The file contains the following JavaScript code:

```
JS array_iteration_api_1.js ×
1 const frameworks = ["Angular.js", "Ember.js", "Vue.js"];
2 frameworks.forEach(framework => console.log(framework));
3
```

The code uses a const declaration to define an array of three strings representing JavaScript frameworks. It then iterates over this array using the forEach method, logging each framework name to the console.

To the right of the code editor is a terminal window titled "TERMINAL" with the identifier "2: bash". The terminal shows the command being run and its output:

```
rodrigobranas:javascriptmasterclass $ node array_iteration_api/array_iteration_api_1.js
Angular.js
Ember.js
Vue.js
rodrigobranas:javascriptmasterclass $
```

The terminal output matches the expected behavior of the provided code, printing the names of the three frameworks: Angular.js, Ember.js, and Vue.js.

A screenshot of a Mac OS X desktop environment showing a terminal window. The window title is "array\_iteration\_api\_2.js — javascriptmasterclass". The main pane contains the following JavaScript code:

```
JS array_iteration_api_2.js x
array_iteration_api_2.js — javascriptmasterclass
1 const frameworks = [
2   {
3     name: "Angular.js",
4     contributors: 1598
5   },
6   {
7     name: "Ember.js",
8     contributors: 746
9   },
10  {
11    name: "Vue.js",
12    contributors: 240
13  }
14];
15 const result = frameworks.filter(function (framework) {
16   return framework.contributors < 1000;
17 });
18 console.log(result);
19
```

The right side of the window shows the terminal output:

```
TERMINAL ... 2: bash + =
rodrigobranas:javascriptmasterclass $ node array_iteration_api/array_iteration_api_2.js
[ { name: 'Ember.js', contributors: 746 },
  { name: 'Vue.js', contributors: 240 } ]
rodrigobranas:javascriptmasterclass $
```

A screenshot of a Mac OS X desktop environment showing a terminal window. The window title is "array\_iteration\_api\_3.js — javascriptmasterclass". The main pane contains the following JavaScript code:

```
JS array_iteration_api_3.js ×
array_iteration_api_3.js — javascriptmasterclass
1 const frameworks = [
2   {
3     name: "Angular.js",
4     contributors: 1598
5   },
6   {
7     name: "Ember.js",
8     contributors: 746
9   },
10  {
11    name: "Vue.js",
12    contributors: 240
13  }
14];
15 const result = frameworks.find(function (framework) {
16   return framework.name === "Angular.js";
17 });
18 console.log(result);
19
```

The right side of the window shows the terminal output:

```
rodrigobranas:javascriptmasterclass $ node array_iteration_api/array_iteration_api_3.js
{ name: 'Angular.js', contributors: 1598 }
rodrigobranas:javascriptmasterclass $
```

A screenshot of a Mac OS X desktop environment showing a terminal window. The window title is "array\_iteration\_api\_4.js — javascriptmasterclass". The main pane contains the following JavaScript code:

```
JS array_iteration_api_4.js ×
array_iteration_api_4.js — javascriptmasterclass
1 const frameworks = [
2   {
3     name: "Angular.js",
4     contributors: 1598
5   },
6   {
7     name: "Ember.js",
8     contributors: 746
9   },
10  {
11    name: "Vue.js",
12    contributors: 240
13  }
14];
15 const result = frameworks.some(function (framework) {
16   return framework.contributors > 1000;
17 });
18 console.log(result);
19
```

The right side of the window shows the terminal output:

```
rodrigobranas:javascriptmasterclass $ node array_iteration_api/array_iteration_api_4.js
true
rodrigobranas:javascriptmasterclass $
```

A screenshot of a macOS desktop environment showing a terminal window and a code editor. The terminal window is titled 'array\_iteration\_api\_5.js — javascriptmasterclass' and contains the command 'node array\_iteration\_api/array\_iteration\_api\_5.js' followed by the output 'true'. The code editor window shows a file named 'array\_iteration\_api\_5.js' with the following content:

```
JS array_iteration_api_5.js ×
array_iteration_api_5.js — javascriptmasterclass
TERMINAL ... 2: bash + ⌂

1 const frameworks = [
2   {
3     name: "Angular.js",
4     contributors: 1598
5   },
6   {
7     name: "Ember.js",
8     contributors: 746
9   },
10  {
11    name: "Vue.js",
12    contributors: 240
13  }
14];
15 const result = frameworks.every(function (framework) {
16   return framework.name.includes("js");
17 });
18 console.log(result);
19
```

The screenshot shows a terminal window with the following details:

- Title Bar:** array\_iteration\_api\_6.js — javascriptmasterclass
- File Tab:** JS array\_iteration\_api\_6.js x
- Toolbar:** Includes icons for search, refresh, and more.
- Terminal Tab:** 2: bash
- Terminal Content:**

```
rodrigobranas:javascriptmasterclass $ node array_iteration_api/array_iteration_api_6.js
[ 'Angular.js', 'Ember.js', 'Vue.js' ]
rodrigobranas:javascriptmasterclass $
```

The code in the editor is as follows:

```
1 const frameworks = [
2   {
3     name: "Angular.js",
4     contributors: 1598
5   },
6   {
7     name: "Ember.js",
8     contributors: 746
9   },
10  {
11    name: "Vue.js",
12    contributors: 240
13  }
14];
15 const result = frameworks.map((framework) => framework.name)
16 console.log(result);
17
```

A screenshot of a Mac OS X desktop environment showing a terminal window. The window title is "array\_iteration\_api\_7.js — javascriptmasterclass". The main pane contains the following JavaScript code:

```
JS array_iteration_api_7.js ×
array_iteration_api_7.js — javascriptmasterclass
1 const frameworks = [
2   {
3     name: "Angular.js",
4     contributors: 1598
5   },
6   {
7     name: "Ember.js",
8     contributors: 746
9   },
10  {
11    name: "Vue.js",
12    contributors: 240
13  }
14];
15 const result = frameworks.reduce(function (total, framework)
16   return total + framework.contributors;
17 }, 0);
18 console.log(result);
19
```

The right side of the window shows the terminal output:

```
rodrigobranas:javascriptmasterclass $ node array_iteration_api/array_iteration_api_7.js
2584
rodrigobranas:javascriptmasterclass $
```