

JAVASCRIPT – ARRAY SORTING

```
var fruits = ["Banana", "Orange", "Apple", "Mango"];
```

```
fruits.sort();
```

```
var numbers = [25, 55, 22, 100];
```

```
numbers.sort();
```

The `sort()` method sorts the items of an array.

The sort order can be either alphabetic or numeric, and either ascending (up) or descending (down).

By default, the `sort()` method sorts the values as strings in alphabetical and ascending order.

This works well for strings ("Apple" comes before "Banana"). However, if numbers are sorted as strings, "25" is bigger than "100", because "2" is bigger than "1".

Because of this, the `sort()` method will produce an incorrect result when sorting numbers.

You can fix this by providing a "compare function"

Parameter Values

Parameter**Description**

Optional. A function that defines an alternative sort order. The function should return a negative, zero, or positive value, depending on the arguments, like:

- `function(a, b){return a-b}`

When the `sort()` method compares two values, it sends the values to the compare function, and sorts the values according to the returned (negative, zero, positive) value.

compareFunction

Example:

When comparing 40 and 100, the `sort()` method calls the `compare function(40,100)`.

The function calculates `40-100`, and returns `-60` (a negative value).

The sort function will sort 40 as a value lower than 100.

Example sort numbers

Sort numbers in an array in ascending order:

```
var points = [40, 100, 1, 5, 25, 10];
points.sort(function(a, b){return a-b});
```

The result of points will be:

```
1,5,10,25,40,100
```

Sort numbers in an array in descending order:

```
var points = [40, 100, 1, 5, 25, 10];
points.sort(function(a, b){return b-a});
```

The result of points will be:

```
100,40,25,10,5,1
```

Find the highest number in array

```
<button onclick="gethigh()">Try it</button>
```

```
<p id="test1"></p>
```

```
<script>
```

```
function gethigh() {
```

```
    var thenumbers = [40, 100, 1, 2, 23, 24, 5, 25, 11];
```

```
    thenumbers.sort(function(a, b){return b-a});
```

```
    document.getElementById("test1").innerHTML = thenumbers[0];
```

```
}
```

```
</script>
```