

# JAVASCRIPT ARRAY



ARRAYS



# INTRODUCTION

An array is an object that can store multiple values at once.

Suppose we need to record the age of **5** students. Instead of creating **5** separate variables, we can simply create an array:

17	18	15	19	14
----	----	----	----	----

Array of Age



# CREATE ARRAY

We can create an array by placing elements inside an array literal [], separated by commas. For example,

```
const numbers = [10, 30, 40, 60, 80]
```

Here,

**numbers** - name of the array

**[10, 30, 40, 60, 80]** - elements of the array



## Access Elements of an Array

Each element of an array is associated with a number called an index. The index specifies the position of the element inside the array.

For the array,

```
let numbers = [10, 30, 40, 60, 80]
```

Here is the indexing of each element:

Indexes	0	1	2	3	4
	10	30	40	60	80



# ADD ELEMENT TO AN ARRAY

We can add elements to an array using built-in methods like `push()` and `unshift()`.

The `push()` method adds an element at the end of the array.



## Array Methods

In JavaScript, there are various methods available that make it easier to perform useful operations with arrays. Some commonly used array methods in JavaScript are:

Method	Description
<code>concat()</code>	Joins two or more arrays and returns a result.
<code>indexOf()</code>	Searches an element of an array and returns its position.
<code>find()</code>	Returns the first value of an array element that passes a test.
<code>findIndex()</code>	Returns the first index of an array element that passes a test.
<code>forEach()</code>	Calls a function for each element.
<code>includes()</code>	Checks if an array contains a specified element.
<code>sort()</code>	Sorts the elements alphabetically in strings and in ascending order.
<code>slice()</code>	Selects the part of an array and returns the new array.
<code>splice()</code>	Removes or replaces existing elements and/or adds new elements.