**javaScript For loop**

The **JavaScript for loop** *iterates the elements for the fixed number of times*. It should be used if number of iteration is known. The syntax of for loop is given below.

for (initialization; condition; increment)

{

code to be executed

}

# JavaScript Array

**JavaScript array** is an object that represents a collection of similar type of elements.

There are 3 ways to construct array in JavaScript

1. By array literal

1. The syntax of creating array using array literal is given below:

1. var arrayname=[value1,value2.....valueN];

As you can see, values are contained inside [ ] and separated by , (comma).

The .length property returns the length of an array.

Ex: <html>

<body>

<script>

var emp=["Sonoo","Vimal","Ratan"];

for (i=0;i<emp.length;i++){

document.write(emp[i] + "<br/>");

}

</script>

</body>

</html>

Output:

Sonoo  
Vimal  
Ratan

2. By creating instance of Array directly (using new keyword):

The syntax of creating array directly is given below:

1. var arrayname=new Array();

Here, **new keyword** is used to create instance of array.

<html>

<body>

<script>

var i;

var emp = new Array();

emp[0] = "Arun";

emp[1] = "Varun";

emp[2] = "John";

for (i=0;i<emp.length;i++){

document.write(emp[i] + "<br>");

}

</script>

</body>

</html>

Output:

Arun  
Varun  
John

3.By using an Array constructor (using new keyword):

Here, you need to create instance of array by passing arguments in constructor so that we don't have to provide value explicitly.

<html>

<body>

<script>

var emp=new Array("Jai","Vijay","Smith");

for (i=0;i<emp.length;i++){

document.write(emp[i] + "<br>");

}

</script>

</body>

</html>

Output:

Jai  
Vijay  
Smith

**JavaScript Array Methods**

Let's see the list of JavaScript array methods with their description.

|  |  |
| --- | --- |
| **Methods** | **Description** |
| [concat()](https://www.javatpoint.com/javascript-array-concat-method) | It returns a new array object that contains two or more merged arrays. |
| [copywithin()](https://www.javatpoint.com/javascript-array-copywithin-method) | It copies the part of the given array with its own elements and returns the modified array. |
| [entries()](https://www.javatpoint.com/javascript-array-entries-method) | It creates an iterator object and a loop that iterates over each key/value pair. |
| [every()](https://www.javatpoint.com/javascript-array-every-method) | It determines whether all the elements of an array are satisfying the provided function conditions. |
| [flat()](https://www.javatpoint.com/javascript-array-flat-method) | It creates a new array carrying sub-array elements concatenated recursively till the specified depth. |
| [flatMap()](https://www.javatpoint.com/javascript-array-flatmap-method) | It maps all array elements via mapping function, then flattens the result into a new array. |
| [fill()](https://www.javatpoint.com/javascript-array-fill-method) | It fills elements into an array with static values. |
| [from()](https://www.javatpoint.com/javascript-array-from-method) | It creates a new array carrying the exact copy of another array element. |
| [filter()](https://www.javatpoint.com/javascript-array-filter-method) | It returns the new array containing the elements that pass the provided function conditions. |
| [find()](https://www.javatpoint.com/javascript-array-find-method) | It returns the value of the first element in the given array that satisfies the specified condition. |
| [findIndex()](https://www.javatpoint.com/javascript-array-findindex-method) | It returns the index value of the first element in the given array that satisfies the specified condition. |
| [forEach()](https://www.javatpoint.com/javascript-array-foreach-method) | It invokes the provided function once for each element of an array. |
| [includes()](https://www.javatpoint.com/javascript-array-includes-method) | It checks whether the given array contains the specified element. |
| [indexOf()](https://www.javatpoint.com/javascript-array-indexof-method) | It searches the specified element in the given array and returns the index of the first match. |
| [isArray()](https://www.javatpoint.com/javascript-array-isarray-method) | It tests if the passed value ia an array. |
| [join()](https://www.javatpoint.com/javascript-array-join-method) | It joins the elements of an array as a string. |
| [keys()](https://www.javatpoint.com/javascript-array-keys-method) | It creates an iterator object that contains only the keys of the array, then loops through these keys. |
| [lastIndexOf()](https://www.javatpoint.com/javascript-array-lastindexof-method) | It searches the specified element in the given array and returns the index of the last match. |
| [map()](https://www.javatpoint.com/javascript-array-map-method) | It calls the specified function for every array element and returns the new array |
| [of()](https://www.javatpoint.com/javascript-array-of-method) | It creates a new array from a variable number of arguments, holding any type of argument. |
| [pop()](https://www.javatpoint.com/javascript-array-pop-method) | It removes and returns the last element of an array. |
| [push()](https://www.javatpoint.com/javascript-array-push-method) | It adds one or more elements to the end of an array. |
| [reverse()](https://www.javatpoint.com/javascript-array-reverse-method) | It reverses the elements of given array. |
| [reduce(function, initial)](https://www.javatpoint.com/javascript-array-reduce-method) | It executes a provided function for each value from left to right and reduces the array to a single value. |
| [reduceRight()](https://www.javatpoint.com/javascript-array-reduceright-method) | It executes a provided function for each value from right to left and reduces the array to a single value. |
| [some()](https://www.javatpoint.com/javascript-array-some-method) | It determines if any element of the array passes the test of the implemented function. |
| [shift()](https://www.javatpoint.com/javascript-array-shift-method) | It removes and returns the first element of an array. |
| [slice()](https://www.javatpoint.com/javascript-array-slice-method) | It returns a new array containing the copy of the part of the given array. |
| [sort()](https://www.javatpoint.com/javascript-array-sort-method) | It returns the element of the given array in a sorted order. |
| [splice()](https://www.javatpoint.com/javascript-array-splice-method) | It add/remove elements to/from the given array. |
| [toLocaleString()](https://www.javatpoint.com/javascript-array-tolocalestring-method) | It returns a string containing all the elements of a specified array. |
| [toString()](https://www.javatpoint.com/javascript-array-tostring-method) | It converts the elements of a specified array into string form, without affecting the original array. |
| [unshift()](https://www.javatpoint.com/javascript-array-unshift-method) | It adds one or more elements in the beginning of the given array. |
| [values()](https://www.javatpoint.com/javascript-array-values-method) | It creates a new iterator object carrying values for each index in the array. |