

Java Arrays Loop

Loop Through an Array

Looping through an array JavaScript is among the most frequent things a programmer will do. An array can include many data entries, and you may wish to do a task on all the data entries. For example, you have an array of numbers you wish to calculate the summation of them, or you have an array of objects and you want to add a property to all of these objects. There are several ways to iterate over an array in JavaScript.

You can loop through the array elements with the for loop, and use the length property to specify how many times the loop should run.

The following example outputs all elements in the cars array:

Example

```
String[] cars = {"Volvo", "BMW", "Ford", "Mazda"};
for (int i = 0; i < cars.length; i++) {
    System.out.println(cars[i]);
}
```

Loop Through an Array with For-Each

The `forEach()` runs a function on each indexed element in an array. Starting at `index[0]` a function will get called on `index[0]`, `index[1]`, `index[2]`, etc... `forEach()` will let you loop through an array nearly the same way as a for loop:

There is also a "for-each" loop, which is used exclusively to loop through elements in arrays.

- array - an array or a collection
- item - each item of array/collection is assigned to this variable
- dataType - the data type of the array/collection

Syntax

The following example outputs all elements in the cars array, using a "for-each" loop:

Example

```
String[] cars = {"Volvo", "BMW", "Ford", "Mazda"};
for (String i : cars) {
    System.out.println(i);
}
```

The example above can be read like this: for each String element (called i - as in index) in cars, print out the value of i.

If you compare the for loop and for-each loop, you will see that the for-each method is easier to write, it does not require a counter (using the length property), and it is more readable.

References

- <https://docs.oracle.com/javase/tutorial/java/nutsandbolts/arrays.html>
- <https://www.programiz.com/java-programming/enhanced-for-loop>
- https://www.w3schools.com/java/java_arrays.asp