

Experiment NO:03

AIM: Develop JavaScript to implement Array functionalities

Theory: (need to draw output for all programs)

- JavaScript array is a single variable that is used to store different elements. It is often used when we want to store a list of elements and access them by a single variable.
- In JavaScript, an array is a single variable that stores multiple elements.
- An array is a special variable, which can hold more than one value

Declaration of an Array:

There are basically two ways to declare an array.

1. `const arrayName = [value1, value2, ...]; // Method 1`
2. `const arrayName = new Array(value1, value2, ...); // Method 2`

Example:

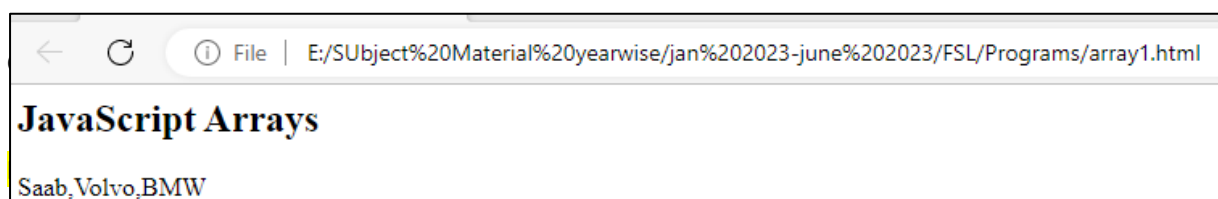
1. `const cars = ["Saab", "Volvo", "BMW"];`
2. `const cars = new Array("Saab", "Volvo", "BMW");`

script 1:

Write javascript to print an array.

```
<html>
<body>
<h2>JavaScript Arrays</h2>
<p id="demo"></p>
<script>
const cars = [];
cars[0]= "Saab";
cars[1]= "Volvo";
cars[2]= "BMW";
document.getElementById("demo").innerHTML = cars;
</script>
</body>
</html>
```

OUTPUT:



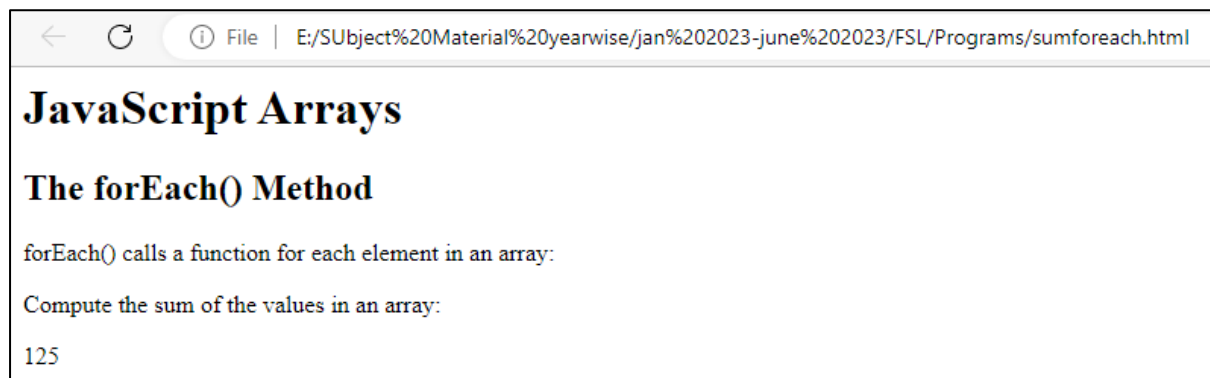
JavaScript Array forEach()

- The forEach() method calls a function for each element in an array.
- The forEach() method is not executed for empty elements.

script 2:

Write javascript to compute the sum using FOR-EACH

```
<body>
<h1>JavaScript Arrays</h1>
<h2>The forEach() Method</h2>
<p>forEach() calls a function for each element in an array:</p>
<p>Compute the sum of the values in an array:</p>
<p id="demo"></p>
<script>
let sum = 0;
const numbers = [65, 44, 12, 4];
numbers.forEach(myFunction);
document.getElementById("demo").innerHTML = sum;
function myFunction(item)
{
    sum += item;
}
</script>
</body>
</html>
```



JavaScript for...in Loop

- The for...in statements combo iterates (loops) over the properties of an object.
- The code block inside the loop is executed once for each property.

Script 3:

Write javascript to Iterate (loop) over the properties of an object:

```
<html>
```

```

<body>
<h1>JavaScript Statements</h1>
<h2>The for...in Loop</h2>
<p>Iterate (loop) over the properties of an object:</p>
<p id="demo"></p>
<script>
const person = { fname:"John", lname:"Doe", age:25 };
let text = "";
for (let x in person) {
    text += person[x] + " ";
}
document.getElementById("demo").innerHTML = text;
</script>
</body>
</html>

```






Script 4:

Write javascript to add a new element to an array is using the push() method:

```

<html>
<body>
<h2>JavaScript Arrays</h2>
<p>The push method appends a new element to an array.</p>
<button onclick="myFunction()">Try it</button>
<p id="demo"></p>
<script>
const fruits = ["Banana", "Orange", "Apple"];
document.getElementById("demo").innerHTML = fruits;
function myFunction() {
    fruits.push("Lemon");
    document.getElementById("demo").innerHTML = fruits;
}
</script>
</body>
</html>

```

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JavaScript Arrays

The push method appends a new element to an array.

Try it

Banana,Orange,Apple,Lemon

CONCLUSION :