**Array in JavaScript**

**Array Declaration**

1. **By array literal**

**const demo = ["one", "two", "three"];**

**document. write(demo[1]);**

**or**

**const demo = ["one", "two", "three"];**

**for(i=0;i<demo.length;i++)**

**{**

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

**}**

1. **By creating instance of Array directly (using new keyword)**

**const demo = new Array();**

**demo[0] = "one";**

**demo[1] = "two";**

**demo[2] = "three";**

**for(i=0;i<demo.length;i++)**

**{**

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

**}**

1. **By using an Array constructor (using new keyword)**

**const demo = new Array("one","two","three");**

**for(i=0;i<demo.length;i++)**

**{**

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

**}**

**JavaScript Array Methods**

The Array object has many properties and methods which help developers to handle arrays easily and efficiently. You can get the value of a property by specifying **arrayname. property** and the output of a method by specifying **arrayname. Method ().**

* length property --> If you want to know the number of elements in an array, you can use the length property.
* prototype property --> If you want to add new properties and methods, you can use the prototype property.
* reverse method --> You can reverse the order of items in an array using a reverse method.
* sort method --> You can sort the items in an array using sort method.
* pop method --> You can remove the last item of an array using a pop method.
* shift method --> You can remove the first item of an array using shift method.
* push method --> You can add a value as the last item of the array.

var students = new Array("John", "Ann", "Aaron", "Edwin", "Elizabeth");

    Array.prototype.displayItems=function(){

        for (i=0;i<this.length;i++){

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

        }

    }

    document.write("students array<br />");

    students.displayItems();

    document.write("<br />The number of items in students array is " + students.length + "<br />");

    document.write("<br />The SORTED students array<br />");

    students.sort();

    students.displayItems();

    document.write("<br />The REVERSED students array<br />");

    students.reverse();

    students.displayItems();

    document.write("<br />THE students array after REMOVING the LAST item<br />");

    students.pop();

    students.displayItems();

    document.write("<br />THE students array after PUSH<br />");

    students.push("New Stuff");

    students.displayItems();

**Output**

students array  
John  
Ann  
Aaron  
Edwin  
Elizabeth  
  
The number of items in students array is 5  
  
The SORTED students array  
Aaron  
Ann  
Edwin  
Elizabeth  
John  
  
The REVERSED students array  
John  
Elizabeth  
Edwin  
Ann  
Aaron  
  
THE students array after REMOVING the LAST item  
John  
Elizabeth  
Edwin  
Ann  
  
THE students array after PUSH  
John  
Elizabeth  
Edwin  
Ann  
New Stuff