JavaScript Array flatMap() Method

The flatMap() method is a combination of flat() and map() methods. This method initially maps each array element through a mapping function, then flatten up the array with depth value as 1.

Syntax

```
var newArr=arr.flatMap(function callback(currentValue[ , index[ , array]])
{
return element
} [ , thisArg])
```

Parameters

callback- It is a function which produces an element for the newly created array and carries the following three arguments:

1. **currentValue:** It is the current array element that is in processing.

2. **index:** It is the index value of the current array element in process. It is an optional argument.

3. **array:** It is an optional argument where the array map is called upon.

4. **thisArg:** It is also an optional argument whose value is used as 'this' when we execute the callback function.

Return

It returns a new array where each element is the result of the callback function.

JavaScript Array flatMap() Method Examples

Let's see the below examples to understand better:

Example1

It is a simple example to know the use of flatMap() method.

```html
<html>
<head> <h5> Javascript Array Methods </h5> </head>
<body>
<script>
var arr=[2,4,6,8];
document.write(arr.flatMap(x=>[[x/2]]));
</script>
</body>
</html>
```
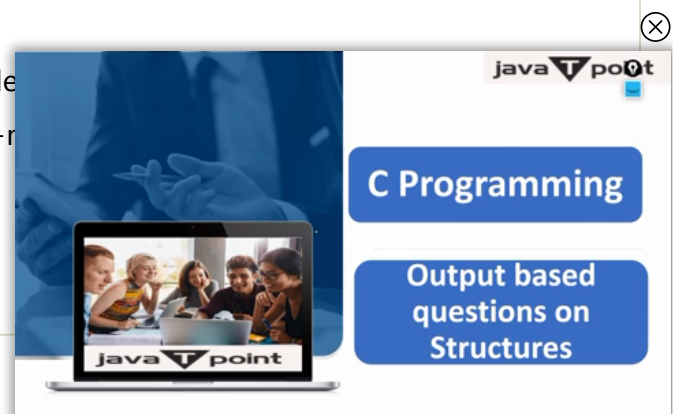
Test it Now

Output:

Javascript Array Methods

1,2,3,4

Example2

Using flatMap() method with two different array elements.

```html
<html>
<head> <h5> Javascript Array Methods </h5> </head>
<body>
<script>
var arr1=['a','b','c','d'];
var arr2=[1,2,3,4];
var newArr=arr1.flatMap((arr1,index)=>[arr1,arr2[inde
document.write("After applying the method <br>" +n
</script>
</body>
</html>
```

Test it Now

Output:

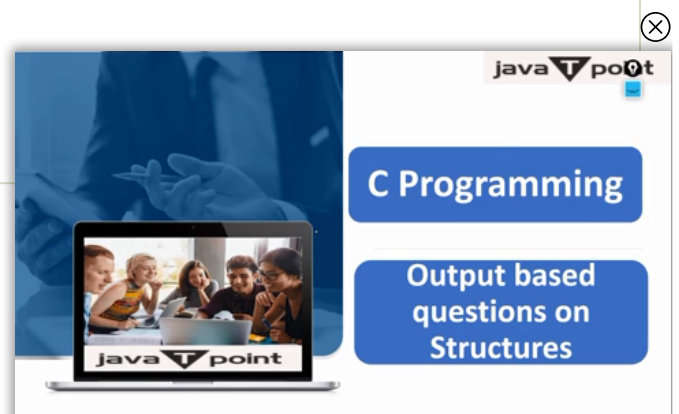**Javascript Array Methods**

After applying the method
a,1,b,2,c,3,d,4

Example3

This example shows the name of the fruit which each member likes.

```html
<html>
<head> <h5> Javascript Array Methods </h5> </head>
<body>
<script>
var arr=['James','John','Mary','Renzo'];
var arr1=['Apple','Pineapple','Guava','Grapes'];
document.write("The resultant will display the fruits liked by each person <br>");
var newArr=arr.flatMap((arr,index)=>[arr,arr1[index]]);
document.write("<br>"+newArr);
</script>
</body>
</html>
```

Test it Now

Output:

Javascript Array Methods

The resultant will display the fruits liked by each person

James,Apple,John,Pineapple,Mary,Guava,Renzo,Grapes

Example4

An example to split the sentences into individual words.

```html
<html>
<head> <h5> Javascript Array Methods </h5> </head>
<body>
<script>
var arr = ["This is", , "JavaTpoint.com"];
var newArr=arr.flatMap(x => x.split(" "));
document.write("This will split the sentences into individual words: "+newArr);
</script>
</body>
</html>
```

Test it Now

Output:

Javascript Array Methods

This will split the sentences into individual words: This,is,JavaTpoint.com

It is clear in the output that each sentence is seperated from one another and forming individual word.