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Division : BE 8	Batch : Q8
Subject : Javascript	Date :

Experiment 7: Append an object to an array and will check if an object is an array.

CODE:

1. HTML

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Experiment 7</title>
    <style>
        #tablestyle {
            font-family: 'Times New Roman', Times, serif;
            border-collapse: collapse;
            width: 20%;
        }
        #tablestyle td, #tablestyle th {
            border: 1px solid;
            padding: 8px;
            background-color: #dbfecf;
        }
    </style>
</head>
<body id = "body" style = "text-align:center;">
    <H1>JavaScript Experiment 7</H1>
    <H3>Name: Vedant Kulkarni <br> Roll No: 42438 <br> Batch: Q8</H3>
    Please enter the Array to begin operations
    <br><br>
    <h3>Enter the Array</h3>
    Enter the length of the array:
    <input id="arrlen" placeholder="Array Length">
    <br><br>
    Enter an Element and click add element:
    <input id="arrEle" placeholder="Array Element">
    <br><br>
    <button id = "AddElement" onclick = "AddElement()">Add Element</button>
    <br><br>
    The Array is now: <b><span id="ArrOut">Empty Array</span></b>
    <br><br>
    <hr>
    <h3>Enter the Object</h3>
    Enter the key-value pair of the object:
    <br><br>
    Enter the key:

    <input id="ObjKey" placeholder="Object Key">
```

```html
<br><br>
Enter the value:
<input id="ObjVal" placeholder="Object Value">
<br><br>
<button id = "AddOBj" onclick = "AddObj()">Add Object</button>
<br><br>
<hr>
<h3>View Array Elements</h3>
Click the button to generate the table
<button id = "checkArray" onclick = "checkArray()">Check Array</button>
<br><br>
<span id="TableOutput"></span>
<hr>
<button id = "reset" onclick = "window.location.reload()">reset</button>
<script>
    const Arr = new Array();
    function AddElement() {
        let Element = document.getElementById("arrEle").value;
        let len = document.getElementById("arrlen").value;
        if(Arr.length >= len) {
            alert("You are trying to Add more elements than the Array Length!")
        } else {
            Arr.push(Element);
            document.getElementById("ArrOut").innerHTML = JSON.stringify(Arr);
        }
    }

    function AddObj() {
        var obj = new Object();
        let key = document.getElementById("ObjKey").value;
        let val = document.getElementById("ObjVal").value;
        let len = document.getElementById("arrlen").value;
        obj.key = key;
        obj.val = val;
        if(Arr.length >= len) {
            alert("You are trying to Add more elements than the Array Length!");
        } else {
            Arr.push(obj);
            document.getElementById("ArrOut").innerHTML = JSON.stringify(Arr);
        }
    }

    function checkArray() {
        var table;
        table='<center><table id="tablestyle" style="text-align: center"><tr><td>Sr. No.</td><td>Element</td><td>Type Of Element</td><td>Is Array?</td></tr>';
        for(i = 0;i < Arr.length; i++){
            table +=
'<tr><td>'+(i+1)+'</td><td>'+JSON.stringify(Arr[i])+'</td><td>'+typeof(Arr[i])+'</td><td>'+Array.isArray(Arr[i])+'</td></tr>';
        }
        table += '</table></center>';
        document.getElementById("TableOutput").innerHTML = table;
    }
</script></body></html>
```