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

Experiment 6: Perform different array operations using JavaScript.

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 6</title>
</head>
<body id = "body" style = "text-align:center;">
   <H2>JavaScript Experiment 6</H2>

      <H4>Name: Vedant Kulkarni <br> Roll No: 42438 <br> Batch: Q8</H4>
      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>Array searching operations</h3>
      <h4>Using User-defined Logic</h4>
      Enter the element to search:
      <input id="searchEle1" placeholder="Element to Search">
      <br><br>
      <button id = "SearchEleBut1" onclick = "SearchElement1()">Search Element</button>
      <br><br>
      The Element is at the index: <b><span id="SearchOut1"></span></b>
      <br><br>
      <h4>Using In-built Logic</h4>
      Enter the element to search:
      <input id="searchEle2" placeholder="Element to Search">
      <br><br>
      <button id = "SearchEleBut2" onclick = "SearchElement2()">Search Element</button>
      <br><br>
      The Element is at the index: <b><span id="SearchOut2"></span></b>
      <br><br>
      <hr>
```

```
        <h3>Array delete operations</h3>
        <h4>Using User-defined Logic</h4>
        Enter the element to delete:
        <input id="delEle1" placeholder="Element to Delete">
        <br><br>
        <button id = "DelEleBut1" onclick = "DelElement1()">Delete Element</button>
        <br><br>
        The Array after deletion is: <b>[<span id="DelOut1">Empty Array</span>]</b>
        <h4>Using In-built Logic</h4>
        Enter the element to delete:
        <input id="delEle2" placeholder="Element to Delete">
        <br><br>
        <button id = "DelEleBut2" onclick = "DelElement2()">Delete Element</button>
        <br><br>
        The Array after deletion is: <b>[<span id="DelOut2">Empty Array</span>]</b>
        <br><br>
        <hr>

        <h3>Array Empty operations</h3>
        <h4>Using User-defined Logic</h4>
        <button id = "EmptyBut1" onclick = "empty1()">Empty Array</button>
        <br><br>
        The Array after emptying is: <b>[<span id="emptyOut1"></span>]</b>
        <h4>Using In-built Logic</h4>
        <button id = "EmptyBut2" onclick = "empty2()">Empty Array</button>
        <br><br>
        The Array after emptying is: <b>[<span id="emptyOut2"></span>]</b>
        <br><br>
        <hr>
        <button id = "reset" onclick = "window.location.reload()">reset</button>
        <script src="arrayopr.js"></script>
</body>
   </html>
```

2. JS

```
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 = Arr.toString();
            }
        }

        function SearchElement1() {
            let Element = document.getElementById("searchEle1").value;
            let len = document.getElementById("arrlen").value;
            var flag = 0;
            for(let i = 0; i < len; i++) {
                if(Element == Arr[i]) {
                    document.getElementById("SearchOut1").innerHTML = i;
```

```
            flag = 1;
            break;
        }
    }
    if(!flag) {
        document.getElementById("SearchOut1").innerHTML = "Element Not Found";
        alert("Element not found in the Array");
    }
}

function SearchElement2() {
    let Element = document.getElementById("searchEle2").value;
    let len = document.getElementById("arrlen").value;
    if(Arr.indexOf(Element) < 0) {
        document.getElementById("SearchOut2").innerHTML = "Element Not Found";
        alert("Element not found in the Array");
    } else {
        document.getElementById("SearchOut2").innerHTML = Arr.indexOf(Element);
    }
}

function DelElement1() {
    const ArrTemp = new Array();
    let Element = document.getElementById("delEle1").value;
    let len = document.getElementById("arrlen").value;
    for(let i = 0; i < len; i++) {
        if(Arr[i] != Element) {
            ArrTemp.push(Arr[i]);
        }
    }
    document.getElementById("DelOut1").innerHTML = ArrTemp.toString();
}

function DelElement2() {
    let Element = document.getElementById("delEle2").value;
    let len = document.getElementById("arrlen").value;
    if(Arr.indexOf(Element) < 0) {
        alert("Element not found in the Array");
    } else {
        Arr.splice(Arr.indexOf(Element), 1);

    }
    document.getElementById("DelOut2").innerHTML = Arr.toString();
}
function empty1() {
    let len = document.getElementById("arrlen").value;
    for(let i = 0; i < len; i++) {
        Arr.pop();
    }
    document.getElementById("emptyOut1").innerHTML = Arr.toString();
}

function empty2() {
    let len = document.getElementById("arrlen").value;
    Arr.splice(0, len);
    document.getElementById("emptyOut1").innerHTML = Arr.toString();}
```