	PUNE INSTITUTE OF COMPUTER TECHNOLOGY, PUNE - 411043
	DEPARTMENT OF ELECTRONICS AND TELECOMMUNICATION ENGG.
	ACADEMIC YEAR : 2023-24 **SEM: 1**

CLASS : BE VII [S7]	SUBJECT : JavaScript	
EXPT. NO. : 6	Roll No.: 42372	DATE :

CODE :

```html
<!DOCTYPE html>
<html>
<head>
 <style>
  body {
    font-family: Arial, sans-serif;
    text-align: center;
  }
  input, button {
    margin: 5px;
  }
 </style>
</head>
<body>
 <h1>Array Operations</h1>
 <h2>42372 V Raghavendra Reddy</h2>
 <p>Enter the array length and elements (comma-separated):</p>
 <input type="text" id="arrayLength">
 <input type="text" id="arrayElements">
 <button onclick="createArray()">Create Array</button>

 <div id="output"></div>

 <script>
  let myArray = [];

  function createArray() {
    const lengthInput = document.getElementById("arrayLength");
    const elementsInput = document.getElementById("arrayElements");
    const outputDiv = document.getElementById("output");

    const length = parseInt(lengthInput.value);
    const elements = elementsInput.value.split(",");

    if (elements.length !== length) {
      outputDiv.innerHTML = "Number of elements must match the specified length.";
      return;
    }

    myArray = elements;
    outputDiv.innerHTML = "Array created: " + myArray;

    lengthInput.value = "";
```

```javascript
  elementsInput.value = "";
}

function removeByIndex() {
  const index = parseInt(prompt("Enter index to remove:"));
  if (index >= 0 && index < myArray.length) {
    myArray.splice(index, 1);
    document.getElementById("output").innerHTML = "Array after removal: " + myArray;
  } else {
    alert("Invalid index");
  }
}

function removeByValue() {
  const value = prompt("Enter value to remove:");
  const index = myArray.indexOf(value);
  if (index !== -1) {
    myArray.splice(index, 1);
    document.getElementById("output").innerHTML = "Array after removal: " + myArray;
  } else {
    alert("Value not found in the array");
  }
}

function replaceByIndex() {
  const index = parseInt(prompt("Enter index to replace:"));
  if (index >= 0 && index < myArray.length) {
    const value = prompt("Enter the new value:");
    myArray[index] = value;
    document.getElementById("output").innerHTML = "Array after replacement: " + myArray;
  } else {
    alert("Invalid index");
  }
}

function replaceByValue() {
  const oldValue = prompt("Enter value to replace:");
  const index = myArray.indexOf(oldValue);
  if (index !== -1) {
    const newValue = prompt("Enter the new value:");
    myArray[index] = newValue;
    document.getElementById("output").innerHTML = "Array after replacement: " + myArray;
  } else {
    alert("Value not found in the array");
  }
}

function appendElement() {
  const value = prompt("Enter value to append:");
```

```
    myArray.push(value);
    document.getElementById("output").innerHTML = "Array after append: " + myArray;
  }

  function checkContainsValue() {
    const value = prompt("Enter value to check:");
    const contains = myArray.includes(value);
    document.getElementById("output").innerHTML = "Array contains " + value + ": " + contains;
  }

  function emptyArray() {
    myArray = [];
    document.getElementById("output").innerHTML = "Array is now empty";
  }
</script>

<p>Operations:</p>
<button onclick="removeByIndex()">Remove by Index</button>
<button onclick="removeByValue()">Remove by Value</button>
<button onclick="replaceByIndex()">Replace by Index</button>
<button onclick="replaceByValue()">Replace by Value</button>
<button onclick="appendElement()">Append Element</button>
<button onclick="checkContainsValue()">Check Contains Value</button>
<button onclick="emptyArray()">Empty Array</button>
</body>
</html>
```

OUTPUT :

Create Array:

Enter the array length and elements (comma-separated):

[   ] [   ] [Create Array]

Array created: 1,2,3,4,5

Operations:

[Remove by Index] [Remove by Value] [Replace by Index] [Replace by Value] [Append Element] [Check Contains Value] [Empty Array]

Remove by Index:

This page says

Enter index to remove:

2

OK   Cancel

Enter the array length and elements (comma-separated):

[   ] [   ] Create Array

Array after removal: 1,2,4,5

Operations:

Remove by Index | Remove by Value | Replace by Index | Replace by Value | Append Element | Check Contains Value | Empty Array

Remove by Value:

This page says

Enter value to remove:

5

OK   Cancel

Enter the array length and elements (comma-separated):

[   ] [   ] Create Array

Array after removal: 1,2,4,5

Operations:

Remove by Index | Remove by Value | Replace by Index | Replace by Value | Append Element | Check Contains Value | Empty Array

Replace by Index:

Enter the array length and elements (comma-separated):

[   ] [   ] [Create Array]

Array after replacement: 1,2,4,6

Operations:

[Remove by Index] [Remove by Value] [Replace by Index] [Replace by Value] [Append Element] [Check Contains Value] [Empty Array]

Replace by Value:

Enter the array length and elements (comma-separated):

[   ] [   ] [Create Array]

Array after replacement: 1,2,4,6

Operations:

[Remove by Index] [Remove by Value] [Replace by Index] [Replace by Value] [Append Element] [Check Contains Value] [Empty Array]

Append Element:

Enter the array length and elements (comma-separated):

[   ] [   ] [Create Array]

Array after append: 1,3,4,6,7

Operations:

[Remove by Index] [Remove by Value] [Replace by Index] [Replace by Value] [Append Element] [Check Contains Value] [Empty Array]

Check Contains Value:

Enter the array length and elements (comma-separated):

[   ] [   ] [Create Array]

Array contains 4: true

Operations:

[Remove by Index] [Remove by Value] [Replace by Index] [Replace by Value] [Append Element] [Check Contains Value] [Empty Array]

Empty Array:

Enter the array length and elements (comma-separated):

[   ] [   ] [Create Array]

Array is now empty

Operations:

[Remove by Index] [Remove by Value] [Replace by Index] [Replace by Value] [Append Element] [Check Contains Value] [Empty Array]