

Output:

Array Operations

Enter Array Elements (comma-separated):

Remove Element:

Check Element:

Current Array
 ["1","2","3","4"]
☒ Array created successfully.

Array Preview

Index	Value
0	1
1	2
2	3
3	4

Current Array

["1","3","4"]

🗑️ Removed '2' from the array.

Current Array

["1","3","4"]

✅ '3' is present in the array.

Current Array

["1","3","4"]

❌ '2' is NOT in the array.

Code:**1. HTML:**

```

<!DOCTYPE html>
<html lang="en">
<head>
<script type="text/javascript" src="array_ops.js"></script>
<link rel="stylesheet" href="style.css">

<meta charset="UTF-8">
<meta name="viewport" content="width=device-width, initial-scale=1.0">

```

```
<title>Document</title>
</head>
<body>
  <h1>Array Operations</h1>

  <div class="shape-box">
    <!-- Input Section -->
    <div class="form-section">
      <label class="area-label">Enter Array Elements (comma-separated):</label>
      <input type="text" id="arrayInput" placeholder="e.g. 10, 20, 30, 40">
      <button onclick="createArray()">Create Array</button>

      <div class="operation">
        <label class="area-label">Remove Element:</label>
        <input type="text" id="removeInput" placeholder="Enter value to remove">
        <button onclick="removeElement()">Remove</button>
      </div>

      <div class="operation">
        <label class="area-label">Check Element:</label>
        <input type="text" id="checkInput" placeholder="Enter value to check">
        <button onclick="checkElement()">Check</button>
      </div>

      <button onclick="emptyArray()">Empty Array</button>
    </div>

    <!-- Result Section -->
    <div class="result-section">
      <div class="area-label">Current Array</div>
      <div class="area-box" id="arrayDisplay">[]</div>
      <div id="message" style="color:#1e40af; font-weight:600;"></div>
    </div>
  </div>

  <h1>Array Preview</h1>
  <!-- Table Section -->
  <table id="arrayTable" style="display:none;">
```

```
<thead>
  <tr>
    <th>Index</th>
    <th>Value</th>
  </tr>
</thead>
<tbody></tbody>
</table>
</body>
```

2. Javascript:

```
let arr = [];

// Update array display and table
function updateDisplay(message="") {
  document.getElementById("arrayDisplay").textContent = JSON.stringify(arr);
  document.getElementById("message").textContent = message;

  const table = document.getElementById("arrayTable");
  const tbody = table.querySelector("tbody");
  tbody.innerHTML = "";

  if (arr.length > 0) {
    table.style.display = "table";
    arr.forEach((val, index) => {
      const row = document.createElement("tr");
      row.innerHTML = `<td>${index}</td><td>${val}</td>`;
      tbody.appendChild(row);
    });
  } else {
    table.style.display = "none";
  }
}

// Create array from input
function createArray() {
  const input = document.getElementById("arrayInput").value.trim();
  if (!input) {
```

Experiment 6

Roll no: 42405

Batch: Q6

```
        updateDisplay("⚠ Please enter some elements first.");
        return;
    }
    arr = input.split(",").map(el => el.trim()).filter(el => el !== "");
    updateDisplay("✅ Array created successfully.");
}

// Remove element
function removeElement() {
    if (arr.length === 0) {
        updateDisplay("⚠ Array is empty. Nothing to remove.");
        return;
    }
    const value = document.getElementById("removeInput").value.trim();
    if (!value) {
        updateDisplay("⚠ Enter a value to remove.");
        return;
    }
    const index = arr.indexOf(value);
    if (index !== -1) {
        arr.splice(index, 1);
        updateDisplay(`🗑 Removed '${value}' from the array.`);
    } else {
        updateDisplay(`✖ '${value}' not found in the array.`);
    }
}

// Check element
function checkElement() {
    if (arr.length === 0) {
        updateDisplay("⚠ Array is empty. Nothing to check.");
        return;
    }
    const value = document.getElementById("checkInput").value.trim();
    if (!value) {
        updateDisplay("⚠ Enter a value to check.");
        return;
    }
}
```

Experiment 6

Roll no: 42405

Batch: Q6

```
    if (arr.includes(value)) {
        updateDisplay(`✅ '${value}' is present in the array.`);
    } else {
        updateDisplay(`❌ '${value}' is NOT in the array.`);
    }
}

// Empty array
function emptyArray() {
    if (arr.length === 0) {
        updateDisplay("⚠️ Array is already empty.");
        return;
    }
    arr = [];
    updateDisplay("🗑️ Array emptied.");
}
```