CLASS : BE VII [S7]		SUBJECT : JavaScript
EXPT. NO. : 7	Roll No.: 42372	DATE :

CODE :

```
<!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>
 <div>
  <p>Enter the array elements (comma-separated values or arrays enclosed in square brackets):</p>
  <input type="text" id="arrayElements">
  <button onclick="appendToArray()">Append to Array</button>
 </div>
 <div>
  <p>Check if an object in the array is an array:</p>
  <input type="text" id="checkArrayIndex">
  <button onclick="checkIsArray()">Check Is Array</button>
 </div>
 <div>
  <p>Show Array:</p>
  <button onclick="showArray()">Show Array</button>
 </div>
 <div>
  <p>Check Array Size:</p>
  <button onclick="checkArraySize()">Check Array Size</button>
 </div>

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

 <script>
  let myArray = [];

  function appendToArray() {
   const elementsInput = document.getElementById("arrayElements");
   const outputDiv = document.getElementById("output");
   const inputString = elementsInput.value;
   const elements = parseInput(inputString);
   if (elements) {
    myArray = myArray.concat(elements.filter(Boolean));
   }
```

```
  elementsInput.value = '';
  outputDiv.innerHTML = "Array after appending: " + JSON.stringify(myArray);
 }

 function parseInput(input) {
  const elements = [];
  const pattern = /\[.*?\]/g;
  const matches = input.match(pattern);
  if (matches) {
   for (const match of matches) {
    try {
     const parsedArray = JSON.parse(match);
     if (Array.isArray(parsedArray)) {
      elements.push(parsedArray);
     }
    } catch (error) {
     // Ignore parsing errors
    }
   }
  }
  const nonArrayPart = input.replace(pattern, '').split(',');
  const nonArrayElements = nonArrayPart.map(element => {
   // Convert to number if possible
   return !isNaN(element) ? parseFloat(element) : element.trim();
  });
  if (nonArrayElements.length > 0) {
   elements.push(...nonArrayElements);
  }
  return elements.length ? elements : null;
 }

 function checkIsArray() {
  const checkIndex = parseInt(document.getElementById("checkArrayIndex").value);
  const outputDiv = document.getElementById("output");

  if (checkIndex >= 0 && checkIndex < myArray.length) {
   if (Array.isArray(myArray[checkIndex])) {
    outputDiv.innerHTML = `The element at index ${checkIndex} is an array.`;
   } else {
    outputDiv.innerHTML = `The element at index ${checkIndex} is not an array.`;
   }
  } else {
   outputDiv.innerHTML = "Index out of bounds";
  }
 }

 function showArray() {
  const outputDiv = document.getElementById("output");
  outputDiv.innerHTML = "Current Array: " + JSON.stringify(myArray);
 }

 function checkArraySize() {
  const outputDiv = document.getElementById("output");
  outputDiv.innerHTML = "Array Size: " + myArray.length;
 }
</script>
```

```
</body>
</html>
```

OUTPUT :

Enter the array elements (comma-separated values or arrays enclosed in square brackets):

[ ] Append to Array

Check if an object in the array is an array:

[ ] Check Is Array

Show Array:

Show Array

Check Array Size:

Check Array Size

Array after appending: [[1,2],3,4]

Enter the array elements (comma-separated values or arrays enclosed in square brackets):

[ ] Append to Array

Check if an object in the array is an array:

[0] Check Is Array

Show Array:

Show Array

Check Array Size:

Check Array Size

The element at index 0 is an array.