

**Output:**

The screenshot shows a web browser window with the title "Concept of Arrays & Array Objects in JavaScript". The page contains a form with the following elements:

- Enter size of array:** A text input field with the value "e.g. 3".
- Create Array:** A blue button.
- Append a value (number, string, or array [e.g. [1,2]]):** A text input field with the value "Enter value to append".
- Append:** A blue button.
- Enter index to check:** A text input field with the value "e.g. 0".
- Check if Array:** A blue button.
- Final Array:** A light blue box containing an empty array `[]`.
- Is Array Check:** A light blue box containing a hyphen `-`.

**Fig. Base Website**

This screenshot shows the state of the website after the "Create Array" button has been clicked. The "Enter size of array:" field now contains the value "4". Below it, a table lists the elements of the array:

1
"Hello"
[3,4,5]
5.63

Below the table is a blue "Save Array" button. To the right, the "Final Array:" box now displays `[1,"Hello",[3,4,5],5.63]`.

**Fig. Creation and Saving**

This screenshot shows the state of the website after the "Append" button has been clicked. The "Append a value (number, string, or array [e.g. [1,2]]):" field now contains the value "4.56". The "Final Array:" box now displays `[1,"Hello",[3,4,5],5.63,4.56]`. The "Is Array Check:" box still contains a hyphen `-`.

**Fig. Appending**

Enter size of array:

Create Array

1
"Hello"
[3,4,5]
5.63

Save Array

Append a value (number, string, or array [e.g. [1,2]]):

Append

Enter index to check:

Check if Array

Final Array:

**[1,"Hello",  
[3,4,5],5.63,4.56]**

Is Array Check:

**No, not an  
Array ×**

Fig. Check at index 3 -&gt; 5.63

Enter size of array:

Create Array

1
"Hello"
[3,4,5]
5.63

Save Array

Append a value (number, string, or array [e.g. [1,2]]):

Append

Enter index to check:

Check if Array

Final Array:

**[1,"Hello",  
[3,4,5],5.63,4.56]**

Is Array Check:

**Yes, it's an  
Array ☑**

Fig. Check if array at index 2

**Code:****1. HTML:**

```
<!doctype html>
<html lang="en">
  <head>
    <script type="text/javascript" src="array_objects.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>Concept of Arrays & Array Objects in JavaScript</h1>

    <div class="shape-box">
      <div class="form-section">
        <label for="arraySize">Enter size of array:</label>
        <input type="number" id="arraySize" min="1" placeholder="e.g. 3" />
        <button onclick="createArray()">Create Array</button>

        <div id="arrayInputs"></div>

        <button id="saveArrayBtn" style="display: none" onclick="saveArray()">
          Save Array
        </button>

        <hr />

        <label for="appendValue"
          >Append a value (number, string, or array [e.g. [1,2]]):</label>
        >
        <input
          type="text"
          id="appendValue"
          placeholder="Enter value to append"
        />
      </div>
    </div>
  </body>
</html>
```

```

        <button onclick="appendObject()">Append</button>

        <label for="checkIndex">Enter index to check:</label>
        <input type="number" id="checkIndex" placeholder="e.g. 0" />
        <button onclick="checkIfArray()">Check if Array</button>
    </div>

    <div class="result-section">
        <div class="area-label">Final Array:</div>
        <div class="area-box" id="finalArray">[]</div>

        <div class="area-label">Is Array Check:</div>
        <div class="area-box" id="isArrayCheck">-</div>
    </div>
</div>
</body>
</html>

```

## 2. Javascript:

```

let userArray = [];

// Step 1 & 2: Accept array size and create input boxes
function createArray() {
    const size = parseInt(document.getElementById("arraySize").value);
    const container = document.getElementById("arrayInputs");
    container.innerHTML = "";

    if (isNaN(size) || size <= 0) {
        alert("Please enter a valid array size.");
        return;
    }

    for (let i = 0; i < size; i++) {
        const input = document.createElement("input");
        input.type = "text";
        input.placeholder = `Element ${i + 1}`;
        input.id = `element-${i}`;
        container.appendChild(input);
    }
}

```

## Experiment 7

Roll no: 42405

Batch: Q6

```
        container.appendChild(document.createElement("br"));
    }

    document.getElementById("saveArrayBtn").style.display = "inline-block";
}

// Step 3: Save array
function saveArray() {
    const size = parseInt(document.getElementById("arraySize").value);
    userArray = [];

    for (let i = 0; i < size; i++) {
        let val = document.getElementById(`element-${i}`).value.trim();

        // Try parsing numbers or arrays
        try {
            val = JSON.parse(val);
        } catch (e) {
            // keep as string if not JSON parsable
        }

        userArray.push(val);
    }

    document.getElementById("finalArray").innerText = JSON.stringify(userArray);
    document.getElementById("isArrayCheck").innerText = "-";
}

// Step 4 & 5: Append object and check
function appendObject() {
    let val = document.getElementById("appendValue").value.trim();

    if (val === "") {
        alert("Enter a value to append!");
        return;
    }

    try {
```

## Experiment 7

Roll no: 42405

Batch: Q6

```
        val = JSON.parse(val);
    } catch (e) {
        // keep as string
    }

    userArray.push(val);

    document.getElementById("finalArray").innerText = JSON.stringify(userArray);
}

function checkIfArray() {
    let index = Number(document.getElementById("checkIndex").value);
    document.getElementById("isArrayCheck").innerText = Array.isArray(
        userArray[index],
    )
        ? "Yes, it's an Array ☒"
        : "No, not an Array ✕";
}
```