Output:

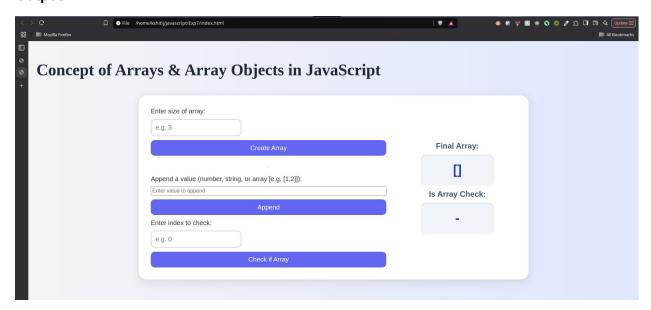


Fig. Base Website



Fig. Creation and Saving

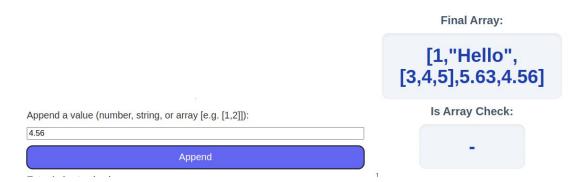


Fig. Appending

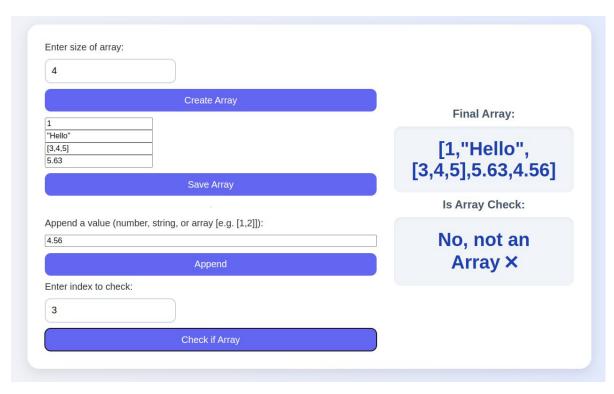


Fig. Check at index 3 -> 5.63

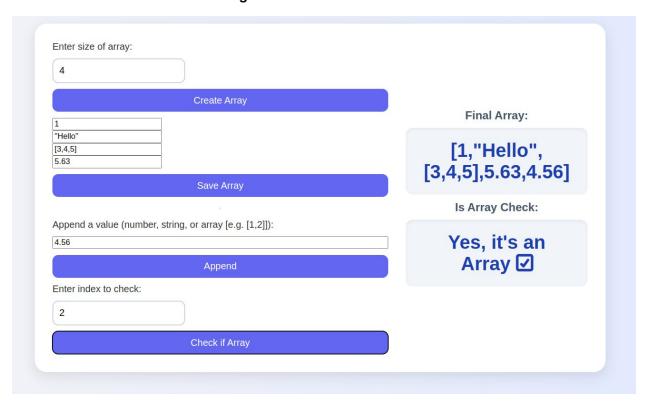


Fig. Check if array at index 2

Roll no: 42405 Batch: Q6

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</putton>
        <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"
        />
```

<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 Arrawy 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) {</pre> 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);

```
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
      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 {
```

```
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 \( \overline{\text{V}} \)"
    : "No, not an Array \( \verline{\text{V}} \)"
}
```