WPL – Program 6

functions.html

```
<html>
<head>
  <title>JavaScript Functions</title>
  <style>
    body {
      font-family: sans-serif;
      padding: 20px;
    }
    .container {
      max-width: 600px;
      margin: auto;
      border: 1px solid #ccc;
      padding: 20px;
      background-color: #e3e3e3;
      border-radius: 8px;
    }
    input[type="text"] {
      width: 95%;
      padding: 8px;
      margin-bottom: 10px;
    }
    button {
      margin: 5px;
      padding: 8px 12px;
```

```
    cursor: pointer;
    background-color: #dbffc8;
    border: 1px solid #4CAF50;
   }
   #result, #result2 {
    font-weight: bold;
    color: #0056b3;
   }
   h2 {
    border-bottom: 1px solid #eee;
    padding-bottom: 5px;
   }
   h1 {
    text-align: center;
   }
   section {
    display: flex;
    justify-content: space-around;
    flex-wrap: wrap;
    gap: 20px;
   }
  </style>
</head>
<body>

  <h1>String and Math Functions</h1>

  <section>
```

```
  <div class="container">

  <label for="inputBox">Enter text:</label>
  <input type="text" id="inputBox" placeholder="Your input here...">

  <p>Result: <span id="result"></span></p>

  <h2>String Functions</h2>
  <button onclick="getStringLength()">Length</button>
  <button onclick="convertToUpperCase()">To Upper Case</button>
  <button onclick="convertToLowerCase()">To Lower Case</button>
  <button onclick="getCharacterAt()">Character At Index 2</button>
  <button onclick="sliceString()">Slice (0 to 4)</button>
  <button onclick="replaceText()">Replace 'haha' with 'hehee'</button>
</div>

<div class="container">

  <label for="inputBox">Enter a number:</label>
  <input type="text" id="inputBox2" placeholder="Your input here...">

  <p>Result: <span id="result2"></span></p>

  <h2>Math Functions (Input should be a number)</h2>
  <button onclick="getSquareRoot()">Square Root</button>
  <button onclick="roundNumber()">Round</button>
  <button onclick="getCeil()">Ceiling</button>
  <button onclick="getFloor()">Floor</button>
```

```
  <button onclick="getAbsolute()">Absolute Value</button>
  <button onclick="showRandom()">Random Number</button>
</div>
</section>

<script>
  function getInputElement(box) {
    return document.getElementById(box);
  }

  function getResultElement(resultBox) {
    return document.getElementById(resultBox);
  }

  function getStringLength() {
    var input = getInputElement('inputBox').value;
    getResultElement('result').innerText = "Length is: " + input.length;
  }

  function convertToUpperCase() {
    var input = getInputElement('inputBox').value;
    getResultElement('result').innerText = input.toUpperCase();
  }

  function convertToLowerCase() {
    var input = getInputElement('inputBox').value;
    getResultElement('result').innerText = input.toLowerCase();
  }
```

```
  function getCharacterAt() {
    var input = getInputElement('inputBox').value;
    if (input.length > 2) {
      getResultElement('result').innerText = "Character at index 2 is: " +
input.charAt(2);
    } else {
      getResultElement('result').innerText = "Input is too short.";
    }
  }

  function sliceString() {
    var input = getInputElement('inputBox').value;
    getResultElement('result').innerText = "Sliced string is: " + input.slice(0, 4);
  }

  function replaceText() {
    var input = getInputElement('inputBox').value;
    getResultElement('result').innerText = input.replace("haha", "hehee");
  }

  function getSquareRoot() {
    var input = getInputElement('inputBox2').value;
    var number = parseFloat(input);
    if (isNaN(number)) {
      getResultElement('result2').innerText = "Please enter a valid number.";
    } else {
      getResultElement('result2').innerText = "Square root is: " + Math.sqrt(number);
```

```
    }
  }

  function roundNumber() {
    var input = getInputElement('inputBox2').value;
    var number = parseFloat(input);
    if (isNaN(number)) {
      getResultElement('result2').innerText = "Please enter a valid number.";
    } else {
      getResultElement('result2').innerText = "Rounded value is: " +
Math.round(number);
    }
  }

  function getCeil() {
    var input = getInputElement('inputBox2').value;
    var number = parseFloat(input);
    if (isNaN(number)) {
      getResultElement('result2').innerText = "Please enter a valid number.";
    } else {
      getResultElement('result2').innerText = "Ceiling value is: " + Math.ceil(number);
    }
  }

  function getFloor() {
    var input = getInputElement('inputBox2').value;
    var number = parseFloat(input);
    if (isNaN(number)) {
```

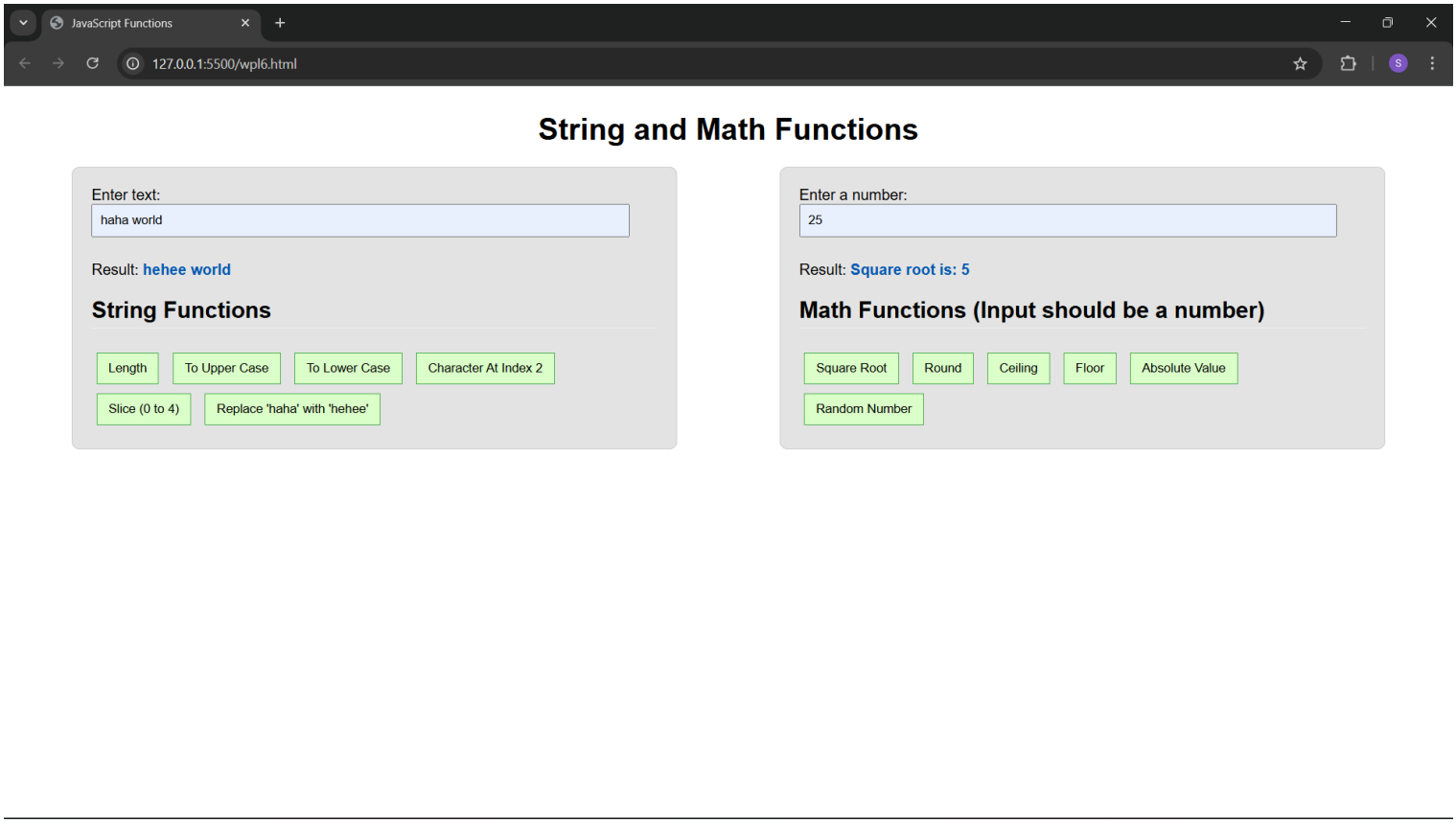
```
      getResultElement('result2').innerText = "Please enter a valid number.";
    } else {
      getResultElement('result2').innerText = "Floor value is: " + Math.floor(number);
    }
  }

  function getAbsolute() {
    var input = getInputElement('inputBox2').value;
    var number = parseFloat(input);
    if (isNaN(number)) {
      getResultElement('result2').innerText = "Please enter a valid number.";
    } else {
      getResultElement('result2').innerText = "Absolute value is: " +
Math.abs(number);
    }
  }

  function showRandom() {
    getResultElement('result2').innerText = "Random number (0-1): " +
Math.random();
  }
 </script>

</body>
</html>
```

Screenshot:


JavaScript Functions
127.0.0.1:5500/wpl6.html
String and Math Functions
Enter text:
haha world
Result: hehee world
String Functions
Length
To Upper Case
To Lower Case
Character At Index 2
Slice (0 to 4)
Replace 'haha' with 'hehee'
Enter a number:
25
Result: Square root is: 5
Math Functions (Input should be a number)
Square Root
Round
Ceiling
Floor
Absolute Value
Random Number