JavaScript Assignment - 03

Name – Soumitra Anil Kode Roll no. – 42134 , BE- 06, Batch - P6

DOP:

```
Git Repo Link:
Source Code:
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <title>Exp 3 - String Operations (Revised)</title>
  <style>
    body {
      font-family: 'Segoe UI', Arial, sans-serif;
      background: linear-gradient(93deg, #e0eaef 0%, #f3f2f4 100%);
      margin: 0;
      min-height: 100vh;
    }
    .container {
      max-width: 670px;
      margin: 38px auto;
      background: #fff;
      box-shadow: 0 4px 24px rgba(0,0,0,0.08);
      padding: 30px 32px;
      border-radius: 14px;
    }
    h1 {
      text-align: center;
      color: #1464c4;
      margin-bottom: 10px;
    }
    h2 {
      color: #346078;
      margin-bottom: 8px;
      margin-top: 22px;
    }
    .section {
      background: #f7fbfc;
      border: 1px solid #cde7f6;
```

```
border-radius: 8px;
  margin-bottom: 27px;
  padding: 18px 14px;
input[type="text"] {
  width: 100%;
  padding: 9px;
  margin-top: 7px;
  border-radius: 5px;
  border: 1px solid #b3c6e0;
  font-size: 1em;
}
button {
  background-color: #1464c4;
  color: #fff;
  border: none;
  padding: 9px 18px;
  margin: 10px 6px 0px 0px;
  border-radius: 5px;
  font-weight: 600;
  cursor: pointer;
  transition: background 0.2s;
}
button:hover { background: #345479; }
.reset-btn { background-color: #778899; }
.reset-btn:hover { background-color: #344050; }
.output {
  margin-top: 8px;
  font-weight: 500;
  color: #15a735;
  background: #eafbe7;
  border-radius: 4px;
  padding: 6px 10px;
}
.error {
  margin-top: 8px;
  font-weight: 500;
  color: #e24863;
  background: #f9dade;
  border-radius: 4px;
  padding: 6px 10px;
```

```
}
    @media(max-width:700px) {
      .container { padding: 9px; }
  </style>
</head>
<body>
<div class="container">
  <h1>JavaScript</h1>
  <div style="text-align:center; margin-bottom:22px;">
    >
      <strong>Experiment 3: String operations</strong><br>
      <strong>Soumitra Kode &bullet; Roll: 42134 &bullet; BE-
06-
P6</strong>
    </div>
  <!-- Reverse String Section -->
  <div class="section" id="reverseSection">
    <h2>1. Reverse String</h2>
    <input type="text" id="reverseInput" placeholder="Enter a string to reverse">
    <button onclick="reverseString()">Reverse</button>
    <button onclick="resetReverse()" class="reset-btn">Reset</button>
    <div id="reverseOutput" class="output"></div>
    <div id="reverseError" class="error"></div>
  </div>
  <!-- Replace Text Section -->
  <div class="section" id="replaceSection">
    <h2>2. Replace Text</h2>
    <input type="text" id="replaceInput" placeholder="Original string">
    <input type="text" id="replaceFrom" placeholder="Text to find">
    <input type="text" id="replaceTo" placeholder="Replace with">
    <button onclick="replaceCharacters()">Replace All</button>
    <button onclick="resetReplace()" class="reset-btn">Reset</button>
    <div id="replaceOutput" class="output"></div>
    <div id="replaceError" class="error"></div>
  </div>
  <!-- Palindrome Section -->
  <div class="section" id="palindromeSection">
    <h2>3. Check Palindrome</h2>
    <input type="text" id="palindromeInput" placeholder="Enter string to check">
```

```
<button onclick="checkPalindrome()">Check</button>
    <button onclick="resetPalindrome()" class="reset-btn">Reset</button>
    <div id="palindromeOutput" class="output"></div>
    <div id="palindromeError" class="error"></div>
  </div>
</div>
<script>
// Utility function to clear output and error
function clearOutput(sectionId) {
  document.getElementById(sectionId + 'Output').innerText = ";
  document.getElementById(sectionId + 'Error').innerText = ";
}
// 1. Reverse String Function
function reverseString() {
  clearOutput('reverse');
  const input = document.getElementById('reverseInput').value.trim();
  if (!input) {
    document.getElementById('reverseError').innerText = 'Please enter a valid string.';
    return;
  }
  const reversed = input.split(").reverse().join(");
  document.getElementById('reverseOutput').innerText = `Reversed String: ${reversed}';
}
function resetReverse() {
  document.getElementById('reverseInput').value = ";
  clearOutput('reverse');
}
// 2. Replace Text Function
function replaceCharacters() {
  clearOutput('replace');
  const input = document.getElementById('replaceInput').value;
  const from = document.getElementById('replaceFrom').value;
  const to = document.getElementById('replaceTo').value;
  if (!input.trim()) {
    document.getElementById('replaceError').innerText = 'Original string cannot be empty.';
    return;
  if (!from) {
    document.getElementById('replaceError').innerText = 'Text to find cannot be empty.';
    return;
  }
```

```
const replaced = input.replaceAll(from, to);
  document.getElementById('replaceOutput').innerText = `Result: ${replaced}';
}
function resetReplace() {
  document.getElementById('replaceInput').value = ";
  document.getElementById('replaceFrom').value = ";
  document.getElementById('replaceTo').value = ";
  clearOutput('replace');
}
// 3. Palindrome Check Function
function checkPalindrome() {
  clearOutput('palindrome');
  const input = document.getElementById('palindromeInput').value.trim();
  if (!input) {
    document.getElementById('palindromeError').innerText = 'Please enter a valid string.';
    return;
  }
  const clean = input.toLowerCase().replace(/[^a-z0-9]/g, '');
  const isPalindrome = clean === clean.split(").reverse().join(");
  document.getElementById('palindromeOutput').innerText = isPalindrome
    ? "${input}" is a palindrome.
    : "${input}" is not a palindrome.;
}
function resetPalindrome() {
  document.getElementById('palindromeInput').value = ";
  clearOutput('palindrome');
}
</script>
</body>
</html>
```

Output:

A. Initial Web Page Layout -



