GANPAT UNIVERSITY
U.V. PATEL COLLEGE OF ENGINEERING

B.Tech 6th Semester CE/IT
2CEIT6PE1: Web Technology

Practical-5

Aim: Create an application which Perform different string manipulation operations using PHP.

Exercise-1:

Design a PHP application with a user-friendly interface to perform

various string manipulation operations. The application should allow

users to input a string and select one of the following operations:

1. Calculate Length of String

2. Convert to Lowercase or Uppercase

3. Calculate White Spaces

4. Calculate Words, Lines, and Characters

5. Find Position of Specific Word

6. Replace Word

7. Calculate Occurrence of Vowels

Code:

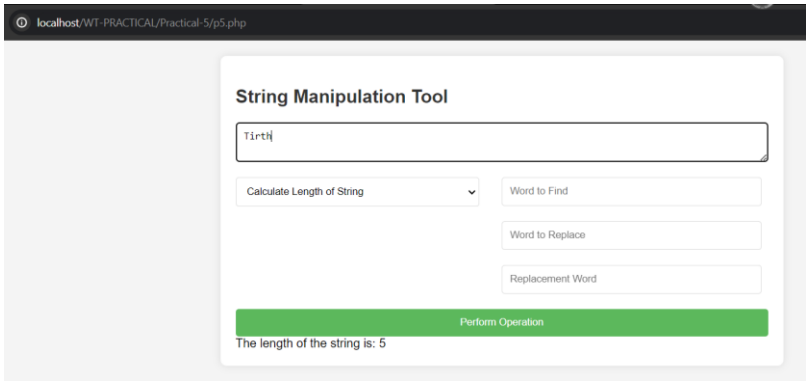
```
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>String Manipulation Tool</title>
<style>
body {
font-family: Arial, sans-serif;
background-color: #f4f4f4;
margin: 0;
padding: 20px;
}
.container {
max-width: 700px;
margin: auto;
background: #fff;
```

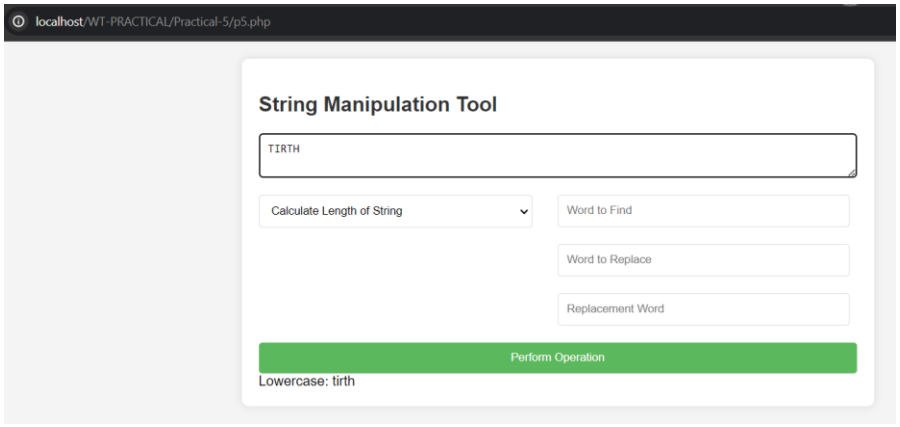
```
padding: 20px;
border-radius: 8px;
box-shadow: 0 0 10px rgba(0, 0, 0, 0.1);
}
h2 {
color: #333;
}
form {
margin-top: 20px;
display: flex;
flex-wrap: wrap;
}
textarea,
select,
input {
width: calc(100% - 20px);
padding: 10px;
margin-bottom: 20px;
border-radius: 4px;
border: 1px solid #ddd;
}
button {
width: 100%;
padding: 10px;
border-radius: 4px;
border: none;
background-color: #5cb85c;
color: white;
cursor: pointer;
}
button:hover {
background-color: #4cae4c;
}
.input-container {
width: calc(50% - 10px);
margin-right: 10px;
}
</style>
</head>
<body>
<div class="container">
<h2>String Manipulation Tool</h2>
<form method="post">
<textarea name="user_string" placeholder="Enter your string here..."></textarea>
<div class="input-container">
<select name="operation">
<option value="length">Calculate Length of String</option>
<option value="case_convertl">Convert to Lowercase</option>
<option value="case_convertu">Convert to Uppercase</option>
<option value="white_spaces">Calculate White Spaces</option>
```

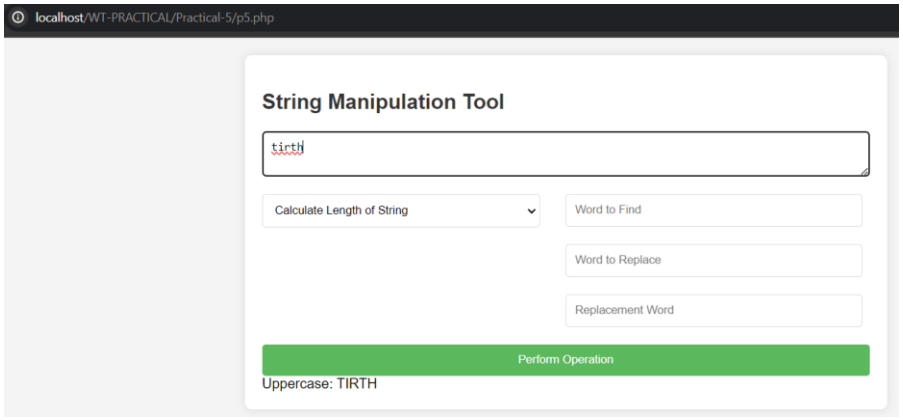
```
<option value="word_count">Calculate Words, Lines, and Characters</option>
<option value="find_word">Find Position of Specific Word</option>
<option value="replace_word">Replace Word</option>
<option value="vowel_count">Calculate Occurrence of Vowels</option>
</select>
</div>
<div class="input-container">
<input type="text" name="word_to_find" placeholder="Word to Find"> <!-- New input field
for Find Word -->
<input type="text" name="word_to_replace" placeholder="Word to Replace"> <!-- New
input field for Replace Word -->
<input type="text" name="replacement_word" placeholder="Replacement Word"><!-- New
input field for Replacement Word -->
</div>
<button type="submit">Perform Operation</button>
</form>


<?php
   if ($_SERVER["REQUEST_METHOD"] == "POST") {
      $user_string = $_POST['user_string'];
      $operation = $_POST['operation'];
      switch ($operation) {
      case 'length':
         $length = strlen($user_string);
         echo "The length of the string is: $length";
         break;

      case 'case_convertl':
         $lower = strtolower($user_string);
         echo "Lowercase: $lower";
         break;

      case 'case_covertu':
         $upper = strtoupper($user_string);
         echo "Uppercase: $upper";
         break;

      case 'white_spaces':
         $white_spaces = substr_count($user_string, ' ');
         echo "Number of white spaces: $white_spaces";
         break;

      case 'word_count':
         $wordCount = str_word_count($user_string);
         $lineCount = substr_count($user_string, "\n") + 1;
         $charCount = strlen($user_string);
         echo "<p><strong>Words:</strong> $wordCount</p>";
         echo "<p><strong>Lines:</strong> $lineCount</p>";
         echo "<p><strong>Characters:</strong> $charCount</p>";
```

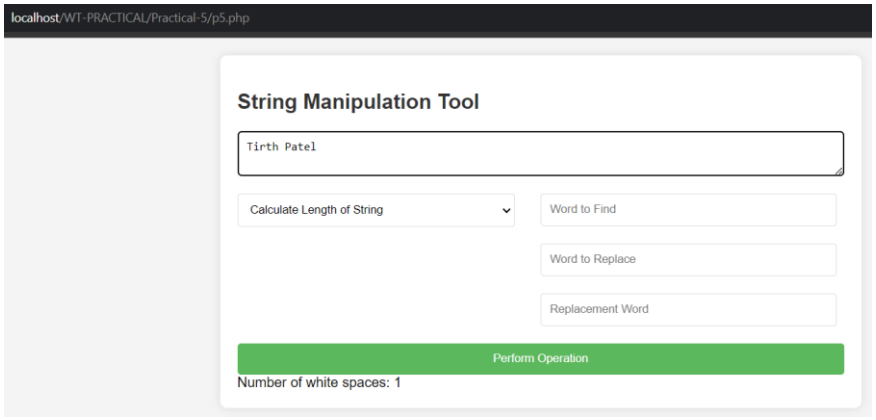
```
        break;

    case 'find_word':
        $word_to_find = $_POST['word_to_find'];
        $position = strpos($user_string, $word_to_find);
        if ($position !== false) {
        echo "The position of the word '$word_to_find' is: $position";
        } else {
        echo "The word '$word_to_find' was not found.";
        }
        break;

    case 'replace_word':
        $word_to_replace = $_POST['word_to_replace'];
        $replacement_word = $_POST['replacement_word'];
        $new_string = str_replace($word_to_replace, $replacement_word,
        $user_string); echo "New string: $new_string";
        break;

    case 'vowel_count':
        $vowels = ['a', 'e', 'i', 'o', 'u', 'A', 'E', 'I', 'O', 'U'];
        $vowel_count = 0;
        foreach ($vowels as $vowel) {
        $vowel_count += substr_count(($user_string), $vowel);
        }
        echo "Total number of vowels: $vowel_count";
        break;

    default:
        echo "Invalid operation.";
        break;
}}
?>
</div>
</body>
</html>
```

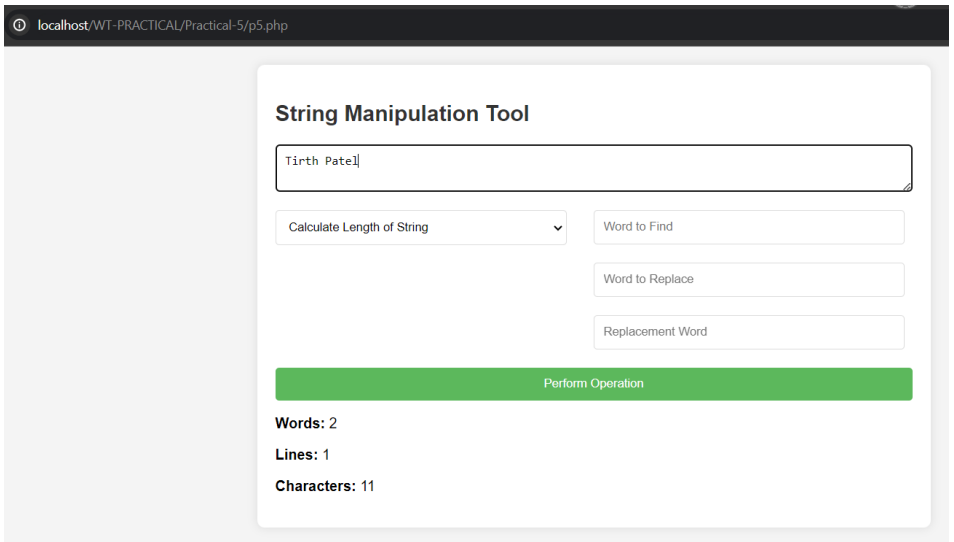
Output:

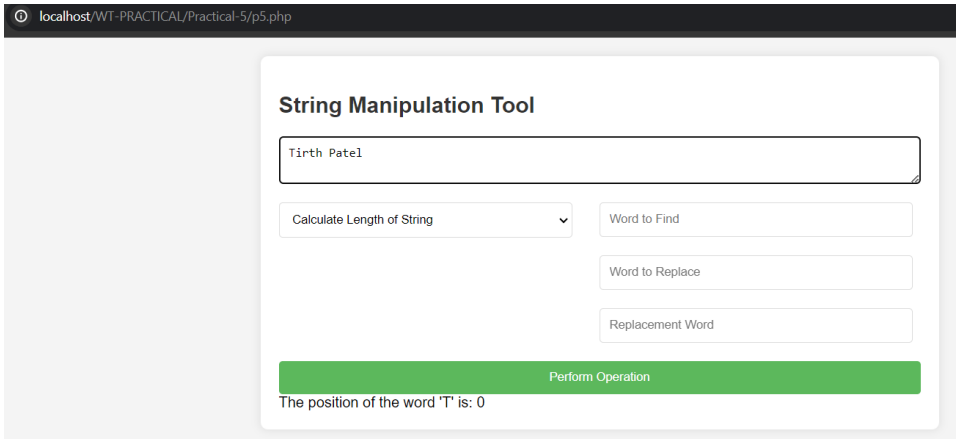


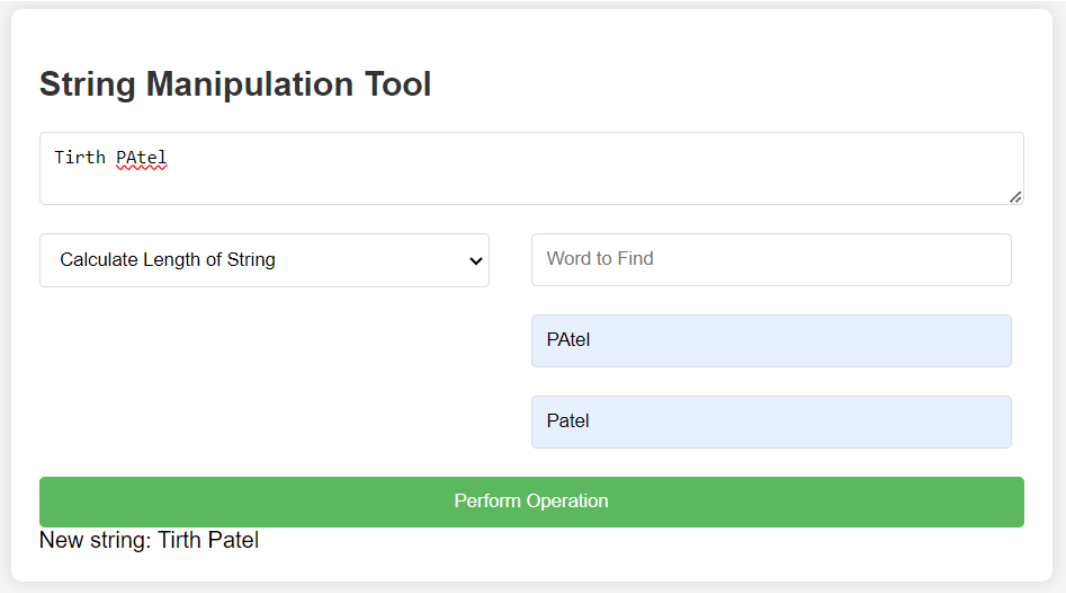

localhost/WT-PRACTICAL/Practical-5/p5.php
String Manipulation Tool
TIRTH
Calculate Length of String
Word to Find
Word to Replace
Replacement Word
Perform Operation
Lowercase: tirth

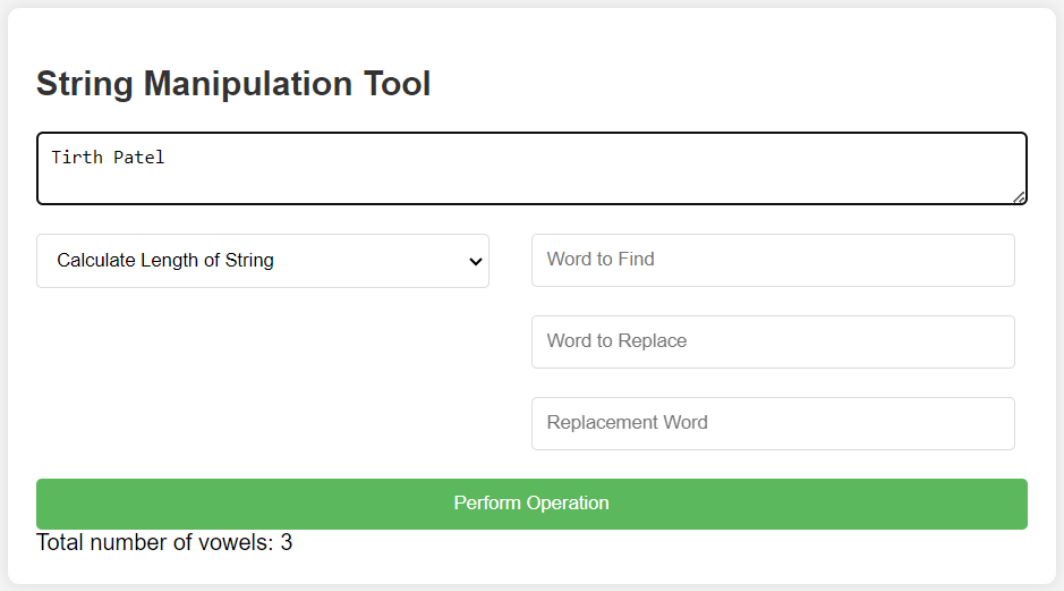

localhost/WT-PRACTICAL/Practical-5/p5.php
String Manipulation Tool
tirth
Calculate Length of String
Word to Find
Word to Replace
Replacement Word
Perform Operation
Uppercase: TIRTH


localhost/WT-PRACTICAL/Practical-5/p5.php
String Manipulation Tool
Tirth Patel
Calculate Length of String
Word to Find
Word to Replace
Replacement Word
Perform Operation
Number of white spaces: 1


localhost/WT-PRACTICAL/Practical-5/p5.php
String Manipulation Tool
Tirth Patel
Calculate Length of String
Word to Find
Word to Replace
Replacement Word
Perform Operation
Words: 2
Lines: 1
Characters: 11


localhost/WT-PRACTICAL/Practical-5/p5.php
String Manipulation Tool
Tirth Patel
Calculate Length of String
Word to Find
Word to Replace
Replacement Word
Perform Operation
The position of the word 'T' is: 0


String Manipulation Tool
Tirth PAtel
Calculate Length of String
Word to Find
PAtel
Patel
Perform Operation
New string: Tirth Patel


String Manipulation Tool
Tirth Patel
Calculate Length of String
Word to Find
Word to Replace
Replacement Word
Perform Operation
Total number of vowels: 3