

7. Write a PHP program that includes a user form with a text field and submit buttons for various string manipulations. It will display the result accordingly. (for replace, replace 'a' with 'x').

String Manipulation

Enter a string:

Get Length

Reverse

Uppercase

Lowercase

Replace

Check Palindrome

Shuffle

Word Count

```
<!DOCTYPE html>
<html>
<head>
  <title>String Manipulation</title>
</head>
<body>
  <h2>String Manipulation</h2>
  <form method="post">
    <label for="inputString">Enter a string:</label><br>
    <input type="text" id="inputString" name="inputString"><br><br>

    <input type="submit" name="operation" value="Get Length">
    <input type="submit" name="operation" value="Upper Case">
    <input type="submit" name="operation" value="Lower Case">
    <input type="submit" name="operation" value="Replace">
    <input type="submit" name="operation" value="Check Palindrome">
    <input type="submit" name="operation" value="Shuffle">
    <input type="submit" name="operation" value="Word Count">
  </form>
  <?php
if(isset($_POST['inputString'])) {
  $inputString = $_POST['inputString'];
  $operation = $_POST['operation'];
  switch ($operation) {
    case 'Get Length':
      echo "<p>Length of the string: " . strlen($inputString) . "</p>";
      break;

    case 'Upper Case':
```

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    echo "<p>Uppercase: " . strtoupper($inputString) . "</p>";
    break;

case 'Lower Case':
    echo "<p>Lowercase: " . strtolower($inputString) . "</p>";
    break;
case 'Replace':
    $resultString = str_replace('a', 'b', $inputString);
    echo "<p>After replacing 'a' with 'b': $resultString</p>";
    break;
case 'Check Palindrome':
    if(strtolower($inputString) == strrev(strtolower($inputString))) {
        echo "<p>The string is a palindrome.</p>";
    } else {
        echo "<p>The string is not a palindrome.</p>";
    }
    break;

case 'Shuffle':
    echo "<p>Shuffled string: " . str_shuffle($inputString) . "</p>";
    break;

case 'Word Count':
    $words = str_word_count($inputString);
    echo "<p>Word count: $words</p>";
    break;

default:
    echo "<p>Please select a valid operation.</p>";
    break;
}
}
?>
</body>
</html>
```

8. Write a PHP user interface program with an HTML form to input a string. Upon submission, it will display the number of times each word occurs, ignoring the distinction between capital and lowercase letters. It should also print the most and least used words

Word Frequency Analyzer

Enter a string:

Word Frequencies:

a: 1 times
b: 2 times
c: 3 times
d: 4 times

The most used word is: d (used 4 times)

The least used word is: a (used 1 times)

Word Frequency Analyzer

Enter a string:

Word Frequencies:

d: 4 times
c: 3 times
b: 2 times
a: 1 times

The most used word is: d (used 4 times)

The least used word is: a (used 1 times)

```
<!DOCTYPE html>
<html>
<head>
  <title>Character Occurrence Counter</title>
</head>
<body>
<h2>Character Counter</h2>
<form method="post">
  <label for="input_string">Enter a string:</label><br>
  <input type="text" name="input_string"><br><br>
  <input type="submit" value="Submit">
</form>
<?php
if($_SERVER["REQUEST_METHOD"] == "POST") {
  // Retrieve input string from form
  $input_string = $_POST['input_string'];

  // Convert input string to lowercase to ignore case distinction
  $input_string = strtolower($input_string);

  // Count occurrences of each character
  $char_counts = array_count_values(str_split($input_string));
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// Sort character counts in descending order
arsort($char_counts);

// Get the maximum occurrence count
$max_count = max($char_counts);

// Find all characters with the maximum occurrence count
$most_used_chars = array_keys($char_counts, $max_count);

// Get the minimum occurrence count
$min_count = min($char_counts);

// Find all characters with the minimum occurrence count
$least_used_chars = array_keys($char_counts, $min_count);

// Display character frequencies
echo "<h3>Character Frequencies:</h3>";
foreach ($char_counts as $char => $count) {
    echo "'$char' : $count times<br>";
}

// Display most used characters
echo "<p>Most used character(s) is/are: ";
foreach ($most_used_chars as $char) {
    echo "'$char' ";
}
echo "</p>";

// Display least used characters
echo "<p>Least used character(s) is/are: ";
foreach ($least_used_chars as $char) {
    echo "'$char' ";
}
echo "</p>";
}
?>
</body>
</html>

```