

ASSIGNMENT 2

NATIONAL INSTITUTE OF TECHNOLOGY WARANGAL
DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING
I MCA II Semester Web Technologies Lab (CS4357)
Assignment-2 Duration (2 Weeks)

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ROLL NO: 22MCF1R40

MCA, 2nd SEMESTER, 1st YEAR

1. Write a PHP program to print "Welcome to NITW".

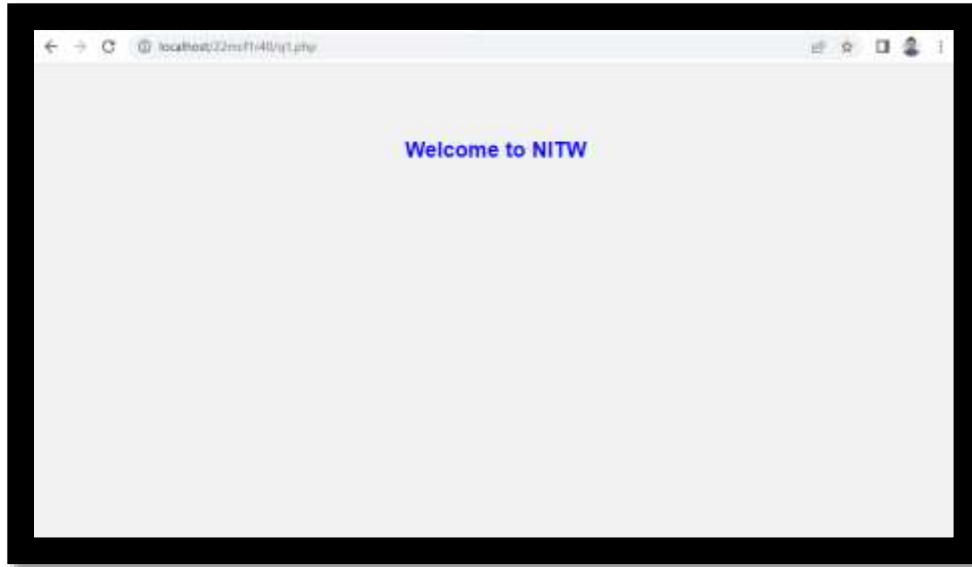
code:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
  <style>

    h2 {
        color: blue;
        font-family: Arial, Helvetica, sans-serif;
        transition: color .3s ease-in-out;
    }

    h2:hover {
        color: red;
    }

    body {
        background-color: #f2f2f2;
        padding: 5% 10%;
    }
  </style>
</head>
<body align="center" >
  <?php
    echo "<h2> Welcome to NITW </h2>";
  ?>
</body>
</html>
```



2. Write a PHP program to perform all string functions.

CODE:

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Document</title>
</head>
<body align="center" bgcolor="pink">
<?php

// Define a sample string to work with
$str = "Hello, World!";

// String length
$length = strlen($str);
echo "String length: " . $length . "<br>";

// Substring
$substring = substr($str, 7, 5);
echo "Substring: " . $substring . "<br>";

// Uppercase
$uppercase = strtoupper($str);
echo "Uppercase: " . $uppercase . "<br>";

// Lowercase
$lowercase = strtolower($str);
echo "Lowercase: " . $lowercase . "<br>";

// Replace
$replace = str_replace("World", "PHP", $str);
echo "Replace: " . $replace . "<br>";
```

```
// Concatenate
$conconcatenate = $str . " Welcome to PHP";
echo "Concatenate: " . $conconcatenate . "<hr>";

// Trim
$trim = "   Hello, World!   ";
$trimmed = trim($trim);
echo "Trimmed string: " . $trimmed . "<hr>";

// Explode
$exploded = explode(" ", $str);
echo "Exploded array: " . print_r($exploded, true) . "<hr>";

// Implode
$implode = implode(" ", $exploded);
echo "Imploded string: " . $implode . "<hr>";

// Position of substring
$position = strpos($str, "World");
echo "Position of substring: " . $position . "<hr>";

// Reverse string
$reversed = strrev($str);
echo "Reversed string: " . $reversed . "<hr>";

// Split string into array of characters
$chars = str_split($str);
echo "Split string: " . print_r($chars, true) . "<hr>";

// Capitalize first letter
$capitalized = ucfirst($str);
echo "Capitalized string: " . $capitalized . "<hr>";

// Make first letter lowercase
$lowercased = lcfirst($str);
echo "Lowercased string: " . $lowercased . "<hr>";

// Capitalize first letter of each word
$wordCapitalized = ucwords($str);
echo "Capitalized each word: " . $wordCapitalized . "<hr>";

// Pad string with characters to a certain length
$padded = str_pad($str, 20, "*", STR_PAD_BOTH);
echo "Padded string: " . $padded . "<hr>";

// Repeat string
$repeated = str_repeat($str, 3);
echo "Repeated string: " . $repeated . "<hr>";

// Convert newlines to HTML line breaks
$newline = "Hello,\nWorld!";
$linebreak = nl2br($newline);
echo "Line break conversion: " . $linebreak . "<hr>";

// Remove HTML and PHP tags
$html = "<p>Hello, <strong>World!</strong></p>";
$stripped = strip_tags($html);
```

```
echo "Stripped string: " . $stripped . "<hr>";
```

```
// Convert special characters to HTML entities
```

```
$specialChars = "This is a 'test' string";
```

```
$convertedChars = htmlspecialchars($specialChars);
```

```
echo "Converted special characters: " . $convertedChars . "<hr>";
```

```
// Convert all characters to HTML entities
```

```
$allChars = "This is a <test> string";
```

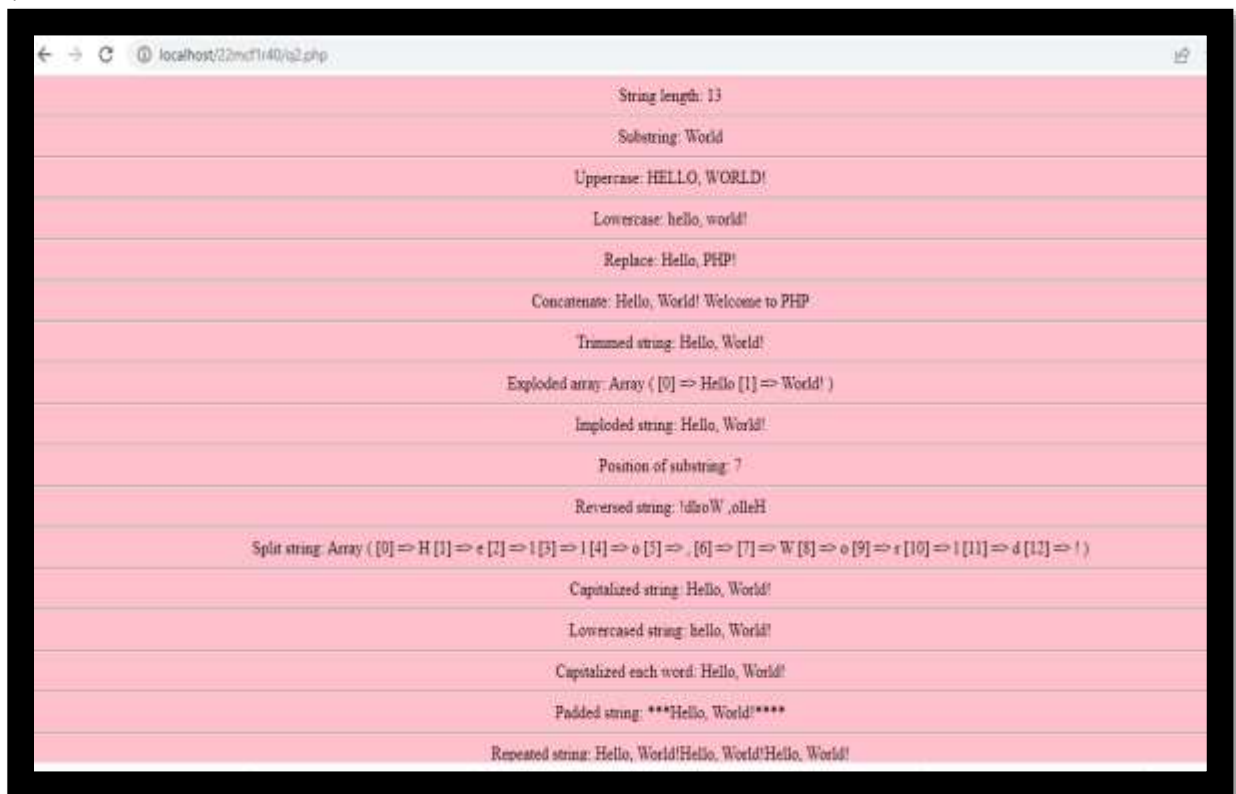
```
$convertedAll = htmlentities($allChars);
```

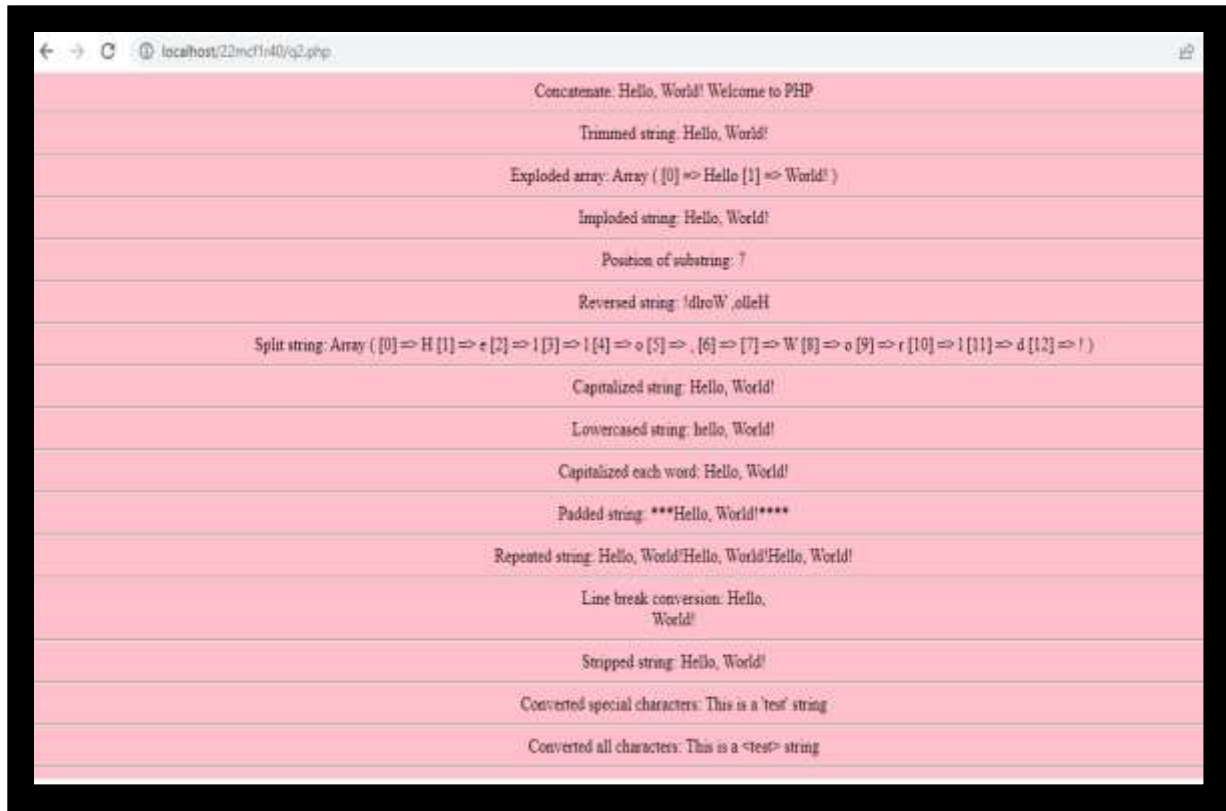
```
echo "Converted all characters: " . $convertedAll . "<hr>";
```

```
?>
```

```
</body>
```

```
</html>
```





3. Write a program to show day of the week (for example: Monday) based on numbers using switch/case statements.

code:

```
<!DOCTYPE html>
<html>
<head>
    <title>Day of the Week</title>
    <style>
        body{
            padding: 15% 10%;

            input[type=number] {
                padding: 0.9% 2.5%;
                border-radius: 5px;
                border: none;
                background-color: #fff;
                box-shadow: 0 0 10px rgba(0,0,0,.1);
            }
            input[type=number]:focus {
                outline: none;
                box-shadow: 0 0 20px rgba(0,0,0,.3);
            }
        }
    </style>

```

```

        button[type=submit] {
            padding: 10px 20px;
            border-radius: 5px;
            border: none;
            background-color: #3e8e20;
            color: #fff;
            font-size: 16px;
            cursor: pointer;
            transition: background-color .3s ease-in-out;
        }
        button[type=submit]:hover {
            background-color: blue;
        }
    }

</style>
</head>
<body align="center" bgcolor="orange">
    <form method="POST">
        <label for="day"><h1>Enter a number (1-7):</h1></label>
        <input type="number" name="day" id="day" required min="1" max="7" placeholder="enter No."> <br><br>
        <button type="submit">Submit</button><br>
    </form>

    <?php
        if (isset($_POST['day'])) {
            $day = $_POST['day'];

            switch ($day) {
                case 1:
                    echo "<h3>Monday</h3>";
                    break;
                case 2:
                    echo "<h3>Tuesday</h3>";
                    break;
                case 3:
                    echo "<h3>Wednesday</h3>";
                    break;
                case 4:
                    echo "<h3>Thursday</h3>";
                    break;
                case 5:
                    echo "<h3>Friday</h3>";
                    break;
                case 6:
                    echo "<h3>Saturday</h3>";
                    break;
                case 7:
                    echo "<h3>Sunday</h3>";
                    break;
                default:
                    echo "<h2>Invalid input. Please enter a number between 1 and 7.</h2>";
                    break;
            }
        }
    ?>
</body>
</html>

```



4. Write a PHP script to calculate and display average temperature, seven lowest and highest temperatures.

Recorded temperatures: 78, 60, 62, 68, 71, 68, 73, 85, 66, 64, 76, 63, 75, 76, 73, 68, 62, 73, 72, 65, 74, 62, 62, 65, 64, 68, 73, 75, 79, 73

Expected Output: Average Temperature is: 70.6

List of seven lowest temperatures: 60, 62, 63, 63, 64,

List of seven highest temperatures: 76, 78, 79, 81, 85,

Code:

```
<!DOCTYPE html>
<html>
<head>
    <title>Temperature Analysis</title>
    <style>
        <head>
            <style>
                body {
                    background-color: #f2f2f2;
                    font-family: Arial, sans-serif;
                    color: #333;
                }
                h1 {
                    font-size: 24px;
                    margin-bottom: 20px;
                }
                table {
                    border-collapse: collapse;
                    margin: 20px 0;
                    width: 100%;
                    max-width: 600px;
                    background-color: #fff;
                    box-shadow: 0 0 10px rgba(0,0,0,.1);
                }
                table td, table th {
                    border: 1px solid #ddd;
```

```

        padding: 10px;
        text-align: center;
    }
    table th {
        background-color: #3380FF;
        font-weight: bold;
    }
</style>
</head>
</style>
</head>
<body>
    <?php
        // Recorded temperatures
        $temperatures = array(78, 60, 62, 68, 71, 68, 73, 85, 66, 64, 76, 63, 75, 76, 73, 68, 62, 73, 72, 65, 74, 62, 62, 65, 64, 68, 73, 75,
79, 73);

        // Calculate average temperature
        $average_temperature = round(array_sum($temperatures) / count($temperatures), 1);

        // Sort temperatures in ascending order
        sort($temperatures);

        // Get seven lowest temperatures
        $seven_lowest_temperatures = array_slice($temperatures, 0, 7);

        // Get seven highest temperatures
        $seven_highest_temperatures = array_slice($temperatures, -7);

        // Output results
        echo "<h1>Temperature Analysis</h1>";
        echo "<p>Average Temperature is: $average_temperature</p>";
        echo "<table>";
        echo "<tr><th>Lowest Temperatures</th></tr>";
        foreach ($seven_lowest_temperatures as $temperature) {
            echo "<tr><td>$temperature</td></tr>";
        }
        echo "</table>";
        echo "<table>";
        echo "<tr><th>Highest Temperatures</th></tr>";
        foreach ($seven_highest_temperatures as $temperature) {
            echo "<tr><td>$temperature</td></tr>";
        }
        echo "</table>";
    ?>
</body>
</html>

```


← → ↻ ⓘ localhost/22mcf1r40/q4.php	
Temperature Analysis	
Average Temperature is: 69.8	
Lowest Temperatures	
60	
62	
62	
62	
62	
63	
64	
Highest Temperatures	
75	
75	
76	
76	
78	

5. Write a program to calculate and print the factorial of a number using a for loop.

The factorial of a number is the product of all integers up to and including that number, so the factorial of 4 is $4*3*2*1=24$.

Code:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
</head>
<body align = " center " bgcolor="gray">
<?php
// Function to calculate the factorial of a number
function factorial($n) {
    $fact = 1;
    for($i = 1; $i <= $n; $i++) {
        $fact *= $i;
    }
    return $fact;
}
```

```
// Test the function
$num = 4;
$fact = factorial($num);
echo "<hr><h3>The factorial of $num is:</h3> $fact <hr>";
?>

</body>
</html>
```



6. Write a PHP script that creates the following table using for loops. Add cellpadding="3px" and cellspacing="0px" to the table tag.

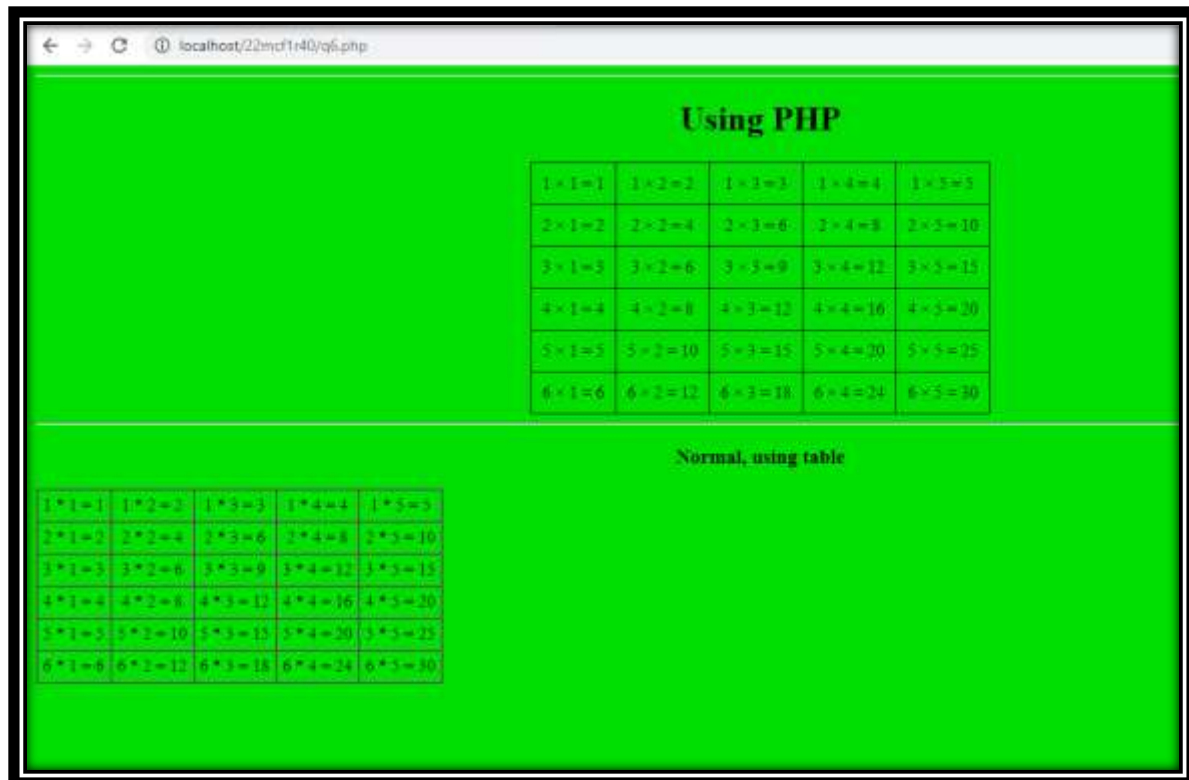
Code:

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Document</title>
    <style>
        .multiplication-table {
            border-collapse: collapse;
            margin: auto;
        }
        .multiplication-cell {
            border: 1px solid black;
            padding: 10px;
            text-align: center;
        }
    </style>
</head>
<body align="center" bgcolor="greenish">

<?php
echo "<hr><h1>Using PHP</h1>";
echo "<table class='multiplication-table'>\n";
for ($i = 1; $i <= 6; $i++) {
    echo "<tr>\n";
    for ($j = 1; $j <= 5; $j++) {
        echo "<td class='multiplication-cell'>". $i . " &times; " . $j . " = " . ($i * $j) . "</td>\n";
    }
    echo "</tr>\n";
}
echo "</table> <hr>";
?>

<h3>Normal, using table</h3>
<table cellpadding='5px' cellspacing='0px' border=1>
<tr>
<td>1 * 1 = 1</td>
<td>1 * 2 = 2</td>
<td>1 * 3 = 3</td>
```

```
<td>1 * 4 = 4</td>
<td>1 * 5 = 5</td>
</tr>
<tr>
<td>2 * 1 = 2</td>
<td>2 * 2 = 4</td>
<td>2 * 3 = 6</td>
<td>2 * 4 = 8</td>
<td>2 * 5 = 10</td>
</tr>
<tr>
<td>3 * 1 = 3</td>
<td>3 * 2 = 6</td>
<td>3 * 3 = 9</td>
<td>3 * 4 = 12</td>
<td>3 * 5 = 15</td>
</tr>
<tr>
<td>4 * 1 = 4</td>
<td>4 * 2 = 8</td>
<td>4 * 3 = 12</td>
<td>4 * 4 = 16</td>
<td>4 * 5 = 20</td>
</tr>
<tr>
<td>5 * 1 = 5</td>
<td>5 * 2 = 10</td>
<td>5 * 3 = 15</td>
<td>5 * 4 = 20</td>
<td>5 * 5 = 25</td>
</tr>
<tr>
<td>6 * 1 = 6</td>
<td>6 * 2 = 12</td>
<td>6 * 3 = 18</td>
<td>6 * 4 = 24</td>
<td>6 * 5 = 30</td>
</tr>
</table>
</body>
</html>
```



7. Write a PHP program which iterates the integers from 1 to 50. For multiples of three print "Fizz" instead of the number and for the multiples of five print "Buzz". For numbers which are multiples of both three and five print "FizzBuzz".

Code:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
</head>
<body bgcolor="gray" align="center">
<?php
for ($i = 1; $i <= 50; $i++) {
  if ($i % 3 == 0 && $i % 5 == 0) {
    echo "<h1> FizzBuzz </h1> <hr>";
  } elseif ($i % 3 == 0) {
    echo "<h3>Fizz</h3><hr>";
  } elseif ($i % 5 == 0) {
    echo "<h3>Buzz</h3><hr>";
  } else {
    echo $i . " <hr>";
  }
}
?>
</body>
</html>
```

Fizz
4
Buzz
Fizz
7
8
Fizz
Buzz
11
Fizz
13
14
FizzBuzz

8. Write a PHP script that removes the last word from a string.

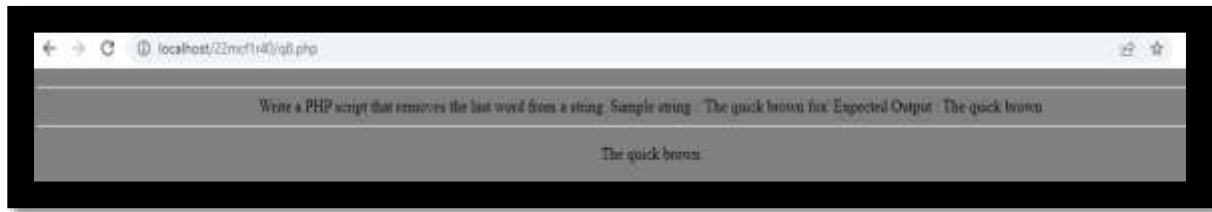
Sample string : 'The quick brown fox'

Expected Output : The quick brown

Code:

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Document</title>
</head>
<body align="center" bgcolor="gray">
<p><hr>Write a PHP script that removes the last word from a string.
Sample string : 'The quick brown fox'
Expected Output : The quick brown<hr></p>
<?php
// Define the string
$string = 'The quick brown fox';
// Explode the string into an array of words
$words = explode(' ', $string);
// Remove the last word from the array
array_pop($words);
// Implode the remaining words back into a string
$newString = implode(' ', $words);
// Output the new string
echo $newString;
?>
```

```
</body>
</html>
```



9. Write a PHP script that removes the whitespaces from a string.

Sample string : 'The quick " " brown fox'

Expected Output : Thequick""brownfox

Code:

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Document</title>
</head>
```

```
<body align="center" bgcolor="gray">
<p><hr>
```

Write a PHP script that removes the whitespaces from a string.

Sample string : 'The quick " " brown fox'

Expected Output : Thequick""brownfox <hr></p>

```
<?php
$string = 'The quick " " brown fox';
$no_spaces_string = str_replace(' ', '', $string);
echo $no_spaces_string; // output: Thequick""brownfox
?>
```

```
</body>
</html>
```



10. Write a PHP script to remove all characters from a string except a-z A-Z 0-9 or " ".

Sample string: abcde\$ddfd @abcd)der]

Expected Result: abcdeddf abcd der

Code:

```
<!DOCTYPE html>
<html lang="en">
```

```

<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Document</title>
</head>
<body align="center" bgcolor="gray">

<p><hr>Write a PHP script to remove all characters from a string except a-z A-Z 0-9 or " ".
Sample string: abcde$ddfd @abcd )der]
Expected Result: abcdeddfd abcd der<hr></p>

<?php
$string = 'abcde$ddfd @abcd )der]';
$clean_string = preg_replace('/[^a-zA-Z0-9 ]/', '', $string);
echo $clean_string; // Output: abcdeddfd abcd der
?>

</body>
</html>

```



11. Write a PHP script to print the current date in the following format. To get current date's information you can use date() function.

Code:

```

<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Document</title>
</head>
<body align="center">
<?php
echo date("Y/m/d") . "\n<br>";
echo date("y.m.d") . "\n<br>";
echo date("d-m-y")."\n<br>";
?>
</body>
</html>

```



12. Write a PHP script to calculate the difference between two dates.

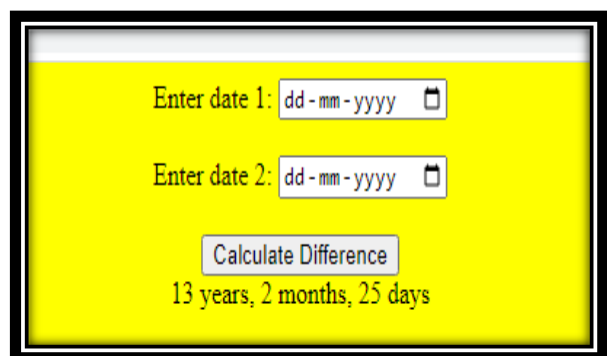
Sample dates: 1981-11-04, 2013-09-04

Expected Result: 31 years, 10 months, 11 days

Code:

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Document</title>
</head>
<body align="center" bgcolor="yellow">

<form method="POST">
    <label for="date1">Enter date 1:</label>
    <input type="date" id="date1" name="date1"><br><br>
    <label for="date2">Enter date 2:</label>
    <input type="date" id="date2" name="date2"><br><br>
    <button type="submit">Calculate Difference</button>
</form>
<?php
if(isset($_POST['date1']) && isset($_POST['date2'])){
    $date1 = new DateTime($_POST['date1']);
    $date2 = new DateTime($_POST['date2']);
    $interval = $date1->diff($date2);
    echo $interval->format('%y years, %m months, %d days');
}
?>
</body>
</html>
```



13. Write a PHP script to convert a date from yyyy-mm-dd to dd-mm-yyyy.

Sample date: 2012-09-12

Expected Result: 12-09-2012

Code:

```
<!DOCTYPE html>
```



```

<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Document</title>
    <style>
    body{
        padding: 10% 15%;
    }
    </style>
</head>
<body align ="center" bgcolor="yellow">
<?php
/*
$date = '2012-09-12';
$newDate = date('d-m-Y', strtotime($date));
echo $newDate;
*/
?>
<form method="POST">
    <label for="date">Enter date (yyyy-mm-dd):</label>
    <input type="text" id="date" name="date"><br><br>
    <button type="submit">Convert Date</button>
</form><br><br>

<?php
if(isset($_POST['date'])){
    $date = $_POST['date'];
    $newDate = date('d-m-Y', strtotime($date));
    echo $newDate;
}
?>
</body>
</html>

```



14. Write a PHP script to

- a) Transform a string all uppercase letters.
- b) Transform a string all lowercase letters.
- c) Make a string's first character uppercase.
- d) Make a string's first character of all the words uppercase.

Code:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
</head>
<body>
<?php
$string = "This is a sample string.";

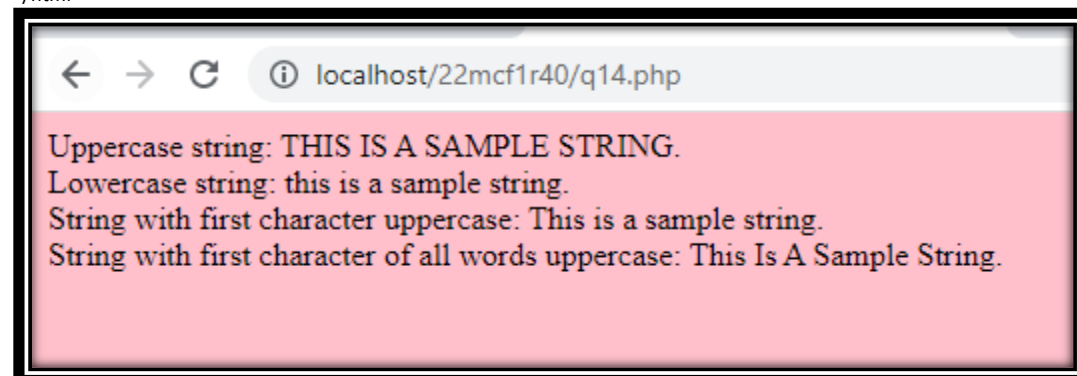
// a) Transform a string all uppercase letters.
$uppercase = strtoupper($string);
echo "Uppercase string: " . $uppercase . "<br>";

// b) Transform a string all lowercase letters.
$lowercase = strtolower($string);
echo "Lowercase string: " . $lowercase . "<br>";

// c) Make a string's first character uppercase.
$ucfirst = ucfirst($string);
echo "String with first character uppercase: " . $ucfirst . "<br>";

// d) Make a string's first character of all the words uppercase.
$ucwords = ucwords($string);
echo "String with first character of all words uppercase: " . $ucwords . "<br>";
?>

</body>
</html>
```



15. Write a PHP script to sort the following associative array

array("Sophia"=>"31", "Jacob"=>"41", "William"=>"39", "Ramesh"=>"40") in

- a) ascending order sort by value
- b) ascending order sort by Key
- c) descending order sorting by Value
- d) descending order sorting by Key

Code:

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Document</title>
</head>
<body>
<?php
$ages = array("Sophia"=>"31", "Jacob"=>"41", "William"=>"39", "Ramesh"=>"40");

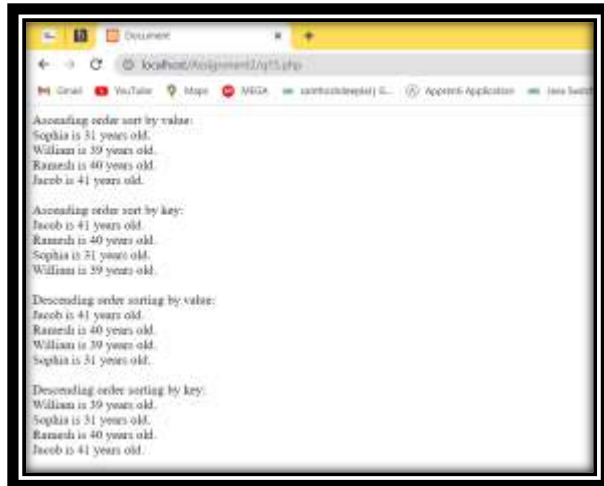
// a) Ascending order sort by value.
asort($ages);
echo "Ascending order sort by value: <br>";
foreach($ages as $key => $value){
    echo $key . " is " . $value . " years old. <br>";
}
echo "<br>";

// b) Ascending order sort by key.
ksort($ages);
echo "Ascending order sort by key: <br>";
foreach($ages as $key => $value){
    echo $key . " is " . $value . " years old. <br>";
}
echo "<br>";

// c) Descending order sorting by value.
arsort($ages);
echo "Descending order sorting by value: <br>";
foreach($ages as $key => $value){
    echo $key . " is " . $value . " years old. <br>";
}
echo "<br>";

// d) Descending order sorting by key.
krsort($ages);
echo "Descending order sorting by key: <br>";
foreach($ages as $key => $value){
    echo $key . " is " . $value . " years old. <br>";
}
?>

</body>
</html>
```



16. Write a PHP script to find the maximum and minimum marks from the following set of arrays.

Sample arrays :

`$marks1 = array(360,310,310,330,313,375,456,111,256);`

`$marks2 = array(350,340,356,330,321);`

`$marks3 = array(630,340,570,635,434,255,298);`

Expected Output :

Maximum marks : 635

Minimum marks : 111

Code:

```
<?php
$marks1 = array(360,310,310,330,313,375,456,111,256);
$marks2 = array(350,340,356,330,321);
$marks3 = array(630,340,570,635,434,255,298);

// Finding maximum marks
$max_marks = max(max($marks1), max($marks2), max($marks3));
echo "Maximum marks: " . $max_marks . "<br>";

// Finding minimum marks
$min_marks = min(min($marks1), min($marks2), min($marks3));
echo "Minimum marks: " . $min_marks . "<br>";
?>
```



17. Write a PHP function that checks whether a passed string is a palindrome or not?

Code:

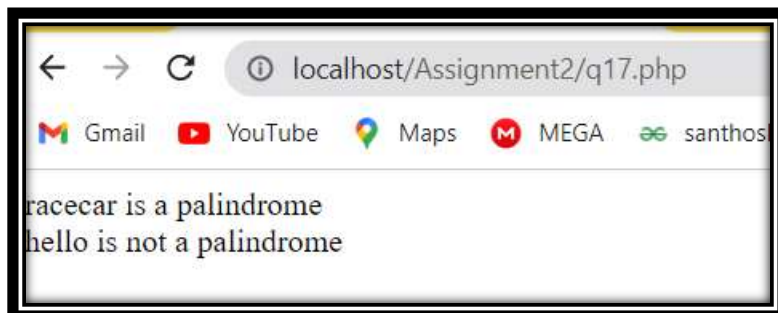
```
<?php
function isPalindrome($string) {
    $string = strtolower(preg_replace('/[^A-Za-z0-9]/', '', $string)); // Remove non-alphanumeric characters and convert to lowercase
    $reverseString = strrev($string); // Reverse the string
    return $string === $reverseString; // Check if the string is equal to its reverse
}

$string1 = "racecar";
$string2 = "hello";

if (isPalindrome($string1)) {
    echo "$string1 is a palindrome<br>";
} else {
    echo "$string1 is not a palindrome<br>";
}

if (isPalindrome($string2)) {
    echo "$string2 is a palindrome<br>";
} else {
    echo "$string2 is not a palindrome<br>";
}

?>
```



18. Write a function to sort an array.

Code:

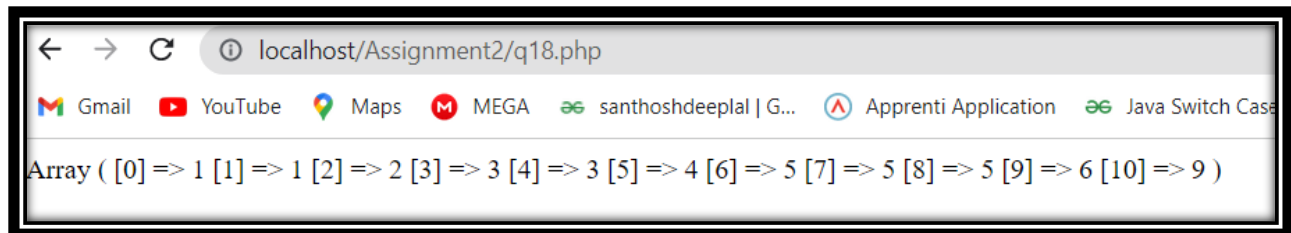
```
<?php
function sortArray($arr) {
    sort($arr);
    return $arr;
}

$myArray = array(3, 1, 4, 1, 5, 9, 2, 6, 5, 3, 5);

$sortedArray = sortArray($myArray);

print_r($sortedArray);

?>
```



19. Create a simple HTML form and accept the user name and display the name through PHP echo statement.

Code:

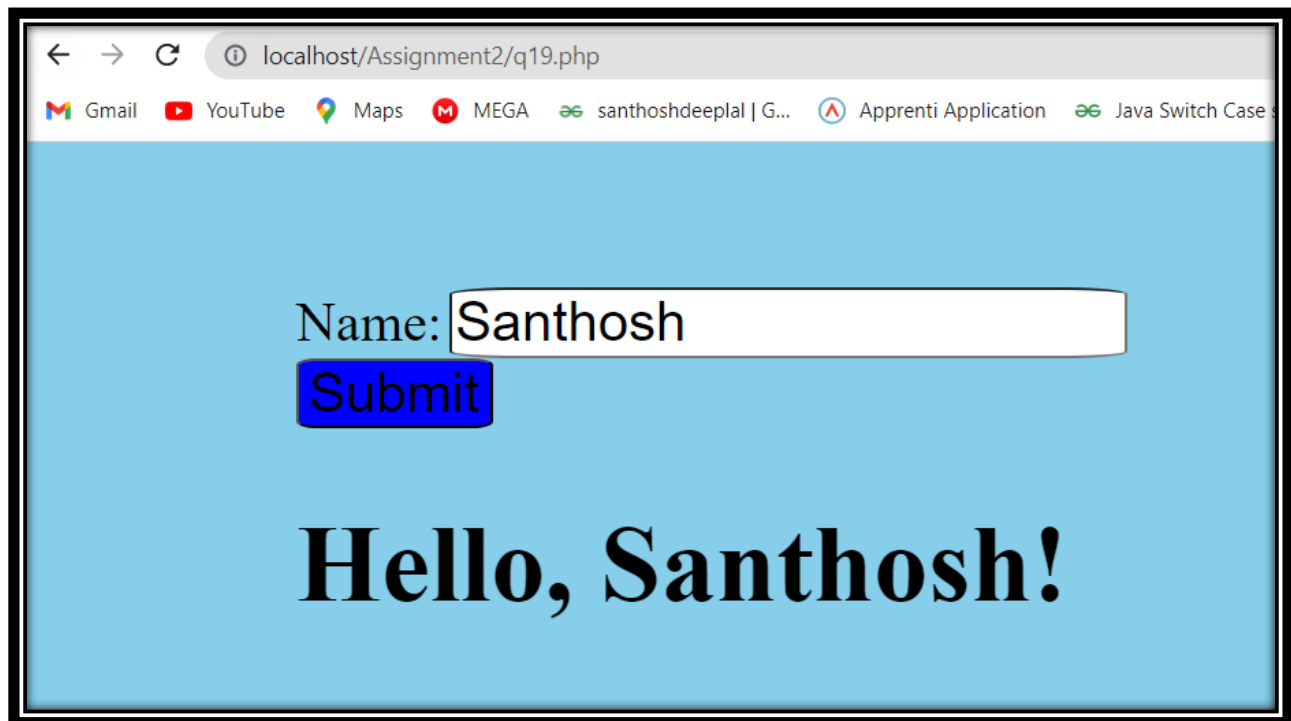
```
<!DOCTYPE html>
<html>
<head>
    <title>Simple HTML Form</title>
    <style>
    body{
        background-color: skyblue;
        padding: 5% 10%;

    }

    label{
        font-size: 2em;
    }
    input{
        border-radius: 10%;
        font-size: 2em;
    }
    button{
        border-radius: 10%;
        font-size: 2em;
        align="center";
        background-color: blue;
    }
    h1{
        border-radius: 10%;
        font-size: 4em;
    }
    </style>
</head>
<body>
    <form method="POST" action="">
        <label for="name">Name:</label>
        <input type="text" name="name" id="name"><br>
        <button type="submit">Submit</button>
    </form>

    <?php
    if(isset($_POST['name'])) {
        $name = $_POST['name'];
        echo "<h1>Hello, $name!</h1>";
    }
}
```

```
?>
</body>
</html>
```



**20. Create a Registration form using HTML and retrieve the details from form using \$_POST[] and display all details.
Code:**

q20.php:

```
<!DOCTYPE html>
<html>
<head>
    <title>Registration Form</title>
</head>
<body bgcolor="#33FFF6">
    <h2>Registration Form</h2>
    <form method="POST" action="process.php">
        <label for="name">Name:</label><br>
        <input type="text" id="name" name="name"><br>
        <label for="email">Email:</label><br>
        <input type="email" id="email" name="email"><br>
        <label for="password">Password:</label><br>
        <input type="password" id="password" name="password"><br>
        <label for="confirm_password">Confirm Password:</label><br>
        <input type="password" id="confirm_password" name="confirm_password"><br>
        <label for="dob">Date of Birth:</label><br>
        <input type="date" id="dob" name="dob"><br>
        <label for="gender">Gender:</label><br>
```

```

        <input type="radio" id="male" name="gender" value="male">
        <label for="male">Male</label><br>
        <input type="radio" id="female" name="gender" value="female">
        <label for="female">Female</label><br>
        <input type="submit" value="Submit">
    </form>
</body>
</html>

```

Process.php:

```

<!DOCTYPE html>
<html>
<head>
    <title>Registration Form - Results</title>
</head>
<body bgcolor="#33FFF6">
    <h2>Registration Form - Results</h2>
    <?php
        if ($_SERVER['REQUEST_METHOD'] == 'POST') {
            $name = $_POST['name'];
            $email = $_POST['email'];
            $password = $_POST['password'];
            $confirm_password = $_POST['confirm_password'];
            $dob = $_POST['dob'];
            $gender = $_POST['gender'];

            echo "<p>Name: $name</p>";
            echo "<p>Email: $email</p>";
            echo "<p>Date of Birth: $dob</p>";
            echo "<p>Gender: $gender</p>";
        }
    ?>
</body>
</html>

```

Registration Form

Name: Ramavath Santhosh

Email: santhoshdeeplal@gmail.com

Password: *****

Confirm Password: *****

Date of Birth: 30-03-2023

Gender: ☒ Male ☐ Female

Submit

Registration Form - Results

Name: Ramavath Santhosh

Email: santhoshdeeplal@gmail.com

Date of Birth: 2023-03-30

Gender: male

21. Write a program to get the username & password from user. If the given username is "admin" and password is "godsgift" show the welcome message otherwise show the error and redirect to login page.

Code:

Q21.php:

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Document</title>
    <style>
        body{

            padding: 15% 30%;
        }
    </style>
</head>
<body bgcolor="#33FFF6">
<?php
if ($_SERVER['REQUEST_METHOD'] === 'POST') {
    // Get the submitted username and password
    $username = $_POST['username'];
    $password = $_POST['password'];

    // Check if the username and password are correct
    if ($username === 'admin' && $password === 'godsgift') {
        // Redirect the user to the welcome page
        header('Location: welcome.php');
        exit;
    } else {
        // Display an error message
        echo 'Invalid username or password. Please try again.';
    }
}
?>

<!-- Display the login form -->
<form method="POST">
    <label>Username:</label>
    <input type="text" name="username">
    <br>
    <label>Password:</label>
    <input type="password" name="password">
    <br>
    <input type="submit" value="Login">
</form>

</body>
</html>
```

Welcome.php:

```
<!DOCTYPE html>
<html>
<head>
```

```

<title>Welcome</title>
<style>
  p{
    font-size: 2em;
  }
</style>
</head>
<body>
  <h1>Welcome!</h1>
  <p>You have successfully logged in as admin.</p>
</body>
</html>

```



22. Write a Program using CSS and PHP to calculate the amount earned by the employee.

Code:

Program3.php:

```

<!DOCTYPE html>
<html>
<head>
  <title>Employee Salary Calculator</title>
  <!-- <link rel="stylesheet" type="text/css" href="style.css"> -->
  <style>

```

```

body {
  background-color: #f8f8f8;
}
#pay{
  max-width: 500px;
  margin: 10px auto;
  padding: 20px;
  border: 2px solid maroon;

```

```

}
form {
    max-width: 500px;
    margin: 50px auto;
    padding: 20px;
    border: 2px solid maroon;
}

/* fieldset {
    border: none;
} */

legend {
    font-size: 1.2em;
    font-weight: bold;
}

label {
    display: block;
    margin-bottom: 10px;
}

input {
    width: 100%;
    padding: 10px;
    border-radius: 5px;
    border: 1px solid #ccc;
    box-sizing: border-box;
}

button[type="submit"] {
    display: block;
    margin-top: 20px;
    padding: 10px;
    background-color: maroon;
    color: #fff;
    border: none;
    border-radius: 5px;
    cursor: pointer;
}

</style>

</head>
<body>

<form id="pay" action="calculate.php" method="POST">
    <fieldset>
        <legend>Pay period ending</legend>
        <label for="day">Day:</label>
        <input type="number" name="day" id="day" required>
        <label for="month">Month:</label>
        <input type="number" name="month" id="month" required>
        <label for="year">Year:</label>
        <input type="number" name="year" id="year" required>

    </fieldset>
</form>

```

```

        <form action="calculate.php" method="POST">
        <fieldset>
        <legend>Hours worked and pay rate</legend>
            <label for="hours">Hours worked:</label>
            <input type="number" name="hours" id="hours" required>
            <label for="rate">Hourly rate:</label>
            <input type="number" name="rate" id="rate" required>
            <button type="submit">Calculate</button>
        </fieldset>
        </form>
    </body>
</html>

```

Calculate.php:

```

<!DOCTYPE html>
<html>
<head>
    <title>Employee Salary Calculator - Results</title>
    <!-- <link rel="stylesheet" type="text/css" href="style.css"> -->
    <style>
        table {
            border-collapse: collapse;
            width: 100%;
            margin-top: 20px;
        }

        th, td {
            text-align: center;
            padding: 8px;
        }

        th {
            background-color: #4CAF50;
            color: white;
        }

        tr:nth-child(even) {
            background-color: #f2f2f2;
        }

        tr:hover {
            background-color: #ddd;
        }

    </style>
</head>
<body>
    <div class="container">
        <h1>Employee Salary Calculator - Results</h1>
        <?php
            $hours = $_POST["hours"];
            $rate = $_POST["rate"];
            $salary = $hours * $rate;
            echo "<table>";
            echo "<tr><th>Hours Worked</th><th>Pay Rate</th><th>Amount Earned</th></tr>";
            echo "<tr><td>" . $hours . "</td><td>" . $rate . "</td><td>" . $salary . "</td></tr>";

```

```

        echo "</table>";
    ?>
</div>
</body>
</html>

```

The screenshot shows a web browser window with the URL `localhost:8080/employees/2/calculate.php`. The page contains a form with two main sections:

- Pay period ending:**
 - Day:
 - Month:
 - Year:
- Hours worked and pay rate:**
 - Hours worked:
 - Hourly rate:
 -

The screenshot shows the results of the salary calculation. The page title is "Employee Salary Calculator - Results". Below the title is a table with the following data:

Hours Worked	Pay Rate	Amount Earned
10	\$500	\$5000

23. Using html and php, create a below page using necessary tags and attributes, retrieve them and display them.

Code:

```

<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Information</title>
    <style>
    body{
        align-items: center;
        padding-left: 30%;
    }

    #des{
        margin: auto;
    }

```

```

        align-items: center;
        text-align: center;
    }

    #but{
        align-items: center;
        text-align: center;
    }

    #n{
        width: 310px;
    }

    table{
        margin-top: 40px;
        border: solid white 2px;
        padding: 10px;
        border-radius: 8px;
        background-color: rgb(115, 115, 1);
        box-shadow: 2px 1px 20px black;
    }

    .container th{
        background-color: gray;
        font-size: 25px;
        margin-bottom: 8px;
    }

    .container td,th{
        padding: 5px;
    }

    .btn{
        height: 35px;
        width: 250px;
        border: gray 4px;
        border-radius: 5px;
        font-size: 15px;
        font-weight: bold;
        color: red;
    }

    .btn:hover{
        background-color: black;
        color: white;
    }

    .container2{
        margin-top: 20px;
        padding: 15px;
        background-color: gray;
        color: white;
        width: 59%;
        border-radius: 8px;
        box-shadow: 2px 1px 20px black;
    }

```

```

p{
    font-size: 25px;
    color: black;
    display: inline-block;
}

</style>
</head>
<body bgcolor="greenish">
    <div class="container">
        <form action="q23.php" method="post">

            <table>
                <tr>
                    <th>
                        Name
                    </th>
                    <th>
                        Value
                    </th>
                </tr>
                <tr>
                    <td>
                        Name
                    </td>
                    <td>
                        <input type="text" id="n" name="nam" placeholder="Please Enter Your Full Name">
                    </td>
                </tr>
                <tr>
                    <td>
                        Sex
                    </td>
                    <td>
                        <label for="r1">
                            <input type="radio" name="sex" id="r1" value="Male">Male
                        </label><br>
                        <label for="r2">
                            <input type="radio" name="sex" id="r2" value="Female">Female
                        </label>
                    </td>
                </tr>
                <tr>
                    <td>
                        Eye Color
                    </td>
                    <td>
                        <select name="EyeColor" id="">
                            <option value="Select">Select Option</option>
                            <option value="Red">Red</option>
                            <option value="Green">Green</option>
                            <option value="Black">Black</option>
                            <option value="Brown">Brown</option>
                            <option value="Other">Other</option>
                        </select>
                    </td>
                </tr>
            </table>
        </div>
    </body>

```

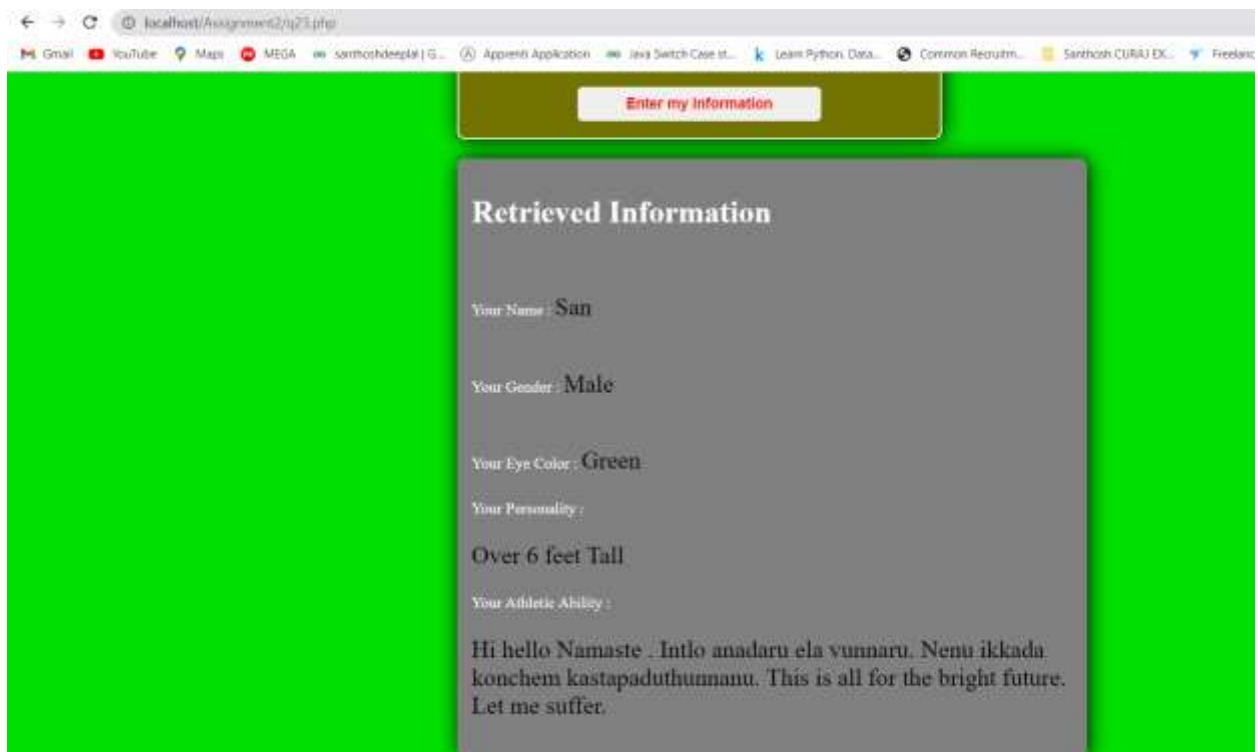
```

        <td>
            Check all that Apply
        </td>
    <td>
        <label for="c1">
            <input type="checkbox" name="o[]" id="c1" value="Over 6 feet Tall"> Over 6 feet tall
        </label><br>
        <label for="c2">
            <input type="checkbox" name="o[]" id="c2" value="Over 200 Pounds"> Over 200 Pounds
        </label>
    </td>
</tr>
<tr>
    <td id="des" colspan="2">
        Describe your athletic ability:
        <br>
        <textarea name="other" id="" cols="60" rows="10" placeholder="Enter your athletic abilities in
sort...."></textarea>
    </td>
</tr>
<tr>
    <td id="but" colspan="2"><button class="btn">Enter my Information</button></td>
</tr>
</table>
</form>
</div>
<div class="container2">
    <h1>Retrieved Information</h1>
    <br>
    <?php
        $name = $_POST['nam'];
        $sex = $_POST['sex'];
        $eyeColor = $_POST['EyeColor'];
        $other = $_POST['other'];

        echo "Your Name : <p>". $name . "</p><br>Your Gender : <p>" . $sex . "</p><br> Your Eye Color : <p>" . $eyeColor . "</p><br>";
        echo "Your Personality : <br>";
        if(!empty($_POST['o'])){
            foreach($_POST['o'] as $selected){
                echo "<p>". $selected . "</p><br>";
            }
        }
        echo "Your Athletic Ability : <p>" . $other . "</p>";
    ?>
</div>

</body>
</html>

```

24. Write a PHP program that tests whether an e-mail address is input correctly. Verify that the input begins with series of characters, followed by the @ character, another series of characters, a period (.) and a final series of characters. Test your program, using both valid and invalid email addresses.

Code:

```
<!DOCTYPE html>
<html>
<head>
    <title>Email Address Validation</title>
    <style>
```

```

body{
  padding: 15% 30%;
  background-color: yellow;
}

  form {
    width: 400px;
    margin: 0 auto;
    text-align: center;
    font-size: 1.2em;
  }
  label {
    display: block;
    margin-bottom: 10px;
    font-weight: bold;
  }
  input[type="text"] {

    font-size: 1.2em;
    border: 1px solid #ccc;
    border-radius: 5px;
    margin-bottom: 20px;
  }
  input[type="submit"] {

    background-color: #4CAF50;
    color: white;
    border: none;
    border-radius: 5px;
    font-size: 1.2em;
    cursor: pointer;
  }
  p {
    margin-top: 20px;
    font-size: 1.2em;
    font-weight: bold;
  }
  .valid {
    color: green;
  }
  .invalid {
    color: red;
  }
}

</style>
</head>
<body>
  <form method="POST">
    <label for="email">Email:</label>
    <input type="text" name="email" id="email"><br>
    <input type="submit" value="Validate">
  </form>

  <?php
    // Check if form is submitted and validate email
    if ($_SERVER["REQUEST_METHOD"] == "POST") {
      $email = $_POST["email"];

      // Define a regular expression pattern for email validation
      $pattern = "/^[a-zA-Z0-9._%+-]+@[a-zA-Z0-9.-]+\.[a-zA-Z]{2,}$/"/;

```

```

        // Test if email matches pattern and display result
        if (preg_match($pattern, $email)) {
            echo "<p class='valid'>Email address $email is valid.</p>";
        } else {
            echo "<p class='invalid'>Email address $email is not valid.</p>";
        }
    }
?>
</body>
</html>

```



25. Write a PHP program to generate and display the first n lines of a Floyd triangle.

(use n=5 and n=11 rows).

Sample output for n = 5 :

```

1
2 3
4 5 6
7 8 9 10
11 12 13 14 15

```

Code:

```

<?php
function floyd_triangle($n)
{
    $num = 1;
    for ($i = 1; $i <= $n; $i++) {
        for ($j = 1; $j <= $i; $j++) {
            echo $num . " ";
            $num++;
        }
        echo "<br>";
    }
}

```

```

// Generate and display the first 5 lines of a Floyd triangle
echo "Floyd triangle with 5 rows:<br>";
floyd_triangle(5);

```

```
// Generate and display the first 11 lines of a Floyd triangle
echo "<br>Floyd triangle with 11 rows:<br>";
floyd_triangle(11);
?>
```

