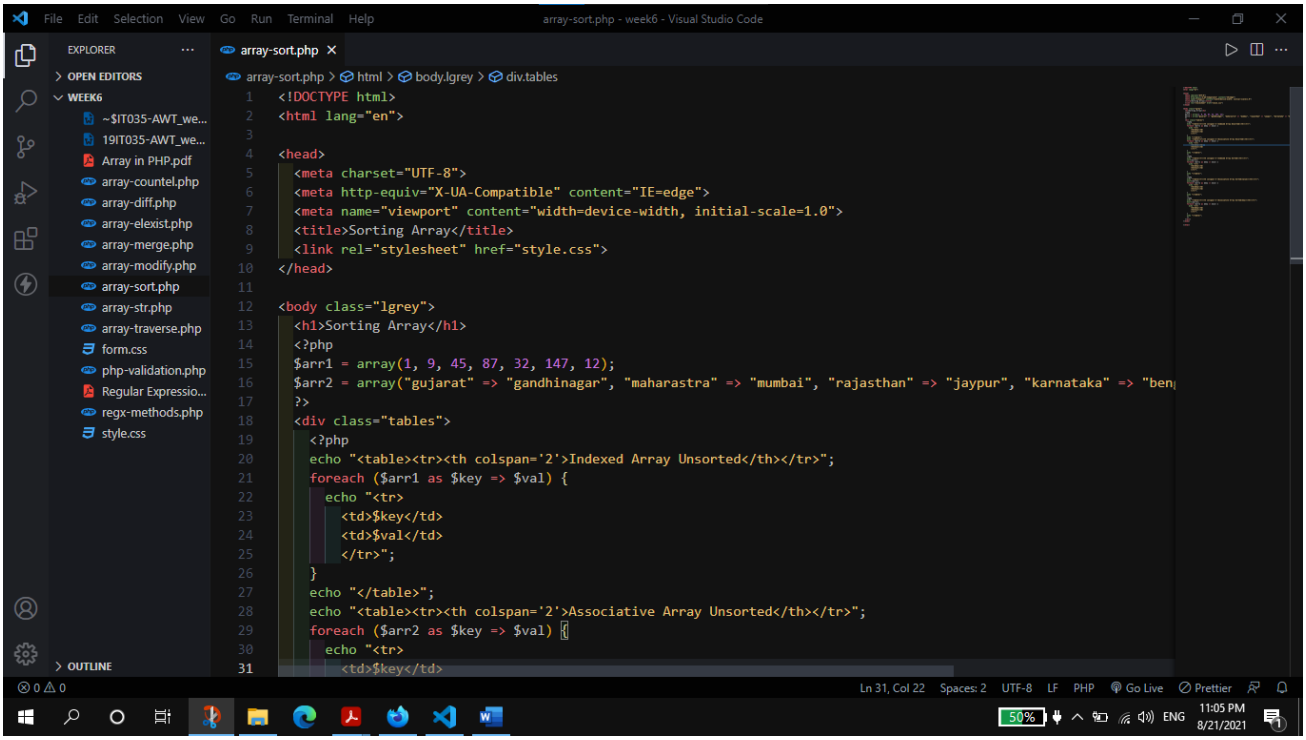
AWT Practical *Week - 6 Task*

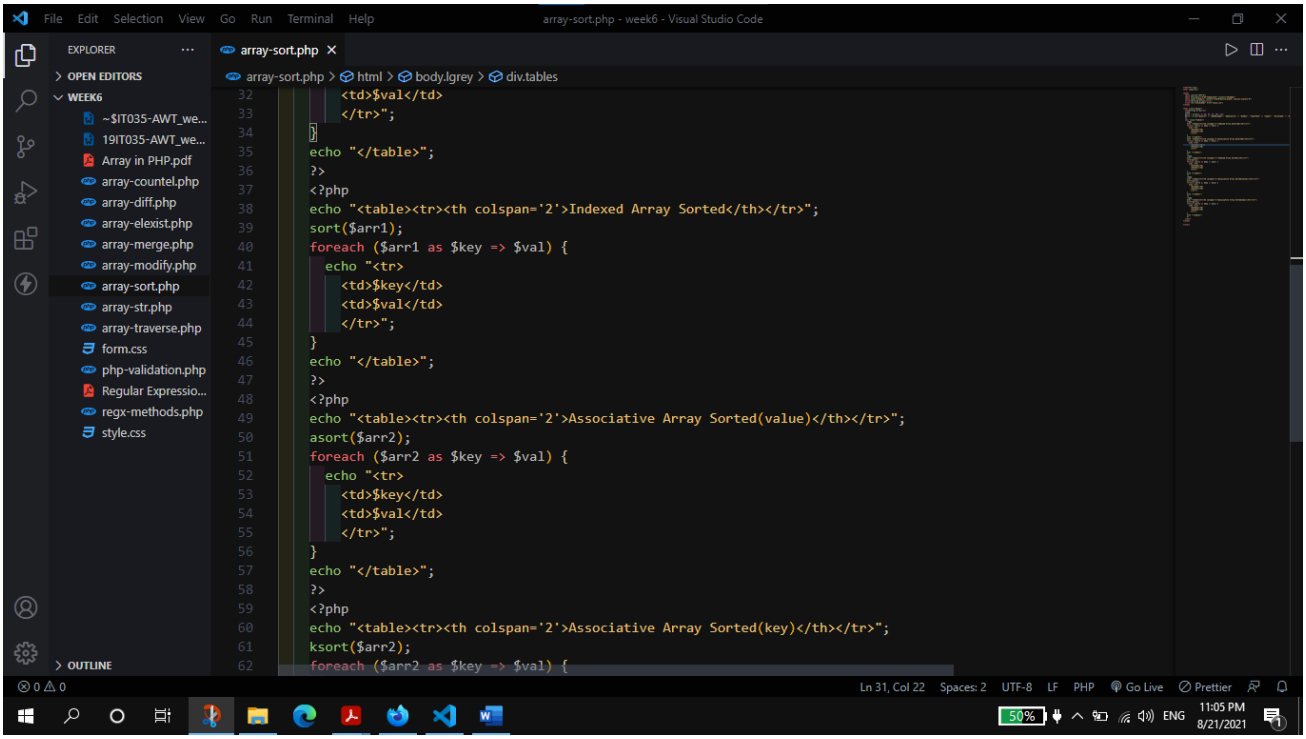
Array, Array methods and REGEX

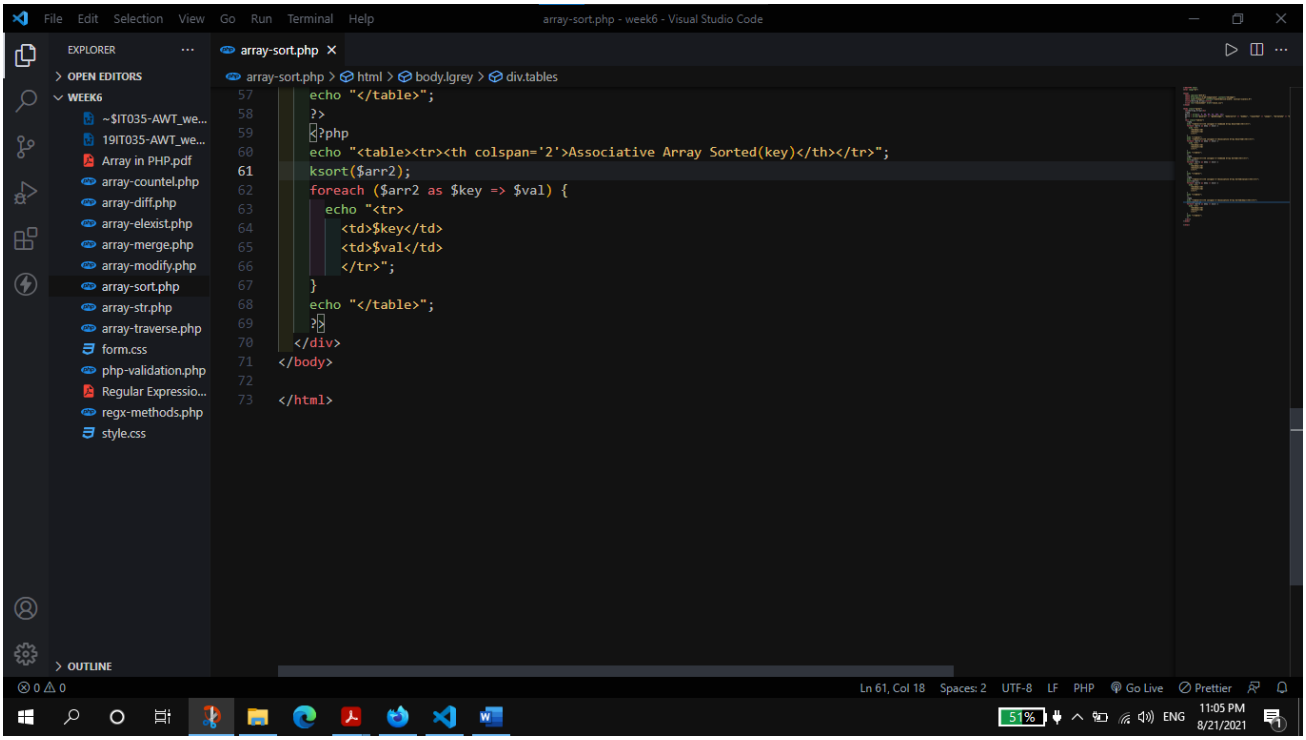
Array Operations (Numerical and Associative Both):

1. Sorting of array

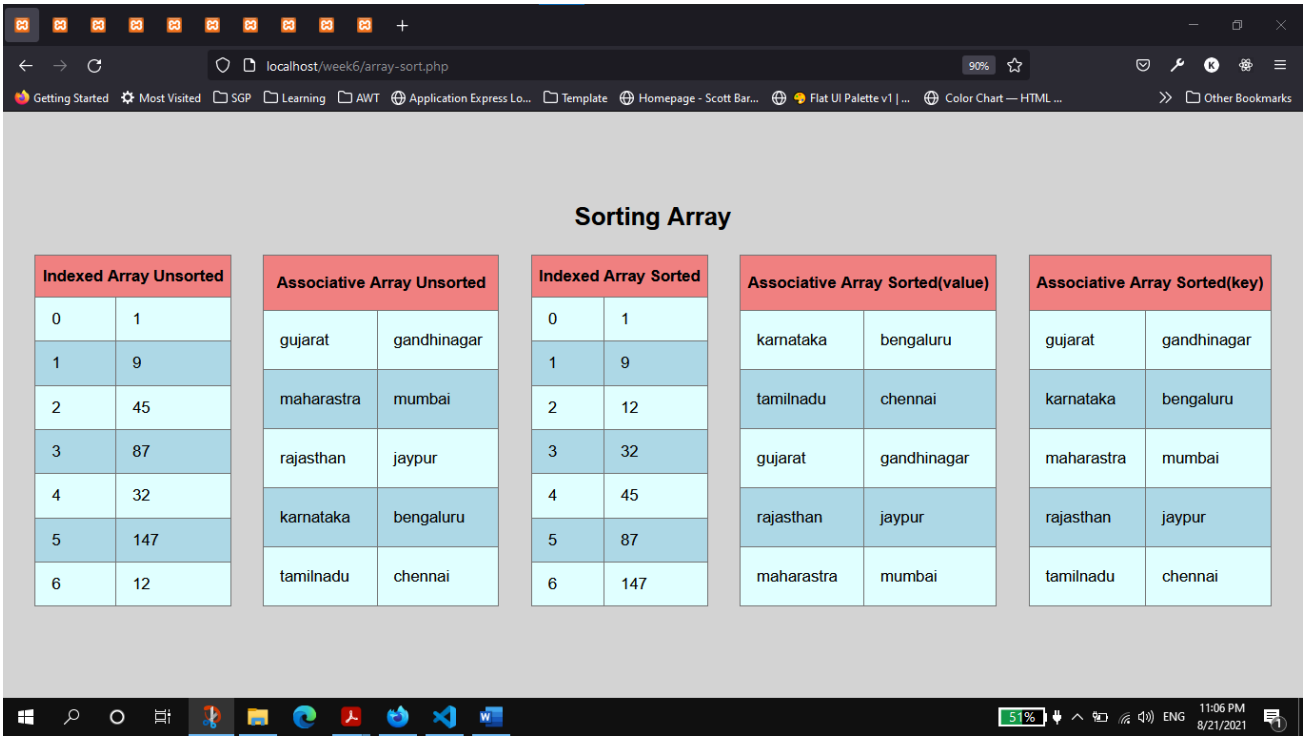
Code:







Output:



Sorting Array

Indexed Array Unsorted	
0	1
1	9
2	45
3	87
4	32
5	147
6	12

Associative Array Unsorted	
gujarat	gandhinagar
maharastra	mumbai
rajasthan	jaypur
karnataka	bengaluru
tamilnadu	chennai

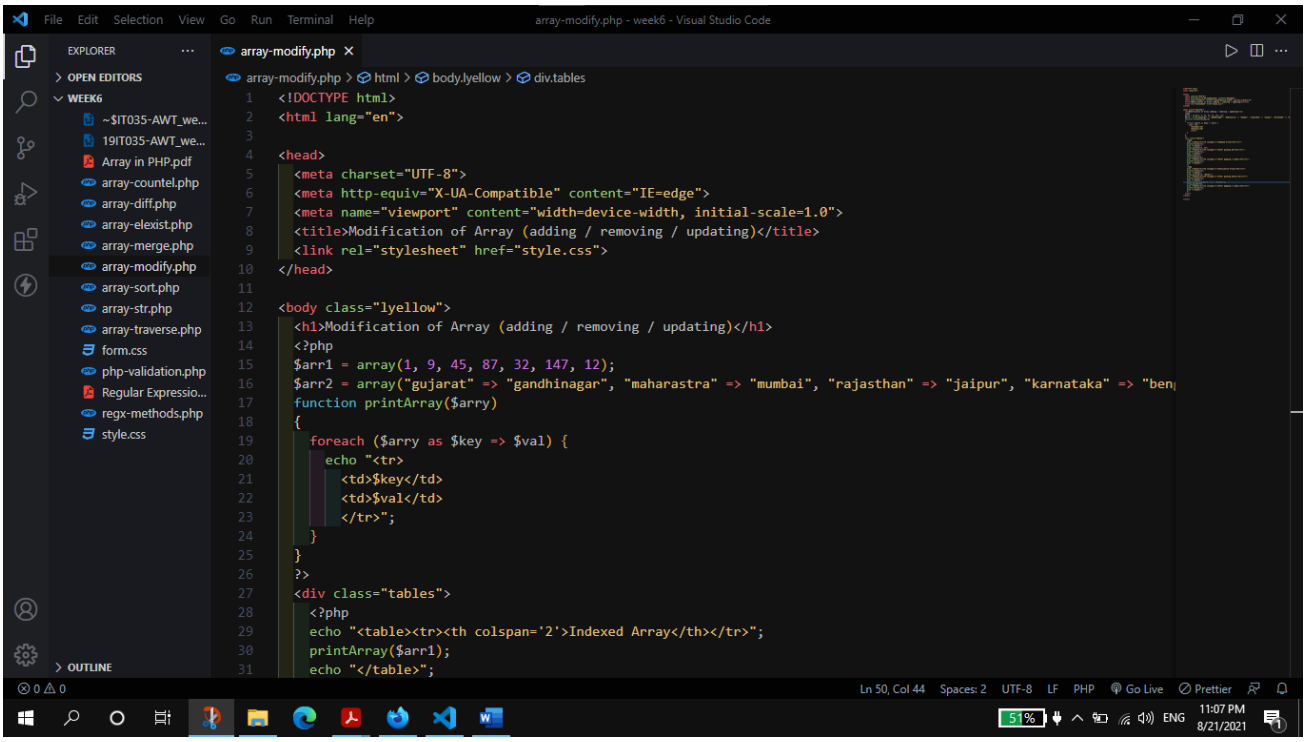
Indexed Array Sorted	
0	1
1	9
2	12
3	32
4	45
5	87
6	147

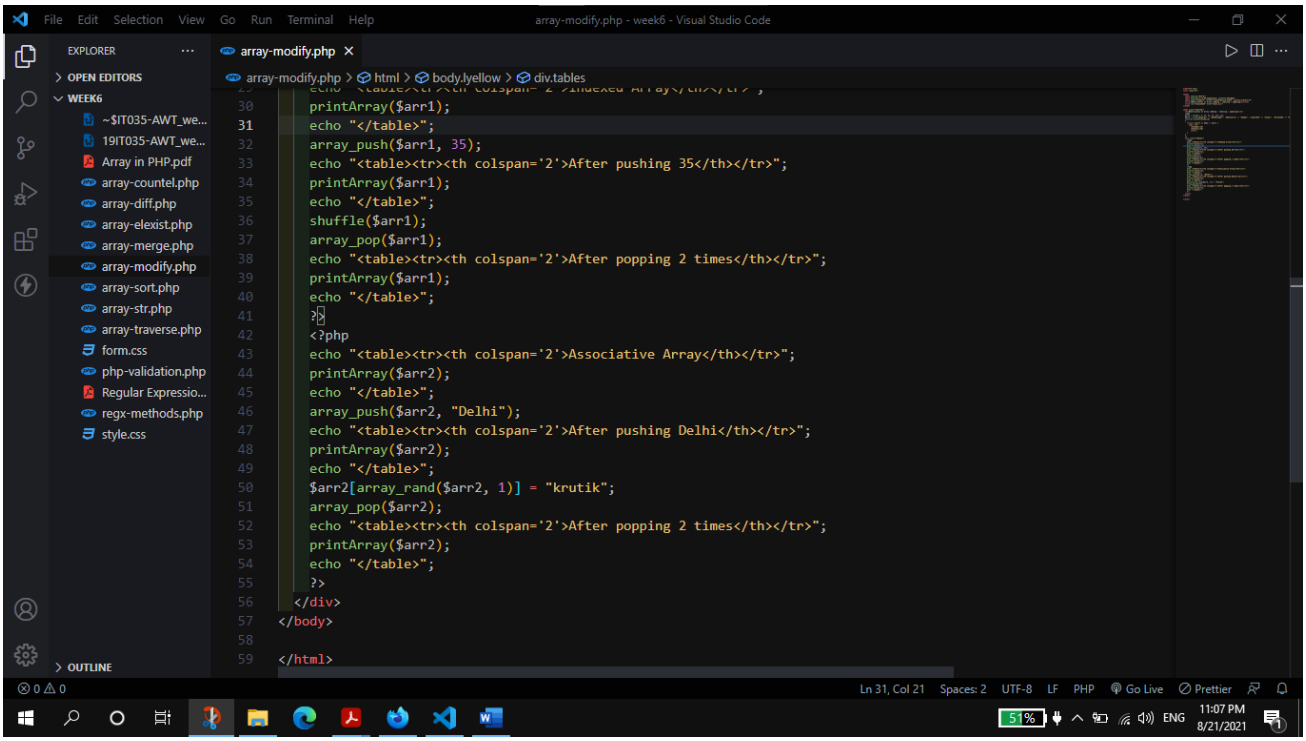
Associative Array Sorted(value)	
karnataka	bengaluru
tamilnadu	chennai
gujarat	gandhinagar
rajasthan	jaypur
maharastra	mumbai

Associative Array Sorted(key)	
gujarat	gandhinagar
karnataka	bengaluru
maharastra	mumbai
rajasthan	jaypur
tamilnadu	chennai

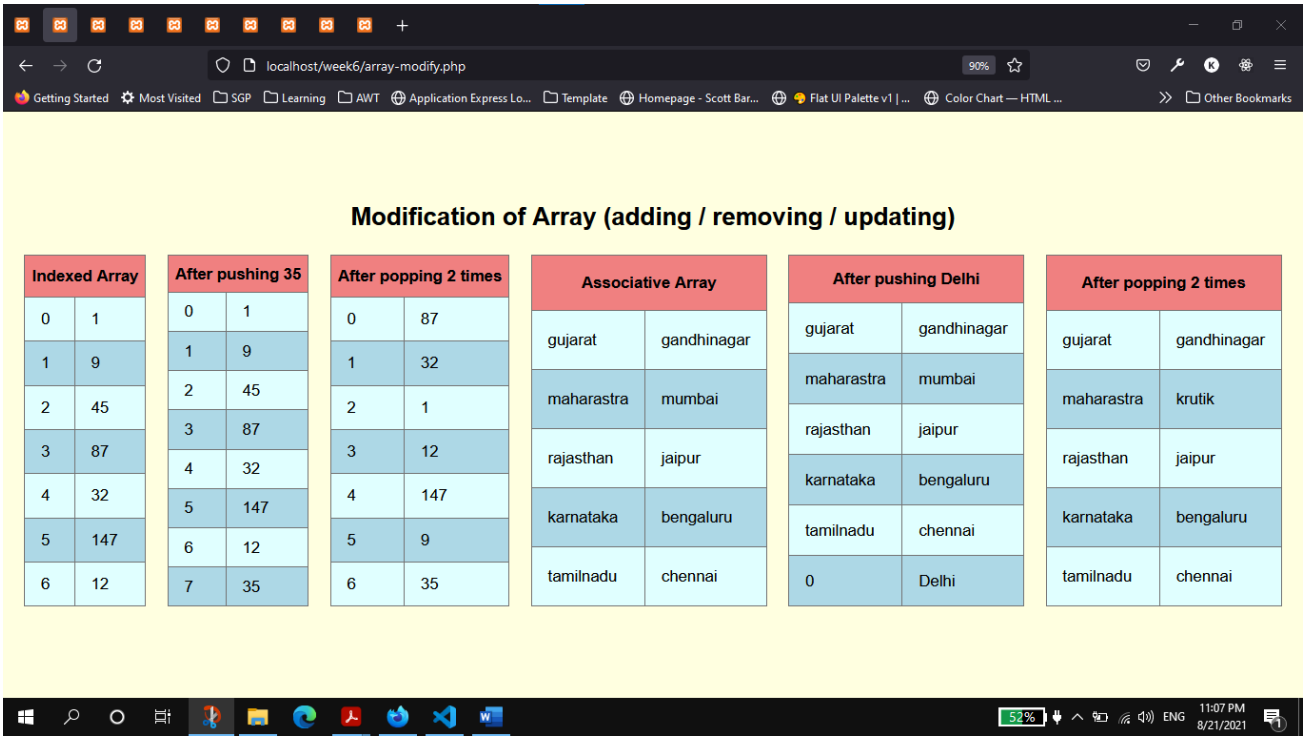
2. Modification of Array (adding / removing / updating).

Code:





Output:



localhost/week6/array-modify.php

Modification of Array (adding / removing / updating)

Indexed Array	
0	1
1	9
2	45
3	87
4	32
5	147
6	12

After pushing 35	
0	1
1	9
2	45
3	87
4	32
5	147
6	12
7	35

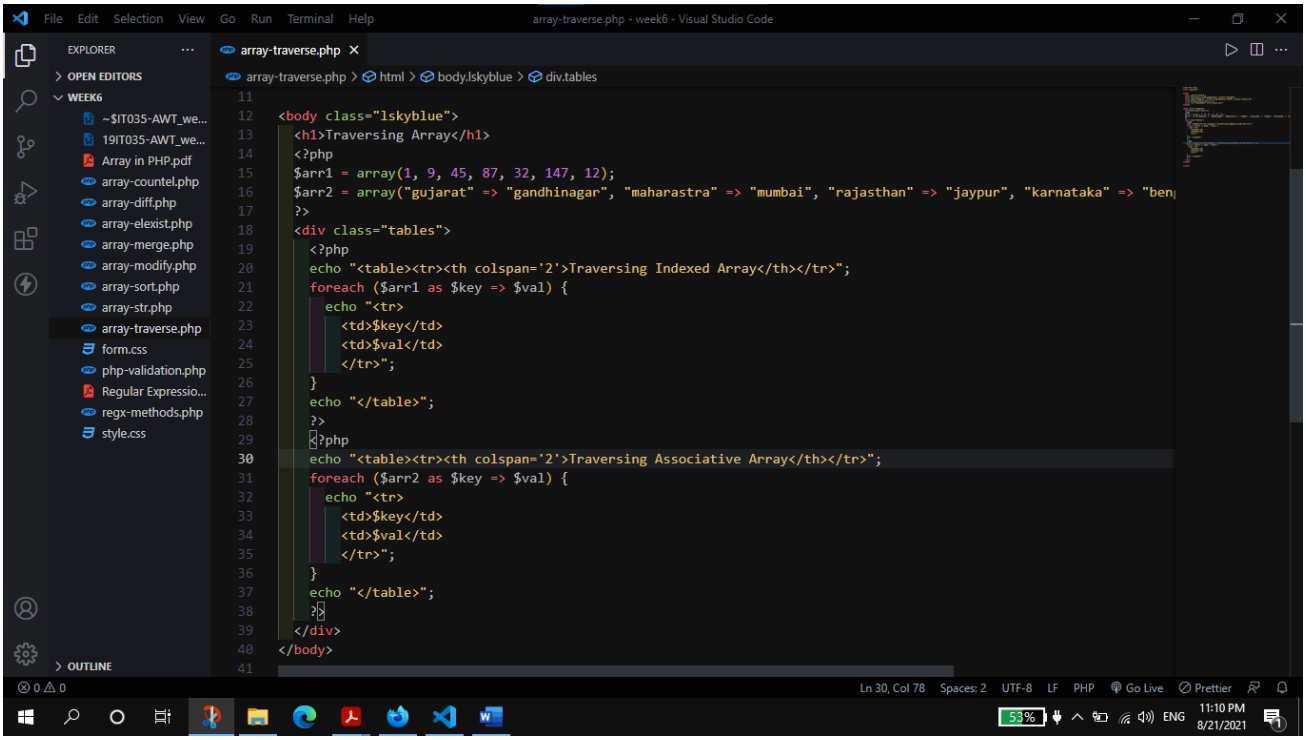
After popping 2 times	
0	87
1	32
2	1
3	12
4	147
5	9
6	35

Associative Array	
gujarat	gandhinagar
maharastra	mumbai
rajasthan	jaipur
karnataka	bengaluru
tamilnadu	chennai

After pushing Delhi	
gujarat	gandhinagar
maharastra	mumbai
rajasthan	jaipur
karnataka	bengaluru
tamilnadu	chennai
0	Delhi

After popping 2 times	
gujarat	gandhinagar
maharastra	krutik
rajasthan	jaipur
karnataka	bengaluru
tamilnadu	chennai

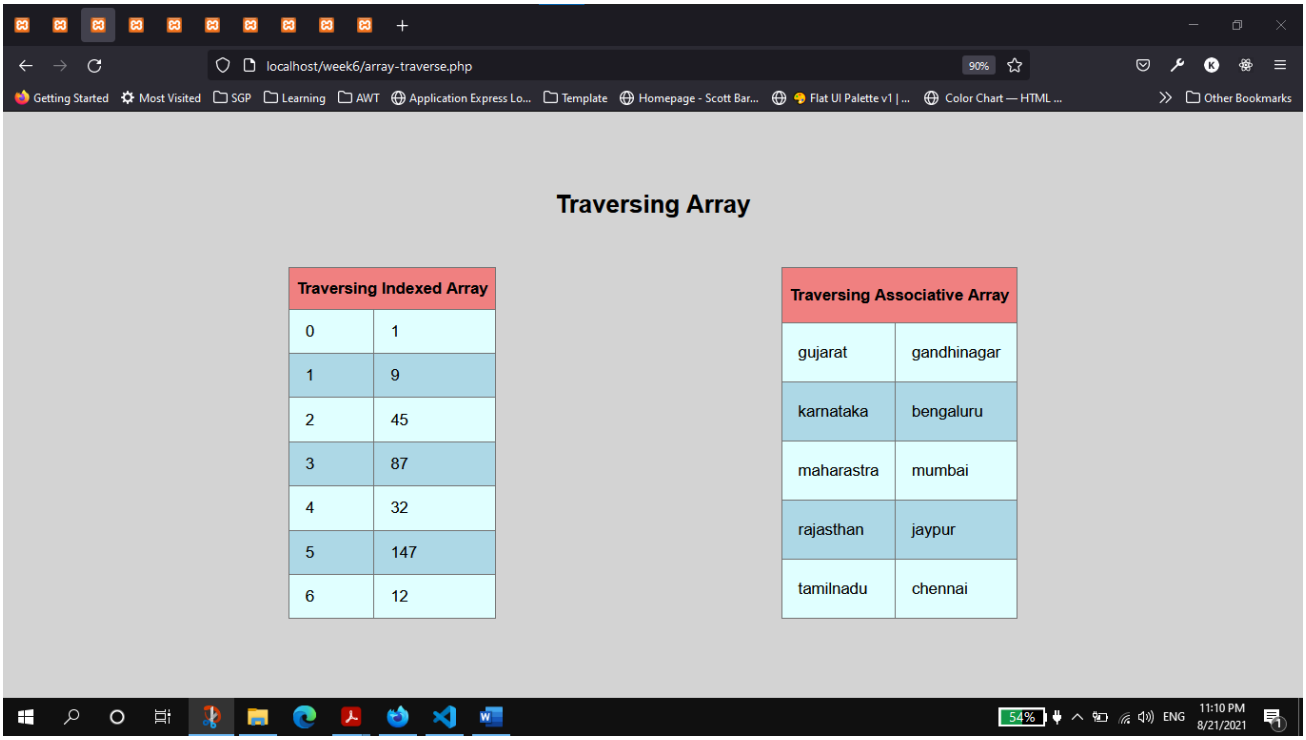
3. Traversing array



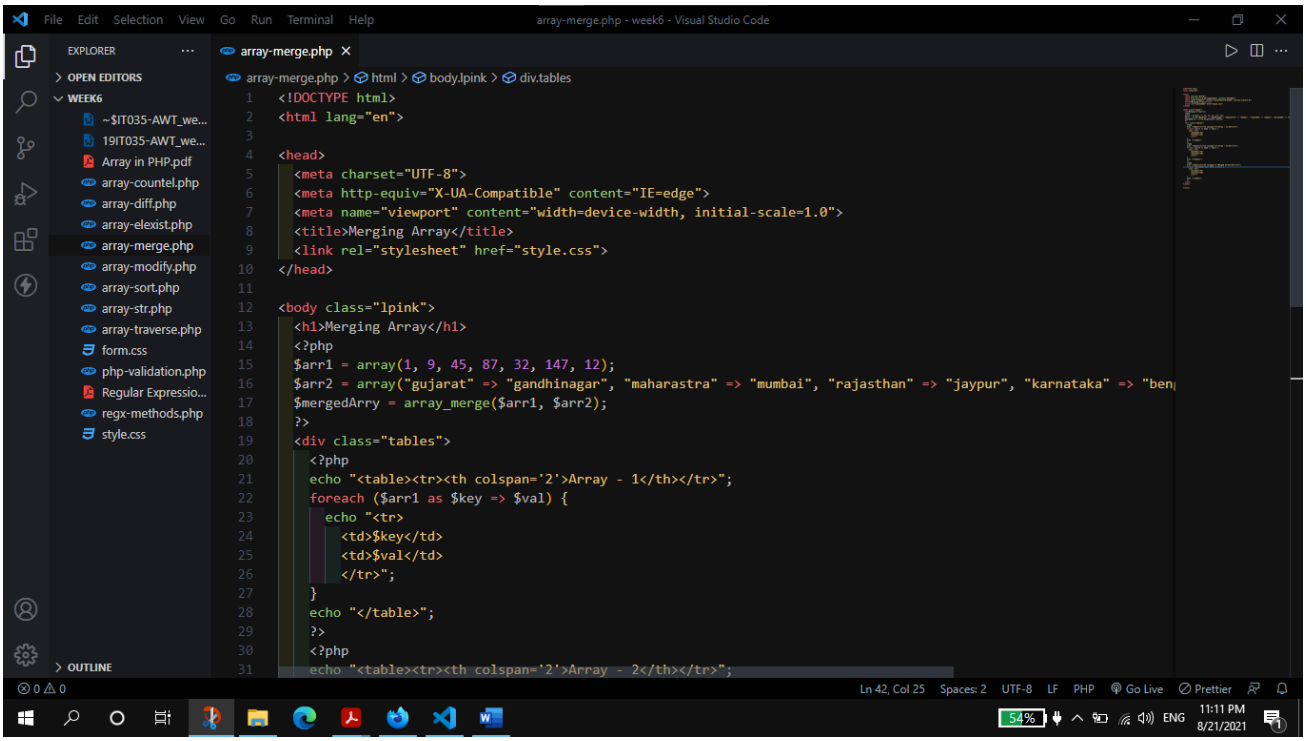
array-traverse.php - week6 - Visual Studio Code

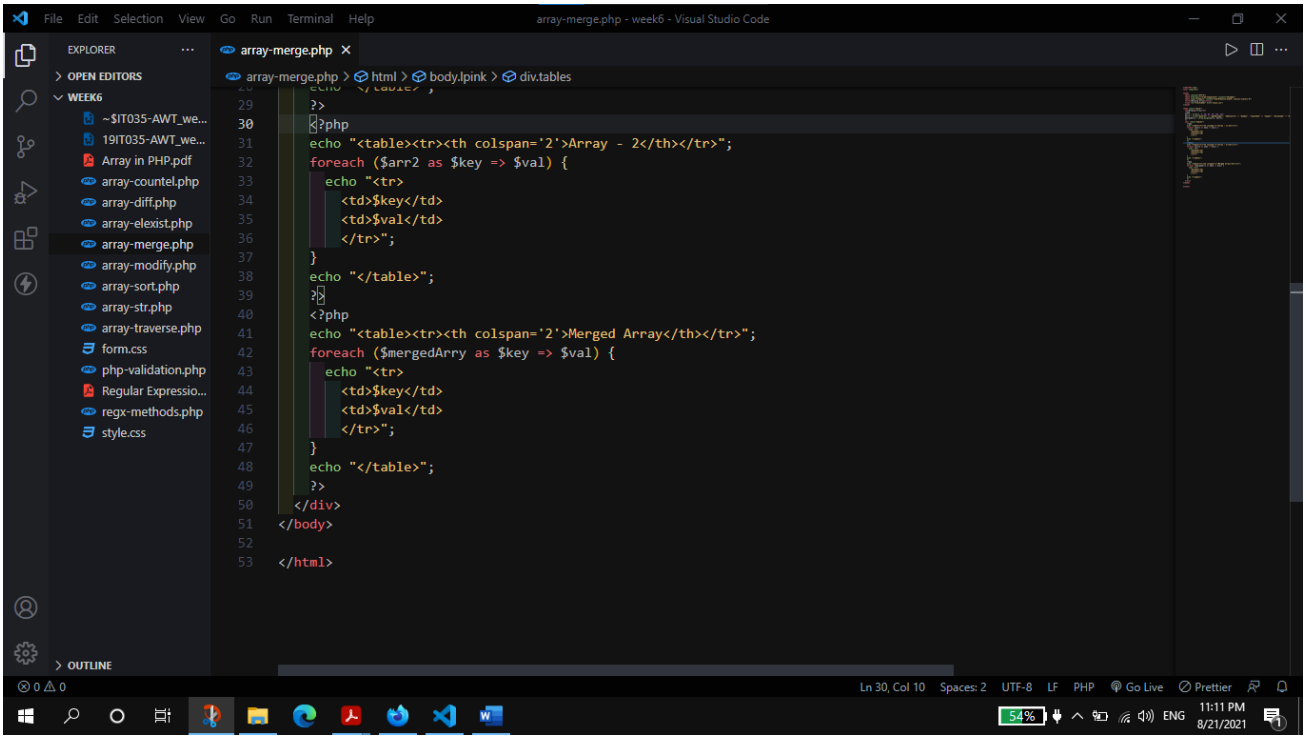
```
<body class="lskyblue">
  <h1>Traversing Array</h1>
  <?php
  $arr1 = array(1, 9, 45, 87, 32, 147, 12);
  $arr2 = array("gujarat" => "gandhinagar", "maharastra" => "mumbai", "rajasthan" => "jaypur", "karnataka" => "ben
  ?>
  <div class="tables">
    <?php
    echo "<table><tr><th colspan='2'>Traversing Indexed Array</th></tr>";
    foreach ($arr1 as $key => $val) {
      echo "<tr>
        <td>$key</td>
        <td>$val</td>
        </tr>";
    }
    echo "</table>";
    ?>
    <?php
    echo "<table><tr><th colspan='2'>Traversing Associative Array</th></tr>";
    foreach ($arr2 as $key => $val) {
      echo "<tr>
        <td>$key</td>
        <td>$val</td>
        </tr>";
    }
    echo "</table>";
    ?>
  </div>
</body>
```

Output:



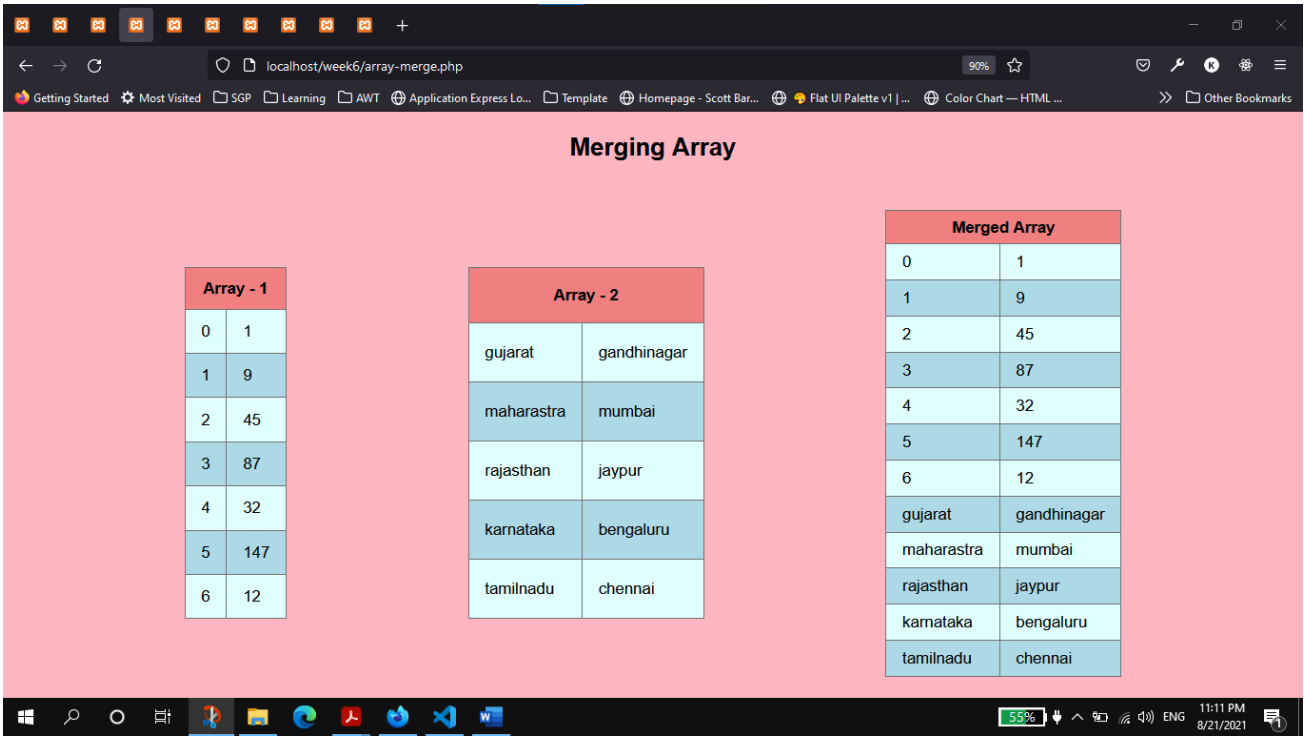
4. Merging Array



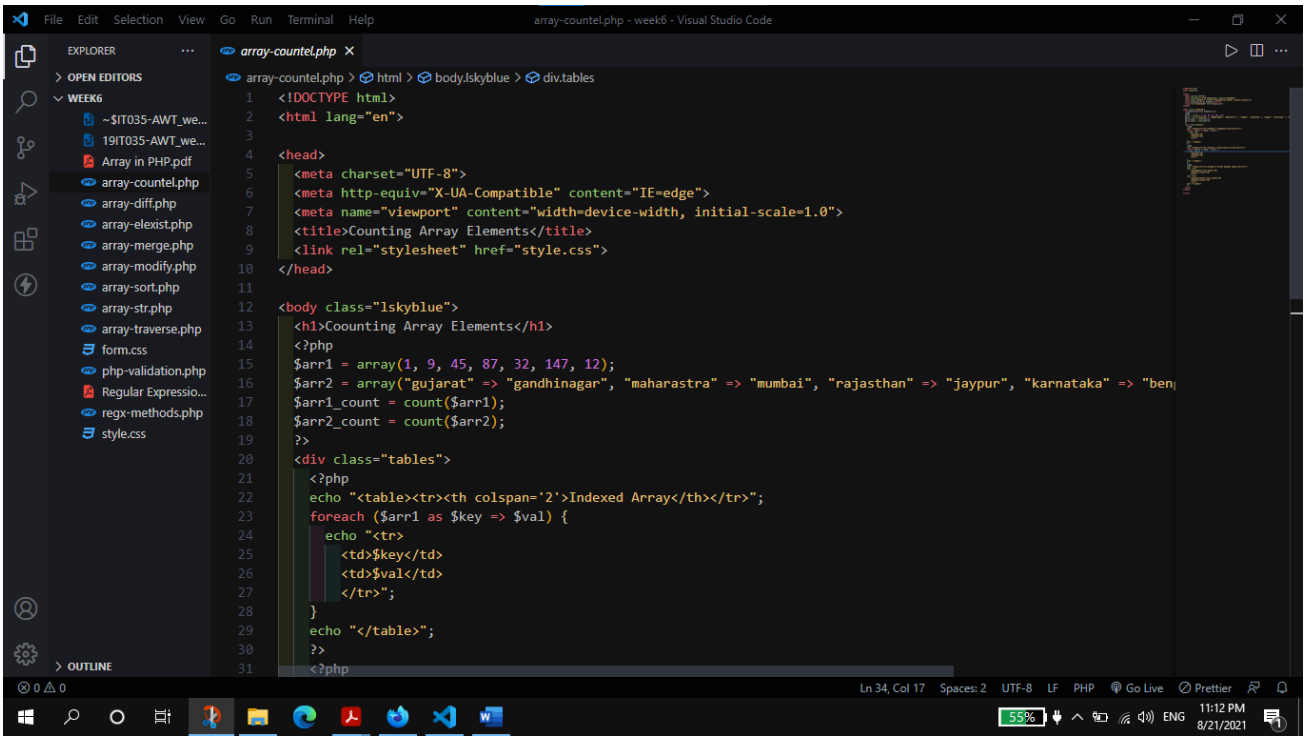

array-merge.php - week6 - Visual Studio Code
array-merge.php
array-merge.php > html > body.lpink > div.tables
<?php
echo "<table><tr><th colspan='2'>Array - 2</th></tr>";
foreach ($arr2 as $key => $val) {
echo "<tr>
<td>$key</td>
<td>$val</td>
</tr>";
}
echo "</table>";
?>
<?php
echo "<table><tr><th colspan='2'>Merged Array</th></tr>";
foreach ($mergedArry as $key => $val) {
echo "<tr>
<td>$key</td>
<td>$val</td>
</tr>";
}
echo "</table>";
?>

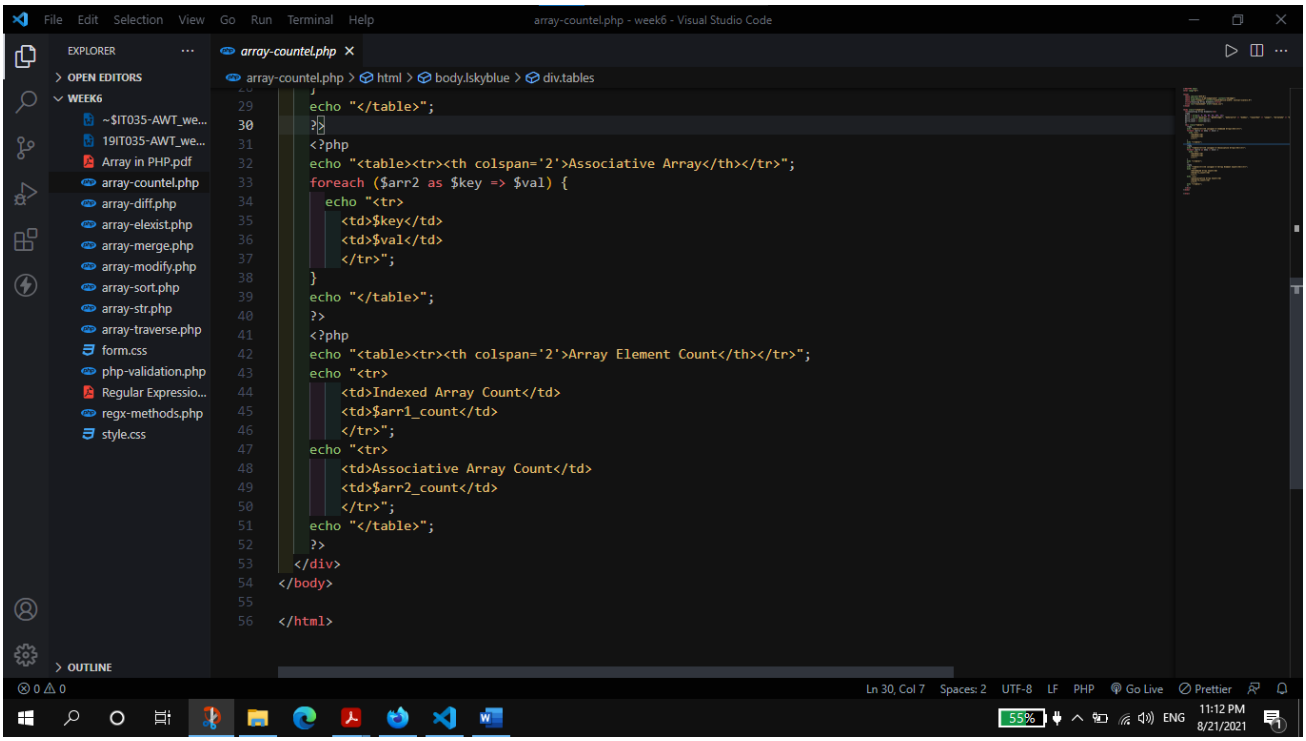
</body>
</html>

Output:

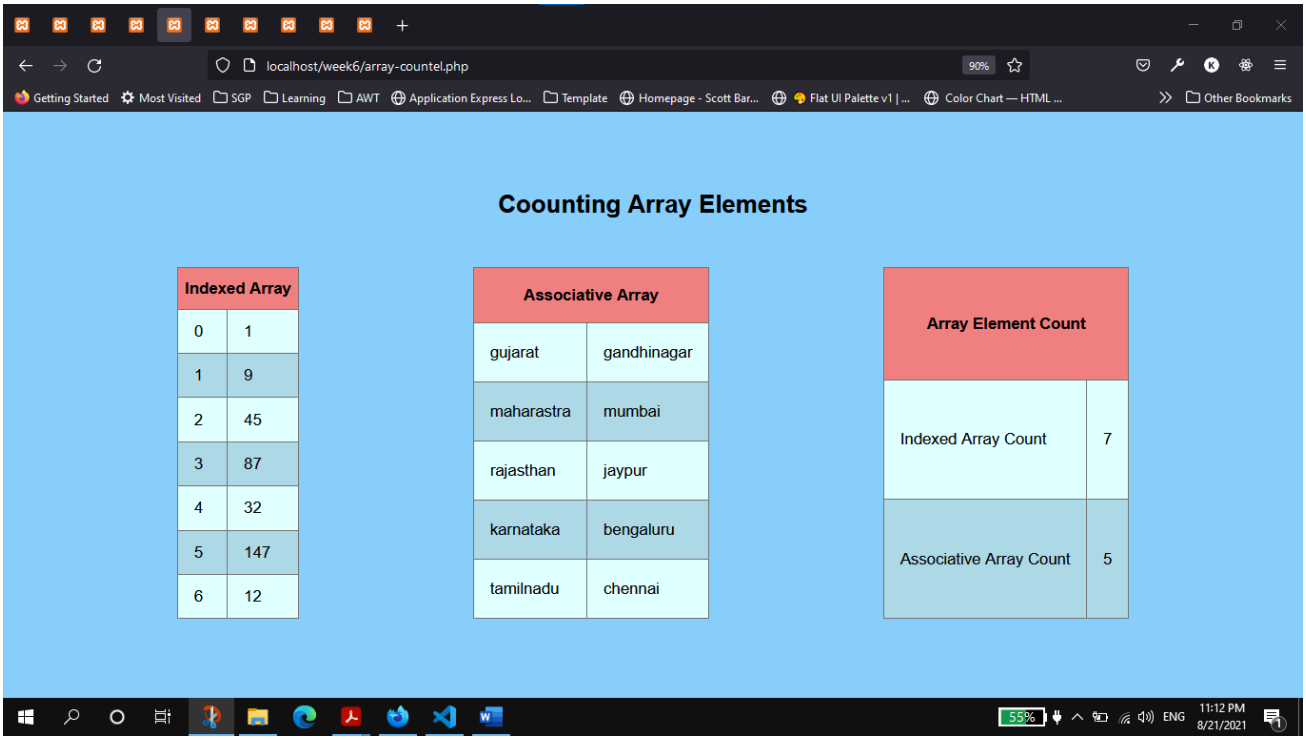

localhost/week6/array-merge.php
Merging Array
Array - 1
0 1
1 9
2 45
3 87
4 32
5 147
6 12
Array - 2
gujarat gandhinagar
maharastra mumbai
rajasthan jaypur
karnataka bengaluru
tamilnadu chennai
Merged Array
0 1
1 9
2 45
3 87
4 32
5 147
6 12
gujarat gandhinagar
maharastra mumbai
rajasthan jaypur
karnataka bengaluru
tamilnadu chennai

5. Counting Elements

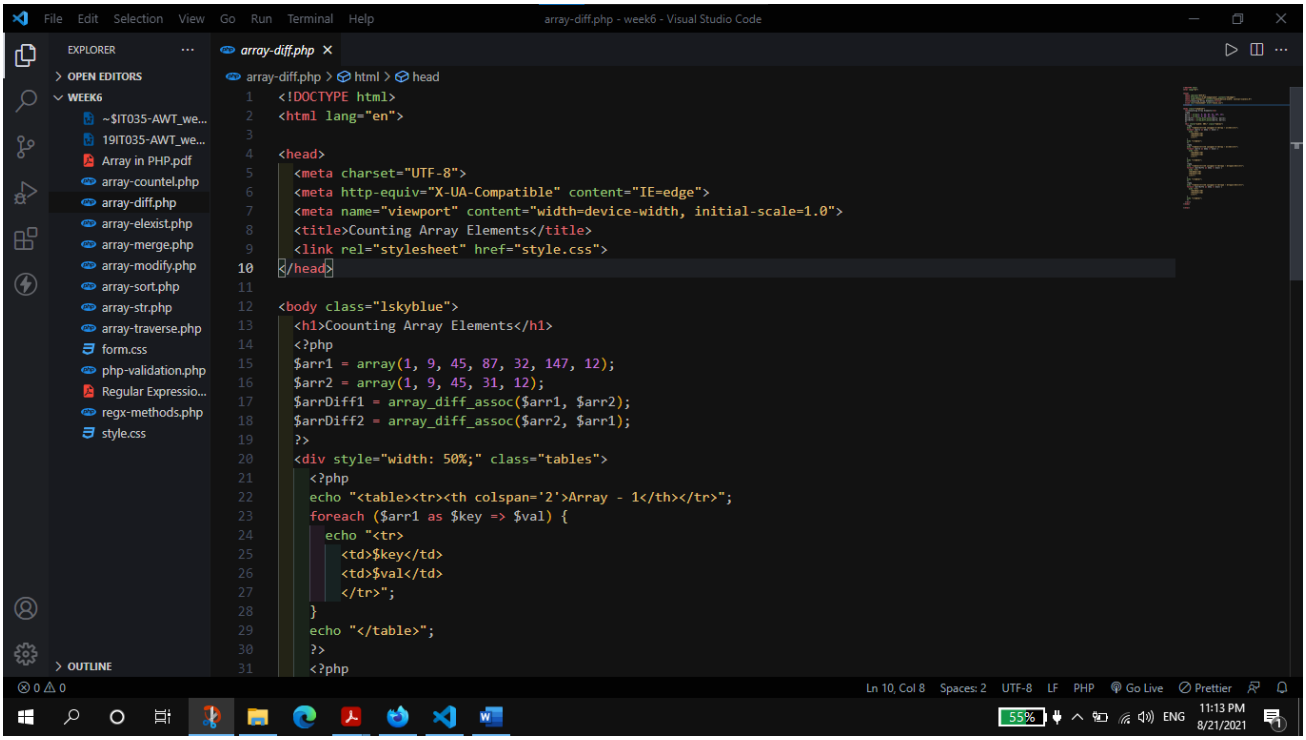


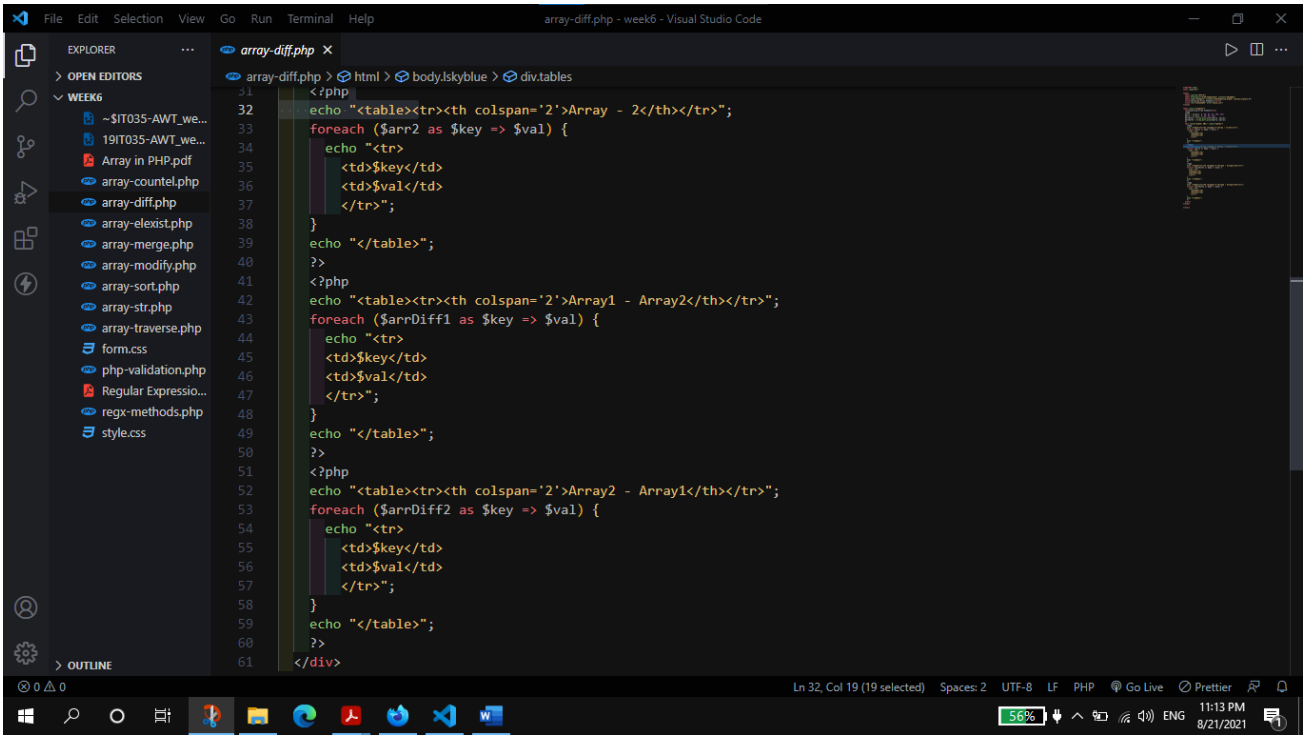


Output:



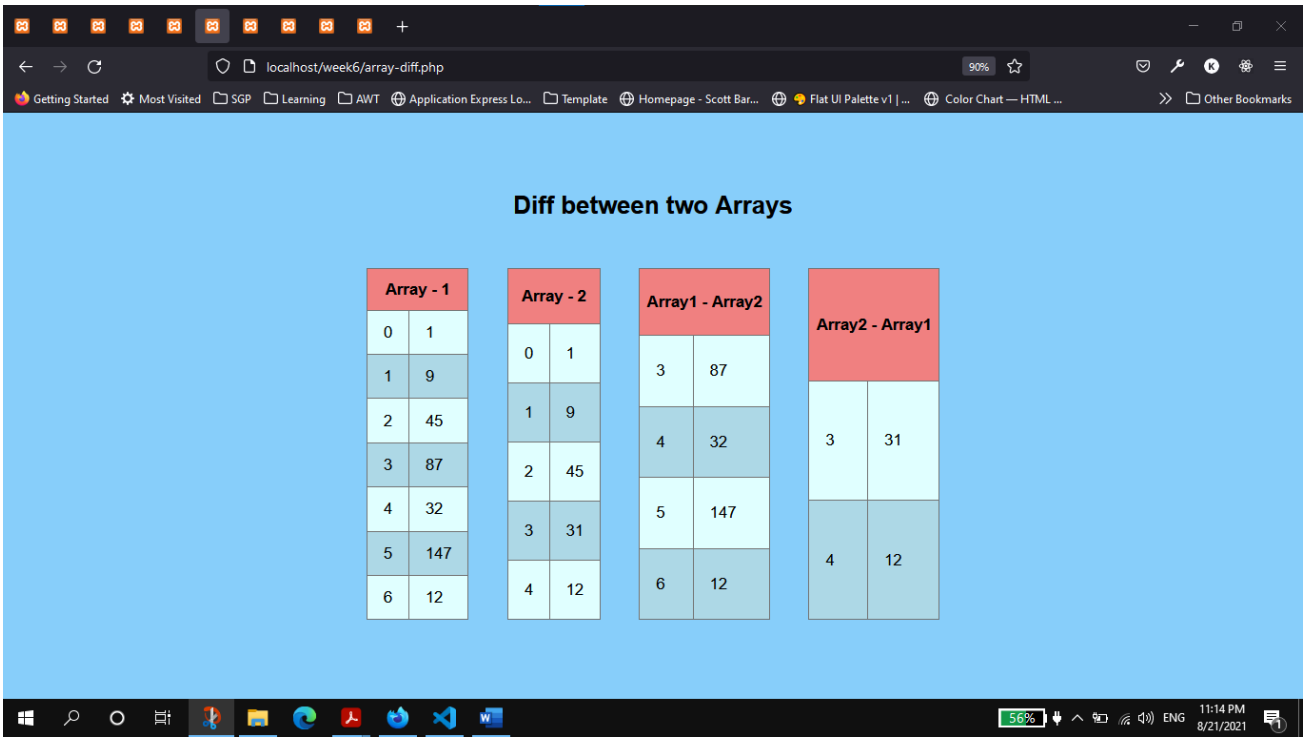
6. Diff between two Arrays




array-diff.php - week6 - Visual Studio Code
EXPLORER
OPEN EDITORS
WEEK6
array-diff.php
array-countel.php
array-elexist.php
array-merge.php
array-modify.php
array-sort.php
array-str.php
array-traverse.php
form.css
php-validation.php
regx-methods.php
style.css
OUTLINE
<?php
echo "<table><tr><th colspan='2'>Array - 2</th></tr>";
foreach ($arr2 as $key => $val) {
echo "<tr>
<td>$key</td>
<td>$val</td>
</tr>";
}
echo "</table>";
?>
<?php
echo "<table><tr><th colspan='2'>Array1 - Array2</th></tr>";
foreach ($arrDiff1 as $key => $val) {
echo "<tr>
<td>$key</td>
<td>$val</td>
</tr>";
}
echo "</table>";
?>
<?php
echo "<table><tr><th colspan='2'>Array2 - Array1</th></tr>";
foreach ($arrDiff2 as $key => $val) {
echo "<tr>
<td>$key</td>
<td>$val</td>
</tr>";
}
echo "</table>";
?>

Ln 32, Col 19 (19 selected) Spaces: 2 UTF-8 LF PHP Go Live Prettier
11:13 PM
8/21/2021

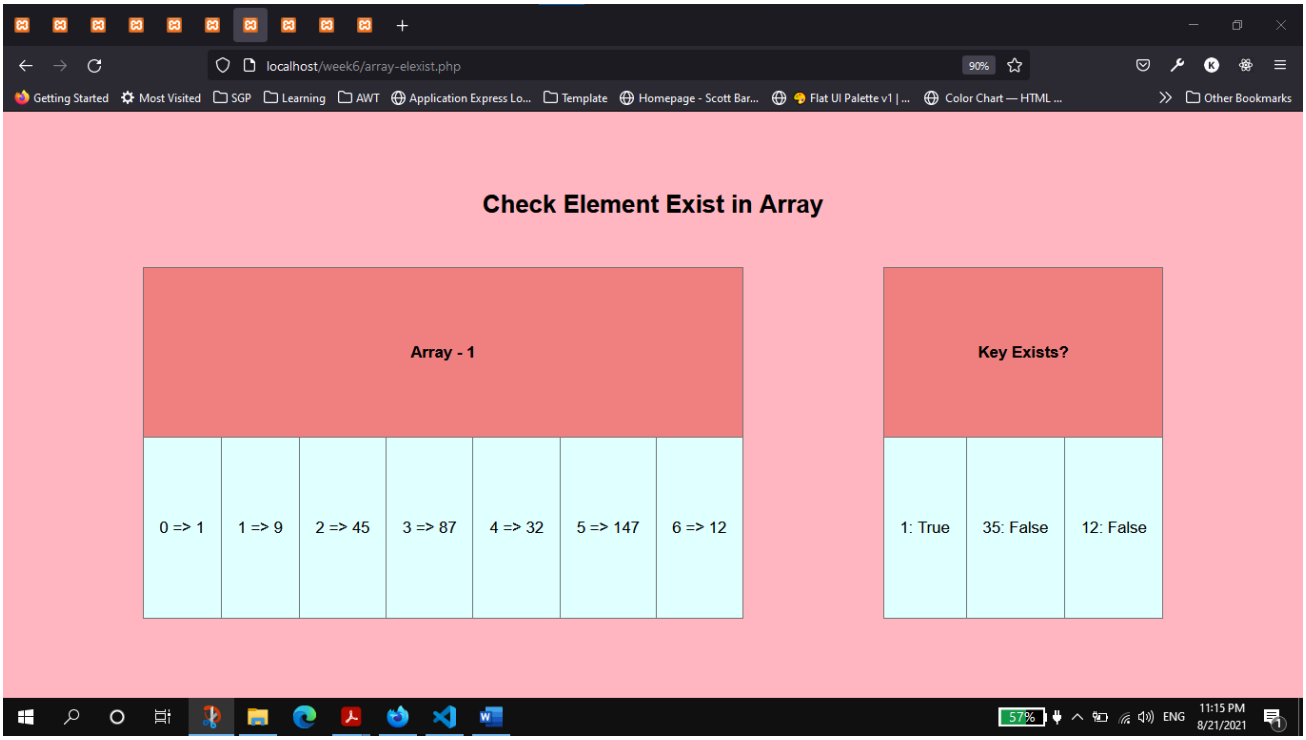
Output:


localhost/week6/array-diff.php
Diff between two Arrays
Array - 1
0 1
1 9
2 45
3 87
4 32
5 147
6 12
Array - 2
0 1
1 9
2 45
3 31
4 12
Array1 - Array2
3 87
4 32
5 147
6 12
Array2 - Array1
3 31
4 12
11:14 PM
8/21/2021

7. Check Element Exist in Array

```php
<body class="lpink">
  <h1>Check Element Exist in Array</h1>
  <?php
  $arr1 = array(1, 9, 45, 87, 32, 147, 12);
  ?>
  <div class="tables">
    <?php
    function keyExist($key, $arr1)
    {
      if (array_key_exists($key, $arr1)) {
        return "$key: True";
      } else {
        return "$key: False";
      }
    }
    echo "<table><tr><th colspan='7'>Array - 1</th></tr><tr>";
    foreach ($arr1 as $key => $val) {
      echo "<td>$key => $val</td>";
    }
    echo "</tr></table>";
    ?>
    <?php
    echo "<table><tr><th colspan='3'>Key Exists?</th></tr><tr>";
    echo "<td>" . keyExist(1, $arr1) . "</td>";
    echo "<td>" . keyExist(35, $arr1) . "</td>";
    echo "<td>" . keyExist(12, $arr1) . "</td>";
    echo "</tr></table>";
    ?>
  </div>
</body>
```

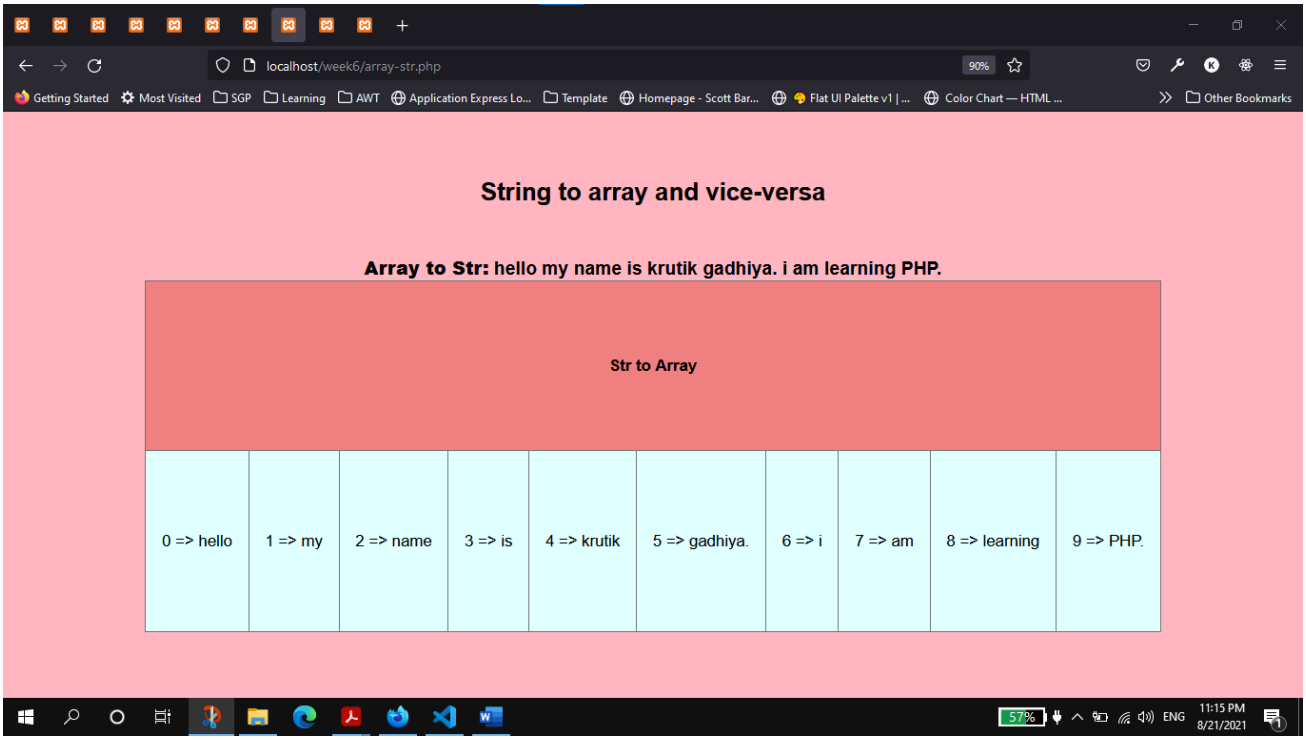
Output:



8. String to array and vice-versa

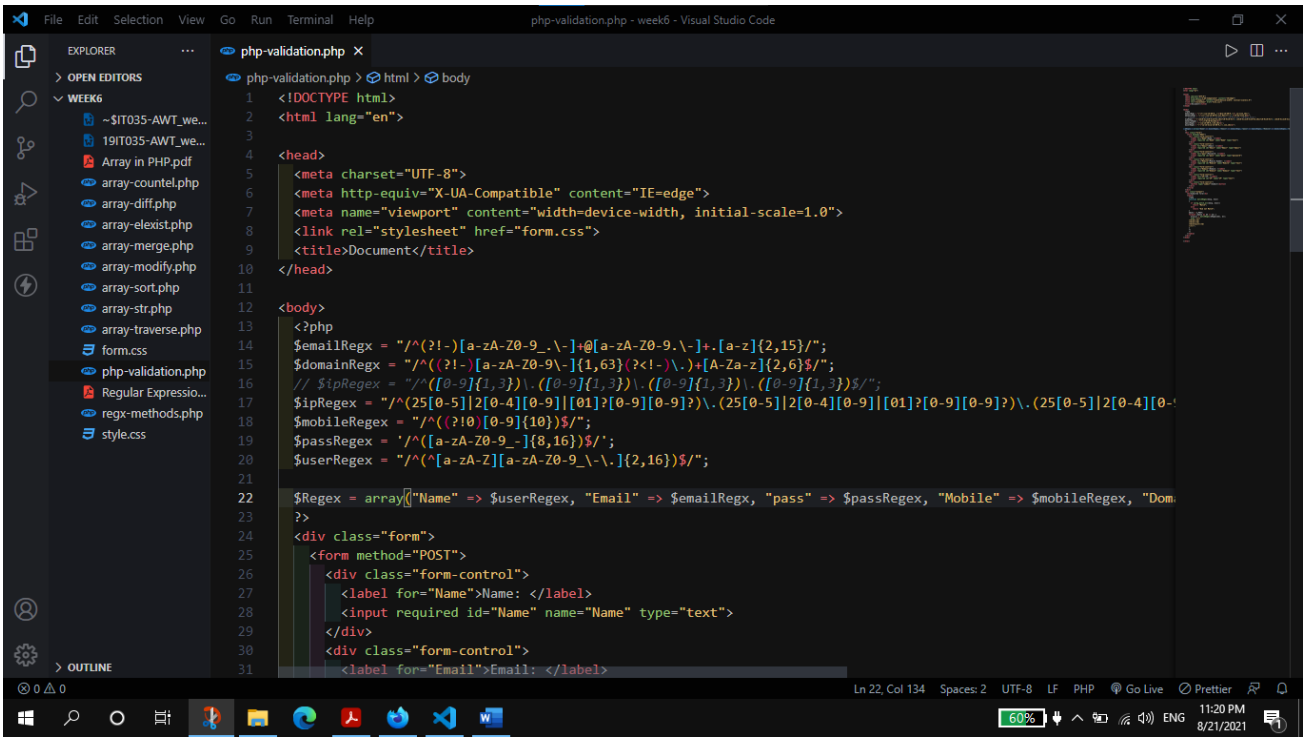
```php
<!DOCTYPE html>
<html lang="en">

<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>String to array and vice-versa</title>
  <link rel="stylesheet" href="style.css">
</head>

<body class="lpink">
  <h1>String to array and vice-versa</h1>
  <?php
  $arry = array("hello", "my", "name", "is", "krutik", "gadhiya.", "i", "am", "learning", "PHP.");
  ?>
  <div style="flex-direction: column;" class="tables">
    <?php
    $arryStr = implode(" ", $arry);
    echo "<h2><b>Array to Str:</b> $arryStr</h2>";
    $strToArry = explode(" ", $arryStr);
    echo "<table><tr><th colspan='10'>Str to Array</th></tr><tr>";
    foreach ($strToArry as $key => $val) {
      echo "<td>$key => $val</td>";
    }
    echo "</tr></table>";
    ?>
  </div>
</body>

</html>
```

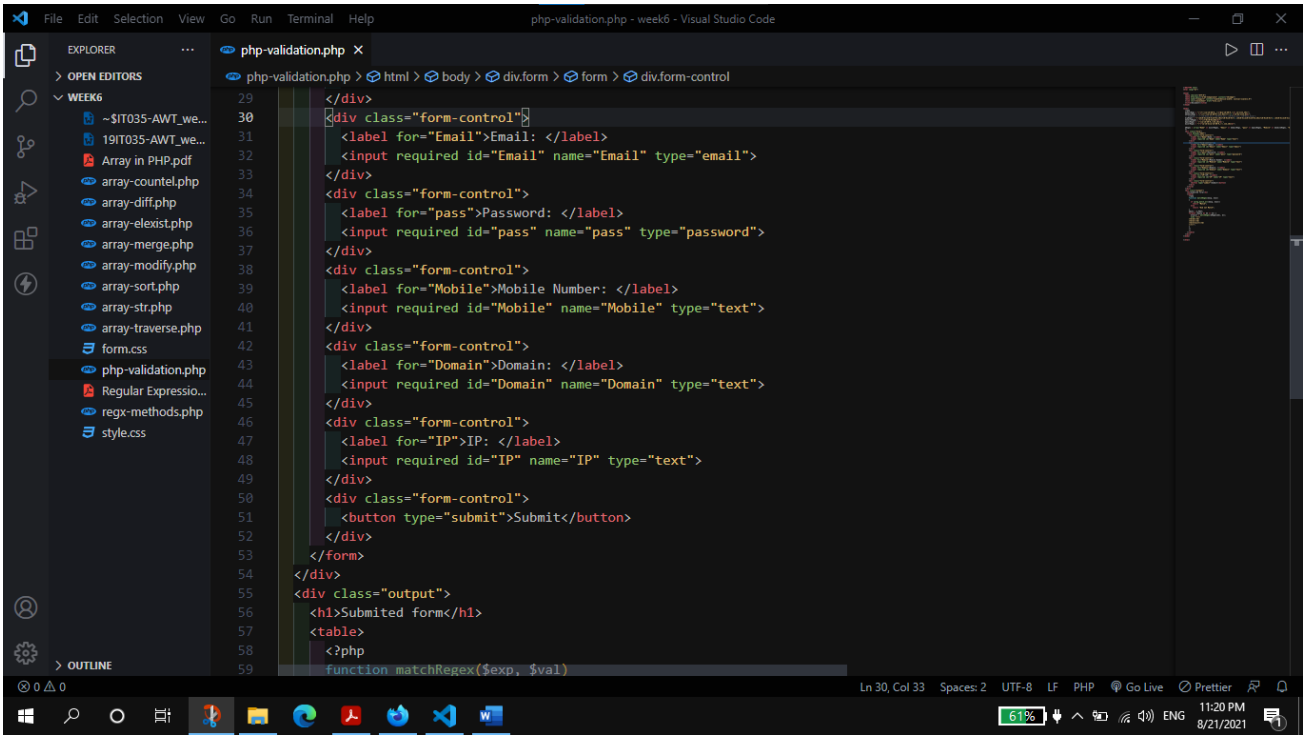
Output:

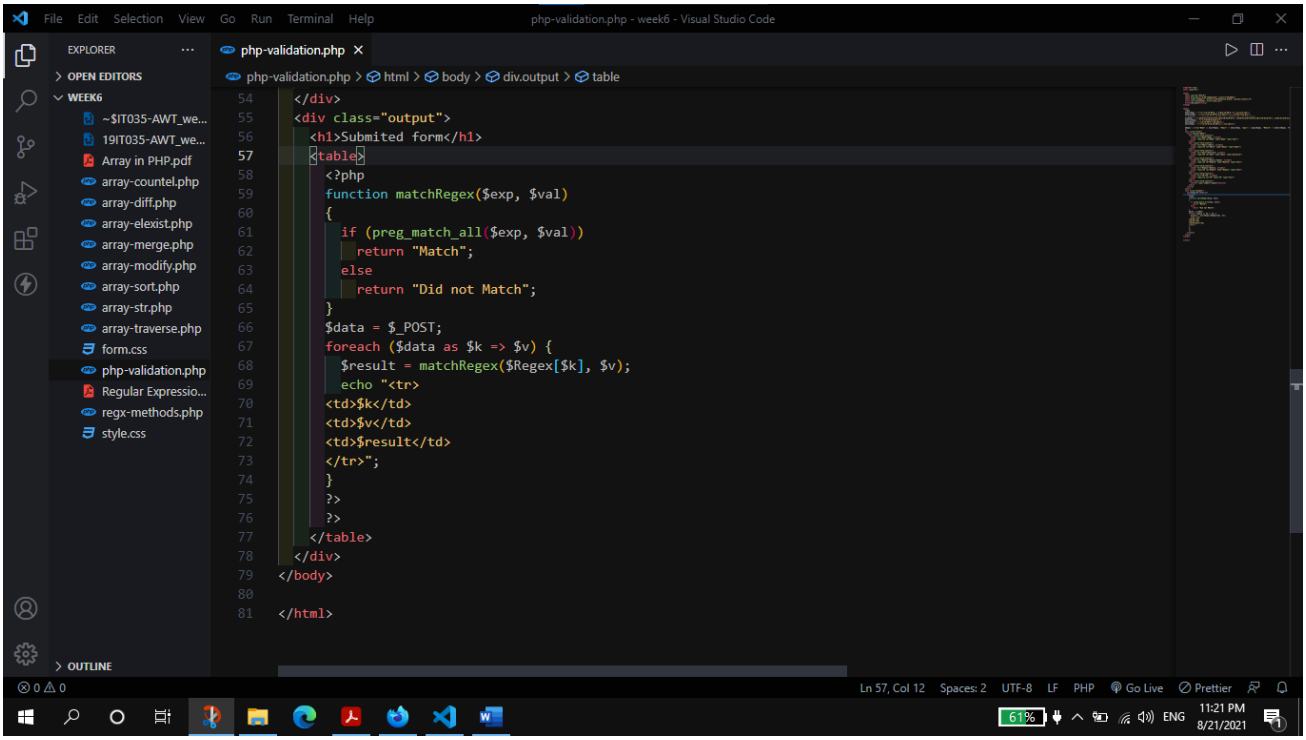


Regular expression in PHP

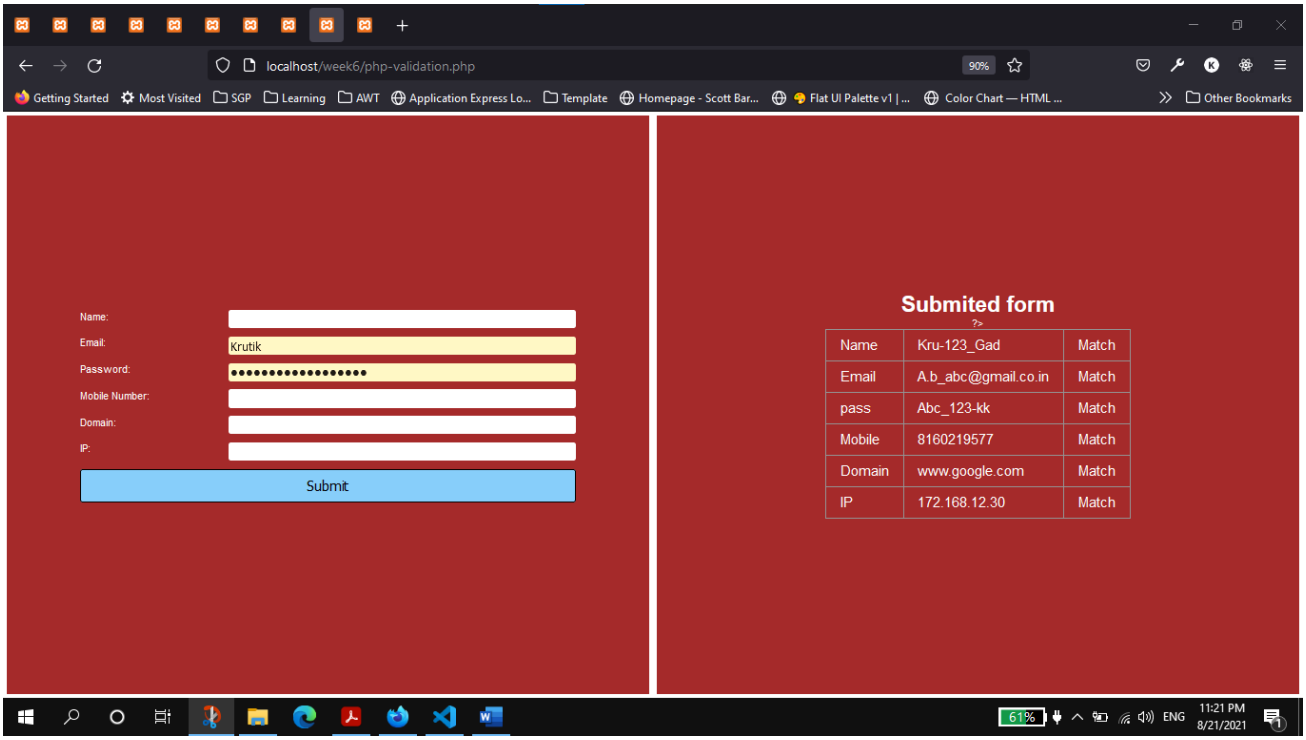
1. **Implement following validations in a PHP form using Regular expression in PHP.**
   - I. **IP Address**
     - A. **172.168.12.30**
   - II. **Domain Name**
     - A. **www.google.com**
   - III. **Email ID**
     - A. **A.b_abc@gmail.co.in**
   - IV. **10 digit Mobile**
   - V. **Password with**
     - A. **8 to 16 letters, numbers, underscores, or hyphens**
   - VI. **UserName with**
     - A. **3 to 16 letters, numbers, underscores, hyphens and dot**
     - B. **Only Start with letter**



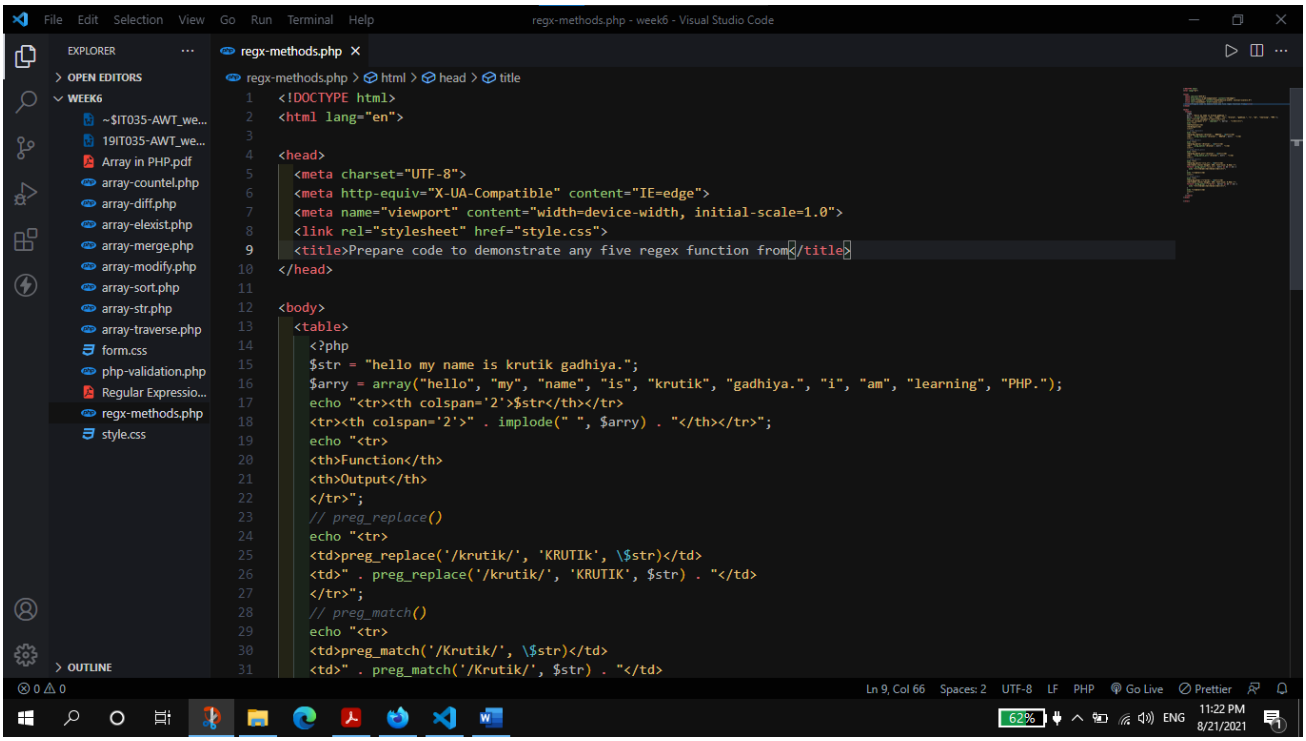

File Edit Selection View Go Run Terminal Help
php-validation.php - week6 - Visual Studio Code
EXPLORER
OPEN EDITORS
WEEK6
~$IT035-AWT_we...
19IT035-AWT_we...
Array in PHP.pdf
array-countel.php
array-diff.php
array-elexist.php
array-merge.php
array-modify.php
array-sort.php
array-str.php
array-traverse.php
form.css
php-validation.php
Regular Expressio...
regx-methods.php
style.css
OUTLINE
php-validation.php
php-validation.php > html > body > div.form > form > div.form-control
29
30
31 <label for="Email">Email: </label>
32 <input required id="Email" name="Email" type="email">
33
34
35 <label for="pass">Password: </label>
36 <input required id="pass" name="pass" type="password">
37
38
39 <label for="Mobile">Mobile Number: </label>
40 <input required id="Mobile" name="Mobile" type="text">
41
42
43 <label for="Domain">Domain: </label>
44 <input required id="Domain" name="Domain" type="text">
45
46
47 <label for="IP">IP: </label>
48 <input required id="IP" name="IP" type="text">
49
50
51 <button type="submit">Submit</button>
52
53 </form>
54
55
56 <h1>Submited form</h1>
57 <table>
58 <?php
59 function matchRegex($exp, $val)
Ln 30, Col 33 Spaces: 2 UTF-8 LF PHP Go Live Prettier
61%
ENG
11:20 PM
8/21/2021

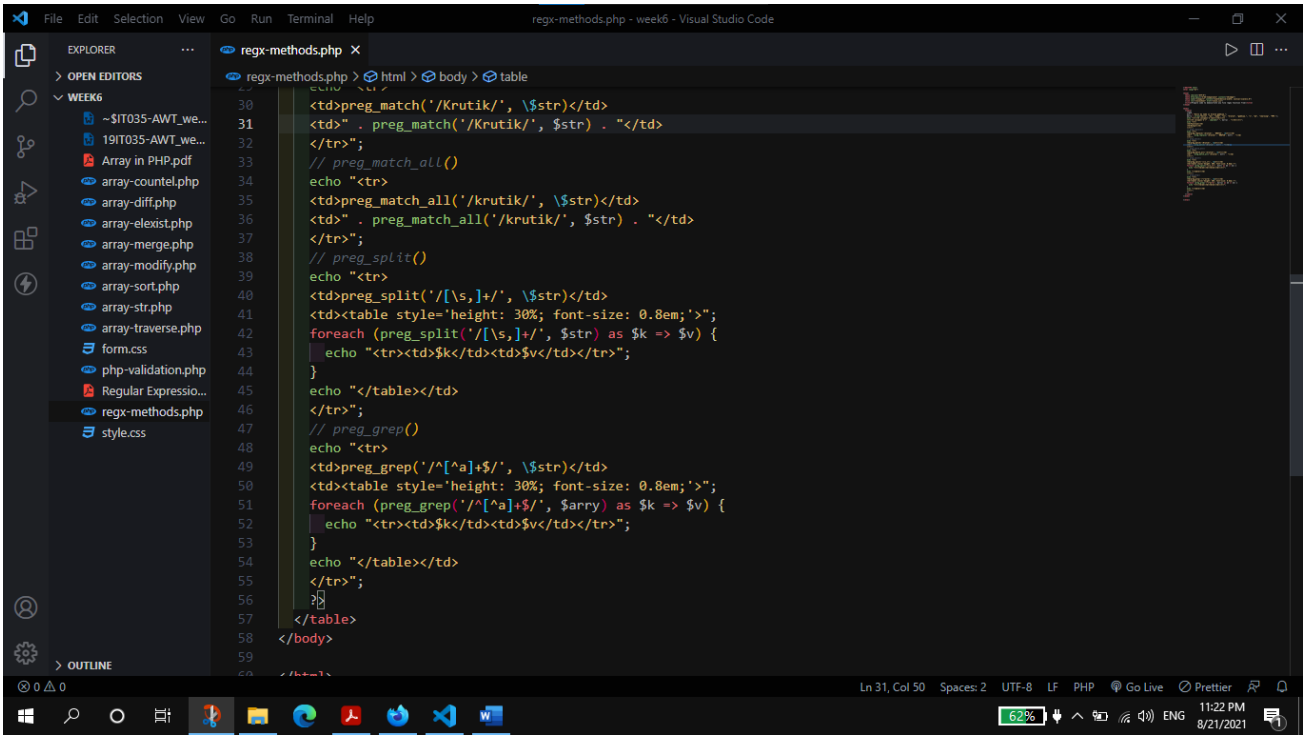

File Edit Selection View Go Run Terminal Help
php-validation.php - week6 - Visual Studio Code
EXPLORER
OPEN EDITORS
WEEK6
~$IT035-AWT_we...
19IT035-AWT_we...
Array in PHP.pdf
array-countel.php
array-diff.php
array-elexist.php
array-merge.php
array-modify.php
array-sort.php
array-str.php
array-traverse.php
form.css
php-validation.php
Regular Expressio...
regx-methods.php
style.css
OUTLINE
php-validation.php
php-validation.php > html > body > div.output > table
54
55
56 <h1>Submited form</h1>
57 <table>
58 <?php
59 function matchRegex($exp, $val)
60 {
61 if (preg_match_all($exp, $val))
62 return "Match";
63 else
64 return "Did not Match";
65 }
66 $data = $_POST;
67 foreach ($data as $k => $v) {
68 $result = matchRegex($Regex[$k], $v);
69 echo "<tr>
70 <td>$k</td>
71 <td>$v</td>
72 <td>$result</td>
73 </tr>";
74 }
75 ?>
76 ?>
77 </table>
78
79 </body>
80
81 </html>
Ln 57, Col 12 Spaces: 2 UTF-8 LF PHP Go Live Prettier
61%
ENG
11:21 PM
8/21/2021

Output:

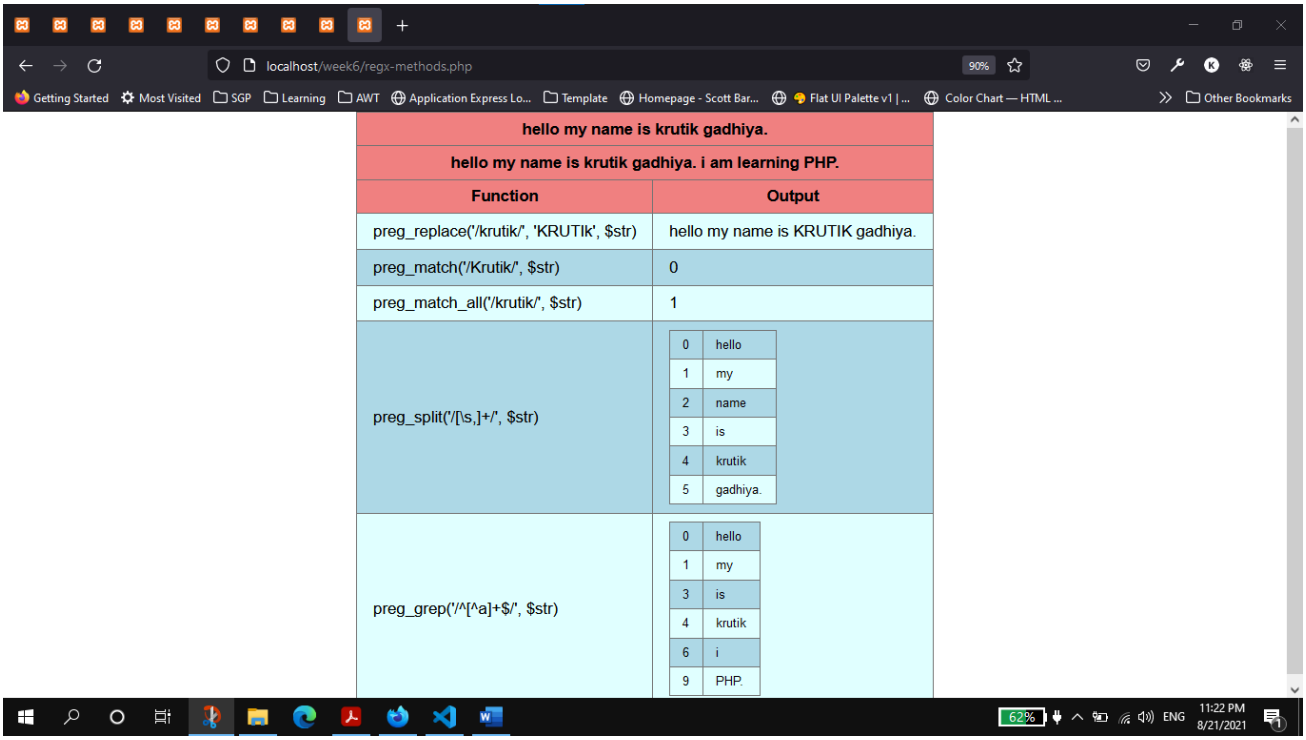


2. Prepare code to demonstrate any five regex function from




regx-methods.php - week6 - Visual Studio Code
EXPLORER
OPEN EDITORS
WEEK6
~$IT035-AWT_we...
19IT035-AWT_we...
Array in PHP.pdf
array-countel.php
array-diff.php
array-elexist.php
array-merge.php
array-modify.php
array-sort.php
array-str.php
array-traverse.php
form.css
php-validation.php
Regular Expressio...
regx-methods.php
style.css
OUTLINE
regx-methods.php > html > body > table
30 <td>preg_match('/Krutik/', \$str)</td>
31 <td>" . preg_match('/Krutik/', $str) . "</td>
32 </tr>";
33 // preg_match_all()
34 echo "<tr>
35 <td>preg_match_all('/krutik/', \$str)</td>
36 <td>" . preg_match_all('/krutik/', $str) . "</td>
37 </tr>";
38 // preg_split()
39 echo "<tr>
40 <td>preg_split('/[\s,]+/', \$str)</td>
41 <td><table style='height: 30%; font-size: 0.8em;'>";
42 foreach (preg_split('/[\s,]+/', $str) as $k => $v) {
43 echo "<tr><td>$k</td><td>$v</td></tr>";
44 }
45 echo "</table></td>
46 </tr>";
47 // preg_grep()
48 echo "<tr>
49 <td>preg_grep('/^[^a]+$/', \$str)</td>
50 <td><table style='height: 30%; font-size: 0.8em;'>";
51 foreach (preg_grep('/^[^a]+$/', $arry) as $k => $v) {
52 echo "<tr><td>$k</td><td>$v</td></tr>";
53 }
54 echo "</table></td>
55 </tr>";
56 ?>
57 </table>
58 </body>
Ln 31, Col 50 Spaces: 2 UTF-8 LF PHP Go Live Prettier
62% ENG 11:22 PM 8/21/2021

Output:


localhost/week6/regx-methods.php
90%
Getting Started Most Visited SGP Learning AWT Application Express Lo... Template Homepage - Scott Bar... Flat UI Palette v1 | ... Color Chart — HTML ... Other Bookmarks
hello my name is krutik gadhiya.
hello my name is krutik gadhiya. i am learning PHP.
Function
Output
preg_replace('/krutik/', 'KRUTIK', $str)
hello my name is KRUTIK gadhiya.
preg_match('/Krutik/', $str)
0
preg_match_all('/krutik/', $str)
1
preg_split('/[\s,]+/', $str)
0 hello
1 my
2 name
3 is
4 krutik
5 gadhiya.
preg_grep('/^[^a]+$/', $str)
0 hello
1 my
3 is
4 krutik
6 i
9 PHP.
62% ENG 11:22 PM 8/21/2021