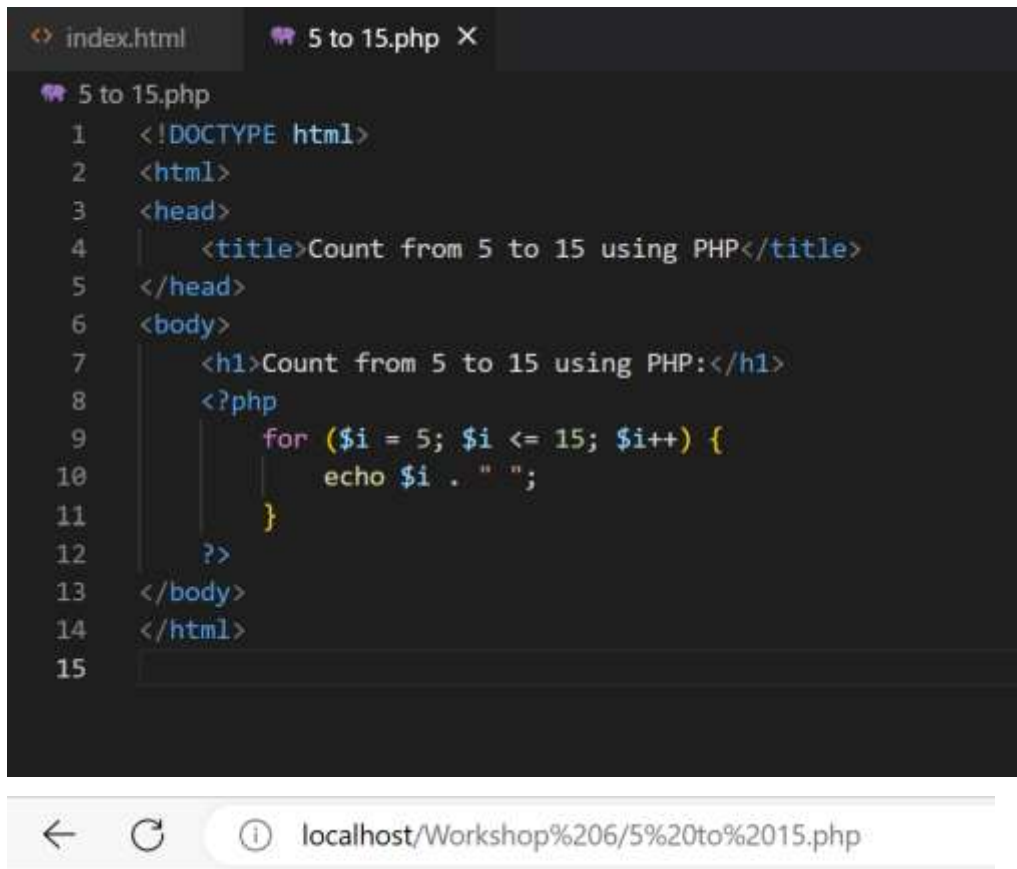


Hands on

Workshop Week 6

Write a Program:

1. To count 5 to 15 using PHP loop.



The image shows a code editor with a file named '5 to 15.php' open. The code is as follows:

```
1 <!DOCTYPE html>
2 <html>
3 <head>
4 |   <title>Count from 5 to 15 using PHP</title>
5 </head>
6 <body>
7 |   <h1>Count from 5 to 15 using PHP:</h1>
8 |   <?php
9 |       for ($i = 5; $i <= 15; $i++) {
10 |           echo $i . " ";
11 |       }
12 |   ?>
13 </body>
14 </html>
15
```

Below the code editor, a browser window is visible with the address bar showing 'localhost/Workshop%206/5%20to%2015.php'. The browser displays the output of the PHP script:

Count from 5 to 15 using PHP:

5 6 7 8 9 10 11 12 13 14 15

Count from 5 to 15 using PHP:

5 6 7 8 9 10 11 12 13 14 15

2. To print "Hello World" using PHP variable.

```
1  <!DOCTYPE html>
2  <html>
3  <head>
4  |   <title>Printing Hello World using PHP variable</title>
5  </head>
6  <body>
7  |   <?php
8  |       $message = "Hello World";
9  |       echo "<h1>$message</h1>";
10 |   ?>
11 </body>
12 </html>
13
```

← ↻ ⓘ localhost/Workshop%206/5%20to%2015.php

Hello World

3. To check student grade based on marks.

```
1  <!DOCTYPE html>
2  <html>
3  <head>
4  |   <title>Check Student Grade using PHP</title>
5  </head>
6  <body>
7  |   <?php
8  |       $marks = 75;
9  |
10 |       if ($marks >= 90) {
11 |           $grade = "A+";
12 |       } elseif ($marks >= 80) {
13 |           $grade = "A";
14 |       } elseif ($marks >= 70) {
15 |           $grade = "B";
16 |       } elseif ($marks >= 60) {
17 |           $grade = "C";
18 |       } elseif ($marks >= 50) {
19 |           $grade = "D";
20 |       } else {
21 |           $grade = "F";
22 |       }
23 |
24 |       echo "<h1>Student Result</h1>";
25 |       echo "<p>Student marks: $marks </p>";
26 |       echo "<p>Student grade: $grade </p>";
27 |   ?>
28 </body>
29 </html>
30
```



Student Result

Student marks: 75

Student grade: B

4. To find factorial of a number using loop in PHP

```
5 to 15.php
1  <!DOCTYPE html>
2  <html>
3  <head>
4  |   <title>Find Factorial of a Number using PHP</title>
5  </head>
6  <body>
7  |   <?php
8  |       $num = 5;
9  |       $factorial = 1;
10 |
11 |       for ($i = 1; $i <= $num; $i++) {
12 |           $factorial *= $i;
13 |       }
14 |
15 |       echo "<h1>Factorial of $num</h1>";
16 |       echo "<p>$num! = $factorial</p>";
17 |   ?>
18 </body>
19 </html>
20
```

← ↻ ⓘ localhost/Workshop%206/5%20to%2015.pt

Factorial of 5

$$5! = 120$$

5. To create a given pattern with * using for loop

```
*  
**  
***  
****  
*****  
*****  
*****  
*****
```

```
5 to 15.php  
1  <!DOCTYPE html>  
2  <html>  
3  <head>  
4      <title>Weather app banaunu partyoo</title>  
5  </head>  
6  <body>  
7      <?php  
8          $rows = 5;  
9  
10         for ($i = 1; $i <= $rows; $i++) {  
11             for ($j = 1; $j <= $i; $j++) {  
12                 echo "* ";  
13             }  
14             echo "<br>";  
15         }  
16     ?>  
17 </body>  
18 </html>  
19
```



localhost/Workshop%206/5%20to%2015.php

```
*  
**  
***  
****  
*****
```

6. \$list = array("Italy"=>"Rome", "Luxembourg"=>"Luxembourg", "Belgium"=> "Brussels",
"Denmark"=>"Copenhagen", "Finland"=>"Helsinki", "France" => "Paris",
"Slovakia"=>"Bratislava", "Slovenia"=>"Ljubljana", "Germany" => "Berlin", "Greece" =>
"Athens", "Ireland"=>"Dublin", "Netherlands"=>"Amsterdam", "Portugal"=>"Lisbon",
"Spain"=>"Madrid", "Sweden"=>"Stockholm", "United Kingdom"=>"London",
"Cyprus"=>"Nicosia", "Lithuania"=>"Vilnius", "Czech Republic"=>"Prague",
"Estonia"=>"Tallin", "Hungary"=>"Budapest", "Latvia"=>"Riga", "Malta"=>"Valetta",
"Austria" => "Vienna", "Poland"=>"Warsaw") ;

Create a PHP script which displays the capital and country name from the above array
\$list. Sort the list by the name of the capital.

```

1  <!DOCTYPE html>
2  <html>
3  <head>
4  |   <title>Country Capitals</title>
5  </head>
6  <body>
7  |   <h1>List of Country Capitals</h1>
8
9  |   <?php
10 |   $list = array(
11 |       "Italy" => "Rome",
12 |       "Luxembourg" => "Luxembourg",
13 |       "Belgium" => "Brussels",
14 |       "Denmark" => "Copenhagen",
15 |       "Finland" => "Helsinki",
16 |       "France" => "Paris",
17 |       "Slovakia" => "Bratislava",
18 |       "Slovenia" => "Ljubljana",
19 |       "Germany" => "Berlin",
20 |       "Greece" => "Athens",
21 |       "Ireland" => "Dublin",
22 |       "Netherlands" => "Amsterdam",
23 |       "Portugal" => "Lisbon",
24 |       "Spain" => "Madrid",
25 |       "Sweden" => "Stockholm",
26 |       "United Kingdom" => "London",
27 |       "Cyprus" => "Nicosia",
28 |       "Lithuania" => "Vilnius",
29 |       "Czech Republic" => "Prague",
30 |       "Estonia" => "Tallin",

```

```

    "Latvia" => "Riga",
    "Malta" => "Valetta",
    "Austria" => "Vienna",
    "Poland" => "Warsaw"
);

asort($list);

foreach ($list as $capital => $country) {
    echo "The capital of $country is $capital.<br>";
}
?>
</body>

</html>

```



List of Country Capitals

The capital of Amsterdam is Netherlands.
The capital of Athens is Greece.
The capital of Berlin is Germany.
The capital of Bratislava is Slovakia.
The capital of Brussels is Belgium.
The capital of Budapest is Hungary.
The capital of Copenhagen is Denmark.
The capital of Dublin is Ireland.
The capital of Helsinki is Finland.
The capital of Lisbon is Portugal.
The capital of Ljubljana is Slovenia.
The capital of London is United Kingdom.
The capital of Luxembourg is Luxembourg.
The capital of Madrid is Spain.
The capital of Nicosia is Cyprus.
The capital of Paris is France.
The capital of Prague is Czech Republic.
The capital of Riga is Latvia.
The capital of Rome is Italy.
The capital of Stockholm is Sweden.
The capital of Tallin is Estonia.
The capital of Valetta is Malta.
The capital of Vienna is Austria.
The capital of Vilnius is Lithuania.
The capital of Warsaw is Poland.

7. Write a PHP function that checks whether a passed string is a palindrome or not?
- A palindrome is word, phrase, or sequence that reads the same backward as forward, e.g., madam or dad or noon.

```
4      <title>Palindrome Checker</title>
5  </head>
6  <body>
7      <h1>Palindrome Checker</h1>
8      <form method="post">
9          <label for="str">Enter a string:</label>
10         <input type="text" name="str" id="str" required>
11         <br><br>
12         <button type="submit" name="check">Check</button>
13     </form>
14     <?php
15     1 reference
16     function isPalindrome($str) {
17         $str = preg_replace("/[^A-Za-z0-9]/", '', $str);
18         $str = strtolower($str);
19         $reverseStr = strrev($str);
20         if ($str == $reverseStr) {
21             return true;
22         } else {
23             return false;
24         }
25     }
26     if (isset($_POST['check'])) {
27         $str = $_POST['str'];
28         if (isPalindrome($str)) {
29             echo "<p>$str is a palindrome.</p>";
30         } else {
31             echo "<p>$str is not a palindrome.</p>";
32         }
33     }
```



localhost/Workshop%206/5%20to%2015.php

Palindrome Checker

Enter a string:

12321 is a palindrome.

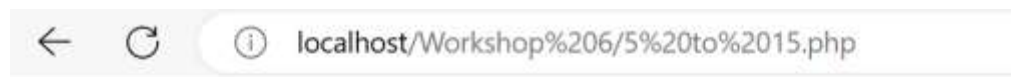
8. To swap two variables

Eg: \$a = 1; \$b =2; Result: \$a = 2; \$b=1;

```
<!DOCTYPE html>
<html>

<head>
|   <title>Swap Variables</title>
</head>

<body>
|   <h1>Swap Variables</h1>
|   <?php
|       $a = 1;
|       $b = 2;
|       echo "<p>Before swapping:</p>";
|       echo "<p>a = $a, b = $b</p>";
|       $temp = $a;
|       $a = $b;
|       $b = $temp;
|       echo "<p>After swapping:</p>";
|       echo "<p>a = $a, b = $b</p>";
|       ?>
|   </body>
</html>
```



Swap Variables

Before swapping:

a = 1, b = 2

After swapping:

a = 2, b = 1

9. To print the multiple of a given number

Example:

```
define('a',5);
```

5 10 15 20 25 30 35 40 45 50 use
 to print in each line.

```
5 to 15.php > ...
1  <!DOCTYPE html>
2  <html>
3  <head>
4  |   <title>Print Multiples</title>
5  </head>
6  <body>
7  |   <h1>Print Multiples</h1>
8  |   <?php
9  |   define('a', 5);
10 |   for ($i = 1; $i <= 10; $i++) {
11 |       $multiple = $i * a;
12 |       echo $multiple;
13 |       if ($i != 10) {
14 |           echo "<br>";
15 |       }
16 |   }
17 |   ?>
18 </body>
19 </html>
20
```

← ↻ ⓘ localhost/Workshop%206/5%20to%2015.php

Print Multiples

5
10
15
20
25
30
35
40
45
50

10. To find whether given number is Armstrong or not.

Example:

\$number = 153

If (\$number == 1*1*1+5*5*5+3*3*3)

Return Armstrong number

Other number: 1, 0, 371, 407 etc.

```
<!DOCTYPE html>
<html>

<head>
    <title>Armstrong Number Checker</title>
</head>

<body>
    <h1>Armstrong Number Checker</h1>
    <form method="post">
        <label for="number">Enter a number:</label>
        <input type="number" name="number" id="number" required>
        <br><br>
        <button type="submit" name="check">Check</button>
    </form>
    <?php

    if (isset($_POST['check'])) {

        $number = $_POST['number'];

        if (isArmstrong($number)) {
            echo "<p>$number is an Armstrong number.</p>";
        } else {
            echo "<p>$number is not an Armstrong number.</p>";
        }
    }
    1 reference
    function isArmstrong($number)
    {
```

```
}
1 reference
function isArmstrong($number)
{
    $digits = str_split($number);
    $sum = 0;
    foreach ($digits as $digit) {
        $sum += pow($digit, count($digits));
    }
    return $sum == $number;
}
?>
</body>

</html>
```

← ↻ ⓘ localhost/Workshop%206/5%20to%2015.php

Armstrong Number Checker

Enter a number:

999 is not an Armstrong number.