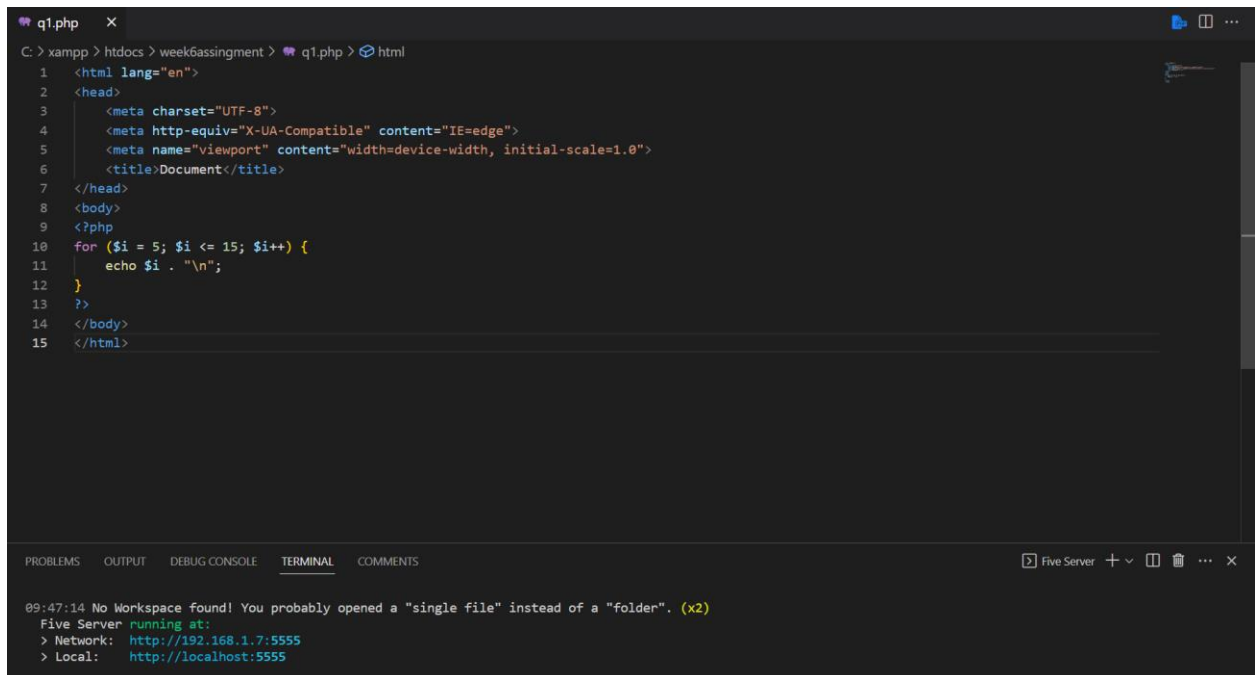


## Hands on

### Workshop Week 6

#### Write a Program:

1. To count 5 to 15 using PHP loop.



The screenshot shows a code editor with a file named `q1.php`. The code is an HTML document with a PHP loop that prints numbers from 5 to 15. The terminal at the bottom shows the output of the script.

```
C: > xampp > htdocs > week6assingment > q1.php > html
1 <html lang="en">
2 <head>
3   <meta charset="UTF-8">
4   <meta http-equiv="X-UA-Compatible" content="IE=edge">
5   <meta name="viewport" content="width=device-width, initial-scale=1.0">
6   <title>Document</title>
7 </head>
8 <body>
9 <?php
10 for ($i = 5; $i <= 15; $i++) {
11     echo $i . "\n";
12 }
13 ?>
14 </body>
15 </html>
```

09:47:14 No Workspace found! You probably opened a "single file" instead of a "folder". (x2)  
Five Server running at:  
> Network: http://192.168.1.7:5555  
> Local: http://localhost:5555

5 6 7 8 9 10 11 12 13 14 15

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

```
q1.php q2.php X
C: > xampp > htdocs > week6assingment > q2.php > html > body
1 <html lang="en">
2 <head>
3   <meta charset="UTF-8">
4   <meta http-equiv="X-UA-Compatible" content="IE=edge">
5   <meta name="viewport" content="width=device-width, initial-scale=1.0">
6   <title>Document</title>
7 </head>
8 <body>
9
10   <?php
11     $greeting = "Hello World";
12     echo $greeting;
13   ?>
14 </body>
15 </html>
```

---

Hello World

3. To check student grade based on marks.

```
q1.php q2.php q3.php X
C: > xampp > htdocs > week6assingment > q3.php > html > body
1 <html lang="en">
2 <head>
3   <meta charset="UTF-8">
4   <meta http-equiv="X-UA-Compatible" content="IE=edge">
5   <meta name="viewport" content="width=device-width, initial-scale=1.0">
6   <title>Document</title>
7 </head>
8 <body>
9   <?php
10     $marks = 85;
11
12     if ($marks >= 100) {
13       echo "Grade: A+";
14     } elseif ($marks >= 90) {
15       echo "Grade: A";
16     } elseif ($marks >= 80) {
17       echo "Grade: B";
18     } elseif ($marks >= 70) {
19       echo "Grade: C";
20     } elseif ($marks >= 60) {
21       echo "Grade: D";
22     } else {
23       echo "Grade: F";
24     }
25   ?>
26
27 </body>
28 </html>
```

Grade: B

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

```
q1.php q2.php q3.php q4.php X
C: > xampp > htdocs > week6assingment > q4.php > html > body
1  <html lang="en">
2  <head>
3      <meta charset="UTF-8">
4      <meta http-equiv="X-UA-Compatible" content="IE=edge">
5      <meta name="viewport" content="width=device-width, initial-scale=1.0">
6      <title>Document</title>
7  </head>
8  <body>
9  <?php
10 $num = 69;
11 $factorial = 2;
12
13 for ($i = $num; $i > 0; $i--) {
14     $factorial *= $i;
15 }
16
17 echo "The factorial of $num is $factorial";
18 ?>
19
20 </body>
21 </html>
```

The factorial of 69 is 3.4224490485628E+98

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

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

```
q1.php q2.php q3.php q4.php q5.php X
C: > xampp > htdocs > week6assingment > q5.php > html > body
1  <html lang="en">
2  <head>
3      <meta charset="UTF-8">
4      <meta http-equiv="X-UA-Compatible" content="IE=edge">
5      <meta name="viewport" content="width=device-width, initial-scale=1.0">
6      <title>Document</title>
7  </head>
8  <body>
9  <?php
10 for ($i = 1; $i <= 8; $i++) {
11     for ($j = 1; $j <= $i; $j++) {
12         echo "*";
13     }
14     echo "<br>";
15 }
16 ?>
17 </body>
18 </html>
```

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

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.

q1.php q2.php q3.php q4.php q5.php q6.php X

C: > xampp > htdocs > week6assingment > q6.php > html > body

```
1 <html lang="en">
2 <head>
3     <meta charset="UTF-8">
4     <meta http-equiv="X-UA-Compatible" content="IE=edge">
5     <meta name="viewport" content="width=device-width, initial-scale=1.0">
6     <title>Document</title>
7 </head>
8 <body>
9 <?php
10 < $list = array(
11     "Italy" => "Rome",
12     "Luxembourg" => "Luxembourg",
13     "Belgium" => "Brussels",
14     "Denmark" => "Copenhagen",
15     "Finland" => "Helsinki",
16     "France" => "Paris",
17     "Slovakia" => "Bratislava",
18     "Slovenia" => "Ljubljana",
19     "Germany" => "Berlin",
20     "Greece" => "Athens",
21     "Ireland" => "Dublin",
22     "Netherlands" => "Amsterdam",
23     "Portugal" => "Lisbon",
24     "Spain" => "Madrid",
25     "Sweden" => "Stockholm",
26     "United Kingdom" => "London",
27     "Cyprus" => "Nicosia",
28     "Lithuania" => "Vilnius",
29     "Czech Republic" => "Prague",
30     "Estonia" => "Tallin",
31     "Hungary" => "Budapest",
32     "Latvia" => "Riga",
33     "Malta" => "Valetta",
34     "Austria" => "Vienna",
35     "Poland" => "Warsaw"
36 );
37 asort($list);
38 foreach ($list as $capital => $country) {
39     echo "Capital: $capital, Country: $country<br>";
40 }
41 ?>
42 </body>
43 </html>
```

---

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

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

```
q1.php q2.php q3.php q4.php q5.php q6.php q7.php X
C: > xampp > htdocs > week6assingment > q7.php > html > body
1  <html lang="en">
2  <head>
3      <meta charset="UTF-8">
4      <meta http-equiv="X-UA-Compatible" content="IE=edge">
5      <meta name="viewport" content="width=device-width, initial-scale=1.0">
6      <title>Document</title>
7  </head>
8  <body>
9      <?php
10     function isPalindrome($str) {
11         $str = strtolower($str);
12         $str = preg_replace('/[^a-z0-9]/', '', $str);
13         $rev = strrev($str);
14         return $str === $rev;
15     }
16
17
18
19     echo isPalindrome("racecar");
20     ?>
21 </body>
22 </html>
```

1

## 8. To swap two variables

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

```
q1.php q2.php q3.php q4.php q5.php q6.php q7.php q8.php X
C: > xampp > htdocs > week6assingment > q8.php > html > body
1  <html lang="en">
2  <head>
3      <meta charset="UTF-8">
4      <meta http-equiv="X-UA-Compatible" content="IE=edge">
5      <meta name="viewport" content="width=device-width, initial-scale=1.0">
6      <title>Document</title>
7  </head>
8  <body>
9      <?php
10     $a = 1;
11     $b = 2;
12
13     $temp = $a;
14     $a = $b;
15     $b = $temp;
16
17     echo "a = $a, b = $b";
18
19     ?>
20 </body>
21 </html>
```

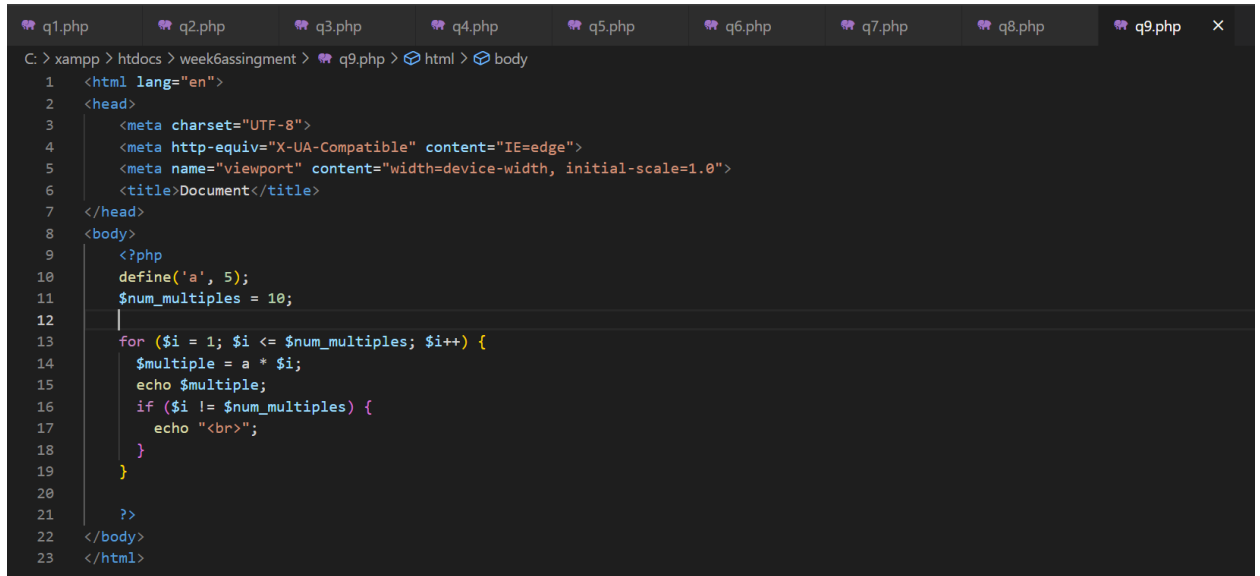
a = 2, b = 1

## 9. To print the multiple of a given number

Example:

define('a',5);

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

A screenshot of a code editor with a dark theme. The top bar shows several tabs labeled q1.php through q9.php. The active tab is q9.php. The editor's content area shows the following PHP code:

```
1 <html lang="en">
2 <head>
3     <meta charset="UTF-8">
4     <meta http-equiv="X-UA-Compatible" content="IE=edge">
5     <meta name="viewport" content="width=device-width, initial-scale=1.0">
6     <title>Document</title>
7 </head>
8 <body>
9     <?php
10     define('a', 5);
11     $num_multiples = 10;
12     |
13     for ($i = 1; $i <= $num_multiples; $i++) {
14         $multiple = a * $i;
15         echo $multiple;
16         if ($i != $num_multiples) {
17             echo "<br>";
18         }
19     }
20
21     ?>
22 </body>
23 </html>
```

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



```
hp q2.php q3.php q4.php q5.php q6.php q7.php q8.php q9.php q10.php x
C: > xampp > htdocs > week6assingment > q10.php > html > body
1 <html lang="en">
2 <head>
3   <meta charset="UTF-8">
4   <meta http-equiv="X-UA-Compatible" content="IE=edge">
5   <meta name="viewport" content="width=device-width, initial-scale=1.0">
6   <title>Document</title>
7 </head>
8 <body>
9   <?php
10     $number = 153;
11     $sum = 0;
12
13     $temp = $number;
14     while ($temp > 0) {
15       $digit = $temp % 10;
16       $sum += pow($digit, 3);
17       $temp = floor($temp / 10);
18     }
19
20     if ($sum == $number) {
21       echo "$number is an Armstrong number.";
22     } else {
23       echo "$number is not an Armstrong number.";
24     }
25
26   ?>
27 </body>
28 </html>
```

---

153 is an Armstrong number.