```php
<?php

$number = 6;
$fact   = 1;
for($k=1;$k<=$number;++$k)
    {
        $fact =  $fact*$k;
    }
echo "Factorial of $number is ".$fact;


?>
```
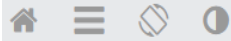
Factorial of 6 is 720

```php
//Write a program in PHP to print Fibonacci series up to a number
<?php
$num = 0;
$n1 = 0;
$n2 = 1;
echo "<h2>Fibonacci series for first 10 numbers: </h2>"."\n".$n1.' '.$n2.' ';
while ($num < 8 )
{
    $n3 = $n2 + $n1;
    echo $n3.' ';
    $n1 = $n2;
    $n2 = $n3;
    $num = $num + 1;
}

?>
```

Fibonacci series for first 10 numbers:
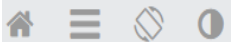
0 1 1 2 3 5 8 13 21 34

//Write a program to find whether a number is Armstrong or not

```php
<?php
$num=153;
$total=0;
$x=$num;
while($x!=0)
{
$rem=$x%10;
$total=$total+$rem*$rem*$rem;
$x=$x/10;
}
if($num==$total)
{
echo "Yes it is an Armstrong number";
}
else
{
echo "No it is not an armstrong number";
}
?>
```

Yes it is an Armstrong number

//Write a program to print Reverse of any number

```php
<?php

function reversDigits($num) {
    $rev_num = 0;
    while($num > 1) {
        $rev_num = $rev_num * 10 + $num % 10;
        $num = (int)$num / 10;
    }
    return $rev_num;
}

$num = 456213;
echo "Original number is :".$num."<br>";
echo "Reverse of no. is :", reversDigits($num);
?>
```

Original number is :456213
Reverse of no. is :312654

Write a program to print the number in descending order.
For eg: let the number is 5 then the expected result will be
5
4
3
2
1

Program:

```php
<?php
$numbers=array("2","4","5","1","3");
rsort($numbers);
foreach( $numbers as $n )
{
  echo "$n<br />";
}
?>
```
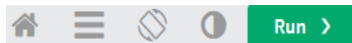
5
4
3
2
1

Run ›

Result Size: 744 x 551

```php
//To check whether a number is Prime or not

<?php
function check_prime($num)
{
   if ($num == 1)
   return 0;
   for ($i = 2; $i <= $num/2; $i++)
   {
      if ($num % $i == 0)
      return 0;
   }
   return 1;
}
$num = 2;
$flag_val = check_prime($num);
if ($flag_val == 1)
   echo "It is a prime number";
else
   echo "It is a non-prime number"
?>
```

It is a prime number

```php
//Write a program to find HCF of two numbers.

<?php
$x = 50;
$y = 100;

if ($x > $y) {
  $temp = $x;
  $x = $y;
  $y = $temp;
}

for($i = 1; $i < ($x+1); $i++) {
  if ($x%$i == 0 and $y%$i == 0)
    $hcf = $i;
}

echo "HCF of $x and $y is: $hcf";
?>
```
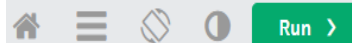
HCF of 50 and 100 is: 50

```php
//Program to find whether a year is LEAP year or not.

<?php
    function year_check($my_year){
        if ($my_year % 400 == 0)
          print("It is a leap year");
        else if ($my_year % 100 == 0)
          print("It is not a leap year");
        else if ($my_year % 4 == 0)
          print("It is a leap year");
        else
          print("It is not a leap year");
    }
    $my_year = 2076;
    year_check($my_year);
?>
```

It is a leap year

```
//Program to print below format.

<?php
for($i=0;$i<=7;$i++){
for($j=7-$i;$j>=1;$j--){
echo $j;
}
echo "<br>";
}
?>
```

```
7654321
654321
54321
4321
321
21
1
```

```
/*
Program to print below format
*
* *
* * *
* * * *
* * * * *
* * * * * *
* * * * * * *
* * * * * * * *
*/


//Program:
<?php
for ($i=1; $i<=8; $i++)
{
for($j=1;$j<=$i;$j++)
{
echo " * ";
}
echo "<br/>";
}
?>
```

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

```
/*
Write a program to print below format
1
1 2
1 2 3
1 2 3 4
1 2 3 4 5
1 2 3 4 5 6
1 2 3 4 5 6 7
1 2 3 4 5 6 7 8
*/

//Program:
<?php
for ($i=1; $i<=8; $i++)
{
for($j=1;$j<=$i;$j++)
{
echo $j." ";
}
echo "<br/>";
}
?>
```

Output:
```
1
12
123
1234
12345
123456
1234567
12345678
```

Run Script ▶ | Main.php | Input

```php
1  //Write a program to find factor of any number
2
3  <?php
4  function printDivisors($n) {
5    echo "Divisors of $n are: ";
6    for($i = 1; $i <= $n; $i++) {
7      if($n%$i == 0)
8        echo "$i ";
9    }
10   echo "\n";
11 }
12
13 printDivisors(10);
14 printDivisors(50);
15 printDivisors(100);
16 ?>
17
```

Output

```
$php Main.php


Divisors of 10 are: 1 2 5 10
Divisors of 50 are: 1 2 5 10 25 50
Divisors of 100 are: 1 2 4 5 10 20 25 50 100
```

Run ›

```php
//Write a program to find table of a number.

<?php
$num = 9;
for($i=1; $i<=10; $i++)
{
$product = $i*$num;
echo "$num * $i = $product" ;
echo '<br>';
}
?>
```

9 * 1 = 9
9 * 2 = 18
9 * 3 = 27
9 * 4 = 36
9 * 5 = 45
9 * 6 = 54
9 * 7 = 63
9 * 8 = 72
9 * 9 = 81
9 * 10 = 90

Run ›

```php
//Write a Program for finding the biggest number in an array without using any array functions

<?php
$numbers = array(0,10,80,67,60,89,91,56,45,30,95,83);
$length = count($numbers);
$max = $numbers[0];
for($i=1;$i<$length;$i++)
{
if($numbers[$i]>$max)
{
$max = $numbers[$i];
}
}
Echo "the biggest number in the array is ".$max;
?>
```

the biggest number in the array is 95

```php
//Write a Program to swap two numbers in PHP.

<?php
$a = 45;
$b = 78;
// Swapping Logic
$third = $a;
$a = $b;
$b = $third;
echo "After swapping:<br><br>";
echo "a =".$a."  b=".$b;
?>
```

After swapping:

a =78 b=45

```php
//Write a Program for Bubble sorting in PHP.

<?php
function bubbleSort(&$arr)
{
    $n = sizeof($arr);
    for($i = 0; $i < $n; $i++)
    {
        for ($j = 0; $j < $n - $i - 1; $j++)
        {
            if ($arr[$j] > $arr[$j+1])
            {
                $t = $arr[$j];
                $arr[$j] = $arr[$j+1];
                $arr[$j+1] = $t;
            }
        }
    }
}
$arr = array(64, 34, 25, 12, 22, 11, 90);
$len = sizeof($arr);
bubbleSort($arr);
echo "Sorted array : \n";
for ($i = 0; $i < $len; $i++)
    echo $arr[$i]." ";
?>
```

Sorted array : 11 12 22 25 34 64 90

```
//. Write a Program for finding the smallest number in an array.

<?php
    function get_min_value($my_array){
        $n = count($my_array);
        $min_val = $my_array[0];
        for ($i = 1; $i < $n; $i++)
            if ($min_val > $my_array[$i])
                $min_val = $my_array[$i];
                return $min_val;
    }
    $my_array = array(56, 78, 91, 44, 0, 11);
    print_r("The lowest value of the array is ");
    echo(get_min_value($my_array));
    echo("\n");
?>
```

The lowest value of the array is 0

```
/*Write a program to print the below format :
1 5 9
2 6 10
3 7 11
4 8 12
*/


//Program:
<?php


for($i=1;$i<=4;$i++)
{
 $i1=$i+4;
 $i2=$i+8;
echo $i." ".$i1." ".$i2;
echo "<br />";
}


?>
```

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

```
/*
Write a program for this Pattern:
*****
* *
* *
* *
*****
*/

//Program:
<?php

for($i = 1; $i<=5; $i++)
{
        for($j = 1; $j<=5; $j++)
        {
           if($i == 1 || $i == 5)
           {
              echo "*";
           }
           else if($j == 1 || $j == 5){
              echo "*";
           }
           else {
              echo "  ";
           }
        }
        echo "<br/>";
    }

?>
```

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

```
/*
How to print this Pattern:
*0
***00
******000
**********0000
***************00000
*/

//Program:
<?php
$count = 5;

for ($i=1; $i <= $count; $i++) {

  $stars = 0;
  for($j=1; $j <= $i; $j++) {
    $stars = $stars + $j;
  }

  echo str_repeat('*', $stars).str_repeat('0', $i)."\n"."<br>";
}
?>
```

```
*0
***00
******000
**********0000
***************00000
```

```php
//How to write a Floyd's Triangle?

<?php

$a = 1;
for($i = 1; $i<=5; $i++)
{
    for($j = 1; $j<=$i; $j++)
    {
        echo $a;
        $a++;
    }
    echo '<br/>';
}

?>
```

```
1
23
456
78910
1112131415
```

```php
//Write a program to concatenate two strings character by character. e.g : JOHN + SMITH
= JSOMHINTH

<?php

 $str= "JOHN";
$str2 = "SMITH";
$a = str_split($str);
$a2 = str_split($str2);

static $j = 0;
  for($i = 0; $i<= 9; $i++){
    if($i%2 !== 0 && $i >0) {
    array_splice($a,$i,0,$a2[$j]);
    $j++;
    }
  }

 echo $str_new = implode('',$a);
 echo '<br/>';
?>
```

```
JSOMHINTH
```

```
//Program to find the LCM of two numbers.

<?php
function lcm($x, $y) {
  $large = max($x,$y);
  $small = min($x,$y);
  $i = $large;

  while (true) {
    if($i % $small == 0)
      return $i;
    $i = $i + $large;
  }
}

$x = 30;
$y = 40;
echo "LCM of $x and $y is: ".lcm($x,$y);
?>
```

LCM of 30 and 40 is: 120

```
//Write a program to find the second highest number in an array.

<?php

$array = array('200', '12','69','250','50','500');

$maxnum1 = 0;
$maxnum2 = 0;

for($i=0; $i< count($array); $i++)
{
    if($array[$i] > $maxnum1)
    {
      $maxnum2 = $maxnum1;
      $maxnum1 = $array[$i];
    }
    else if($array[$i] > $maxnum2)
    {
      $maxnum2 = $array[$i];
    }
}

echo "Second Heighest No. is ".$maxnum2;

?>
```

Second Heighest No. is 250