EX.NO : 01	**PRIME NUMBER OR NOT**
DATE :	

AIM:

To write a php program to check the given number is prime number or not.

ALGORITHM:

Step 1: Start the process

Step 2: Write the html5 program and create a form using text area and button control it performs the form action.

Step 3: When we click our button control it performs the form action.

Step 4: Write a php code and create a primenumber.php file

Step 5: Check if the given number is prime or not.

```
$flag=1;
for($i=2;$i<$v;$i++)
{
   if($v%$i==0){
      $flag = 0;
      break;
   }
}
```
Step 6: Save this program in the name of primenumber.php and run using any web browser.

Step 7: Stop the process.

form.html

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Prime Number</title>
    <style>
        .Heading{
            display: flex;
            flex-direction: column;
            align-items: center;
            margin-top: 200PX;
        }
        button{
            align-items: center;
            justify-content: center;
            margin-left: 120px;
            margin-top: 20px;
        }
    </style>
</head>
<body>
    <div class="Heading">
        <h1>Prime Number</h1>
        <form action="primeNumber.php" method="post">
            <label for="number">Enter the Number : </lable>
            <input type = "text" name="number">
            <br>
            <button onClick="primeNumber.php">Click Me</button>
        </form>
    </div>
```
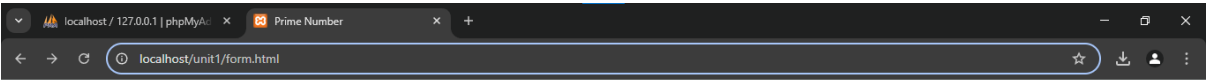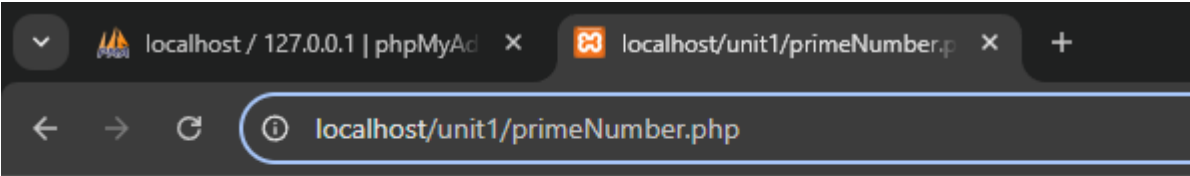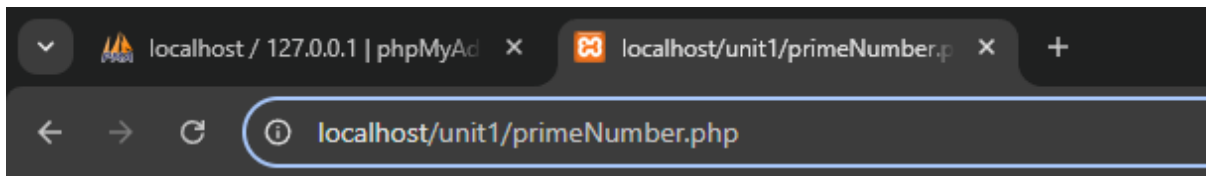
```
</body>

</html>
```

primeNumber.php

```php
<?php
$v=$_POST["number"];

$flag=1;

for($i=2;$i<$v;$i++)

{

   if($v%$i==0){

      $flag = 0;

      break;

   }

}

if($flag == 1)

   echo $v." is Prime Numbers ";

else

   echo $v." is Not Prime Numbers ";

?>
```

Output:

Prime Number

Enter the Number : 17

Click Me

---

localhost/unit1/primeNumber.php

17 is Prime Numbers

Prime Number

Enter the Number : 20

Click Me

20 is Not Prime Numbers

Result:

Thus, our program has been successfully saved and executed.

EX.NO : 02	**GENERATE PRIME NUMBER**
DATE :	

AIM:

To write a php program to generate the prime number upto the given number

ALGORITHM:

Step 1: Start the process

Step 2: Write the html5 program and create a form using text area and button control it performs the form action.

Step 3: When we click our button control it performs the form action.

Step 4: Write a php code and create a generatePrimeNumber.php file

Step 5: Check if the sequence of number is prime then print.

```
for($i=2;$i<=$v;$i++)
{
    $flag=1;
    for($j=2;$j<$i;$j++){
        if($i % $j == 0){
            $flag = 0;
            break;
        }
    }
    if($flag == 1){
        echo $i." is Prime Numbers ";
        echo "<br>";
    }
}
```
Step 6: Save this program in the name of generatePrimeNumber.php and run using any web browser.

Step 7: Stop the process.

form.html

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Generate Of Prime Number</title>
    <style>
      .Heading{
          display: flex;
          flex-direction: column;
          align-items: center;
          margin-top: 200PX;
      }
      button{
          align-items: center;
          justify-content: center;
          margin-left: 120px;
          margin-top: 20px;
      }
    </style>
</head>
<body>
    <div class="Heading">
      <h1>Generate Of Prime Number</h1>
      <form action="generatePrimeNumber.php" method="post">
        <label for="number">Enter the Number : </lable>
        <input type = "text" name="number">
        <br>
        <button onClick="generatePrimeNumber.php">Click Me</button>
      </form>
    </div>
</body>
</html>
```
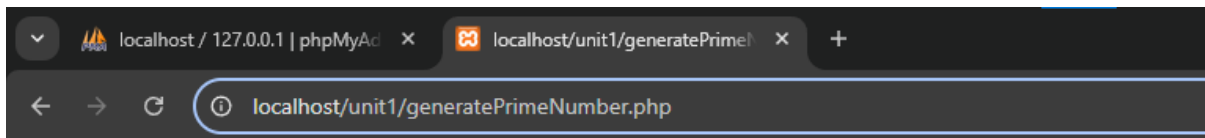
generateprimeNumber.php

```php
<?php
$v=$_POST["number"];
for($i=2;$i<=$v;$i++)
{
   $flag=1;
   for($j=2;$j<$i;$j++){
     if($i % $j == 0){
        $flag = 0;
        break;
     }
   }
   if($flag == 1){
     echo $i." is Prime Numbers ";
     echo "<br>";
   }
}
?>
```

```php
<?php
$v=$_POST["number"];
for($i=2;$i<=$v;$i++)
```

Output:

Result:

Thus, our program has been successfully saved and executed.

EX.NO : 03	**PERFECT NUMBERS**
DATE :	

AIM:

To write a php program to check the given number is perfect number or not

ALGORITHM:

Step 1: Start the process

Step 2: Write the html5 program and create a form using text area and button control it performs the form action.

Step 3: When we click our button control it performs the form action.

Step 4: Write a php code and create a PerfectNumber.php file

Step 5: Check if the given number is perfect number or not.

```
$sum=1;
for($i=2;$i<$v;$i++){
    if($v%$i==0){
        $sum = $sum + $i;
    }
}
if($sum==$v){
    echo $v." is Perfect Number ";
    echo "<br>";
}
else{
    echo $v." is Not Perfect Number ";
    echo "<br>";
}
```

Step 6: Save this program in the name of PerfectNumber.php and run using any web browser.

Step 7: Stop the process.

form.html

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Perfect Number</title>
    <style>
      .Heading{
        display: flex;
        flex-direction: column;
        align-items: center;
        margin-top: 200PX;
      }
      button{
        align-items: center;
        justify-content: center;
        margin-left: 120px;
        margin-top: 20px;
      }
   </style>
</head>
<body>
   <div class="Heading">
      <h1>Perfect Number </h1>
      <form action="PerfectNumber.php" method="post">
        <label for="number">Enter the Number : </lable>
        <input type = "text" name="number">
        <br>
        <button onClick="PerfectNumber.php">Click Me</button>
      </form>
   </div>
</body>
</html>
```
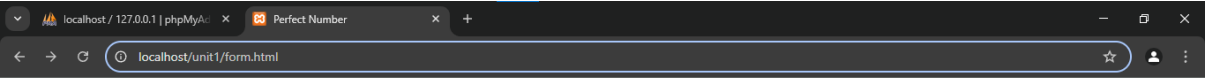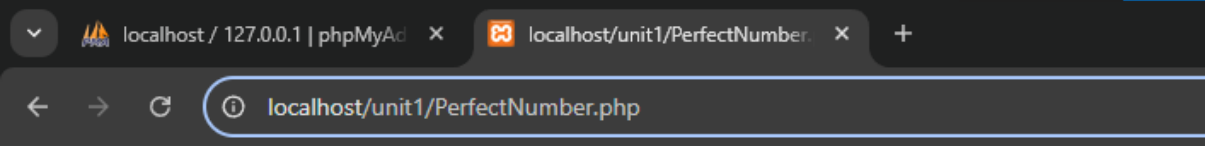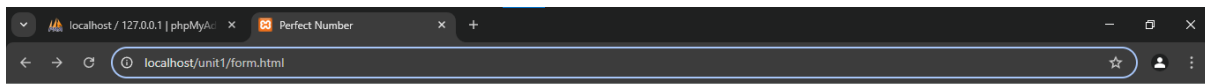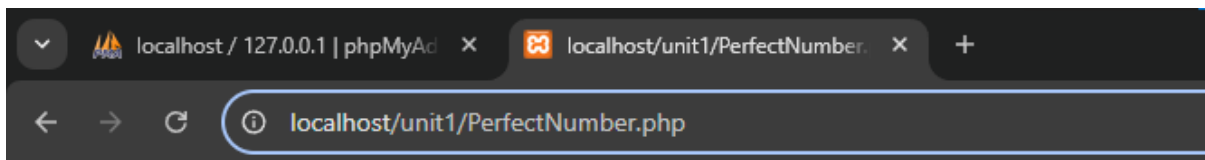
PerfectNumber.php

```php
<?php
$v=$_POST["number"];
$sum=1;
for($i=2;$i<$v;$i++){
    if($v%$i==0){
        $sum = $sum + $i;
    }
}
if($sum==$v){
    echo $v." is Perfect Number ";
    echo "<br>";
}
else{
    echo $v." is Not Perfect Number ";
    echo "<br>";
}
?>
```

```php
<?php
$v=$_POST["number"];
$sum=1;
```

Output:

10 is Not Perfect Number

Result:

Thus, our program has been successfully saved and executed.

EX.NO : 04	**GENERATE PERFECT NUMBERS**
DATE :	

AIM:

To write a php program to generate the perfect number upto the given number

ALGORITHM:

Step 1: Start the process

Step 2: Write the html5 program and create a form using text area and button control it performs the form action.

Step 3: When we click our button control it performs the form action.

Step 4: Write a php code and create a GeneratePerfectNumber.php file

Step 5: To generate perfect number upto the given number.

```
for($j=2;$j<=$v;$j++)
{
   $sum=1;
   for($i=2;$i<$j;$i++){
     if($j%$i==0){
        $sum = $sum + $i;
     }
   }
   if($sum==$j){
     echo $j." is Perfect Number ";
     echo "<br>";
   }
}
```
Step 6: Save this program in the name of GeneratePerfectNumber.php and run using any web browser.

Step 7: Stop the process.

form.html

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Perfect Number</title>
    <style>
        .Heading{
            display: flex;
            flex-direction: column;
            align-items: center;
            margin-top: 200PX;
        }
        button{
            align-items: center;
            justify-content: center;
            margin-left: 120px;
            margin-top: 20px;
        }
    </style>
</head>
<body>
    <div class="Heading">
        <h1>Generate Perfect Number</h1>
        <form action="GeneratePerfectNumber.php" method="post">
            <label for="number">Enter the Number : </lable>
            <input type = "text" name="number">
            <br>
            <button onClick="GeneratePerfectNumber.php">Click Me</button>
        </form>
    </div>
</body>
</html>
```
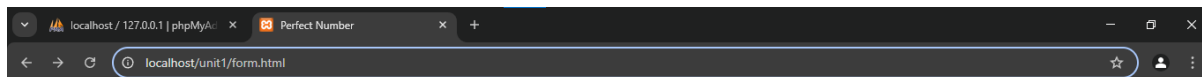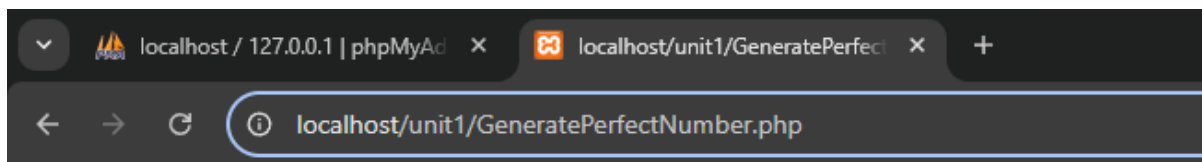
GeneratePerfectNumber.php

```php
<?php
$v=$_POST["number"];
for($j=2;$j<=$v;$j++)
{
   $sum=1;
   for($i=2;$i<$j;$i++){
      if($j%$i==0){
         $sum = $sum + $i;
      }
   }
   if($sum==$j){
      echo $j." is Perfect Number ";
      echo "<br>";
   }
}
?>
```

Output:

6 is Perfect Number
28 is Perfect Number

Result:

Thus, our program has been successfully saved and executed.

EX.NO : 05	**ARM STRONG**
DATE :	

AIM:

To write a php program to check the given number is Arm Strong number or not

ALGORITHM:

Step 1: Start the process.

Step 2: Write the html5 program and create a form using text area and button control it performs the form action.

Step 3: When we click our button control it performs the form action.

Step 4: Write a php code and create a Armstrong.php file

Step 5: To check thethe given number is Armstrong Number or not.

```
$c=$v;
$r = 0;
$sum = 0;
while($v>0){
    $r = $v % 10;
    $sum = $sum + ( $r * $r * $r);
    $v = $v / 10;
}
if($c==$sum){
    echo $c." Is Arm strong Number";
}
else{
    echo $c." Is Not an Arm strong Number";
}
```
Step 6: Save this program in the name of Armstrong.php and run using any web browser.
Step 7: Stop the process.

form.html

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Arm strong</title>
    <style>
        .Heading{
            display: flex;
            flex-direction: column;
            align-items: center;
            margin-top: 200PX;
        }
        button{
            align-items: center;
            justify-content: center;
            margin-left: 120px;
            margin-top: 20px;
        }
    </style>
</head>
<body>
    <div class="Heading">
        <h1>Arm strong</h1>
        <form action="Armstrong.php" method="post">
            <label for="number">Enter the Number : </lable>
            <input type = "text" name="number">
            <br>
            <button onClick="Armstrong.php">Click Me</button>
        </form>
    </div>
</body>
</html>
```
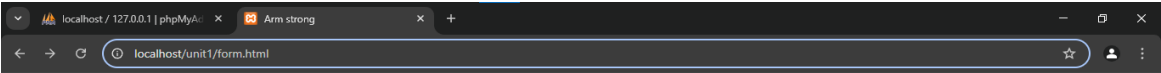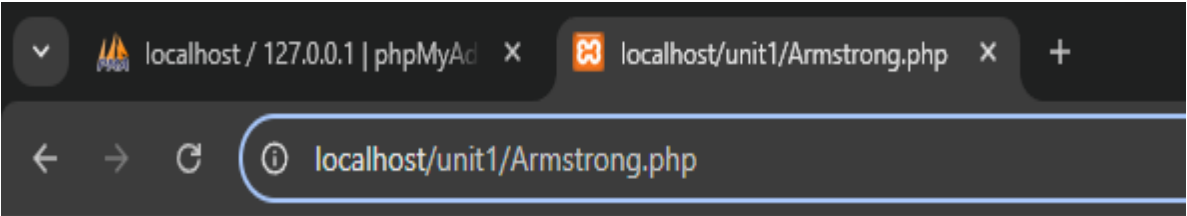
Armstrong.php

```php
<?php
  $v=$_POST["number"];
  $c=$v;
  $r = 0;
  $sum = 0;
  while($v>0){
     $r = $v%10;
     $sum = $sum + ($r*$r*$r);
     $v = $v/10;
  }
  if($c==$sum){
     echo $c." Is Arm strong Number";
  }
  else{
     echo $c." Is Not an Arm strong Number";
  }
?>
```
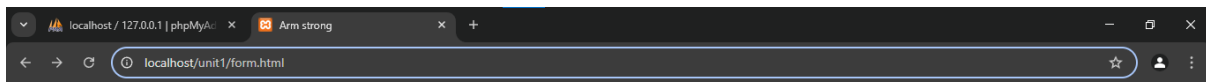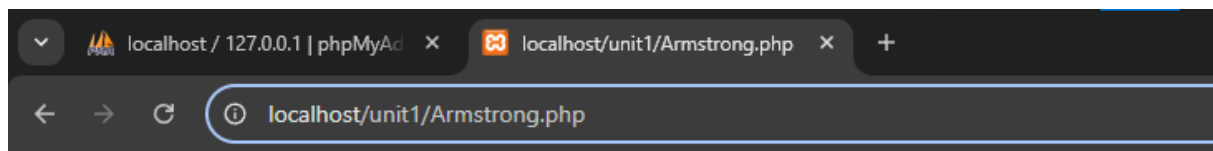
Output:

Arm strong

Enter the Number : [153]

[Click Me]

153 Is Arm strong Number

154 Is Not an Arm strong Number

Result:

Thus, our program has been successfully saved and executed.

EX.NO : 06	**GENERATE ARM STRONG**
DATE :	

AIM:

   To write a php program to generate the Arm Strong number upto the given number

ALGORITHM:

Step 1: Start the process

Step 2: Write the html5 program and create a form using text area and button control it performs the form action.

Step 3: When we click our button control it performs the form action.

Step 4: Write a php code and create a GenerateArmStrong.php file

Step 5: To generate Arm strong number upto the given number.

```
for($i=1;$i<=$v;$i++){
    $sum = 0;
    $j=$i;
    while($j>0){
       $r = $j%10;
       $sum = $sum + ($r*$r*$r);
       $j = $j/10;
    }
    if($i==$sum){
       echo $sum." Is Arm strong Number";
       echo "<br>";
    }
  }
```
Step 6: Save this program in the name of GenerateArmStrong.php and run using any web browser.

Step 7: Stop the process.

form.html

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Generate Arm Strong</title>
    <style>
      .Heading{
        display: flex;
        flex-direction: column;
        align-items: center;
        margin-top: 200PX;
      }
      button{
        align-items: center;
        justify-content: center;
        margin-left: 120px;
        margin-top: 20px;
      }
   </style>
</head>
<body>
   <div class="Heading">
      <h1>Generate Arm Strong</h1>
      <form action="GenerateArmStrong.php" method="post">
        <label for="number">Enter the Number : </lable>
        <input type = "text" name="number">
        <br>
        <button onClick="GenerateArmStrong.php">Click Me</button>
      </form>
   </div>
</body>
</html>
```

GenerateArmStrong.php

```php
<?php
  $v = $_POST["number"];
  $c = $v;
  $r = 0;
  for($i=1;$i<=$v;$i++){
    $sum = 0;
    $j=$i;
    while($j>0){
      $r = $j%10;
      $sum = $sum + ($r*$r*$r);
      $j = $j/10;
    }
    if($i==$sum){
      echo $sum." Is Arm strong Number";
      echo "<br>";
    }
  }
?>
```
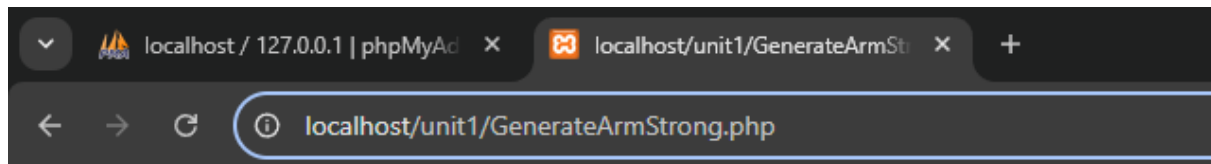
Output:

1 Is Arm strong Number
153 Is Arm strong Number
370 Is Arm strong Number
371 Is Arm strong Number
407 Is Arm strong Number

Output:

Result:

Thus, our program has been successfully saved and executed.

EX.NO : 07	**PRODUCT OF THE PRIME**
DATE :	

AIM:

To write a php program to generate the product of the prime for the given number

ALGORITHM:

Step 1: Start the process

Step 2: Write the html5 program and create a form using text area and button control it performs the form action.

Step 3: When we click our button control it performs the form action.

Step 4: Write a php code and create a ProductofPrime.php file

Step 5: To generate product of prime number for the given number.

```
$i=2;
while($v!=1){
    if($v%$i==0){
        echo $i.",";
        $v=$v/$i;
    }
    else{
        $i=$i+1;
    }
}
```

Step 6: Save this program in the name of ProductofPrime.php and run using any web browser.

Step 7: Stop the process.

form.html

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Product of Prime</title>
    <style>
      .Heading{
        display: flex;
        flex-direction: column;
        align-items: center;
        margin-top: 200PX;
      }
      button{
        align-items: center;
        justify-content: center;
        margin-left: 120px;
        margin-top: 20px;
      }
    </style>
</head>
<body>
    <div class="Heading">
      <h1>Product of Prime </h1>
      <form action="ProductofPrime.php" method="post">
        <label for="number">Enter the Number : </lable>
        <input type = "text" name="number">
        <br>
        <button onClick="ProductofPrime.php">Click Me</button>
      </form>
    </div>
</body>
</html>
```
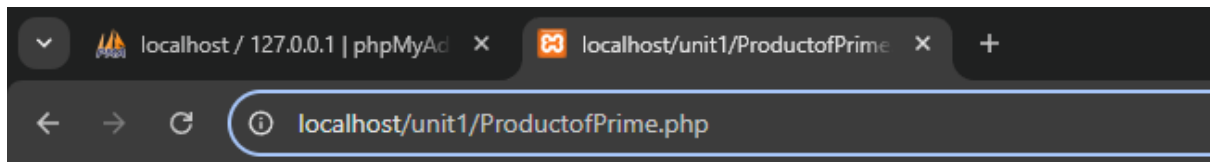
ProductofPrime.php

```php
<?php
$v=$_POST["number"];
$i=2;
while($v!=1){
   if($v%$i==0){
      echo $i.",";
      $v=$v/$i;
   }
   else{
      $i=$i+1;
   }
}
?>
```

Output:

2,2,2,5,5,5,

Result:

Thus, our program has been successfully saved and executed.

EX.NO : 08	**COLLATZE SEQUENCE**
DATE :	

AIM:

   To write a php program to generate collatze sequence for the given number

ALGORITHM:

Step 1: Start the process.

Step 2: Write the html5 program and create a form using text area and button control it performs the form

action.

Step 3: When we click our button control it performs the form action.

Step 4: Write a php code and create a collatzsequence.php file

Step 5: To generate collatzsequence number for the given number.

```
while($v != 1){
   if($v % 2 == 0){
      $v = $v/2;
      echo $v.",";
   }
   else{
      $v= 3 * $v + 1;
      echo $v.",";
   }
}
```
Step 6: Save this program in the name of collatzsequence.php and run using any web browser.

Step 7: Stop the process.

form.html

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>collatzsequence</title>
    <style>
      .Heading{
         display: flex;
         flex-direction: column;
         align-items: center;
         margin-top: 200PX;
      }
      button{
         align-items: center;
         justify-content: center;
         margin-left: 120px;
         margin-top: 20px;
      }
   </style>
</head>
<body>
   <div class="Heading">
      <h1>collatzsequence</h1>
      <form action="collatzsequence.php" method="post">
         <label for="number">Enter the Number : </lable>
         <input type = "text" name="number">
         <br>
         <button onClick="collatzsequence.php">Click Me</button>
      </form>
   </div>
</body>
</html>
```
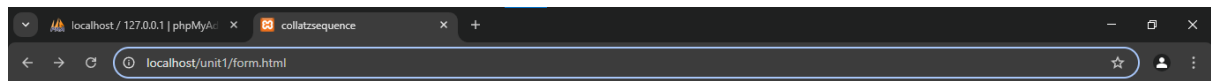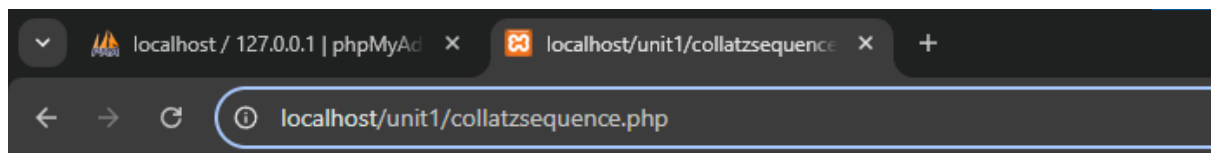
collatzsequence.php

```php
<?php
$v=$_POST["number"];
while($v!=1){
   if($v%2==0){
      $v=$v/2;
      echo $v.",";
   }
   else{
      $v=3* $v+1;
      echo $v.",";
   }
}
?>
```

Output:

Result:

Thus, our program has been successfully saved and executed.

EX.NO : 09	**AMICABLE NUMBERS**
DATE :	

AIM:

To write a php program to generate collatze sequence for the given number

ALGORITHM:

Step 1: Start the process.

Step 2: Write the html5 program and create a form using text area and button control it performs the form action.

Step 3: When we click our button control it performs the form action.

Step 4: Write a php code and create a AmicableNumbers.php file.

Step 5: To check the given number is Amicable Number or not.

```
$sum=0;
$sum_of_sum = 0;
for($i=1;$i<$v;$i++){
   if($v%$i==0){
      $sum = $sum+$i;
   }
}

for($i=1;$i<$sum;$i++){
   if($sum%$i==0){
      $sum_of_sum = $sum_of_sum+$i;
   }
}

if($sum_of_sum == $v){
   echo $v." is Amicable Number";
}
else{
   echo $v." is No Amicable Numbers";
}
```
Step 6: Save this program in the name of AmicableNumbers.php and run using any web browser.

Step 7: Stop the process.

form.html

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Amicable Numbers</title>
    <style>
      .Heading{
        display: flex;
        flex-direction: column;
        align-items: center;
        margin-top: 200PX;
      }
      button{
        align-items: center;
        justify-content: center;
        margin-left: 120px;
        margin-top: 20px;
      }
    </style>
</head>
<body>
    <div class="Heading">
      <h1>Amicable Numbers</h1>
      <form action="AmicableNumbers.php" method="post">
        <label for="number">Enter the Number : </lable>
        <input type = "text" name="number">
        <br>
        <button onClick="AmicableNumbers.php">Click Me</button>
      </form>
    </div>
</body>
</html>
```
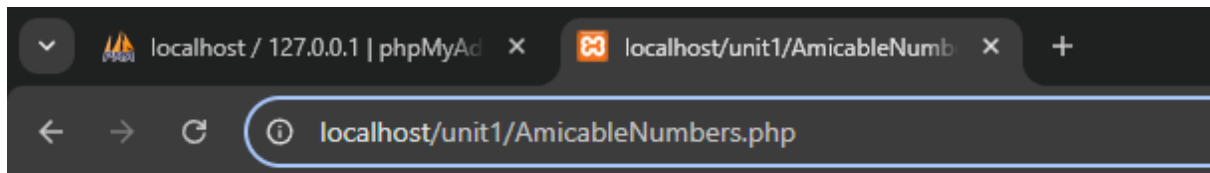
AmicableNumbers.php

```php
<?php
$v = $_POST["number"];
$sum=0;
$sum_of_sum = 0;
for($i=1;$i<$v;$i++){
    if($v%$i==0){
        $sum = $sum+$i;
    }
}
for($i=1;$i<$sum;$i++){
    if($sum%$i==0){
        $sum_of_sum = $sum_of_sum+$i;
    }
}
if($sum_of_sum == $v){
    echo $v." is Amicable Number";
}
else{
    echo $v." is No Amicable Numbers";
}
?>
```

Output:

220 is Amicable Number

Result:

Thus, our program has been successfully saved and executed.

EX.NO : 10	**CO-PRIME NUMBERS**
DATE :	

AIM:

To write a php program to check the given numbers are co-prime or not

ALGORITHM:

Step 1: Start the process.

Step 2: Write the html5 program and create a form using text area and button control it performs the form action.

Step 3: When we click our button control it performs the form action.

Step 4: Write a php code and create a coprime.php file.

Step 5: To check the given two numbers are co-prime or not.

```
function gcd($a, $b) {
   while ($b != 0) {
     $temp = $b;
     $b = $a % $b;
     $a = $temp;
   }
   return $a;
}
function areCoPrime($num1, $num2) {
   if (gcd($num1, $num2) == 1) {
     return true;
   }
   return false;
}
```

Step 6: Save this program in the name of coprime.php and run using any web browser.

Step 7: Stop the process.

coprimeformdesign. html

```html
<!DOCTYPE html>
<html lang="en">
<head>
   <meta charset="UTF-8">
   <meta name="viewport" content="width=device-width, initial-scale=1.0">
   <title>co-prime</title>
   <style>
     .Heading{
        display: flex;
        flex-direction: column;
        align-items: center;
        margin-top: 200PX;
     }
     button{
        align-items: center;
        justify-content: center;
        margin-left: 120px;
        margin-top: 20px;
     }
   </style>
</head>
<body>
   <div class="Heading">
     <h1>co-prime</h1>
     <form action="coprime.php" method="post">
        <label for="num1">Enter the Num1 : </lable>
        <input type = "text" name="num1">
        <label for="num2">Enter the Num2 : </lable>
        <input type = "text" name="num2">
        <br>
        <button onClick="coprime.php">Click Me</button>
     </form>
   </div>
</body>
</html>
```
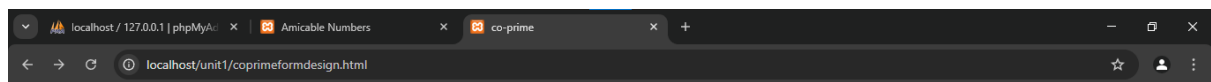
coprime.php

```php
<?php
function gcd($a, $b) {
    while ($b != 0) {
        $temp = $b;
        $b = $a % $b;
        $a = $temp;
    }
    return $a;
}
function areCoPrime($num1, $num2) {
    if (gcd($num1, $num2) == 1) {
        return true;
    }
    return false;
}
if (isset($_POST["num1"]) && isset($_POST["num2"])) {
    $num1 = $_POST["num1"];
    $num2 = $_POST["num2"];

    if (areCoPrime($num1, $num2)) {
        echo "$num1 and $num2 are co-prime.";
    } else {
        echo "$num1 and $num2 are not co-prime.";
    }
} else {
    echo "Please provide two numbers via URL (e.g., ?num1=5&num2=9)";
}
?>
```
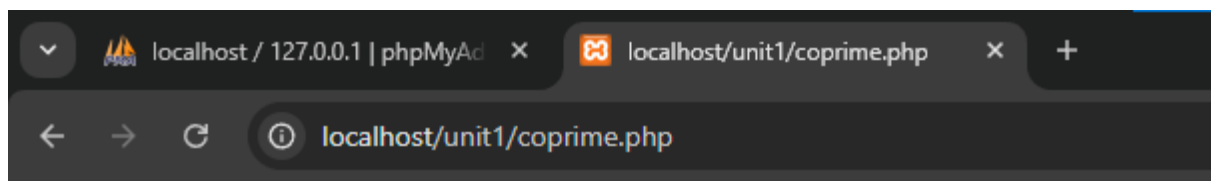
Output:

Result:

10 and 7 are co-prime.

Result:

Thus, our program has been successfully saved and executed.

EX.NO : 11	**EVEN FIBONACCI NUMBERS**
DATE :	

AIM:

To write a php program to sum of the even fibonacci numbers for the given numbers.

ALGORITHM:

Step 1: Start the process.

Step 2: Write the html5 program and create a form using text area and button control it performs the form action.

Step 3: When we click our button control it performs the form action.

Step 4: Write a php code and create a EvenFibonacci.php file.

Step 5: To sum of the even fibonacci numbers for the given numbers.

```
while ($b <= $limit) {
    if ($b % 2 == 0) {
       $sum += $b;
    }

    $next = $a + $b;
    $a = $b;
    $b = $next;
  }
```
Step 6: Save this program in the name of EvenFibonacci.php and run using any web browser.

Step 7: Stop the process.

form.html

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Even fibonacci</title>
    <style>
      .Heading{
        display: flex;
        flex-direction: column;
        align-items: center;
        margin-top: 200PX;
      }
      button{
        align-items: center;
        justify-content: center;
        margin-left: 120px;
        margin-top: 20px;
      }
    </style>
</head>
<body>
    <div class="Heading">
      <h1>Even fibonacci</h1>
      <form action="Evenfibonacci.php" method="post">
        <label for="number">Enter the Number : </lable>
        <input type = "text" name="number">
        <br>
        <button onClick="Evenfibonacci.php">Click Me</button>
      </form>
    </div>
</body>
</html>
```

Evenfibonacci.php

```php
<?php
function evenFibonacciNumbers($limit) {
    $a = 0;
    $b = 1;
    $sum = 0;
    while ($b <= $limit) {
        if ($b % 2 == 0) {
            $sum += $b;
        }

        $next = $a + $b;
        $a = $b;
        $b = $next;
    }
    return $sum;
}

$limit = $_POST["number"];
echo "The Number of Sum of even Fibonacci numbers is $limit: " . evenFibonacciNumbers($limit) . "\n";

?>
```
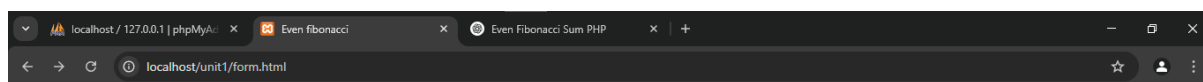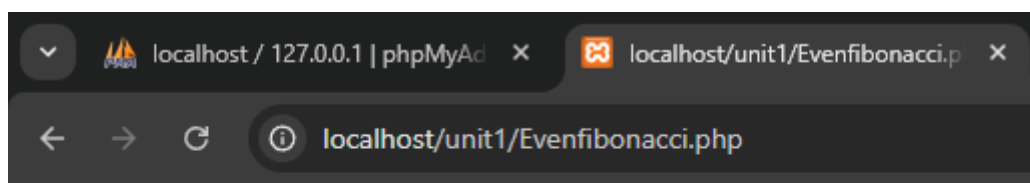
Output:

Result:

Thus, our program has been successfully saved and executed.

EX.NO : 12	**SINGLE DIGIT**
DATE :	

AIM:

To write a php program to convert the given numbers into single digit number.

ALGORITHM:

Step 1: Start the process.

Step 2: Write the html5 program and create a form using text area and button control it performs the form action.

Step 3: When we click our button control it performs the form action.

Step 4: Write a php code and create a single.php file.

Step 5: To convert the given number into single digit.

while ($number >= 10) {

    $number = array_sum(str_split($number));

  }

Step 6: Save this program in the name of single.php and run using any web browser.

Step 7: Stop the process.

form.html

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Single Digit</title>
    <style>
        .Heading{
            display: flex;
            flex-direction: column;
            align-items: center;
            margin-top: 200PX;
        }
        button{
            align-items: center;
            justify-content: center;
            margin-left: 120px;
            margin-top: 20px;
        }
    </style>
</head>
<body>
    <div class="Heading">
        <h1>Convert the Given Numbers into Single Digit</h1>
        <form action="single.php" method="post">
            <label for="number">Enter the Number : </lable>
            <input type = "text" name="number">
            <br>
            <button onClick="single.php">Click Me</button>
        </form>
    </div>
</body>
</html>
```
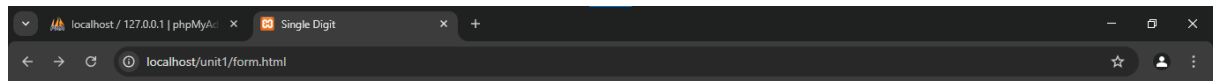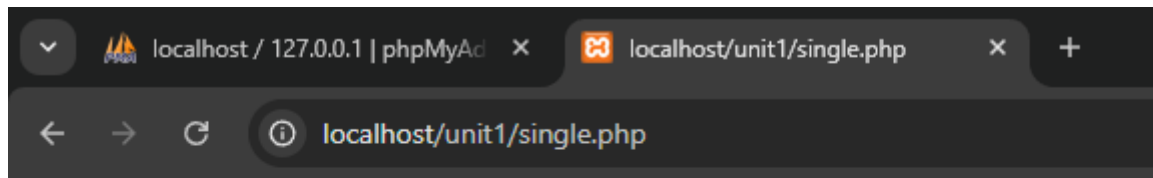
single.php

```php
<?php
function reduceToSingleDigit($number) {
    while ($number >= 10) {
        $number = array_sum(str_split($number));
    }
    return $number;
}
$number = $_POST["number"];
echo "The Given Number $number : " . reduceToSingleDigit($number);
?>
```

Output:

Result:

Thus, our program has been successfully saved and executed.