

## Practical No. 1

Date: -    /    /

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**Q.1) Write a PHP program to swap two numbers with and without using third variable.**

**Program:** - Using Third variable

```
<?php

    // Define two variables and assign values

        $a = 10;

        $b = 20;

    // Print the original values

        echo "Before swapping: a = $a, b = $b\n";

        echo "<br>";

    // Use a third variable to swap the values

        $temp = $a;

        $a = $b;

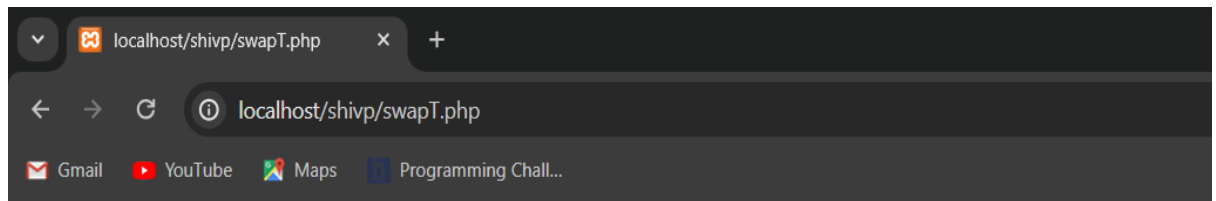
        $b = $temp;

    // Print the swapped values

        echo "After swapping: a = $a, b = $b\n";

?>
```

**Output: -**



Before swapping:  $a = 10, b = 20$

After swapping:  $a = 20, b = 10$

## Program 2: - Without Using Third variable..

```
<?php

    // Define two variables and assign values

    $a = 10;

    $b = 20;

    // Print the original values

    echo "Before swapping: a = $a, b = $b\n";

    echo "<br>";

    // Use arithmetic operations to swap the values

    $a = $a + $b;

    $b = $a - $b;

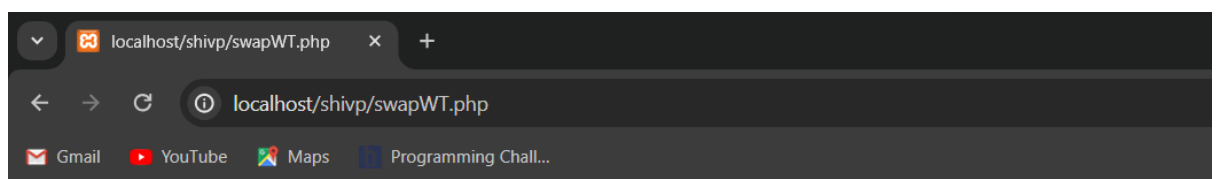
    $a = $a - $b;

    // Print the swapped values

    echo "After swapping: a = $a, b = $b\n";

?>
```

## Output:-



Before swapping: a = 10, b = 20

After swapping: a = 20, b = 10

## Practical No. 2

Date: -   /   /

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**Q.1) Write a PHP program to find the Factorial of a number.**

**Program: -**

```
<?php

    // Define a variable and assign a value

    $num = 5;

    // Declare a variable and assign with 1

    $factorial = 1;

    // Start loop

    for ($x=$num; $x>=1; $x--) {

        $factorial = $factorial * $x;

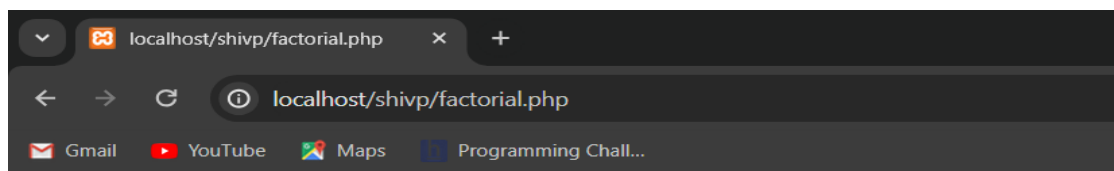
    }

    // Print the result

    echo "Factorial of $num is $factorial";

?>
```

**Output:-**



Factorial of 5 is 120

## Practical No. 3

Date: -   /   /

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**Q.1) Write a PHP program to count the total number of words in a String.**

**Program: -**

```
<?php

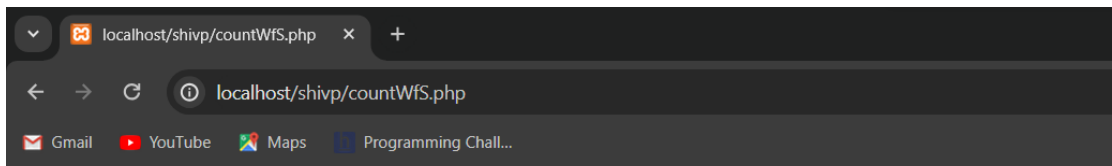
    $value = "Hello My Name is Shivanad Gheji, I'm BCA 2nd year Student.";

    echo "$value<br>Total no. of words in this: ";

    echo str_word_count($value);

?>
```

**Output:**



Hello My Name is Shivanad Gheji, I'm BCA 2nd year Student.  
Total no. of words in this: 11

## Practical No. 4

Date: - / /

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**Q.1) Write a program in PHP to find the occurrence of a word in a string.**

**Program: -**

```
<?php

$string = "Hare Krishna Hare Krishna Krishna Krishna Hare Hare Hare Ram
Hare Rama Hare Rama Rama Rama Hare Hare";

$count;

//Split the string into words using built-in function

$words = explode(" ", $string);

echo "Duplicate words in a given string : <br>";

for($i = 0; $i < count($words); $i++) {

    $count = 1;

    $occ = 1;

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

        if($words[$i] == $words[$j]) {

            $count++;

            $occ++;

            //Set words[j] to 0 to avoid printing visited word

            $words[$j] = "0";

        }

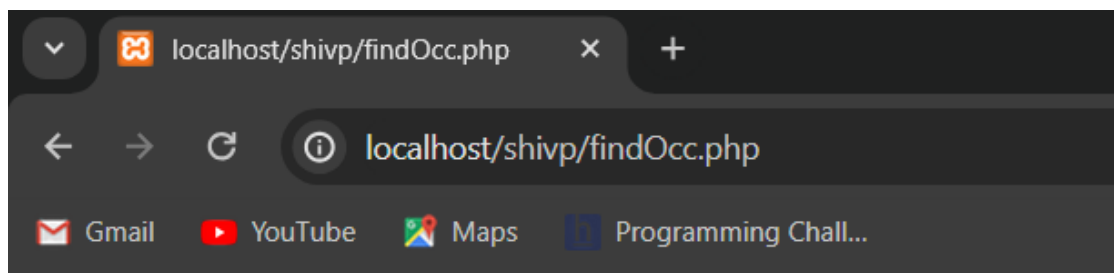
    }

}

//Displays the duplicate word if count is greater than 1
```

```
if($count > 1 && $words[$i] != "0"){  
    echo "The word $words[$i] occurs $occ times.<br>";  
}  
}
```

**Output:**



Duplicate words in a given string :  
The word Hare occurs 9 times.  
The word Krishna occurs 4 times.  
The word Rama occurs 4 times.

## Practical No. 5

Date: - / /

**Q.1) Write a PHP program to replace a word in a string.**

**Program: -**

```
<?php

$string = 'Good morning friends..';

echo "before replacement : $string<br>";

// Display replaced string

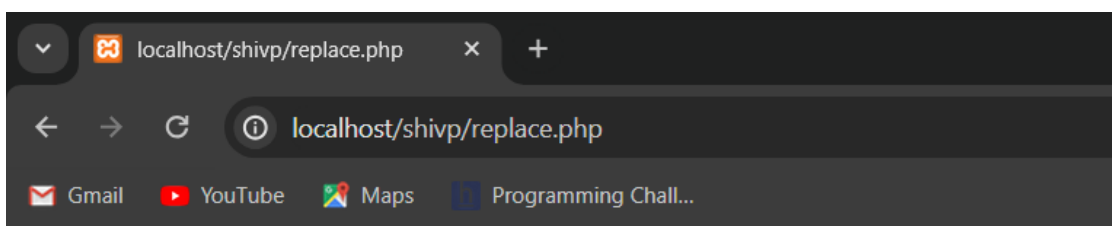
echo "After replacement : ";

echo str_replace("morning", "Night", $string, $count);

echo "<br>Number of replacement = $count";

?>
```

**Output:**



before replacement : Good morning friends..  
After replacement : Good Night friends..  
Number of replacement = 1



## Practical No. 6

Date: -   /   /

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**Q.1) Write a PHP program to demonstrate various functions of regular expression.**

**Program:**

```
<?php
```

```
// Test string
```

```
    $string = "The quick brown fox jumps over the lazy dog";
```

```
    echo "$string<br>";
```

```
// 1. Check if a pattern exists in a string
```

```
    $pattern1 = "/brown/";
```

```
    if (preg_match($pattern1, $string)) {
```

```
        echo "Pattern \"$pattern1\" found in the string.";
```

```
    } else {
```

```
        echo "Pattern \"$pattern1\" not found in the string.";
```

```
    }
```

```
// 2. Replace pattern in a string
```

```
    $pattern2 = "/brown/";
```

```
    $replacement = "red";
```

```
    $new_string = preg_replace($pattern2, $replacement, $string);
```

```
    echo "<br>String after replacement: $new_string";
```

// 3. Extract matches from a string

```
$pattern3 = "[a-z]{4}";  
  
preg_match_all($pattern3, $string, $matches);  
  
echo "<br>Matches found: ";  
  
print_r($matches[0]);  
  
echo "<br>";
```

// 4. Split string using regular expression

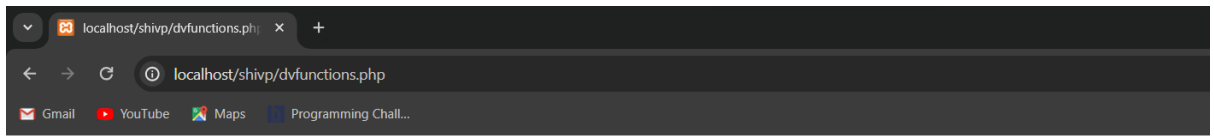
```
$date = "1970-01-01 00:00:00";  
  
$pattern = "[-\s:]";  
  
$components = preg_split($pattern, $date);  
  
print_r($components);  
  
echo "<br>";
```

// 5. Case-insensitive search

```
$pattern5 = "/quick/i";  
  
if (preg_match($pattern5, $string)) {  
  
    echo "Case-insensitive search found 'quick'.\n";  
  
} else {  
  
    echo "Case-insensitive search didn't find 'quick'.\n";  
  
}
```

?>

## Output:



The quick brown fox jumps over the lazy dog

Pattern "/brown/" found in the string.

String after replacement: The quick red fox jumps over the lazy dog

Matches found: Array ( [0] => quic [1] => brow [2] => jump [3] => over [4] => lazy )

Array ( [0] => 1970 [1] => 01 [2] => 01 [3] => 00 [4] => 00 [5] => 00 )

Case-insensitive search found 'quick'.

## Practical No. 7

Date: -   /   /

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**Q.1) Write a PHP program to find area of triangle and rectangle using functions.**

**Program:**

```
<?php

// Function to calculate the area of a triangle

    function triangleArea($base, $height) {

        $area = 0.5 * $base * $height;

        return $area;

    }


// Function to calculate the area of a rectangle

    function rectangleArea($length, $width) {

        $area = $length * $width;

        return $area;

    }


// Input for triangle

    $base_triangle = 10;

    $height_triangle = 5;


// Input for rectangle

    $length_rectangle = 8;
```

```
$width_rectangle = 6;
```

```
$triangle_area = triangleArea($base_triangle, $height_triangle);
```

```
$rectangle_area = rectangleArea($length_rectangle, $width_rectangle);
```

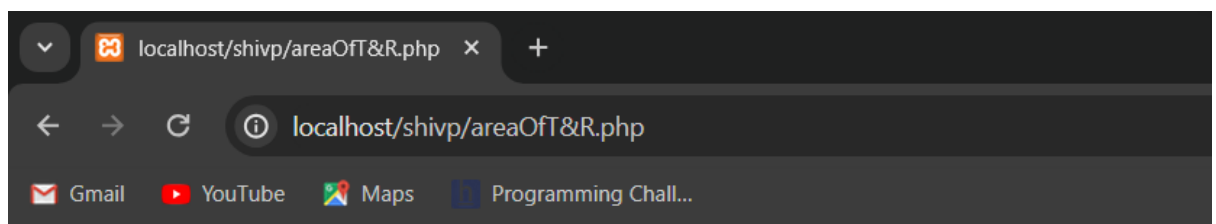
```
// Output results
```

```
echo "Area of triangle with base $base_triangle and height  
$height_triangle is: $triangle_area<br>";
```

```
echo "Area of rectangle with length $length_rectangle and width  
$width_rectangle is: $rectangle_area<br>";
```

```
?>
```

**Output:**



Area of triangle with base 10 and height 5 is: 25  
Area of rectangle with length 8 and width 6 is: 48

## Practical No. 8

Date: -   /   /

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**Q.1) Write a PHP program to find the GCD of two numbers using user-defined functions.**

**Program:**

```
<?php

// Function to find GCD of two numbers

function findGCD($num1, $num2) {

    while ($num2 != 0) {

        $temp = $num1 % $num2;

        $num1 = $num2;

        $num2 = $temp;

    }

    return $num1;

}

// Input numbers

$num1 = 36;

$num2 = 48;

// Call the function to find GCD

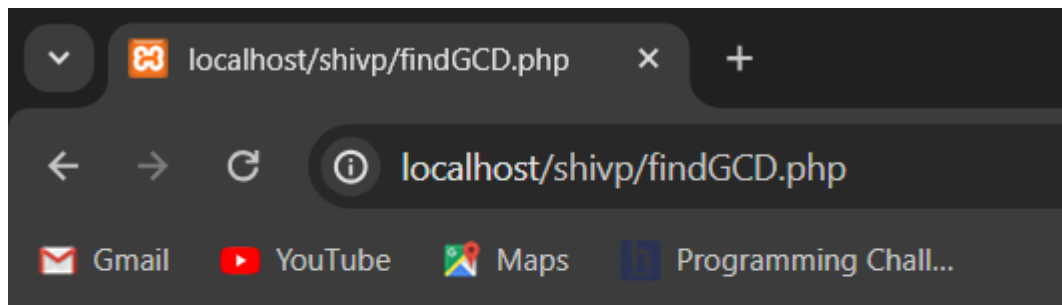
$gcd = findGCD($num1, $num2);
```

```
// Output the result
```

```
echo "GCD of $num1 and $num2 is: $gcd\n";
```

```
?>
```

**Output:**



GCD of 50 and 100 is: 50

## Practical No. 9

Date: -   /   /

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**Q.1) Write a program for finding the biggest number in an array without using any array functions.**

**Program:**

```
<?php
```

```
// Function to find the largest number in an array
```

```
function findLargestNumber($arr) {
```

```
    $max = $arr[0];
```

```
    $length = count($arr);
```

```
    for ($i = 1; $i < $length; $i++) {
```

```
        if ($arr[$i] > $max) {
```

```
            $max = $arr[$i];
```

```
        }
```

```
    }
```

```
    return $max;
```

```
}
```

```
$array = array(10, 25, 5, 30, 15);
```

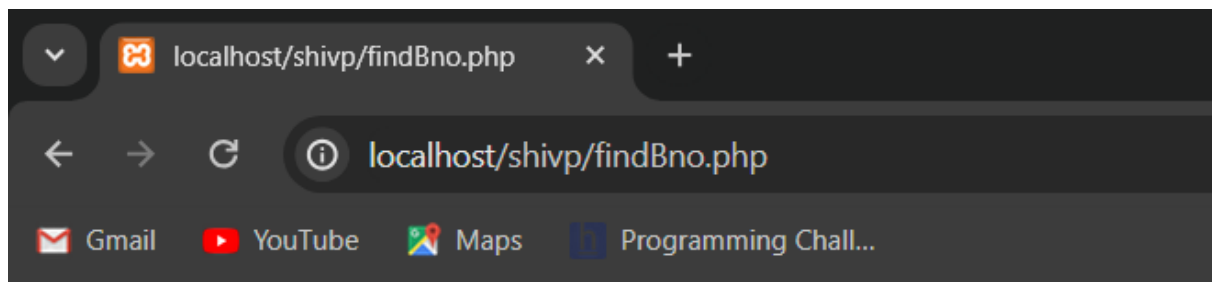


```
$largestNumber = findLargestNumber($array);
```

```
echo "The largest number in the array is: $largestNumber\n";
```

```
?>
```

**Output:**



The largest number in the array is: 30

## Practical No. 10

Date: -   /   /

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**Q.1) Write a program for finding the smallest number in an array.**

**Program:**

```
<?php
```

```
// Function to find the smallest number in an array
```

```
function findSmallestNumber($arr) {
```

```
    $min = $arr[0];
```

```
    $length = count($arr);
```

```
    for ($i = 1; $i < $length; $i++) {
```

```
        if ($arr[$i] < $min) {
```

```
            $min = $arr[$i];
```

```
        }
```

```
    }
```

```
    return $min;
```

```
}
```

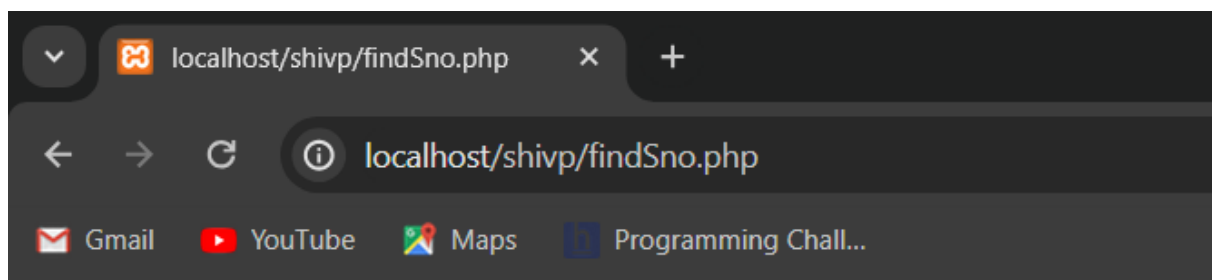
```
$array = array(10, 25, 5, 30, 15);
```

```
$smallestNumber = findSmallestNumber($array);
```

```
echo "The smallest number in the array is: $smallestNumber\n";
```

```
?>
```

**Output:**



The smallest number in the array is: 5

## Practical No. 11

Date: -   /   /

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**Q.1) Write a PHP program to design a simple calculator.**

```
<!DOCTYPE html>

<html>

<head>

    <title>Simple Calculator</title>

</head>

<body>

    <h2>Simple Calculator</h2>

    <form method="post" action="<?php echo
    htmlspecialchars($_SERVER["PHP_SELF"]);?>">

        <input type="number" name="num1" placeholder="Enter first number"
required><br><br>

        <input type="number" name="num2" placeholder="Enter second
number" required><br><br>

        <select name="operator">

            <option value="add">Addition</option>

            <option value="subtract">Subtraction</option>

            <option value="multiply">Multiplication</option>

            <option value="divide">Division</option>

        </select><br><br>

        <input type="submit" name="calculate" value="Calculate">

    </form>

    <?php
    if(isset($_POST['calculate'])) {
```

```

$num1 = $_POST['num1'];

$num2 = $_POST['num2'];

$operator = $_POST['operator'];

switch($operator){

    case "add": $result = $num1 + $num2;

        echo "Result: $num1 + $num2 = $result";

        break;

    case "subtract": $result = $num1 - $num2;

        echo "Result: $num1 - $num2 = $result";

        break;

    case "multiply":

        $result = $num1 * $num2;

        echo "Result: $num1 * $num2 = $result";

        break;

    case "divide": if($num2 == 0) {

        echo "Cannot divide by zero";

        } else {

            $result = $num1 / $num2;

            echo "Result: $num1 / $num2 = $result";

        }

        break;

    default:

        echo "Invalid operator";

    }

}

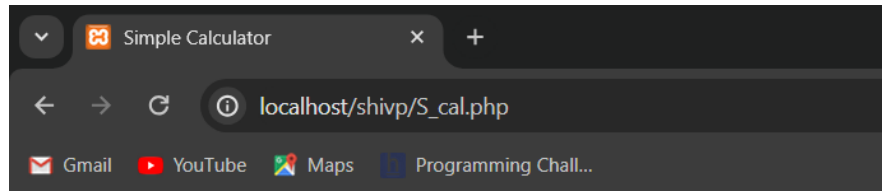
?>

```

</body>

</html>

**Output:**



# Simple Calculator

Result: 5 \* 5 = 25

## Practical No. 12

Date: -    /    /

**Q.1) Design a simple web page to generate multiplication table for a given number using PHP.**

```
<!DOCTYPE html>

<html>

<head>

    <title>Multiplication Table Generator</title>

</head>

<body>

    <h2>Multiplication Table Generator</h2>

    <form method="post" action="<?php echo
htmlspecialchars($_SERVER["PHP_SELF"]);?>">

        <label for="number">Enter a number:</label>

        <input type="number" id="number" name="number" required>

        <input type="submit" name="generate" value="Generate Table">

    </form>

<?php
if(isset($_POST['generate'])) {
    $number = $_POST['number'];
    echo "<h3>Multiplication Table for $number</h3>";
    echo "<table border='1'>";
    echo "<tr><th>Multiplier</th><th>Result</th></tr>";
    for ($i = 1; $i <= 10; $i++){
```

```

        $result = $number * $i; echo "<tr><td>$number x
$i</td><td>$result</td></tr>";

    }

    echo "</table>";

}

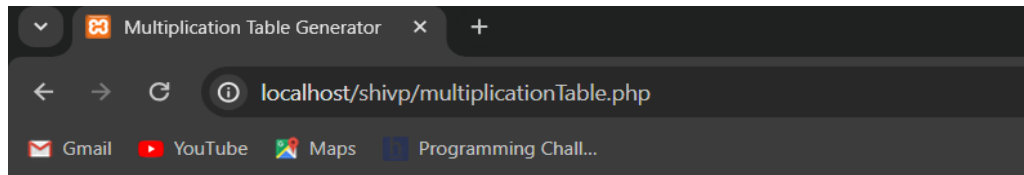
?>

</body>

</html>

```

### Output:



## Multiplication Table Generator

Enter a number:

### Multiplication Table for 5

Multiplier	Result
5 x 1	5
5 x 2	10
5 x 3	15
5 x 4	20
5 x 5	25
5 x 6	30
5 x 7	35
5 x 8	40
5 x 9	45
5 x 10	50



## Practical No. 13

Date: -    /    /

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**Q.1) Design a web page that should compute one's age on a given date using PHP.**

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
    <title>Age Calculator</title>
```

```
</head>
```

```
<body>
```

```
    <h2>Age Calculator</h2>
```

```
    <form          method="post"          action="<?php          echo
htmlspecialchars($_SERVER["PHP_SELF"]);?>">
```

```
        <label for="birthdate">Enter your birthdate:</label>
```

```
        <input      type="date"      id="birthdate"      name="birthdate"
required><br><br>
```

```
        <label for="targetdate">Enter the target date:</label>
```

```
        <input      type="date"      id="targetdate"      name="targetdate"
required><br><br>
```

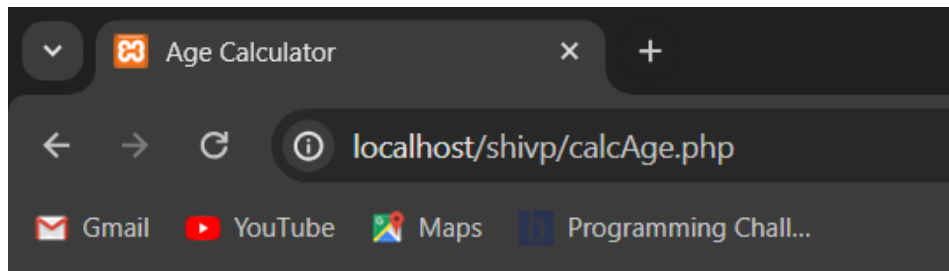
```
        <input      type="submit"      name="calculate"      value="Calculate
Age">
```

```
    </form>
```


```
<?php
```


```
if(isset($_POST['calculate'])) {  
    $birthdate = new DateTime($_POST['birthdate']);  
    $targetdate = new DateTime($_POST['targetdate']);  
    $age = $birthdate->diff($targetdate)->y;  
    echo "<p>Your age on " . $targetdate->format('Y-m-d') . " is:  
$age years old.</p>";  
}  
?>  
</body>  
</html>
```

**Output:**



# Age Calculator

Enter your birthdate:  

Enter the target date:  

Calculate Age

Your age on 2024-03-25 is: 20 years old.

## Practical No. 14

Date: -    /    /

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**Q.1) Write a PHP program read Student information (Roll No. Name, Class, Contact No., email id) using HTML form and display this information using GET/POST method.**

```
<!DOCTYPE html>

<html>

<head>

    <title>Student Information</title>

</head>

<body>

    <h2>Student Information Form</h2>

    <form          method="post"          action="?php          echo
htmlspecialchars($_SERVER["PHP_SELF"]);?>">

        <label for="rollno">Roll No.:</label>

        <input type="text" id="rollno" name="rollno" required><br><br>

        <label for="name">Name:</label>

        <input type="text" id="name" name="name" required><br><br>

        <label for="class">Class:</label>

        <input type="text" id="class" name="class" required><br><br>

        <label for="contact">Contact No.:</label>

        <input type="text" id="contact" name="contact" required><br><br>

        <label for="email">Email ID:</label>

        <input type="email" id="email" name="email" required><br><br>

        <input type="submit" name="submit" value="Submit">
```

```
</form>

<?php
    if($_SERVER["REQUEST_METHOD"] == "POST") {

        $rollno = $_POST['rollno'];

        $name = $_POST['name'];

        $class = $_POST['class'];

        $contact = $_POST['contact'];

        $email = $_POST['email'];

        echo "<h2>Student Information</h2>";

        echo "<p><strong>Roll No.:</strong> $rollno</p>";

        echo "<p><strong>Name:</strong> $name</p>";

        echo "<p><strong>Class:</strong> $class</p>";

        echo "<p><strong>Contact No.:</strong> $contact</p>"; echo
"<p><strong>Email ID:</strong> $email</p>";

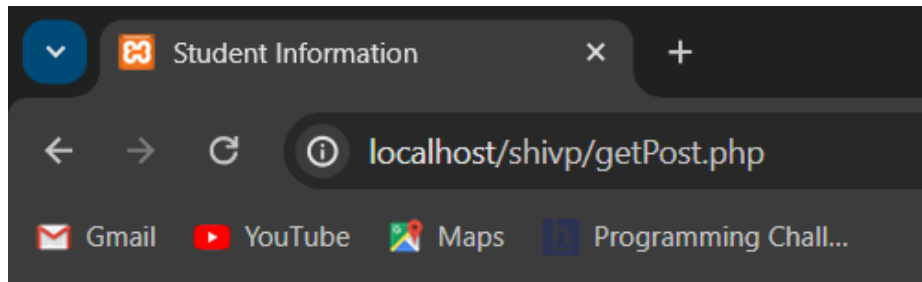
    }

?>

</body>

</html>
```

**Output:**



## Student Information Form

Roll No.:

Name:

Class:

Contact No.:

Email ID:

## Student Information

**Roll No.:** 99

**Name:** Shivanand Gheji

**Class:** BCA 2 Year

**Contact No.:** 9307485179

**Email ID:** shivagheji@gmail.com

## Practical No. 15

Date: -   /   /

**Q.1) Write a PHP program to read student marks for semester subject with other required details (prn, name, roll no, class .... etc.) and display semester mark list.**

```
<!DOCTYPE html>
```

```
<html lang="en">
```

```
<head>
```

```
<meta charset="UTF-8">
```

```
<meta name="viewport" content="width=device-width, initial-  
scale=1.0">
```

```
<title>student semester marklist information</title>
```

```
</head>
```

```
<body>
```

```
<form method="POST" action="<?php echo  
htmlspecialchars($_SERVER["PHP_SELF"]);?>">
```

```
    Name : <input type="text" name="sname"><br><br>
```

```
    Roll Number : <input type="number" name="rollno"><br><br>
```

```
    Prn Number : <input type="number" name="prn"><br><br>
```

```
    Class : <input type="text" name="class"><br><br>
```

```
<p>Five subject mark</p>
```

```
    PHP :<input type="number" name="s1" placeholder="enter  
marks"><br><br>
```

C++ :<input type="number" name="s2" placeholder="enter marks"><br><br>

Software engnieering :<input type="number" name="s3" placeholder="enter marks"><br><br>

ERP :<input type="number" name="s4" placeholder="enter marks"><br><br>

Entrepreneurship development :<input type="number" name="s5" placeholder="enter marks"><br><br>

<input type="submit" >

</form>

<h1> output :- </h1>

<?php

```
if($_SERVER["REQUEST_METHOD"]=="POST") {  
    $name = htmlspecialchars($_REQUEST['sname']);  
    $rollno = htmlspecialchars($_REQUEST['rollno']);  
    $prn = htmlspecialchars($_REQUEST['prn']);  
    $class = htmlspecialchars($_REQUEST['class']);  
    $s1 = htmlspecialchars($_REQUEST['s1']);  
    $s2 = htmlspecialchars($_REQUEST['s2']);  
    $s3 = htmlspecialchars($_REQUEST['s3']);  
    $s4 = htmlspecialchars($_REQUEST['s4']);  
    $s5 = htmlspecialchars($_REQUEST['s5']);
```



```

        if(empty($s1) && empty($s2) && empty($s3) && empty($s4)
        && empty($s5)){

            echo "fill the form properly all fields are required!";

        } else{

            $total = $per = "";

            $total = $s1+$s2+$s3+$s4+$s5;

            $per = $total/500*100; echo "<table border = '1'>";

            echo
            "<tr><th colspan='3'>$name</th><th>$prn</th></tr>";

            echo "<tr><th colspan='4'>$class</th></tr>";

            echo "<tr>  <th>sr  no.</th><th>Subject</th><th>Out
            of</th><th>optian marks</th>";

            echo
            "<tr><td>1</td><td>PHP</td><td>100</td><td>$s1</td></tr>";

            echo
            "<tr><td>2</td><td>C++</td><td>100</td><td>$s2</td></tr>";

            echo
            "<tr><td>3</td><td>Software
            engnieering</td><td>100</td><td>$s3</td></tr>";

            echo
            "<tr><td>4</td><td>ERP</td><td>100</td><td>$s4</td></tr>";

            echo
            "<tr><td>5</td><td>Enterperneureship
            development</td><td>100</td><td>$s5</td></tr>";

            echo
            "<tr><td>6</td><td>Total
            Marks</td><td>500</td><td><b>$total</b></td></tr>";

```

echo

```
"<tr><td>7</td><td>Percentages</td><td>100%</td><td><b>$per  
%</b></td></tr>"
```

```
}
```

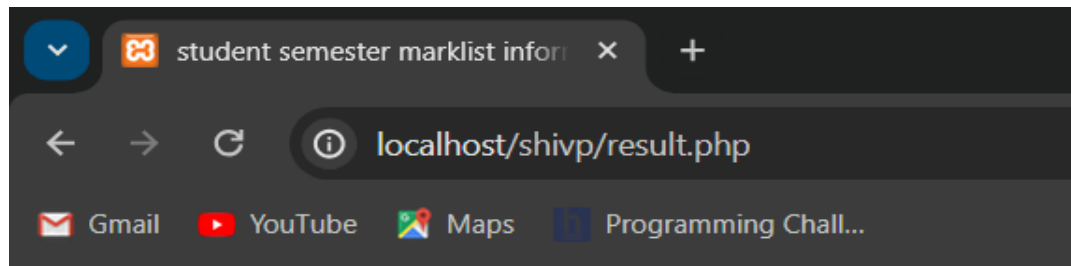
```
}
```

```
?>
```

```
</body>
```

```
</html>
```

### Output:



Name :

Roll Number :

Prn Number :

Class :

Five subject mark

PHP :

C++ :

Software engnieering :

ERP :

Entrepreneurship development :

### output :-

Shivanand Gheji

1234567890			
BCA 2 Year			
sr no.	Subject	Out of	optian marks
1	PHP	100	94
2	C++	100	95
3	Software engnieering	100	93
4	ERP	100	92
5	Enterperneureship development	100	91
6	Total Marks	500	465
7	Percentages	100%	93%