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CA-C25L: WEB PROGRAMMING LAB

Lab Prgm 1. Create a form with the elements of Textboxes, Radio buttons, Checkboxes, and so on. Write JavaScript code to validate the format in email, and mobile number in 10 characters, If a textbox has been left empty, popup an alert indicating when email, mobile number and textbox has been left empty.

```
<html>
<head>
<title>Form Validation</title>
<script type="text/javascript">
 function validate()
 {
        var myArray = new Array();
        for(var i=0;i<document.myForm.length;i++)
        {
          if(document.myForm.elements[i].value.length==0)
           {
          myArray.push(document.myForm.elements[i].name);
        }
      }
        if(myArray.length!=0)
        {
        alert("The following TextBoxes are Empty: \n" +myArray);
        return false;
```

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```
            }
                return true;
    }
function validate_mobile()
{
        const myInput = document.myForm.mob.value;
    if(myInput.length != 10)
        {
                alert('10 digit mobile number is required !!');
                return false;
        }
        return true;
}

function validateEmail()
{
    var data = document.myForm.email.value;
    var atSign = data.indexOf("@");
    var dotSign = data.indexOf(".");
     if (atSign < 1 || dotSign < atSign+2 || dotSign+2 >= data.length)
      {
        alert("Please add @ and . in your Email id !!");
        return false;
      }
```

```
        return true;

}

</script>


 <body bgcolor="Pink" align="left">

        <form name="myForm" onsubmit="return (validate() && validate_mobile() &&
validateEmail())">

                <font size="8"><b>Student Information Form </font><br/><br/><br/>

                <font size="5">        Name: <input type="text" name="Name" /><br/><br/>

                Password: <input type="password" name="Password"
maxlength=15/><br/><br/>

                Address: <textarea name="Address" cols="30"
rows="5"></textarea><br/></br>

                Sex: <input type="radio" name="Gender" /> Male

                    <input type="radio" name="Gender" /> Female <br/><br/>

                Student <input type="Checkbox" name="checkbox" checked="checked"
/><br/><br/>

                Email Id: <input type="text" name="Email" id="email"/><br/><br/>

                Mobile_Num: <input type="number" name="Phno" id="mob"
placeholder="+91##########"/><br/><br/>

                <input type="submit" value="Submit" /> </font></b>

        </form>

 </body>

</html>
```
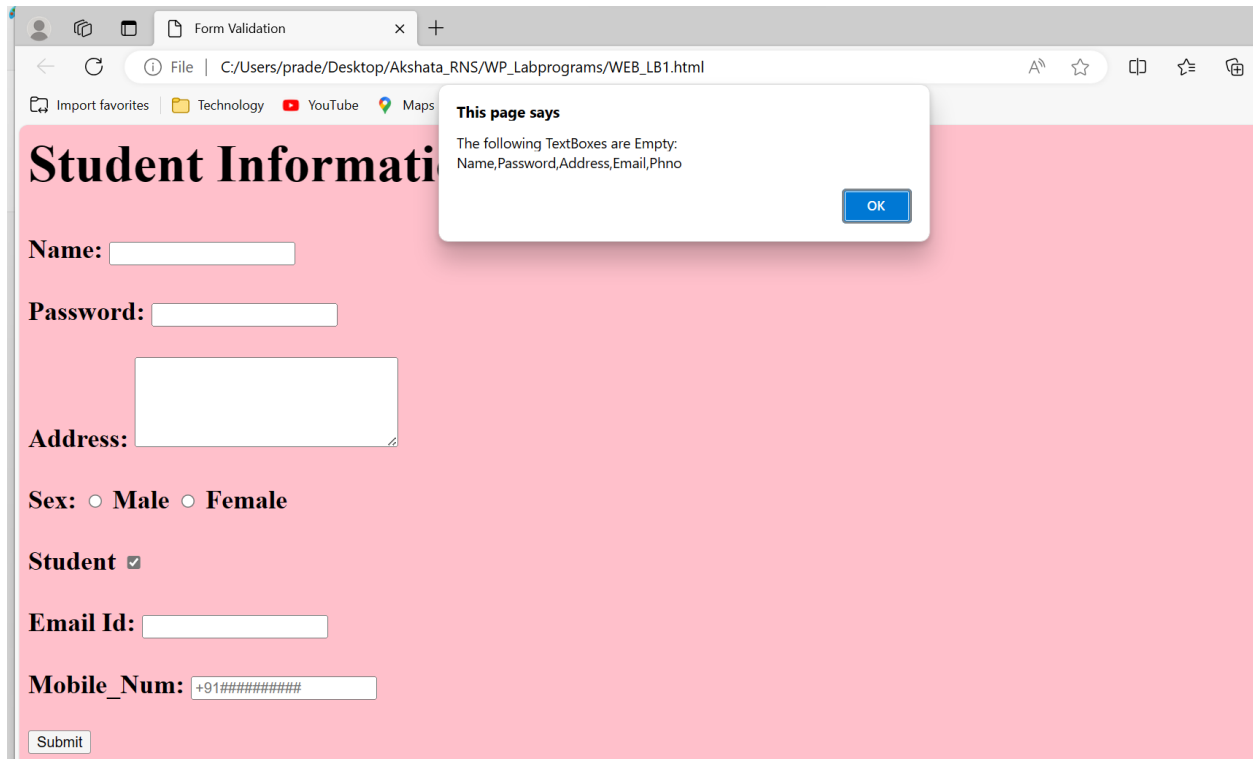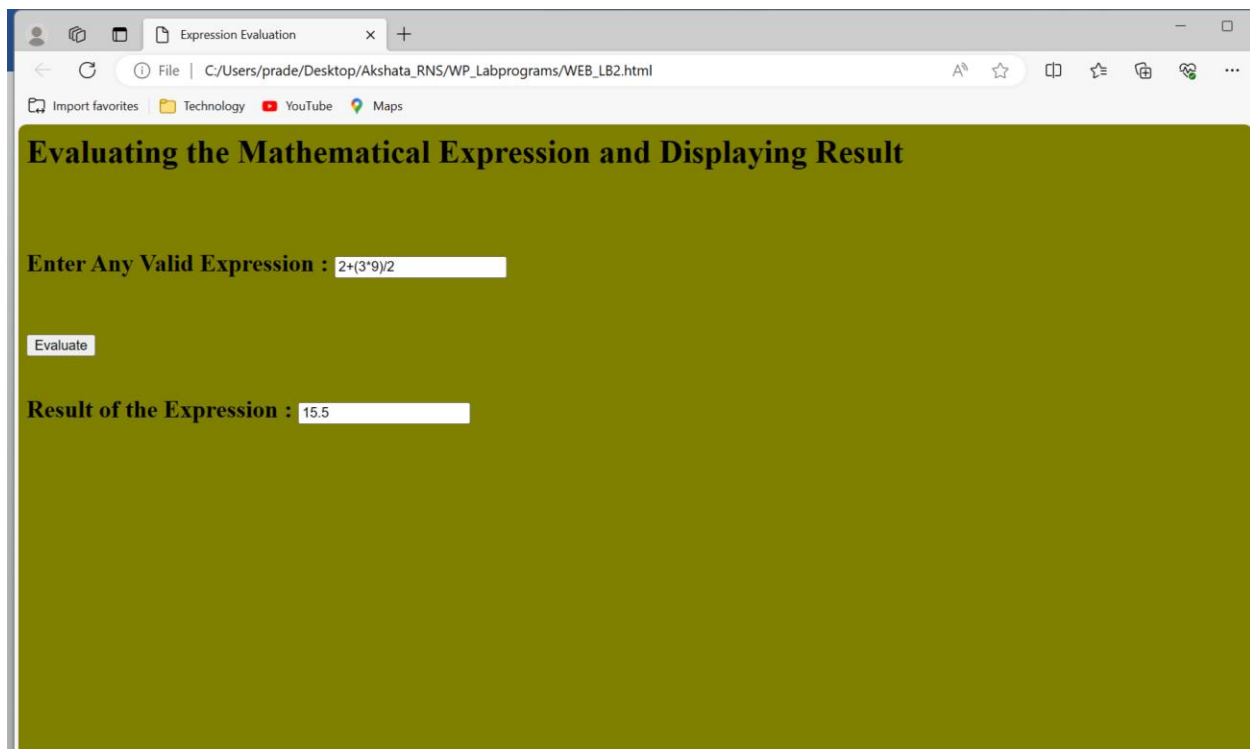
OUTPUT:

Lab Prgm 2. Develop an HTML Form, which accepts any Mathematical expression. Write JavaScript code to Evaluate the expression and Display the result.

```
<html>
<head>
<title> Expression Evaluation </title>
<script type="text/javascript">
  function my_expr()
  {
   try
    {
     var enteredExpr=document.getElementById("expr").value;
     document.getElementById("result").value = eval(enteredExpr);
    }
   catch
    {
     alert("Give a Valid Regular Expression!!");
    }
  }
</script>
</head>
<body bgcolor="olive">
<h1> Evaluating the Mathematical Expression and Displaying Result </h1>
<form name="myForm">
        <br/><br/>
```

```
      <b><h2>Enter Any Valid Expression : </b><input type="text" id="expr"
/></h2><br/><br/>

      <input type="button" value="Evaluate" onclick="my_expr()" /> <br/><br/>

   <b><h2>Result of the Expression : </b><input type="text" id="result" /></h2> <br/><br/>

</form>

</body>

</html>
```

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Lab Prgm 3. Create a page with dynamic effects. Write the code to include layers and basic animation.

```
<html>
<head>
<title> Basic Animation </title>
<style>
        #layer1 {position:absolute;top:80px;left:150px;}

        #layer2 {position:absolute;top:130px;left:450px;}

        #layer3 {position:absolute;top:180px;left:750px;}
</style>
<script type="text/javascript">
        function move_image(layer)
        {
         var top = window.prompt("Enter Top Value:")

         var left = window.prompt("Enter Left Value:")

         document.getElementById(layer).style.top = top+'px';

         document.getElementById(layer).style.left = left+'px';

        }


</script>
</head>
```

```
<body bgcolor="Tan">

  <h3> Creating Dynamic Effects with Basic Animation </h3>

        <div id="layer1"><img src="images1.jpg" onclick="move_image('layer1')" alt="My
First Image." /></div>

        <div id="layer2"><img src="images2.jpg" onclick="move_image('layer2')" alt="My
Second Image." /></div>

        <div id="layer3"><img src="images3.jpg" onclick="move_image('layer3')" alt="My
Third Image." /></div>

</body>

</html>
```
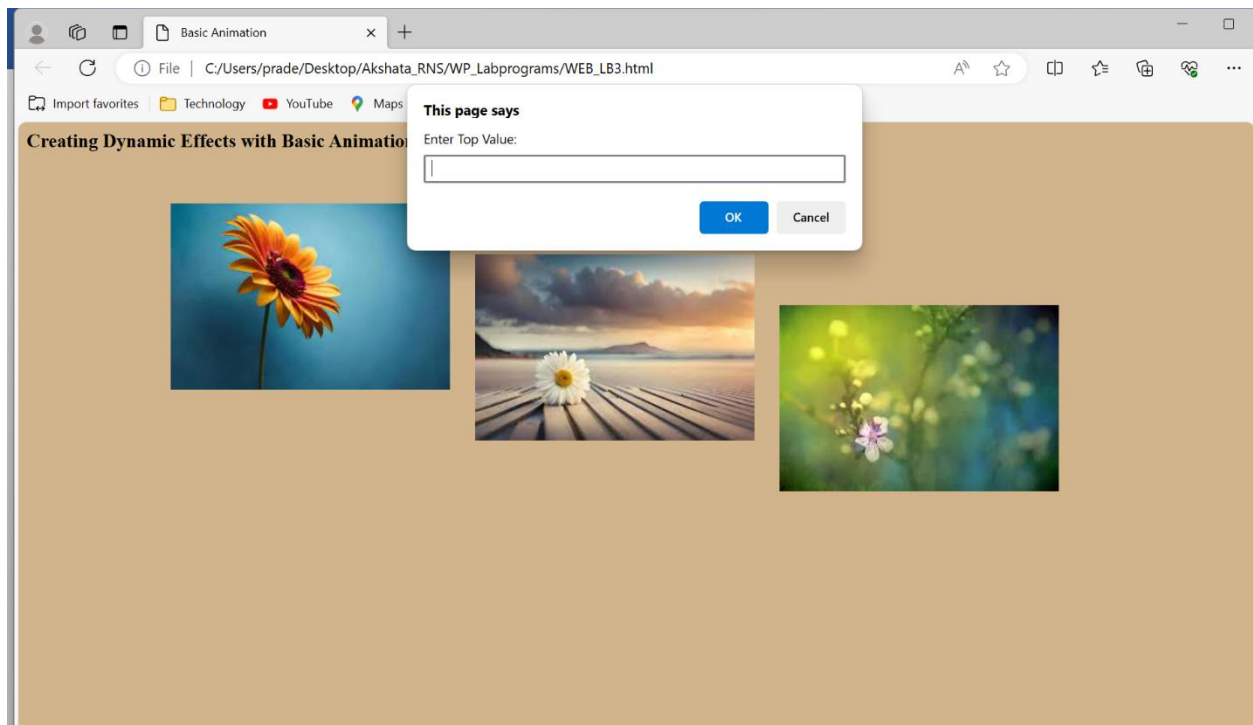
OUTPUT:

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Lab Prgm 4. Write a JavaScript code to find the sum of N natural Numbers. (Use userdefined function)

```html
<html>
<head>
<title> Sum of Natural Numbers </title>
<script type="text/javascript">
  function sum1()
  {
   var num = window.prompt("Enter the Value of N:");
   var n = parseInt(num);
   var sum = (n*(n+1))/2;
   window.alert("Sum of First "+n+" Natural Numbers is : " +sum)
  }
</script>
</head>
<body bgcolor="LightYellow">
<br/><br/>
<h2> Sum of 'N' Natural Numbers </h2>
<form>
        <input type="button" value="Find Sum of Natural Numbers" onclick="sum1()" />
</form>
</body>
</html>
```
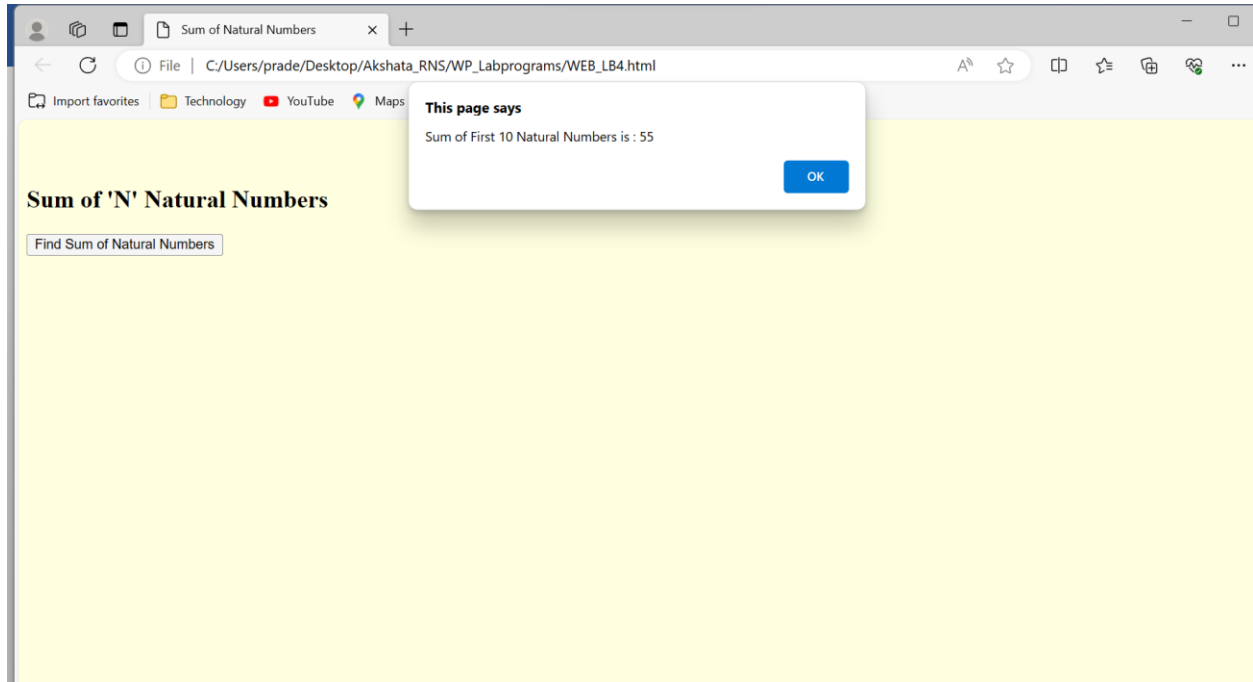
OUTPUT:

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Lab Prgm 5. Write a JavaScript code block using arrays and generate the current date in words, this should include the day, month and year.

```
<html>

<head>

<title> Date Display </title>

<script type="text/javascript">

        var days = ["zero",
"First","Second","Third","Fourth","Fifth","Sixth","Seventh","Eighth","Ninth","Tenth","Eleventh","Twelfth",

"Thirteenth","Fourteenth","Fifteenth","Sixteenth","Seventeenth","Eighteenth","Nineteenth","Twentyeth",

"TwentyFirst","TwentySecond","TwentyThird","TwentyFourth","TwentyFifth","TwentySixth","TwentySeventh","TwentyEighth",

        "TwentyNinth","Thirtyeth","ThirtyFirst"];

        var months =
["January","February","March","April","May","June","July","August","September","October","November","December"];

        var year = "Two Thousand Twenty Three";

        var dateObj = new Date();

        var currMonth = dateObj.getMonth();

        var currDate = dateObj.getDate();

        var currYear = dateObj.getFullYear();

        if(currYear == 2023)

    alert("Today's Date is : "+days[currDate]+" "+months[currMonth]+""+year);

    else
```
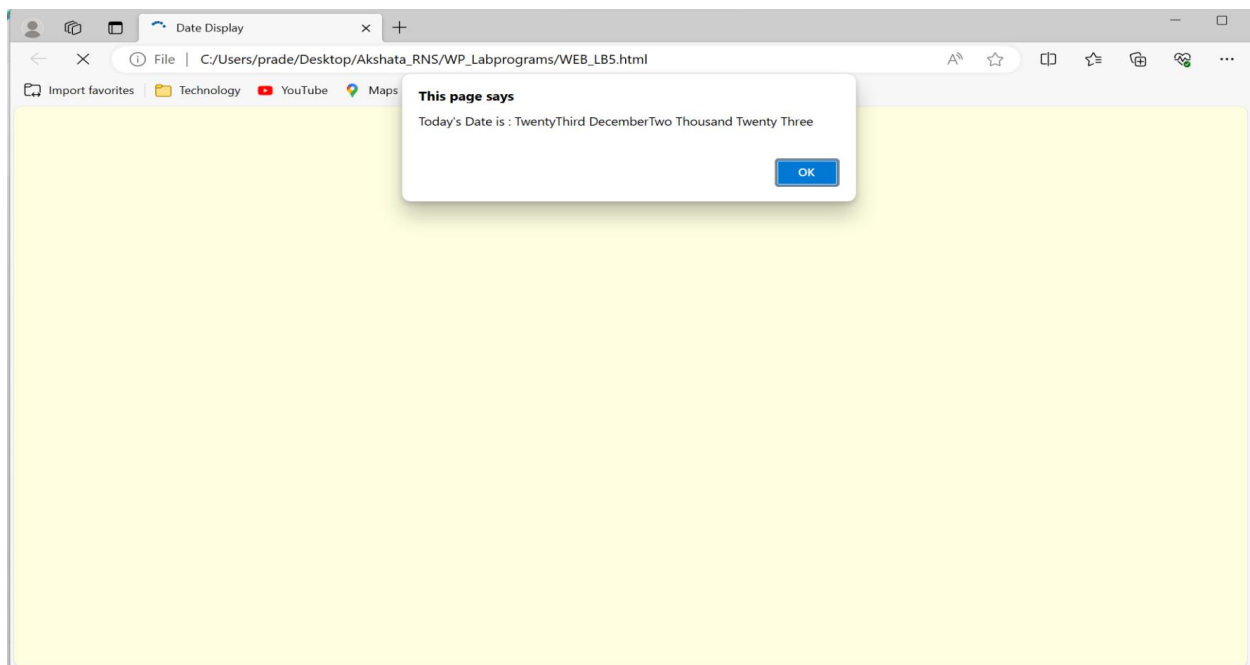
```
      alert("Today's Date is : "+days[currDate]+" "+months[currMonth]+""+currYear);
</script>
</head>
<body bgcolor="teal">
</body>
</html>
```

OUTPUT:

Lab Prgm 6. Create a form for Student information. Write JavaScript code to find Total, Average, Result and Grade.

```
<html>
<head>
<title> Student Data Example </title>
<script type="text/javascript">
  function showResults()
  {
    var name = document.getElementById("name").value;
    var cls = document.getElementById("class").value;
    var marks1 = parseInt(document.getElementById("sub1").value);
    var marks2 = parseInt(document.getElementById("sub2").value);
    var marks3 = parseInt(document.getElementById("sub3").value);
    var total = marks1+marks2+marks3;
    var avg = total/3;
    var grade,result;
    if(avg>=60)
    {
      grade="A";
      result="First Class";
    }
    else if(avg<60 && avg>=50)
    {
      grade="B";
```

```
    result="Second Class";
   }
   else if(avg<50 && avg>=40)
   {
    grade="C";
    result="Third Class";
   }
   else
   {
    grade="D";
    result="Fail";
   }
   document.writeln("<h2>Results</h2>");
   document.writeln("<b>Name        :"+name+"</b><br/><br/>");
   document.writeln("<b>Class        :"+cls+"</b><br/><br/>");
   document.writeln("<b>Total Marks        :"+total+"</b><br/><br/>");
   document.writeln("<b>Average   :"+avg+"</b><br/><br/>");
   document.writeln("<b>Grade        :"+grade+"</b><br/><br/>");
   document.writeln("<b>Result        :"+result+"</b><br/><br/>");
  }
</script>
</head>
<body bgcolor="peachpuff">
<form>
```

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```html
<table border="5">
<tr><th> Student Details </th></tr>
    <tr>
            <td> Student Name : </td>
            <td><input type="text" id="name" /></td>
    </tr>
    <tr>
            <td> Class : </td>
            <td><input type="text" id="class" /></td>
    </tr>
    <tr>
            <td> Subject1 Marks : </td>
            <td><input type="text" id="sub1" /></td>
    </tr>
    <tr>
            <td> Subject2 Marks : </td>
            <td><input type="text" id="sub2" /></td>
    </tr>
    <tr>
            <td> Subject3 Marks : </td>
            <td><input type="text" id="sub3" /></td>
    </tr>
    </table>
<br/><input type="button" value="View Results" onclick="showResults()" />
```
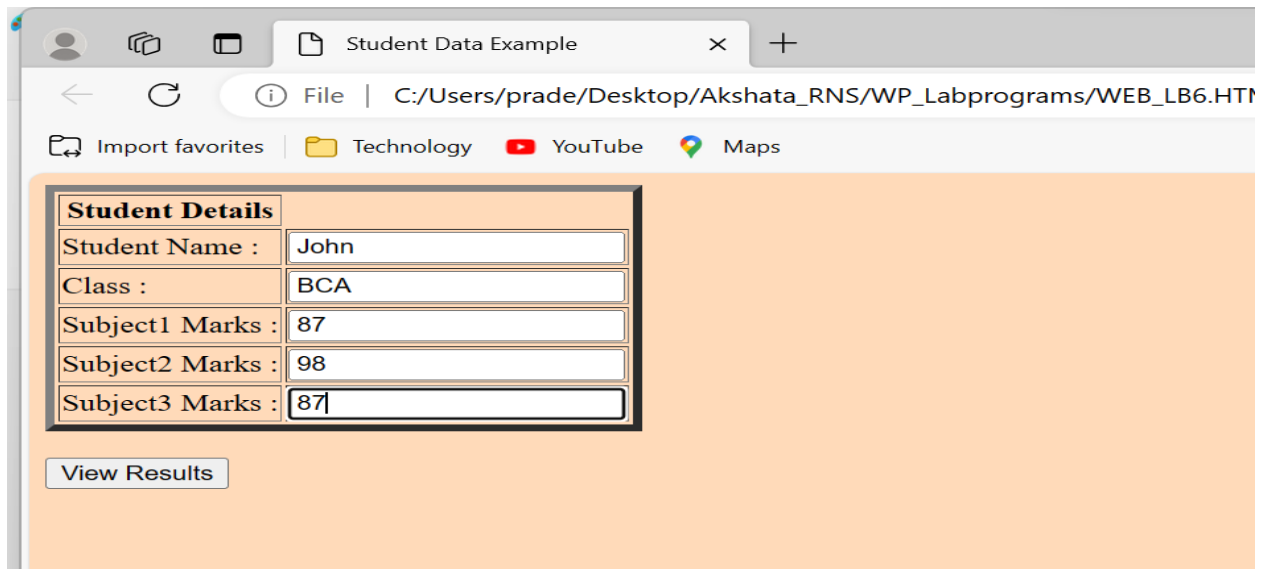
```
</form>

</body>

</html>
```

OUTPUT:

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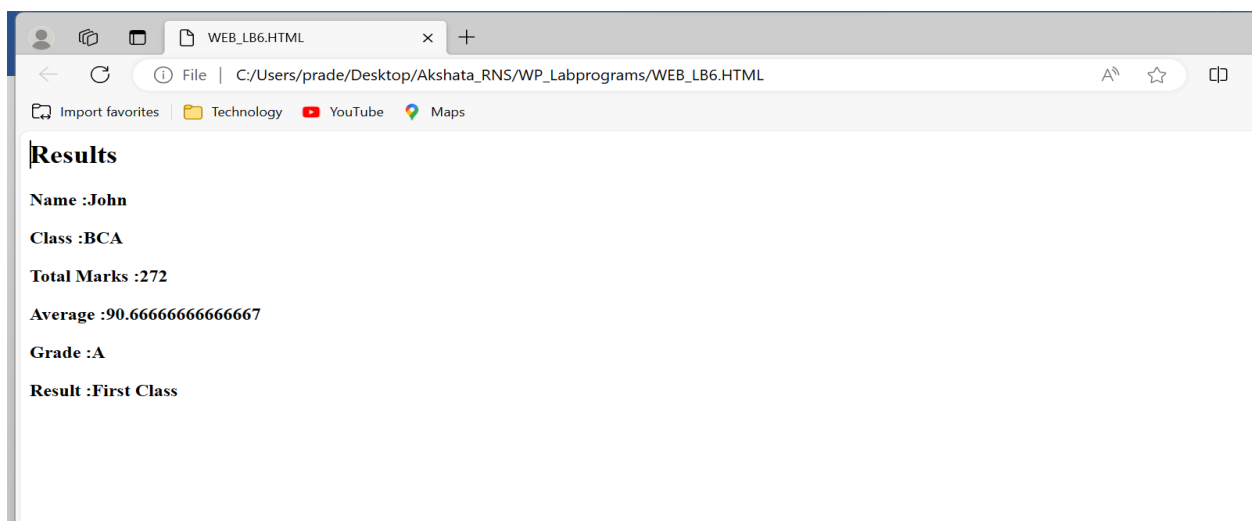**Dr. Vishnuvardhan Road, Channasandra, RR Nagara, Bangalore – 98**

Lab Prgm 7. Create a form for Employee information. Write JavaScript code to find DA, HRA, PF, TAX, Gross pay, Deduction and Net pay.

```
<html>
<head>
<title> Employees Salary Details </title>
<script type="text/javascript">
  function showSalary()
  {
   var empname = document.getElementById("empname").value;
   var empno = document.getElementById("empno").value;
   var basic = parseInt(document.getElementById("basic").value);
   // hra is 40% of basic
   var hra = basic*0.4;
   // da is 60% of basic
   var da = basic*0.6;
   var gross = basic+hra+da;
   // pf is 13% of gross
   var pf = gross*0.13;
   // tax is 20% of gross
   var tax = gross*0.2;
   var deductions = pf+tax;
   var netsalary = gross-deductions;
```

```
document.writeln("<table border='5'>");

document.writeln(" <tr> <th> Employee Salary Breakup Details </th> </tr>");

document.writeln("<tr> <td> Emp Name : </td><td>"+empname+"</td></tr>");

document.writeln("<tr> <td> Emp No : </td><td>"+empno+"</td></tr>");

document.writeln("<tr> <td> Basic Salary : </td><td>"+basic+"</td></tr>");

document.writeln("<tr> <td> HRA(40% of Basic) : </td><td>"+hra+"</td></tr>");

document.writeln("<tr> <td> DA(60% of Basic) : </td><td>"+da+"</td></tr>");

document.writeln("<tr> <td> Gross Salary : </td><td>"+gross+"</td></tr>");

document.writeln("<tr> <td> PF(13% of Gross) : </td><td>"+pf+"</td></tr>");

document.writeln("<tr> <td> Tax(20% of Gross) : </td><td>"+tax+"</td></tr>");

document.writeln("<tr> <td> Deductions(PF+Tax) : </td><td>"+deductions+"</td></tr>");

document.writeln("<tr> <td> <b> Net Salary(Gross-Deductions) : </b></td>");

document.writeln("<td> <b>"+netsalary+" </b></td></tr>");

document.writeln("</table>");

        }
</script>
</head>
<body bgcolor="beige">
<form>
        <table border="5">
     <tr><th> Employee Details </th></tr>
      <tr>
        <td> Employee Name: </td>
        <td> <input type="text" id="empname" /></td>
```

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```
          </tr>

          <tr>

            <td> Employee Number </td>

            <td> <input type="text" id="empno" /></td>

          </tr>

          <tr>

            <td> Basic Pay: </td>

            <td> <input type="text" id="basic" /></td>

          </tr>

</table>

<br/><input type="button" value="Show Salary Details" onclick="showSalary()" />

</form>

</body>

</html>
```
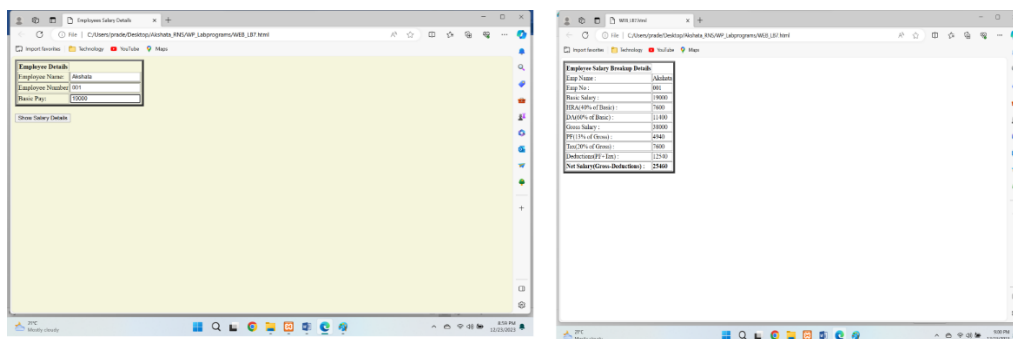
OUTPUT:

Lab Prgm 8. Write a program in PHP to change background color based on day of the week

using if else if statements and using arrays .

```php
<!DOCTYPE html>
<html>
<head>
   <title>Change Background Color</title>
   <style>
      body {
         font-family: Arial, sans-serif;
         text-align: center;
      }
   </style>
</head>
<body bgcolor="peachpuff">

<?php
   // Get the current day of the week (0 = Sunday, 1 = Monday, ..., 6 = Saturday)
   $dayOfWeek = date("w");

   // Define an array of background colors for each day of the week
   $backgroundColor = [
      "Sunday" => "teal",
      "Monday" => "cyan",
      "Tuesday" => "turquoise",
```

```php
    "Wednesday" => "lightblue",

    "Thursday" => "orange",

    "Friday" => "tomato",

    "Saturday" => "olive"

];
// Get the day name based on the day of the week

$dayName = date("l");


// Display a message and set the background color

echo "<h2>Happy $dayName!</h2>";

echo "<p>Today's background color is: <span style='background-color:
{$backgroundColor[$dayName]}; padding:
5px;'>{$backgroundColor[$dayName]}</span></p>";

?>

</body>

</html>
```
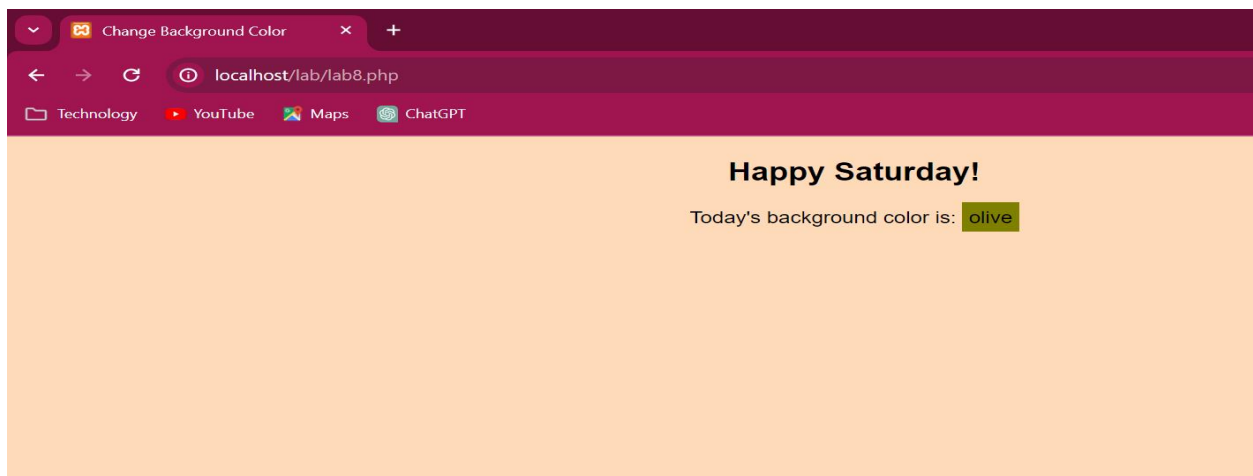
OUTPUT:

Lab Prgm 9. Write a simple program in PHP for i) generating Prime number ii) generate Fibonacci series.

```php
<!DOCTYPE html>
<html>
<head>
   <title>Generate Prime Numbers and Fibonacci series</title>
   <style>
     body {
        font-family: Arial, sans-serif;
        text-align: center;
     }
   </style>
</head>
<body bgcolor="cyan">

<?php
   // Function to check if a number is prime
   function isPrime($num) {
     if ($num < 2) {
       return false;
     }
     for ($i = 2; $i <= sqrt($num); $i++) {
       if ($num % $i === 0) {
          return false;
```

```php
    }
  }
  return true;
}


// Function to generate and display prime numbers up to a specified limit
function generatePrimes($limit) {
  echo "<p>Prime numbers up to $limit:</p>";
  for ($i = 2; $i <= $limit; $i++) {
    if (isPrime($i)) {
      echo "$i ";
    }
  }
}


// Set the limit for prime number generation
$limit = 100;
// Call the function to generate and display prime numbers
generatePrimes($limit);
// Function to generate Fibonacci series up to a specified limit
function generateFibonacci($limit) {
  $fibonacciSeries = [];
  $fibonacciSeries[0] = 0;
  $fibonacciSeries[1] = 1;
```

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```php
    for ($i = 2; $i < $limit; $i++) {
        $fibonacciSeries[$i] = $fibonacciSeries[$i - 1] + $fibonacciSeries[$i - 2];
    }
    echo "<p>Fibonacci series up to $limit:</p>";
    echo implode(', ', $fibonacciSeries);
}
// Set the limit for the Fibonacci series
$limit = 20;
// Call the function to generate and display the Fibonacci series
generateFibonacci($limit);
?>
</body>
</html>
```

OUTPUT:
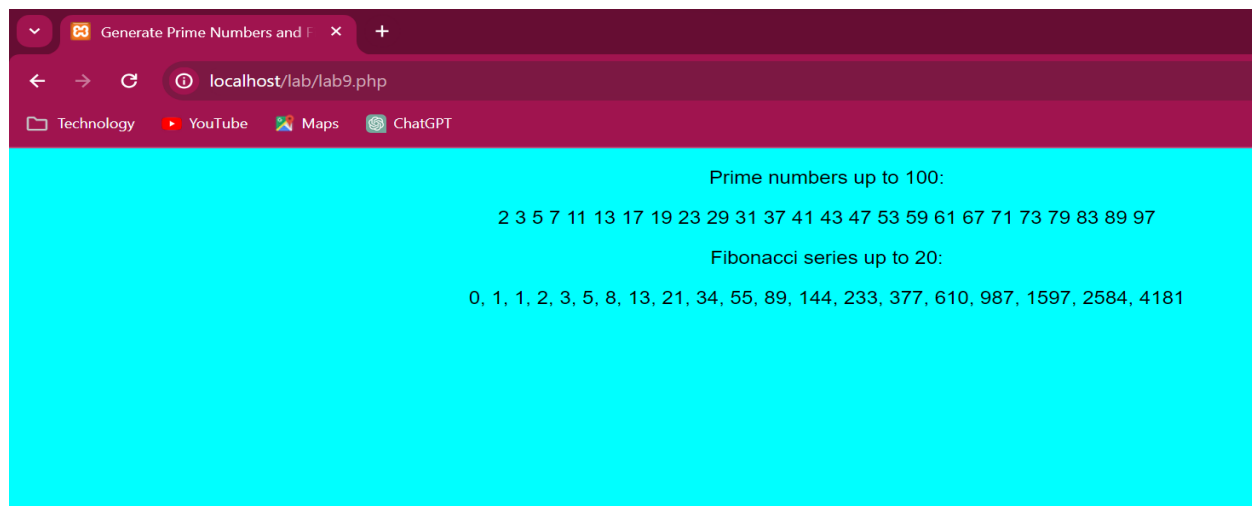
Lab Prgm 10. Write a PHP program to remove duplicates from a sorted list.

```
<!DOCTYPE html>
<html>
<head>
   <title>Remove Duplicates from Sorted List</title>
   <style>
     body {
        font-family: Arial, sans-serif;
        text-align: center;
     }
   </style>
</head>
<body bgcolor="lightcoral">

<?php
   // Function to remove duplicates from a sorted list
   function removeDuplicates($sortedList) {
     $result = [];

     // If the list is empty, return an empty list
     if (empty($sortedList)) {
        return $result;
     }
```

```php
    // The first element is always unique

    $result[] = $sortedList[0];


    // Iterate through the list to find and skip duplicates

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

      // Compare with the previous element

      if ($sortedList[$i] !== $sortedList[$i - 1]) {

        // If not a duplicate, add it to the result

        $result[] = $sortedList[$i];

      }

    }

    return $result;

  }
  // Example sorted list with duplicates

  $sortedListWithDuplicates = [1, 2, 2, 3, 4, 4, 4, 5, 6, 6];

  // Call the function to remove duplicates

  $uniqueList = removeDuplicates($sortedListWithDuplicates);


  // Display the original and unique lists

  echo "<p>Original List: " . implode(', ', $sortedListWithDuplicates) . "</p>";

  echo "<p>Unique List: " . implode(', ', $uniqueList) . "</p>";

?>
</body>

</html>
```
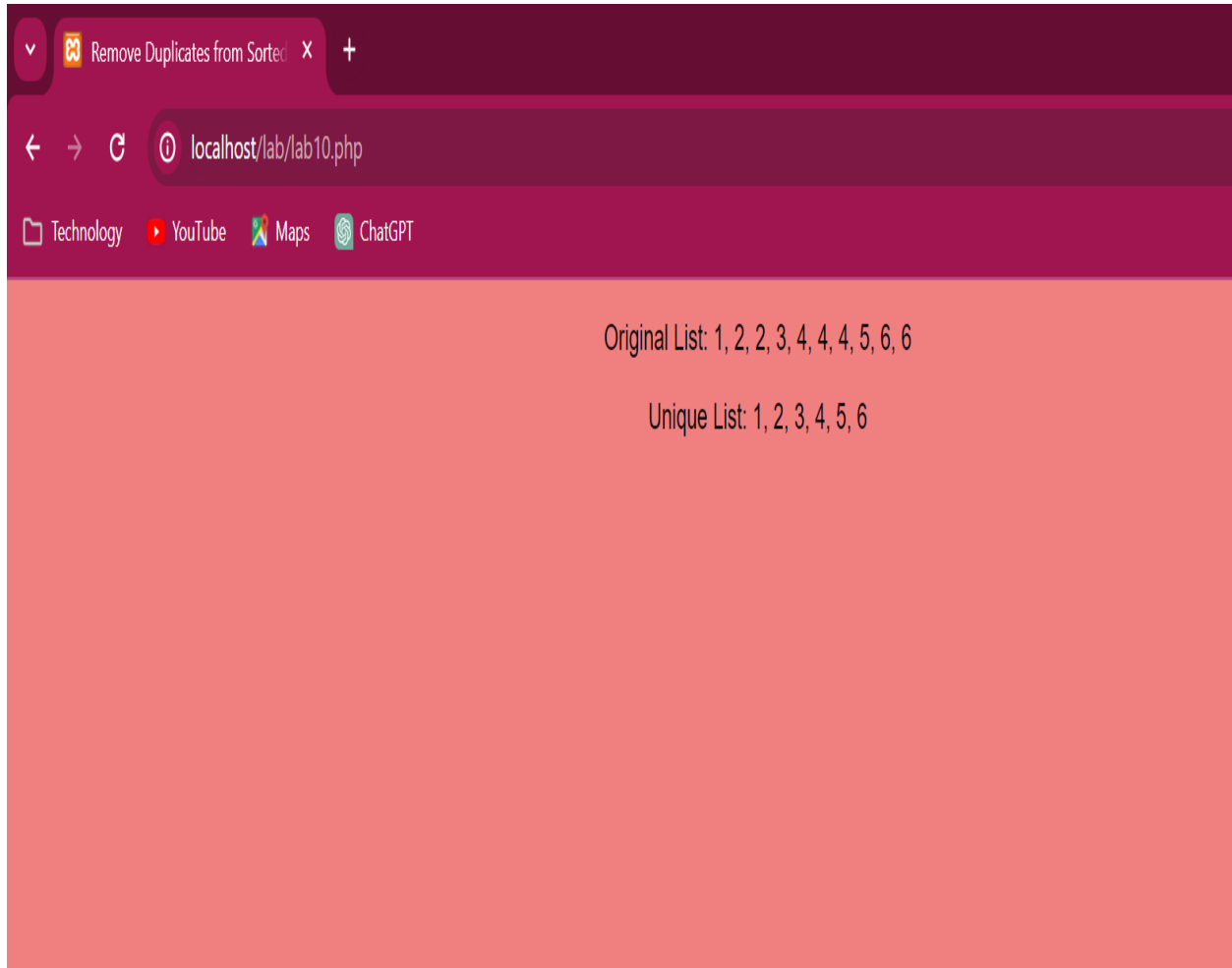
OUTPUT:

Original List: 1, 2, 2, 3, 4, 4, 4, 5, 6, 6

Unique List: 1, 2, 3, 4, 5, 6

Lab Prgm 11. Write a PHP Script to print the pattern on the Screen.

```
<!DOCTYPE html>
<html>
<head>
   <title>Print Pattern</title>
   <style>
      body {
         font-family: Arial, sans-serif;
         text-align: center;
      }
   </style>
</head>
<body bgcolor="plum">

<?php
   // Function to print a pattern of asterisks
   function printPattern($rows) {
      for ($i = 1; $i <= $rows; $i++)
      {
         for ($j = 1; $j <= $i; $j++) {
            echo '$ ';
         }
         echo '<br>';
      }
```

```php
    echo '<br>';
    echo '<br>';
    echo '<br>';
    for($i=0;$i<=5;$i++)
     {
       for($j=5-$i;$j>=0;$j--){
          echo "* ";
        }
      echo "<br>";
     }
}
  // Set the number of rows for the pattern
  $rowCount = 5;


  // Call the function to print the pattern
  printPattern($rowCount);
?>
</body>
</html>
```
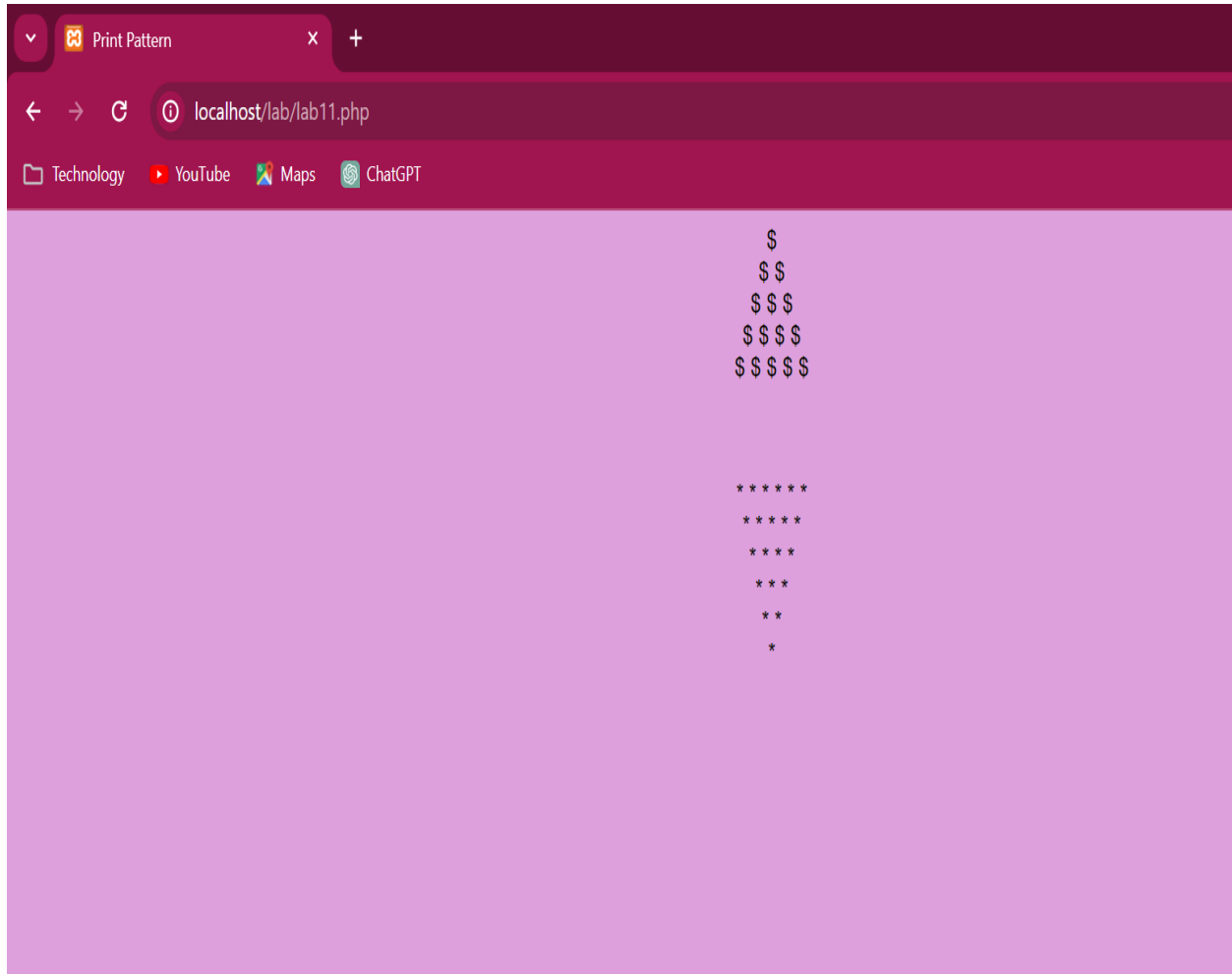
OUTPUT:

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Lab Prgm 12. Write a simple program in PHP for Searching of data by different criteria.

```html
<!DOCTYPE html>
<html>
<head>
  <title>Data Search</title>
  <style>
    body {
      font-family: Arial, sans-serif;
      text-align: center;
    }
    form {
      margin-top: 20px;
    }
  </style>
</head>
<body bgcolor="rosybrown">
<?php
  // Sample data for demonstration
  $data = [
    ['name' => 'John', 'age' => 25,'id' => 001,'sal' => 25000],
    ['name' => 'Jane', 'age' => 30,'id' => 002,'sal' => 35000],
    ['name' => 'Bob', 'age' => 22,'id' => 003,'sal' => 45000],
    ['name' => 'Alice', 'age' => 28,'id' => 004,'sal' => 65000],
  ];
```

```php
// Function to search data by criteria
function searchData($data, $criteria, $value) {
    $results = [];
    foreach ($data as $item) {
        if ($item[$criteria] == $value) {
            $results[] = $item;
        }
    }
    return $results;
}



// Process the search when the form is submitted
if ($_SERVER['REQUEST_METHOD'] === 'POST') {
    $searchCriteria = $_POST['criteria'];
    $searchValue = $_POST['search'];

    // Validate input and perform the search
    if (!empty($searchCriteria) && !empty($searchValue)) {
        $searchResults = searchData($data, $searchCriteria, $searchValue);
        if (!empty($searchResults)) {
            echo "<p>Search Results:</p>";
            foreach ($searchResults as $result) {
                echo "<p>Name: {$result['name']}, Age: {$result['age']},ID: {$result['id']},Sal:
{$result['sal']}</p>";
```
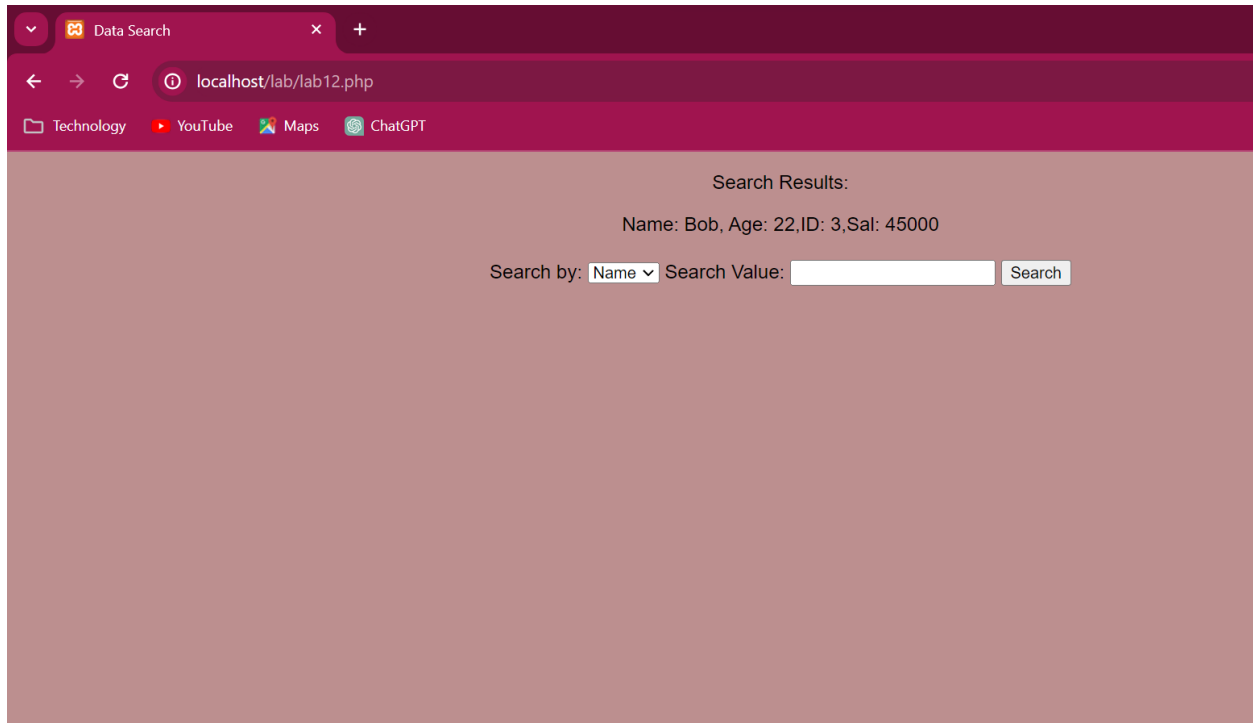
```php
            }
        } else {
            echo "<p>No matching results found.</p>";
        }
    } else {
        echo "<p>Please provide both criteria and search value.</p>";
    }
}
?>
```

```html
<!-- Search Form -->
<form method="post">
   <label for="criteria">Search by:</label>
   <select name="criteria" id="criteria">
      <option value="name">Name</option>
      <option value="age">Age</option>
   </select>
   <label for="search">Search Value:</label>
   <input type="text" name="search" id="search">
   <button type="submit">Search</button>
</form>
</body>
</html>
```

OUTPUT:

Lab Prgm 13. Write a function in PHP to generate captcha code.

```php
<?php
// Start the session to store the captcha code
session_start();


// Function to generate a random captcha code and store it in the session
function generateCaptchaCode($length = 6) {
   // Generate a random code using letters and numbers
   $characters = 'ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz0123456789';
   $captchaCode = '';
   for ($i = 0; $i < $length; $i++) {
      $captchaCode .= $characters[rand(0, strlen($characters) - 1)];
   }
   // Store the captcha code in the session
   $_SESSION['captcha_code'] = $captchaCode;


   return $captchaCode;
}
// Example: Generate a captcha code with a length of 6 characters
$captcha = generateCaptchaCode(6);


$_SESSION['data'] = $captcha
?>
```

```html
<!DOCTYPE html>
<html>
<head>
   <title>Captcha Example</title>
   <style>
     body {
        font-family: Arial, sans-serif;
        text-align: center;
        background-color: SlateGrey;
     }
     img {
        margin-top: 20px;
        border: 1px solid #ccc;
     }
   </style>
</head>
<body>

<h2>Generated Captcha Code: <?php echo $captcha; ?></h2>

<!-- Display the captcha code as an image -->
<img src="captcha_image.php" alt="Captcha Image">
</body>
</html>
```

```php
// captcha_image.php file

<?php

//Step to be done before runing this code

// 1.   Copy file 'arial.ttf' in same dir as this file.

// 2.   Make sure that the GD library is enabled in your PHP installation. You can check this by
looking for the gd extension in your php.ini file.

// How to enable GD, go to "\xampp\php\php.ini" look for 'extension=gd', remove ';' from the
start of the line and restart server.


session_start();


// Generate a captcha code and set up the image

$captchaCode = $_SESSION['data'];

$imageWidth = 120;

$imageHeight = 40;


// Create the image

$image = imagecreatetruecolor($imageWidth, $imageHeight);


// Set the background color

$backgroundColor = imagecolorallocate($image, 255, 255, 255);

imagefill($image, 0, 0, $backgroundColor);


// Set the text color

$textColor = imagecolorallocate($image, 0, 0, 0);
```

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```php
// Add random lines to the image for noise

for ($i = 0; $i < 5; $i++) {

    imageline($image, rand(0, $imageWidth), rand(0, $imageHeight), rand(0, $imageWidth), rand(0, $imageHeight), $textColor);

}


// Add random dots to the image for noise

for ($i = 0; $i < 50; $i++) {

    imagesetpixel($image, rand(0, $imageWidth), rand(0, $imageHeight), $textColor);

}


// Add the captcha code to the image

imagettftext($image, 20, 0, 10, 30, $textColor, 'arial.ttf', $captchaCode);


// Set the content type

header('Content-Type: image/png');


// Display the image

imagepng($image);


// Free up memory

imagedestroy($image);

?>
```
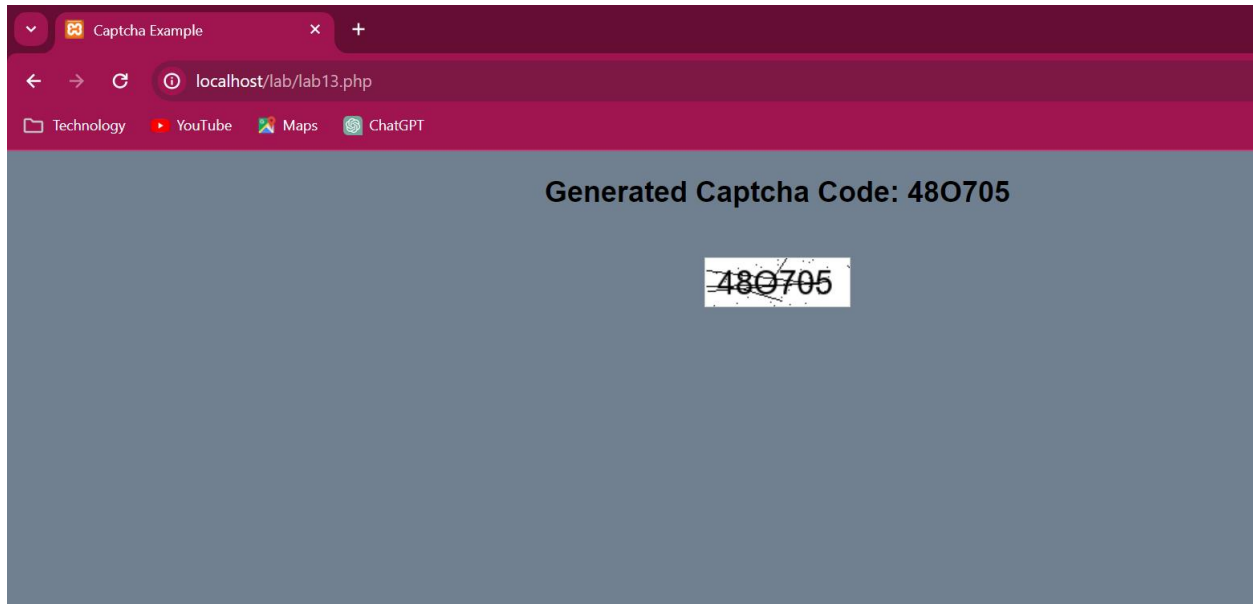
OUTPUT:

Lab Prgm 14. Write a Program to store and read image from Database.

```
<html>

<head>

<title> Image Selection and Insertion to the Database

</title>

</head>

<body bgcolor="Aqua">

<?php

// NOTE:

// CREATE a DB with name studentdb and also table as images with help of myphpadmin


// Database connection configuration

$servername = "localhost";

$username = 'root';

$password = '';

$dbname="studentdb";

// Create connection

$conn = new mysqli($servername, $username, $password, $dbname);

// Check connection

if ($conn->connect_error) {

    die("Connection failed: ".$conn->connect_error);

}


// Image upload handling
```

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```php
// Check if a file was uploaded
if (isset($_FILES['image'])) {

    $image = $_FILES['image'];

    // Check connection
    if ($conn->connect_error) {

        die("Connection failed: " . $conn->connect_error);

    }

    $imageName = $image['name'];

    $imageData = file_get_contents($image['tmp_name']);

    // Prepare and execute the SQL query to insert the image into the database
    $stmt = $conn->prepare("INSERT INTO images (name, image_data) VALUES (?, ?)");

    $stmt->bind_param("ss", $imageName, $imageData);

    if ($stmt->execute()) {

        echo "Image uploaded successfully.";

    } else {

        echo "Error uploading image: " . $stmt->error;

    }

    // Close the database connection
```

```php
    $stmt->close();


} else {

    echo "No image selected.";

}


// Retrieve image from database and display
// Check connection
if ($conn->connect_error) {

    die("Connection failed: " . $conn->connect_error);

}


// Retrieve the latest image from the database
$result = $conn->query("SELECT name, image_data FROM images ORDER BY id DESC");


if ($result->num_rows > 0) {

    $row = $result->fetch_assoc();

    $imageName = $row['name'];

    $imageData = $row['image_data'];


    // Display the image
    // header("Content-type: image/*");

    // header("Content-Disposition: inline; filename=$imageName");

    // echo $imageData;
```

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```php
    // Read image path, convert to base64 encoding

    $imgData = base64_encode($row['image_data']);

    $type = pathinfo($imageName, PATHINFO_EXTENSION);


    // Format the image SRC:  data:{mime};base64,{data};

    $src = 'data: '.';base64,'.$imgData;


    // Echo out a sample image

    echo '<img src="'.$src.'">';
} else {

    echo "No image found.";

}


// Close the database connection

$conn->close();

?>
</body>

</html>
<!-- HTML Form for Image Upload -->
<form action="" method="post" enctype="multipart/form-data">

    <input type="file" name="image" />

    <input type="submit" value="Upload" name="submit"/>

</form>
# Create your own Database and create a Table in Mysql.
```
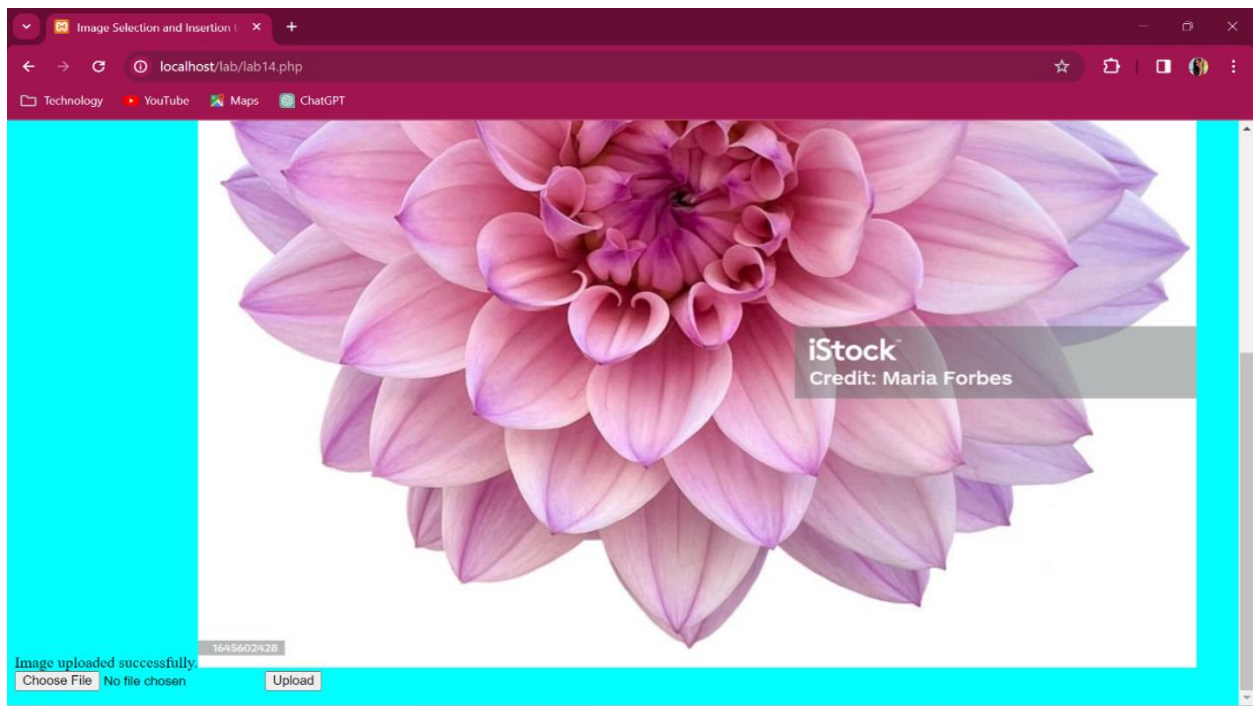
```
CREATE TABLE `studentdb`.'images' (

    id INT AUTO_INCREMENT PRIMARY KEY,

    name VARCHAR(255),

    image_data LONGBLOB

);

CREATE TABLE `studentdb`.`students` (

    name VARCHAR(100) NOT NULL ,

    age INT NOT NULL ,

    grade VARCHAR(100) NOT NULL

    ) ENGINE = InnoDB;
```

OUTPUT:

Lab Prgm 15. Write a program in PHP to read and write file using form control.

#Create a Text file called Lab15 in the same folder and then create the php file.

```
<!DOCTYPE html>

<html>

<head>

<title>Read and Write File</title>

</head>

<body>

<h2>Write to File</h2>

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

    <textarea name="content" rows="5" cols="40" placeholder="Enter text to write"></textarea><br><br>

    <input type="submit" name="write" value="Write to File">

</form>

<hr>


<h2>Read from File</h2>

<?php

    $file = 'Lab15.txt'; // Name of the file

if($_SERVER["REQUEST_METHOD"] == "POST" && isset($_POST['write'])) {

    $content = $_POST['content'];

    file_put_contents($file, $content, FILE_APPEND | LOCK_EX);

    echo "Content written to file successfully!";

}
```
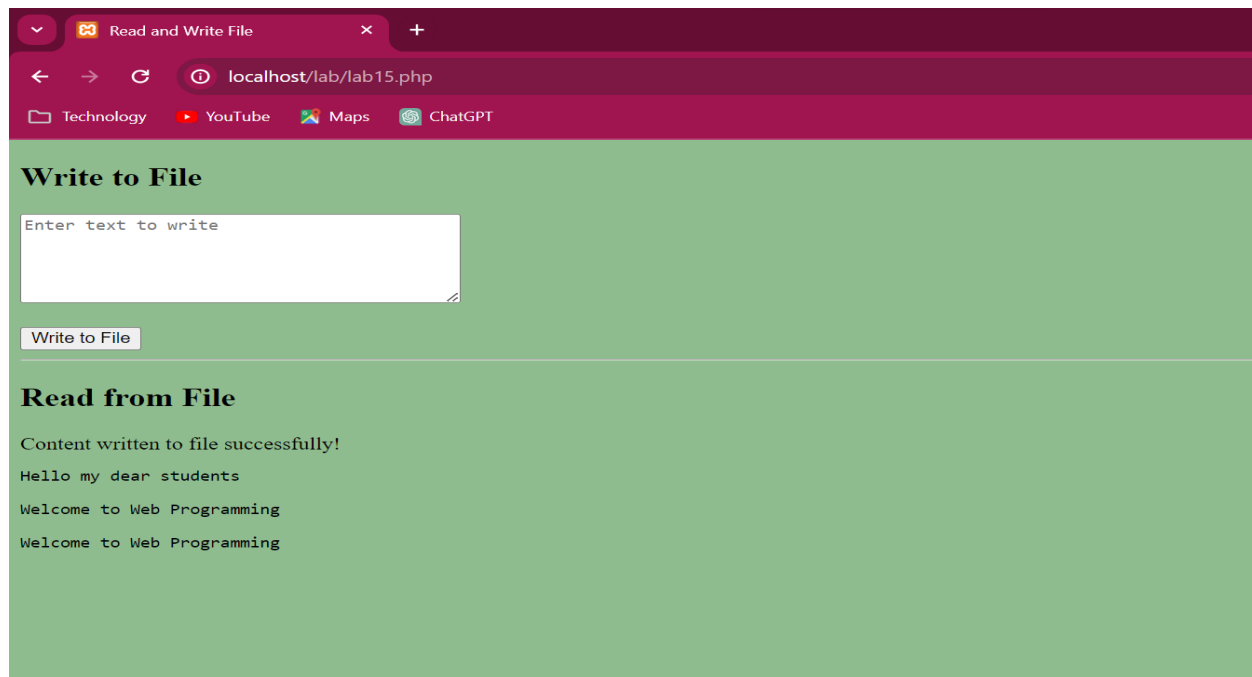
```php
if (file_exists($file)) {

    $content = file_get_contents($file);

    echo "<pre>$content</pre>";

} else {

    echo "File not found!";

}
?>
</body>

</html>
```

OUTPUT:

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Lab Prgm 16. Write a program in PHP to add, update and delete using student database.

```php
<!DOCTYPE html>

<html>

<head>

<title>Student Database Operations</title>

</head>

<body bgcolor="cadetblue">

<?php

$servername = "localhost";

$username = "root";

$password = "";

$dbname="studentdb";

// Create connection

$conn = new mysqli($servername, $username, $password, $dbname);

// Check connection

if ($conn->connect_error) {

    die("Connection failed: ". $conn->connect_error);

}


// Add Student

$add_sql = "INSERT INTO students (name, age, grade) VALUES ('Akshata', 34, 'A+')";

if ($conn->query($add_sql) === TRUE) {

    echo "New record added successfully.<br><br><br>";

} else {
```

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```php
    echo "Error adding record: ".$conn->error. "<br>";
}


// Update Student

$update_sql = "UPDATE students SET age = 33 WHERE name = 'Akshata'";


if ($conn->query($update_sql) == TRUE) {

    echo "Record updated successfully.<br><br><br>";

} else {

    echo "Error updating record: ".$conn->error. "<br>";

}


// Delete Student

$delete_sql = "DELETE FROM students WHERE name = 'Akshata'";

if ($conn->query($delete_sql) == TRUE) {

    echo "Record deleted successfully.<br><br><br>";

} else {

    echo "Error deleting record: ".$conn->error. "<br>";

}
$conn->close();


?>
</body>

</html>
```
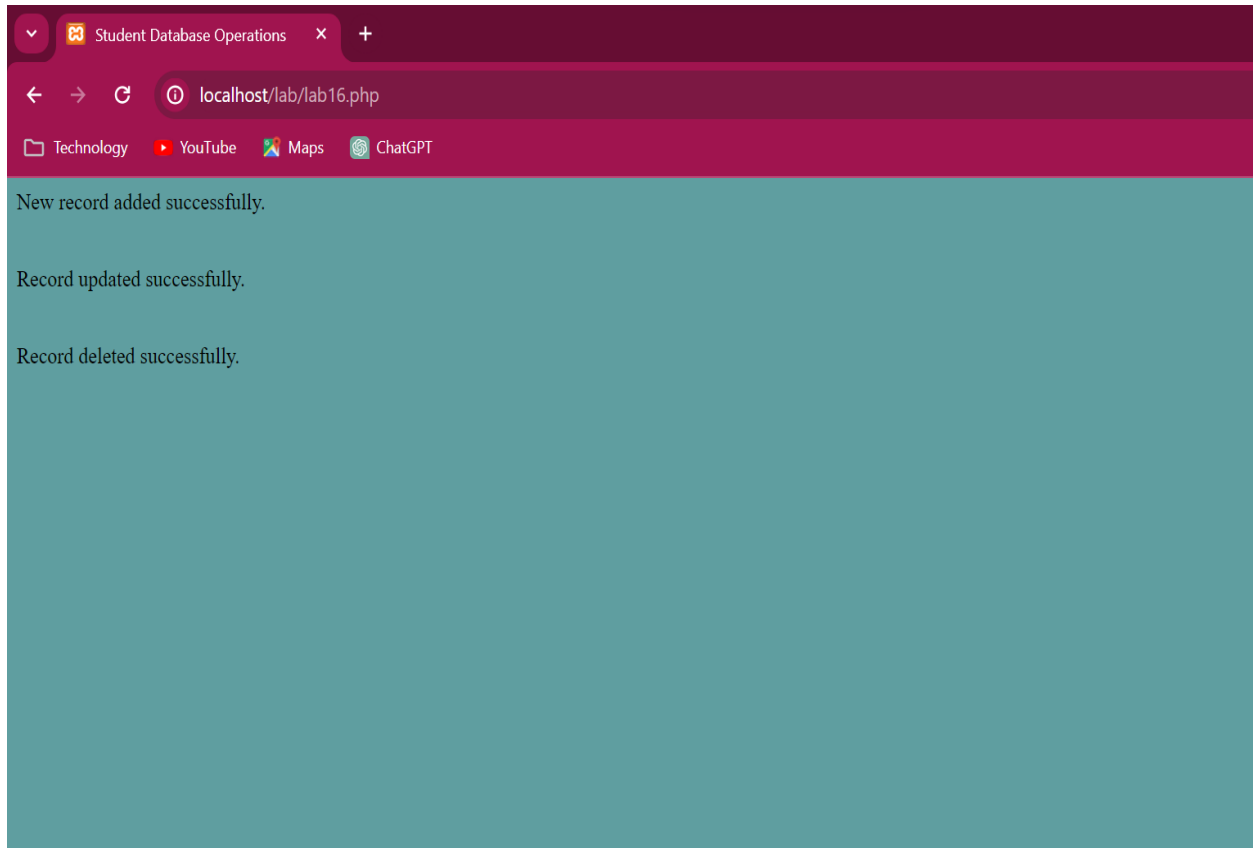
OUTPUT:

Lab Prgm 17. Write a program in PHP to Validate Input.

```
<!DOCTYPE html>

<html>

<title>Input Validation</title>

<head>

</head>

<body bgcolor="lavender">

<?php

   $username = $usernameErr = "";

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

     // Validate username input

     if (empty($_POST["username"])) {

        $usernameErr="Username is required";

     } else {

        $username=test_input($_POST["username"]);

        // Check if username contains only letters and whitespace

        if (!preg_match("/^[a-zA-Z ]*$/", $username)) {

          $usernameErr = "Only letters and white space allowed";

        }

     }

   }


   // Function to sanitize and validate input
```

```php
function test_input($data) {

    $data = trim($data);

    $data = stripslashes($data);

    $data = htmlspecialchars($data); return $data;

  }
?>


<h2>Validate Input: Username</h2>
<form action="<?php echo htmlspecialchars($_SERVER["PHP_SELF"]); ?>" method="post">

  Username: <input type="text" name="username">

  <span class="error">*<?php echo $usernameErr; ?></span>

  <br><br>

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

</form>


<?php
  if (!empty($username)) {

    echo "<h3>Entered Username:</h3>";

    echo $username;

  }
?>
</body>

</html>
```
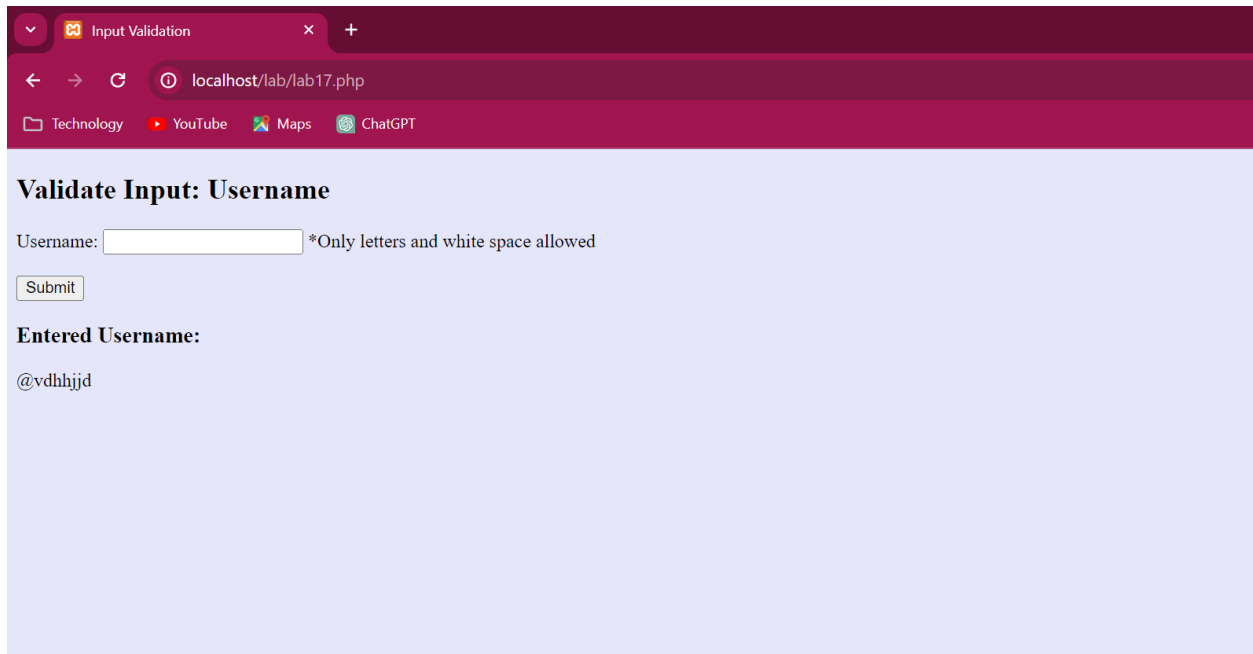
OUTPUT:

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Lab Prgm 18. Write a program in PHP for setting and retrieving a cookie.

```
<!DOCTYPE html>

<html>

<title>Setting and Reading a Cookie</title>

<head>

</head>

<body bgcolor="gold">


<?php

//Validation, In fresh page of browser, load this page and check the request header, for cookies values.


// Set a cookie named 'user' with value 'Shiva' that expires in 24 hours

$cookie_name = "UserID";

$cookie_value = "Hello_Students!!";

$expiration_time = time() + (24* 3600); // 24 hours from now

setcookie($cookie_name, $cookie_value, $expiration_time, "/");

echo "Cookie '$cookie_name' is set.<br><br><br>";


// Retrieve the value of the 'user' cookie, if it exists

if(isset($_COOKIE[$cookie_name]))

{

   echo "Value of cookie '$cookie_name' is: ".$_COOKIE[$cookie_name];

}

else
```
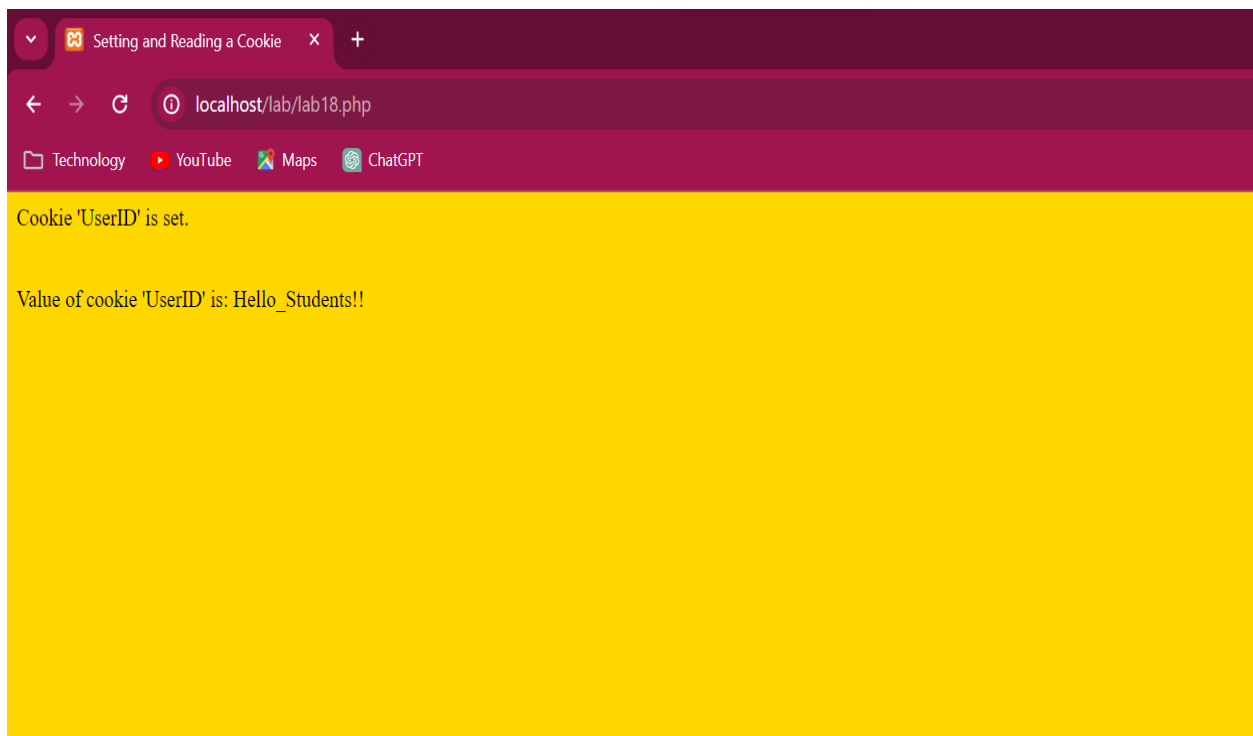
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```
{
    echo "Cookie named '$cookie_name' is not set.";
}
?>
</body>
</html>
```

OUTPUT:

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Lab Prgm 19. Write a PHP program to Create a simple webpage of a college.

```html
<!DOCTYPE html>
<html>
  <head>
    <title>College Website</title>
    <!-- CSS styles can be added here -->
    <style>
      body
        {
        font-family: Arial, sans-serif;
        margin: 20px;
        }
      h1
        {
        color: #333;
        }
      p
        {
        color: #666;
        }
    </style>
  </head>
  <body bgcolor="beige">
    <header>
```

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```
<h1>Welcome to Our College</h1>
</header>
<nav>
  <ul>
    <li><a href="#">Home</a></li>
    <li><a href="#">About Us</a></li>
    <li><a href="#">Courses</a></li>
    <li><a href="#">Contact</a></li>
  </ul>
</nav>


<main>
  <section>
    <h2>About Our College</h2>



  <p>
```

A college where students spend their time, make endless efforts and also show dedication towards their passions and goals, that would surely pay them back all that they deserve.

Our college is one among them, promising a bright future and the chance to reach their potentials and objectives. RNS First Grade College is really a great platform for all those young minds who dream to achieve big. The college provides a plenty of opportunities to come forward with what students seek to be in their near and dear future. We are committed to support students personal growth, enhance and keep up the quality education. The courses that are offered in our Institution and the time they spend in the campus would be considered with great care and help them take right decision.

```
</p>
</section>
   <h2>Available Courses</h2>
<section>
   <?php
      //PHP code to display available courses
      $courses = ['BCA', 'BBA', 'BCom'];
      echo "<ul>";
      foreach($courses as $course)
      {
      echo "<li>$course</li>";
      }
      echo "</ul>";
   ?>
</section>
<section>
   <h2>Contact Information</h2>
   <p>Address: RNSFGC,Channasandra,RRNagar,Bengaluru, Karnataka, India
560098</p>
   <p>Email: info@rnsfgc.com</p>
   <p>Phone: 080-123456789</p>
</section>
</main>
<footer>
   <p>&copy; <?php echo date("Y");?>
```

Our College. All rights are reserved.</p>

</footer>

</body>

</html>

OUTPUT:
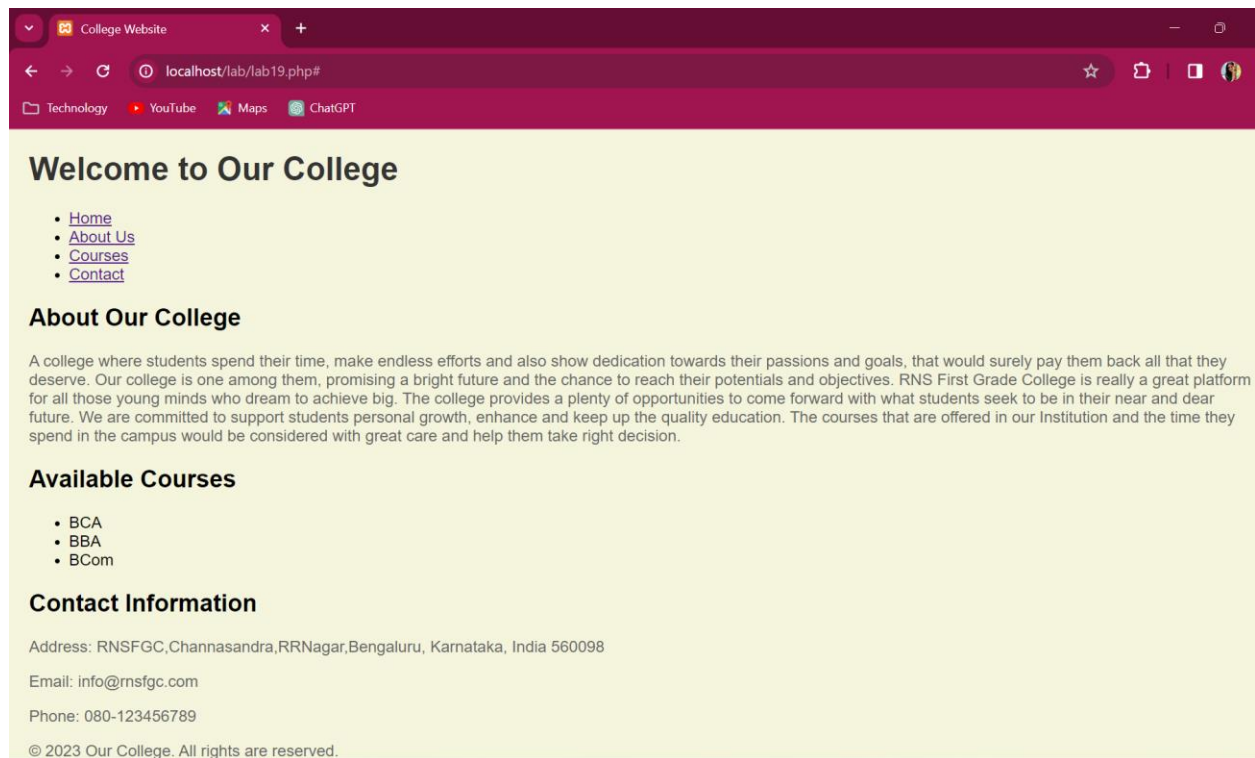
Lab Prgm 20. Write a program in PHP for exception handling for i) divide by zero ii) checking date format.

```php
<!DOCTYPE html>

<html>

<title>PHP Exception Handling</title>

<head>

</head>

<body bgcolor="aliceblue">

<?php

   try {

// Division by zero

     $numerator = 10;

     $denominator = 2;

        if ($denominator === 0)

         {

        throw new Exception("Division by zero error");

      }

     $result = $numerator / $denominator;

     echo "Result of division: ". $result."<br><br><br>";


// Checking date format

     $dateString = '2023-12-20';

     $dateFormat = 'Y-m-d';
```

```php
$date= DateTime::createFromFormat($dateFormat, $dateString);

if (!$date || $date->format($dateFormat) !== $dateString)

    {

    throw new Exception("Invalid date format");

}

echo "Date is valid: ". $dateString;

}catch (Exception $e)

    {

 echo "Error: ". $e->getMessage();

}
?>
</body>

</html>
```

OUTPUT: