

16. Write a JavaScript program to display the current day and time in the following format. *Sample Output*

: Today is : Wednesday.

Current time is : 2 PM : 30 : 38

```
=> <!DOCTYPE html>

<html lang="en">

<head>

  <meta charset="UTF-8">

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

  <title>Current Day and Time</title>

  <script>

    function displayDateTime() {

      const days = ["Sunday", "Monday", "Tuesday", "Wednesday", "Thursday", "Friday", "Saturday"];

      const now = new Date();

      const day = days[now.getDay()];

      const hours = now.getHours();

      const minutes = now.getMinutes();

      const seconds = now.getSeconds();

      const ampm = hours >= 12 ? "PM" : "AM";

      const formattedHours = hours % 12 || 12; // Convert to 12-hour format

      document.getElementById("day").textContent = `Today is : ${day}.`;

      document.getElementById("time").textContent = `Current time is : ${formattedHours} ${ampm} :

${minutes.toString().padStart(2, '0')} : ${seconds.toString().padStart(2, '0')}`;

    }

    setInterval(displayDateTime, 1000); // Update every second

  </script>

</head>

<body onload="displayDateTime()">

  <h1>Current Day and Time</h1>

  <p id="day"></p>

  <p id="time"></p>

</body>

</html>
```

Output:

Current Day and Time

Today is : Wednesday.

Current time is : 12 AM : 27 : 12

12.A. Write a java script program to sort 50 natural numbers.

```
=> <!DOCTYPE html>

<html lang="en">

<head>

  <meta charset="UTF-8">

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

  <title>Sort Natural Numbers</title>

  <script>

    function sortNumbers() {

      const numbers = Array.from({ length: 50 }, (_, i) => i + 1);

      const sortedNumbers = numbers.sort((a, b) => a - b);

      document.getElementById("result").textContent = `Sorted Numbers: ${sortedNumbers.join(", ")}`;

    }

  </script>

</head>

<body onload="sortNumbers()">

  <h1>Sorting 50 Natural Numbers</h1>

  <p id="result"></p>

</body>

</html>
```

Output:

Sorting 50 Natural Numbers

Sorted Numbers: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50

B. Write a JavaScript program that accept two integers and display the larger.

```
=> <!DOCTYPE html>

<html>

<head>

  <title>Larger Number</title>

  <script>

    function findLarger() {

      const num1 = +document.getElementById("num1").value;

      const num2 = +document.getElementById("num2").value;

      document.getElementById("result").textContent = isNaN(num1) || isNaN(num2)

        ? "Enter valid numbers!"

        : `The larger number is: ${Math.max(num1, num2)}`;

    }

  </script>

</head>

<body>

  <h3>Enter two numbers:</h3>

  <input id="num1" type="number"> <input id="num2" type="number">

  <button onclick="findLarger()">Find Larger</button>

  <p id="result"></p>

</body>

</html>
```

Output:

Enter two numbers:

The larger number is: 25

13. a. Pattern program

output:

```
=> <!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
<title>Pattern</title>
```

```
</head>
```

```
<body>
```

```
<form method="post">
```

```
<button type="submit" name="print">Print Pattern</button>
```

```
</form>
```

```
<?php
```

```
if (isset($_POST['print'])) {
```

```
    for ($i = 1; $i <= 5; $i++) echo str_repeat("*", $i) . "<br>";
```

```
}
```

```
?>
```

```
</body>
```

```
</html>
```

Print Pattern

*

**

B.pattern program:

output:

```
=> <!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
<title>Inverted Pyramid Pattern</title>
```

```
</head>
```

```
<body>
```

```
<form method="post">
```

```
<button type="submit" name="print">Print Pattern</button>
```

```
</form>
```

```
<?php
```

```
if (isset($_POST['print'])) {
```

```
    for ($i = 5; $i >= 1; $i--) {
```

```
        echo str_repeat("* ", $i) . "<br>";
```

```
    }
```

```
}
```

```
?>
```

```
</body>
```

```
</html>
```

Print Pattern

* * * * *

* * * *

* * *

* *

*

14. Write PHP code to print Grade card of Student using Switch case.

<!DOCTYPE html>

output:

<html><head>

<title>Student Grade Card</title>

</head>

<body>

<?php

\$studentName = "John Doe";

\$studentMarks = 85;

\$grade = match (true) {

\$studentMarks >= 90 => "A+",

\$studentMarks >= 80 => "A",

\$studentMarks >= 70 => "B+",

\$studentMarks >= 60 => "B",

\$studentMarks >= 50 => "C",

default => "F",

}; ?>

<h1>Grade Card</h1>

<p>Student Name: <?= \$studentName; ?></p>

<p>Marks Obtained: <?= \$studentMarks; ?></p>

<p>Grade: <?= \$grade; ?></p>

</body>

</html>

Grade Card

Student Name: John Doe

Marks Obtained: 85

Grade: A

15. Write PHP code to print Fibonacci series.

<!DOCTYPE html> **output:**

<html>

<head>

<title>Fibonacci Series</title>

</head>

<body>

<?php

\$n = 10; // Number of terms in Fibonacci series

\$a = 0; \$b = 1; // First two numbers of the series

echo "<h1>Fibonacci Series:</h1><p>";

for (\$i = 0; \$i < \$n; \$i++) {

echo \$a . " ";

\$next = \$a + \$b;

\$a = \$b;

\$b = \$next;

}

echo "</p>";

?>

</body>

</html>

Fibonacci Series:

0 1 1 2 3 5 8 13 21 34

17. Write a JavaScript program to print the contents of the current window.

<!DOCTYPE html>

output:

<html>

<head>

<title>Print Page</title>

</head>

<body>

<h1>Content to Print</h1>

<p>This is the content of the current window.</p>

<button onclick="window.print()">Print this page</button>

</body>

</html>

Content to Print

This is the content of the current window.

Print this page

18. Write a JavaScript function that reverses a number.

Example x = 32243;

Expected Output : 34223

```
<!DOCTYPE html>
```

output:

Reversed Number: 465

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

```
<head>
```

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

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

```
  <title>Reverse Number</title>
```

```
</head>
```

```
<body>
```

```
  <h2>Reverse a Number</h2>
```

```
  <input type="number" id="numberInput" placeholder="Enter a number">
```

```
  <button onclick="document.getElementById('result').innerText = 'Reversed Number: ' +  
document.getElementById('numberInput').value.split('').reverse().join('')">Reverse Number</button>
```

```
  <p id="result"></p>
```

```
</body>
```

```
</html>
```

19. Write a JavaScript function that checks whether a passed string is palindrome or not?

```
<!DOCTYPE html>

<html lang="en">

<head>

  <meta charset="UTF-8">

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

  <title>Palindrome Checker</title>

</head>

<body>

  <h2>Palindrome Checker</h2>

  <input type="text" id="inputString" placeholder="Enter a string">

  <button onclick="checkPalindrome()">Check</button>

  <p id="result"></p>

  <script>

    function checkPalindrome() {

      let str = document.getElementById("inputString").value;

      document.getElementById("result").textContent =

        str === str.split("").reverse().join("") ? "Palindrome" : "Not a Palindrome";

    }

  </script>

</body>

</html>
```

Output:

Palindrome Checker

Not a Palindrome

Palindrome Checker

Palindrome

21. Write a JavaScript function to check whether an `input` is an array or not.

```
<!DOCTYPE html>
```

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

```
<head>
```

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

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

```
  <title>Array Check</title>
```

```
<script>
```

```
  function checkInput() {
```

```
    const input = document.getElementById('userInput').value;
```

```
    try {
```

```
      document.getElementById('result').textContent = Array.isArray(JSON.parse(input)) ? 'It is an array!' : 'It is not an array.';
```

```
    } catch {
```

```
      document.getElementById('result').textContent = 'It is not an array.';
```

```
    }
```

```
  }
```

```
</script>
```

```
</head>
```

```
<body>
```

```
  <h1>Check if input is an Array</h1>
```

```
  <input id="userInput" placeholder="Enter array like "[1,2,3]">
```

```
  <button onclick="checkInput()">Check</button>
```

```
  <p id="result"></p>
```

```
</body>
```

```
</html>
```

Output:

Check if input is an Array

It is an array!

Check if input is an Array

It is not an array.

2. Build a HTML form and write PHP code to calculate Largest among three numbers using a) If_else b) conditional operator.

<!DOCTYPE html>

output:

<html>

<head>

<title>Largest Number Calculator</title>

</head>

<body>

<h2>Largest Number Calculator</h2>

<form method="post" action="">

Enter Number 1: <input type="number" name="num1">

Enter Number 2: <input type="number" name="num2">

Enter Number 3: <input type="number" name="num3">

<input type="submit" value="Calculate Largest">

</form>

<?php

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

\$num1 = \$_POST["num1"];

\$num2 = \$_POST["num2"];

\$num3 = \$_POST["num3"];

// Using if-else

if (\$num1 >= \$num2 && \$num1 >= \$num3) {

\$largest = \$num1;

} elseif (\$num2 >= \$num1 && \$num2 >= \$num3) {

\$largest = \$num2;

} else {

\$largest = \$num3;

}

echo "The largest number (using if-else): " . \$largest . "
";

// Using conditional operator

\$largest = (\$num1 >= \$num2) ? ((\$num1 >= \$num3) ? \$num1 : \$num3) : ((\$num2 >= \$num3) ? \$num2 : \$num3);

echo "The largest number (using conditional operator): " . \$largest;

}

?></body></html>

Largest Number Calculator

Enter Number 1: 15

Enter Number 2: 19

Enter Number 3: 30

Calculate Largest

The largest number (using if-else): 30

The largest number (using conditional operator): 30

3. Build a HTML from and write PHP code to design a calculator program to show use of +,-,* ,/ operators.

```
<!DOCTYPE html>

<html>

<head>

    <title>Simple Calculator</title>

</head>

<body>

    <h2>Simple Calculator</h2>

    <form method="post">

        <input type="number" name="num1" placeholder="Enter number 1">

        <select name="operator">

            <option value="+">+</option>

            <option value="-">-</option>

            <option value="*">*</option>

            <option value="/">/</option>

        </select>

        <input type="number" name="num2" placeholder="Enter number 2">

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

    </form>

<?php

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

        $num1 = $_POST["num1"];

        $num2 = $_POST["num2"];

        $operator = $_POST["operator"];

    switch ($operator) {

        case '+':

            $result = $num1 + $num2;

            break;

        case '-':

            $result = $num1 - $num2;

            break;

        case '*':

            $result = $num1 * $num2;

            break;

        case '/':

            if ($num2 == 0) {
```

```

        $result = "Division by zero is not allowed.";
    } else {
        $result = $num1 / $num2;
    }
    break;
default:
    $result = "Invalid operator";
}
echo "Result: " . $result;
}
?>
</body>
</html>
Output:

```

7. In a HTML form write a JavaScript function that generates all combinations of a string.

Example string : 'dog'

Expected Output : d,do,dog,o,og,g

```

<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>String Combinations</title>
</head>
<body>
    <h2>Generate Combinations</h2>
    <input type="text" id="inputString" value="dog">
    <button onclick="document.getElementById('result').textContent =
[...document.getElementById('inputString').value].map((_,i,s)=>s.slice(i)).join(', ')">Generate</button>

```

output:

Combinations:

d,o,g, o,g, g

<h3>Combinations:</h3>

<p id="result"></p>

</body></html>

8.a. a) Swap two numbers using function in PHP.

<!DOCTYPE html>

output:

<html>

<head>

<title>Swap Two Numbers</title>

</head>

<body>

<h2>Swap Two Numbers</h2>

<form method="post" action="">

Enter Number 1: <input type="number" name="num1">

Enter Number 2: <input type="number" name="num2">

<input type="submit" value="Swap">

</form>

<?php

function swapNumbers(&\$num1, &\$num2) {

\$temp = \$num1;

\$num1 = \$num2;

\$num2 = \$temp;

}

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

\$num1 = \$_POST["num1"];

\$num2 = \$_POST["num2"];

echo "Before swapping: Number 1 = " . \$num1 . ", Number 2 = " . \$num2 . "
";

swapNumbers(\$num1, \$num2);

echo "After swapping: Number 1 = " . \$num1 . ", Number 2 = " . \$num2;

}

?>

</body>

</html>

Swap Two Numbers

Enter Number 1:

Enter Number 2:

Before swapping: Number 1 = 6, Number 2 = 4

After swapping: Number 1 = 4, Number 2 = 6

8b. b) Factorial of a number using function in PHP.

```
<!DOCTYPE html>

<html>

<head>

    <title>Factorial Calculator</title>

</head>

<body>

    <h2>Factorial Calculator</h2>

    <form method="post" action="">

        Enter a number: <input type="number" name="number"><br>

        <input type="submit" value="Calculate Factorial">

    </form>

<?php

    function factorial($number) {

        if ($number == 0) {

            return 1;

        } else {

            return $number * factorial($number - 1);

        }

    }

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

        $number = $_POST["number"];

        $result = factorial($number);

        echo "The factorial of " . $number . " is " . $result;

    }

?>

</body>

</html>
```

output:

Factorial Calculator

Enter a number:

The factorial of 5 is 120

9.a. Use recursion to solve the following exercises.

Write a JavaScript program to calculate the factorial of a number.

```
<!DOCTYPE html>

<html lang="en">

<head>

    <meta charset="UTF-8">

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

output:

Factorial Calculator

Factorial: 120

```

<title>Factorial Calculator</title>

<script>

function calculateFactorial() {

    let num = document.getElementById("number").value, result = 1;

    if (num < 0) return document.getElementById("output").innerHTML = "Enter a non-negative number.";

    for (let i = 1; i <= num; i++) result *= i;

    document.getElementById("output").innerHTML = `Factorial: ${result}`;

}

</script>

</head>

<body>

<h1>Factorial Calculator</h1>

<input type="number" id="number" placeholder="Enter a number">

<button onclick="calculateFactorial()">Calculate</button>

<p id="output"></p>

</body>

</html>

```

9b. Write a JavaScript program to find the greatest common divisor (gcd) of two positive numbers.

```

<!DOCTYPE html>

<html lang="en">

<head>

    <meta charset="UTF-8">

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

    <title>GCD Calculator</title>

    <script>

function calculateGCD() {

    let a = +document.getElementById("num1").value, b = +document.getElementById("num2").value;

    if (a <= 0 || b <= 0) return document.getElementById("output").textContent = "Enter positive numbers.";

    while (b) [a, b] = [b, a % b];

    document.getElementById("output").textContent = `GCD: ${a}`;

}

</script>

</head>

<body>

    <h1>GCD Calculator</h1>

    <input type="number" id="num1" placeholder="First number">

```

output: **GCD Calculator**

6	9	Calculate
---	---	-----------

GCD: 3

```
<input type="number" id="num2" placeholder="Second number">
```

```
<button onclick="calculateGCD()">Calculate</button>
```

```
<p id="output"></p>
```

```
</body>
```

```
</html>
```

10.a. In a HTML form using PHP a) Check a number whether it is even or odd.

```
<!DOCTYPE html>
```

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

```
<head>
```

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

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

```
<title>Even or Odd Checker</title>
```

```
</head>
```

```
<body>
```

```
<h1>Check if a Number is Even or Odd</h1>
```

```
<form method="POST">
```

```
<input type="number" name="number" placeholder="Enter a number" required>
```

```
<button type="submit">Check</button>
```

```
</form>
```

```
<?php
```

```
if ($_SERVER['REQUEST_METHOD'] == 'POST') {
```

```
    $num = $_POST['number'];
```

```
    echo ($num % 2 == 0) ? "<p>$num is Even</p>" : "<p>$num is Odd</p>";
```

```
}
```

```
?>
```

```
</body>
```

```
</html>
```

Output:

Check if a Number is Even or Odd

4 is Even

Check if a Number is Even or Odd

1 is Odd

b. Check a year whether it is leap year or not.

```
<!DOCTYPE html>

<html lang="en">

<head>

  <meta charset="UTF-8">

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

  <title>Leap Year Checker</title>

</head>

<body>

  <h1>Check if a Year is a Leap Year</h1>

  <form method="POST">

    <input type="number" name="year" placeholder="Enter a year" required>

    <button type="submit">Check</button>

  </form>

  <?php

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

      $year = $_POST['year'];

      if (($year % 4 == 0 && $year % 100 != 0) || $year % 400 == 0) {

        echo "<p>$year is a Leap Year</p>";

      } else {

        echo "<p>$year is not a Leap Year</p>";

      }

    }

  ?>

</body>

</html>
```

Output:

Check if a Year is a Leap Year

2024 is a Leap Year

1. Design and validate this form with proper code.

```
=> <!DOCTYPE html>
```

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

```
<head>
```

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

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

```
    <title>Form Validation</title>
```

```
</head>
```

```
<body>
```

```
    <h2>User Registration Form</h2>
```

```
    <?php
```

```
    // Initialize variables for error messages and form data
```

```
    $emailErr = $usernameErr = $passwordErr = "";
```

```
    $email = $username = $password = "";
```

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

```
    // Email validation
```

```
    if (empty($_POST["email"])) {
```

```
        $emailErr = "Email is required.";
```

```
    } elseif (!filter_var($_POST["email"], FILTER_VALIDATE_EMAIL)) {
```

```
        $emailErr = "Invalid email format.";
```

```
    } else {
```

```
        $email = htmlspecialchars($_POST["email"]);
```

```
    }
```

```
// Username validation
```

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

```
        $usernameErr = "Username is required.";
```

```
    } elseif (!preg_match("/^[a-zA-Z0-9]*$/", $_POST["username"])) {
```

```
        $usernameErr = "Only letters and numbers are allowed.";
```

```
    } else {
```

```
        $username = htmlspecialchars($_POST["username"]);
```

```
    }
```

```
// Password validation
```

```
    if (empty($_POST["password"])) {
```

```
        $passwordErr = "Password is required.";
```

```
    } elseif (strlen($_POST["password"]) < 6) {
```

```
        $passwordErr = "Password must be at least 6 characters long.";
```

```
    } else {
```

```

        $password = htmlspecialchars($_POST["password"]);
    }

    // If no errors, display a success message
    if (empty($emailErr) && empty($usernameErr) && empty($passwordErr)) {
        echo "<p style='color: green;'>Form submitted successfully!</p>";
        echo "<p>Email: $email</p>";
        echo "<p>Username: $username</p>";
    }
}

?>

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

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

    <input type="email" id="email" name="email" value="<?php echo $email; ?>" required>

    <span style="color: red;"><?php echo $emailErr; ?></span>

    <br><br>

<label for="username">Username:</label>

    <input type="text" id="username" name="username" value="<?php echo $username; ?>" required>

    <span style="color: red;"><?php echo $usernameErr; ?></span>

    <br><br>

<label for="password">Password:</label>

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

    <span style="color: red;"><?php echo $passwordErr; ?></span>

    <br><br>

<input type="submit" value="Register">

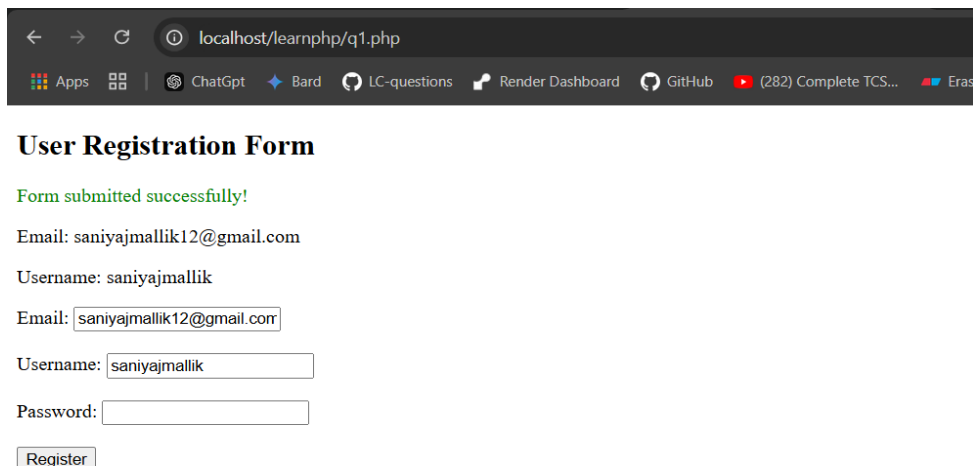
</form>

</body>

</html>

```

Output:



User Registration Form

Form submitted successfully!

Email: saniyajmallik12@gmail.com

Username: saniyajmallik

Email:

Username:

Password:

4. <!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

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

<title>Registration Form</title>

</head>

<body>

<h2>Registration Form</h2>

<?php

// Initialize error messages and input variables

\$errors = [];

\$inputs = [

"name" => "", "father_name" => "", "postal_address" => "", "personal_address" => "",

"sex" => "", "city" => "", "course" => "", "district" => "", "state" => "",

"pincode" => "", "emailid" => "", "dos" => "", "mobile_no" => ""

];

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

// Sanitize and validate inputs

foreach (\$inputs as \$key => &\$value) {

\$value = htmlspecialchars(trim(\$_POST[\$key]));

}

if (empty(\$inputs["name"])) \$errors["name"] = "Name is required.";

if (empty(\$inputs["father_name"])) \$errors["father_name"] = "Father's Name is required.";

if (empty(\$inputs["postal_address"])) \$errors["postal_address"] = "Postal Address is required.";

if (empty(\$inputs["personal_address"])) \$errors["personal_address"] = "Personal Address is required.";

if (empty(\$inputs["sex"])) \$errors["sex"] = "Sex is required.";

if (empty(\$inputs["city"])) \$errors["city"] = "City is required.";

if (empty(\$inputs["course"])) \$errors["course"] = "Course is required.";

if (empty(\$inputs["district"])) \$errors["district"] = "District is required.";

if (empty(\$inputs["state"])) \$errors["state"] = "State is required.";

if (empty(\$inputs["pincode"]) || !ctype_digit(\$inputs["pincode"]) || strlen(\$inputs["pincode"]) != 6)

\$errors["pincode"] = "Valid 6-digit Pincode is required.";

if (empty(\$inputs["emailid"]) || !filter_var(\$inputs["emailid"], FILTER_VALIDATE_EMAIL))

\$errors["emailid"] = "Valid Email ID is required.";

if (empty(\$inputs["dos"])) \$errors["dos"] = "Date of Submission is required.";

```

if (empty($inputs["mobile_no"]) || !preg_match("/^\d{10}$/", $inputs["mobile_no"]))

    $errors["mobile_no"] = "Valid 10-digit Mobile Number is required.";

// Display success message if no errors

if (empty($errors)) {

    echo "<h3>Form submitted successfully!</h3>";

    foreach ($inputs as $key => $value) {

        echo "<p><strong>" . ucfirst(str_replace("_", " ", $key)) . " :</strong> $value</p>";

    }

}

?>

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

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

    <input type="text" id="name" name="name" value="<?php echo $inputs['name']; ?>" required>

    <span style="color: red;"><?php echo $errors["name"] ?? ""; ?></span>

    <br><br>

<label for="father_name">Father's Name:</label>

    <input type="text" id="father_name" name="father_name" value="<?php echo $inputs['father_name']; ?>" required>

    <span style="color: red;"><?php echo $errors["father_name"] ?? ""; ?></span>

    <br><br>

<label for="postal_address">Postal Address:</label>

    <textarea id="postal_address" name="postal_address" required><?php echo $inputs['postal_address']; ?></textarea>

    <span style="color: red;"><?php echo $errors["postal_address"] ?? ""; ?></span>

    <br><br>

<label for="personal_address">Personal Address:</label>

    <textarea id="personal_address" name="personal_address" required><?php echo $inputs['personal_address'];
?></textarea>

    <span style="color: red;"><?php echo $errors["personal_address"] ?? ""; ?></span>

    <br><br>

<label>Sex:</label>

    <input type="radio" id="male" name="sex" value="Male" <?php if ($inputs['sex'] == 'Male') echo "checked"; ?> required>
Male

    <input type="radio" id="female" name="sex" value="Female" <?php if ($inputs['sex'] == 'Female') echo "checked"; ?>
required> Female

    <span style="color: red;"><?php echo $errors["sex"] ?? ""; ?></span>

    <br><br>

<label for="city">City:</label>

```

<input type="text" id="city" name="city" value="<?php echo \$inputs['city']; ?>" required>

<?php echo \$errors["city"] ?? ""; ?>

<label for="course">Course:</label>

<input type="text" id="course" name="course" value="<?php echo \$inputs['course']; ?>" required>

<?php echo \$errors["course"] ?? ""; ?>

<label for="district">District:</label>

<input type="text" id="district" name="district" value="<?php echo \$inputs['district']; ?>" required>

<?php echo \$errors["district"] ?? ""; ?>

<label for="state">State:</label>

<input type="text" id="state" name="state" value="<?php echo \$inputs['state']; ?>" required>

<?php echo \$errors["state"] ?? ""; ?>

<label for="pincode">Pincode:</label>

<input type="text" id="pincode" name="pincode" value="<?php echo \$inputs['pincode']; ?>" required>

<?php echo \$errors["pincode"] ?? ""; ?>

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

<input type="email" id="emailid" name="emailid" value="<?php echo \$inputs['emailid']; ?>" required>

<?php echo \$errors["emailid"] ?? ""; ?>

<label for="dos">Date of Submission:</label>

<input type="date" id="dos" name="dos" value="<?php echo \$inputs['dos']; ?>" required>

<?php echo \$errors["dos"] ?? ""; ?>

<label for="mobile_no">Mobile No:</label>

<input type="text" id="mobile_no" name="mobile_no" value="<?php echo \$inputs['mobile_no']; ?>" required>

<?php echo \$errors["mobile_no"] ?? ""; ?>

<button type="reset">Reset</button>

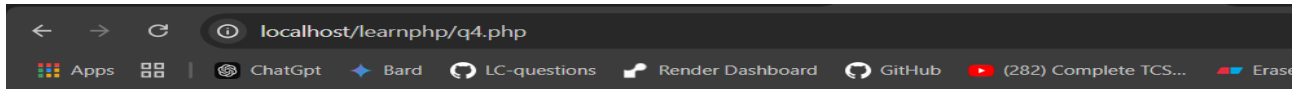
<button type="submit">Submit</button>

</form>

</body>

</html>

Output:



Registration Form

Name:

Father's Name:

Postal Address:

Personal Address:

Sex: ☐ Male ☐ Female

City:

Course:

District:

State:

Pincode:

Email ID:

Date of Submission:

Mobile No:

6. <!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

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

<title>Form Validation</title>

<style>

body {

font-family: Arial, sans-serif;

margin: 20px;

}

form {

max-width: 500px;

}

label {

font-weight: bold;

}

.error {

color: red;

font-size: 0.9em;

}

```

        .success {
            color: green;
            font-weight: bold;
        }
    </style>
</head>
<body>
    <h2>Registration Form</h2>

    <?php
    // Initialize error messages and input variables
    $errors = [];
    $inputs = [
        "name" => "", "email" => "", "contact_number" => "", "city" => "", "description" => ""
    ];
    if ($_SERVER["REQUEST_METHOD"] == "POST") {
        // Sanitize and validate inputs
        foreach ($inputs as $key => &$amp;value) {
            $value = htmlspecialchars(trim($_POST[$key]));
        }
        // Validate Name
        if (empty($inputs["name"])) {
            $errors["name"] = "Name is required.";
        } elseif (!preg_match("/^[a-zA-Z\s]+$/", $inputs["name"])) {
            $errors["name"] = "Name can only contain letters and spaces.";
        }
        // Validate Email
        if (empty($inputs["email"])) {
            $errors["email"] = "Email is required.";
        } elseif (!filter_var($inputs["email"], FILTER_VALIDATE_EMAIL)) {
            $errors["email"] = "Invalid email format.";
        }
        // Validate Contact Number
        if (empty($inputs["contact_number"])) {
            $errors["contact_number"] = "Contact number is required.";
        } elseif (!preg_match("/^\d{10}$/", $inputs["contact_number"])) {

```



```

        $errors["contact_number"] = "Contact number must be a 10-digit number.";
    }

// Validate City
    if (empty($inputs["city"])) {
        $errors["city"] = "City is required.";
    }

// Validate Description
    if (empty($inputs["description"])) {
        $errors["description"] = "Description is required.";
    } elseif (strlen($inputs["description"]) > 500) {
        $errors["description"] = "Description must not exceed 500 characters.";
    }

// Display success message if no errors
    if (empty($errors)) {
        echo "<p class='success'>Form submitted successfully!</p>";
        foreach ($inputs as $key => $value) {
            echo "<p><strong>" . ucfirst(str_replace("_", " ", $key)) . ":</strong> $value</p>";
        }
    }
}

?>

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

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

    <input type="text" id="name" name="name" value="<?php echo $inputs['name']; ?>" required>

    <span class="error"><?php echo $errors["name"] ?? ""; ?></span>

    <br><br>

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

    <input type="email" id="email" name="email" value="<?php echo $inputs['email']; ?>" required>

    <span class="error"><?php echo $errors["email"] ?? ""; ?></span>

    <br><br>

<label for="contact_number">Contact Number:</label><br>

    <input type="text" id="contact_number" name="contact_number" value="<?php echo $inputs['contact_number']; ?>"
required>

    <span class="error"><?php echo $errors["contact_number"] ?? ""; ?></span>

    <br><br>

<label for="city">City:</label><br>

    <input type="text" id="city" name="city" value="<?php echo $inputs['city']; ?>" required>

```

```

<span class="error"><?php echo $errors["city"] ?? ""; ?></span>

<br><br>

<label for="description">Description:</label><br>

<textarea id="description" name="description" rows="4" maxlength="500" required><?php echo $inputs['description'];
?></textarea>

<span class="error"><?php echo $errors["description"] ?? ""; ?></span>

<br><br>

<button type="reset">Reset</button>

<button type="submit">Submit</button>

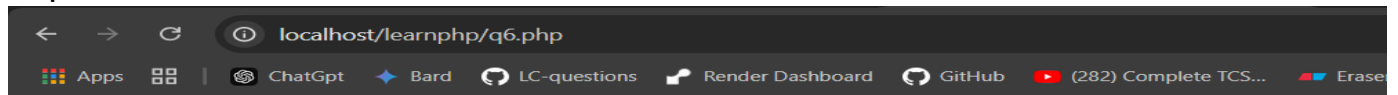
</form>

</body>

</html>

```

Output:



Registration Form

Form submitted successfully!

Name: Saniyaj Mallik

Email: saniyajmallik12@gmail.com

Contact number: 2222222222

City: kolkata

Description: kolkata

Name:

Saniyaj Mallik

Email ID:

saniyajmallik12@gmail.com

Contact Number:

2222222222

City:

kolkata

Description:

kolkata

Reset

Submit

11. <!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

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

<title>Form Validation</title>

<style>

body {

font-family: Arial, sans-serif;

```
padding: 20px;
}

.form-container {
    max-width: 600px;
    margin: auto;
    padding: 20px;
    border: 1px solid #ccc;
    border-radius: 8px;
}

label {
    margin-top: 10px;
    display: block;
}

input[type="text"],
input[type="email"],
textarea,
select {
    width: 100%;
    padding: 8px;
    margin-top: 5px;
    border: 1px solid #ccc;
    border-radius: 4px;
}

.checkbox-group input {
    margin-right: 10px;
}

button {
    margin-top: 20px;
    padding: 10px 15px;
    background-color: #4CAF50;
    color: white;
    border: none;
    border-radius: 4px;
    cursor: pointer;
}

button:hover {
```

```
background-color: #45a049;

}

.error {

    color: red;

    font-size: 14px;

}

</style>

<script>

function validateForm() {

    // Reset errors

    let isValid = true;

    let errorMessage = "";

    // Name validation

    let name = document.getElementById("name").value;

    if (name.trim() == "") {

        errorMessage += "Name is required.\n";

        isValid = false;

    }

    // Email validation

    let email = document.getElementById("email").value;

    let emailPattern = /^[a-zA-Z0-9._-]+@[a-zA-Z0-9.-]+\.[a-zA-Z]{2,6}$/;

    if (email.trim() == "") {

        errorMessage += "Email is required.\n";

        isValid = false;

    } else if (!emailPattern.test(email)) {

        errorMessage += "Please enter a valid email address.\n";

        isValid = false;

    }

    // Education validation

    let education = document.getElementById("education").value;

    if (education == "") {

        errorMessage += "Education is required.\n";

        isValid = false;

    }

}
```

```
}
```

```
// Gender validation
```

```
let gender = document.querySelector('input[name="gender"]:checked');
```

```
if (!gender) {
```

```
    errorMessage += "Gender is required.\n";
```

```
    isValid = false;
```

```
}
```

```
// Hobbies validation
```

```
let hobbies = document.querySelectorAll('input[name="hobbies[]"]:checked');
```

```
if (hobbies.length === 0) {
```

```
    errorMessage += "Please select at least one hobby.\n";
```

```
    isValid = false;
```

```
}
```

```
// Comment validation
```

```
let comment = document.getElementById("comment").value;
```

```
if (comment.trim() == "") {
```

```
    errorMessage += "Comment is required.\n";
```

```
    isValid = false;
```

```
}
```

```
if (!isValid) {
```

```
    alert(errorMessage);
```

```
}
```

```
return isValid;
```

```
}
```

```
</script>
```

```
</head>
```

```
<body>
```

```
<div class="form-container">
```

```
    <h2>Registration Form</h2>
```

```
    <form onsubmit="return validateForm()">
```

<!-- Name -->

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

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

<!-- Email -->

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

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

<!-- Education -->

<label for="education">Education:</label>

<select id="education" name="education">

<option value="">Select Education</option>

<option value="High School">High School</option>

<option value="Bachelor's Degree">Bachelor's Degree</option>

<option value="Master's Degree">Master's Degree</option>

<option value="PhD">PhD</option>

</select>

<!-- Gender -->

<label>Gender:</label>

<input type="radio" id="male" name="gender" value="Male">

<label for="male">Male</label>

<input type="radio" id="female" name="gender" value="Female">

<label for="female">Female</label>

<input type="radio" id="other" name="gender" value="Other">

<label for="other">Other</label>

<!-- Hobbies -->

<label>Hobbies:</label>

<div class="checkbox-group">

<input type="checkbox" id="drawing" name="hobbies[]" value="Drawing">

<label for="drawing">Drawing</label>

<input type="checkbox" id="singing" name="hobbies[]" value="Singing">

<label for="singing">Singing</label>

<input type="checkbox" id="dancing" name="hobbies[]" value="Dancing">

<label for="dancing">Dancing</label>

</div>

<!-- Comment -->

<label for="comment">Comment:</label>

<textarea id="comment" name="comment" rows="4"></textarea>

<button type="submit">Submit</button>

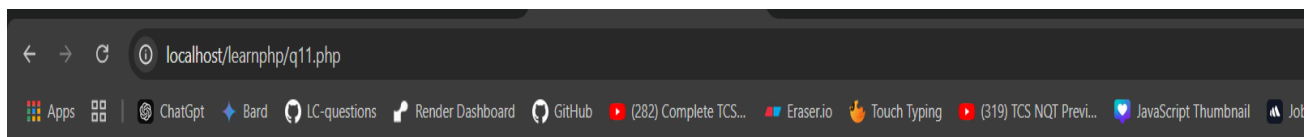
</form>

</div>

</body>

</html>

Output:



Registration Form

Name:

Email:

Education:

Select Education

Gender:
☐
Male
☐
Female
☐
Other

Hobbies:
☐
Drawing
☐
Singing
☐
Dancing

Comment: