--------------------------------------------------------------------------------------------------------------------------------------

1. Program to play audio with controls attribute for your web page.

<html>

<body>

<p>This is Sample Audio.</p>

<audio controls>

<source src="audio.mp3" type="audio/mpeg">

</audio>

</body>

</html>

--------------------------------------------------------------------------------------------------------------------------------------

1. Program to play video with autoplay attribute for your web page.

<html>

<body>

<p>This is Sample Video.</p>

<video autoplay controls>

<source src="video.mp4" type="video/mp4">

</video>

</body>

</html>

--------------------------------------------------------------------------------------------------------------------------------------

1. Program to design form using following HTML5 semantics tags. 1.<progress> 2. <main> 3. <mark> 4. <time> 5. <article>

<html>

<body>

<main>

<h1>Simple Form</h1>

<article>

<form action="#" method="POST">

<p>

<label>Name:</label>

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

</p>

<p>

<label>Email:</label>

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

</p>

<p>

<label>Password:</label>

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

</p>

<p>

<label>Progress:</label>

<progress id="progress" value="40" max="100"></progress>

</p>

<p>

<label>Date:</label>

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

</p>

<p>

<label>Time:</label>

<input type="time" id="date" name="date" required>

</p>

<p>

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

</p>

</form>

</article>

</main>

<mark>This form is designed using HTML5 semantic tags.</mark>

</body>

</html>

--------------------------------------------------------------------------------------------------------------------------------------

1. Draw a text with strokeText() and draw linear gradient using Canvas.

<html>

<body>

<canvas id="myCanvas" width="600" height="150" style="border:1px solid #d3d3d3;"> </canvas>

<script>

var c = document.getElementById("myCanvas");

var ctx = c.getContext("2d");

ctx.font = "40px Arial";

ctx.strokeText("HTML5", 10, 50);

ctx.font = "30px Verdana";

var gradient = ctx.createLinearGradient(0, 0, c.width, 0);

gradient.addColorStop("0", "magenta");

gradient.addColorStop("0.5", "blue");

gradient.addColorStop("1.0", "red");

ctx.strokeStyle = gradient;

ctx.strokeText("HyperText Markup Language Version 5", 10, 90);

</script>

</body>

</html>

--------------------------------------------------------------------------------------------------------------------------------------

1. Draw rectangle, rounded rectangle, circle, star using SVG graphics.

<html>

<body>

<svg width="400" height="400">

<rect x="50" y="50" width="100" height="80" fill="blue" stroke="black" />

<rect x="200" y="50" rx="10" ry="10" width="100" height="80" fill="red" stroke="black"/>

<circle cx="150" cy="200" r="50" fill="green" stroke="black" />

<polygon points="300,200 320,250 370,250 330,280 350,330 300,300 250,330 270,280 230,250 280,250" fill="orange" stroke="black"/>

</svg>

</body>

</html>

--------------------------------------------------------------------------------------------------------------------------------------

1. Program to implement HTML5 drag and drop feature.

<html>

<head>

<style>

#div1 {

width: 300px;

height: 300px;

padding: 10px;

border: 1px solid #aaaaaa;

}

</style>

<script>

function allowDrop(ev) {

ev.preventDefault();

}

function drag(ev) {

ev.dataTransfer.setData("text", ev.target.id);

}

function drop(ev) {

ev.preventDefault();

var data = ev.dataTransfer.getData("text");

ev.target.appendChild(document.getElementById(data));

}

</script>

</head>

<body>

<div id="div1" ondrop="drop(event)" ondragover="allowDrop(event)"></div>

<br>

<img id="drag1" src="download.png" draggable="true" ondragstart="drag(event)" width="290" height="290">

</body>

</html>

--------------------------------------------------------------------------------------------------------------------------------------

1. Design Employee registartion form using HTML5 tags and use input type- text, radio, date, checkbox, number, range, color, email, search, url, tel, submit.

<html>

<body>

<h1>Employee Registration Form</h1>

<form action="#" method="POST">

<p>

<label>Name:</label>

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

</p>

<p>

<label>Gender:</label>

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

<label>Male</label>

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

<label>Female</label>

</p>

<p>

<label>Date of Birth:</label>

<input type="date" id="dob" name="dob" required>

</p>

<p>

<label>Skills:</label>

<input type="checkbox" id="html" name="skills" value="html">

<label>HTML</label>

<input type="checkbox" id="css" name="skills" value="css">

<label>CSS</label>

<input type="checkbox" id="javascript" name="skills" value="javascript">

<label>JavaScript</label>

</p>

<p>

<label>Experience (in years):</label>

<input type="number" id="experience" name="experience" min="0" max="50" step="1" required>

</p>

<p>

<label>Salary:</label>

<input type="range" id="salary" name="salary" min="0" max="100000" step="1000">

</p>

<p>

<label>Favorite Color:</label>

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

</p>

<p>

<label>Email:</label>

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

</p>

<p>

<label>Search:</label>

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

</p>

<p>

<label>Website:</label>

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

</p>

<p>

<label>Phone Number:</label>

<input type="tel" id="phone" name="phone" pattern="[0-9]{3}-[0-9]{3}-[0-9]{4}">

<small>Format: 123-456-7890</small>

</p>

<p>

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

</p>

</form>

</body>

</html>

--------------------------------------------------------------------------------------------------------------------------------------

1. Programs to demonstrate external and internal styles in the web page using font, text,background, borders, opacity and other CSS 3 properties.

.html file

<html>

<head>

<title>CSS Styles Demo</title>

<link rel="stylesheet" type="text/css" href="styles.css">

<style>

.internal-style {

color: red;

font-size: 24px;

background-color: yellow;

border: 1px solid blue;

opacity: 0.7;

}

</style>

</head>

<body>

<h1 class="internal-style">Internal Style</h1>

<h2 id="external-style">External Style</h2>

<p>This is a paragraph with the default style.</p>

<p class="internal-style">This is a paragraph with internal style.</p>

<p class="external-style">This is a paragraph with external style.</p>

</body>

</html>

.css file

.external-style {

color: blue;

font-size: 18px;

background-color: lightgray;

border: 2px dashed red;

opacity: 0.5;

}

--------------------------------------------------------------------------------------------------------------------------------------

1. Implement Transformation using Translation, Rotation and Scaling in your web page.

<html>

<head>

<style>

div {

width: 100px;

height: 100px;

border: 1px solid black;

}

.translated {

transform: translate(10px, 20px);

}

.rotated {

transform: rotate(45deg);

}

.scaled {

transform: scale(2);

}

</style>

</head>

<body>

<div class="translated">This is a translated div</div>

<div class="rotated">This is a rotated div</div>

<div class="scaled">This is a scaled div</div>

</body>

</html>

--------------------------------------------------------------------------------------------------------------------------------------

1. Program to show current date and time using user defined module in node.js

//date.js

function getDate()

{

const date = new Date()

return date

}

module.exports = getDate;

//getCurrentDate.js

const dateob = require('./date')

console.log("Date:"+dateob())

--------------------------------------------------------------------------------------------------------------------------------------

1. Program using built-in modules in node.js to split the query string into readable parts.

const querystring = require("querystring");

const query = "name=Rohan&Age=21&Marks=99.99";

const parsedQuery = querystring.parse(query);

const name = parsedQuery.name;

const age = parsedQuery.Age;

const marks = parsedQuery.Marks;

console.log("Name:", name);

console.log("Age:", age);

console.log("Marks:", marks);

--------------------------------------------------------------------------------------------------------------------------------------

1. Program using NPM which will convert entered string into either case

const readline = require("readline");

const reader = readline.createInterface({

input:process.stdin,

output:process.stdout

});

reader.question("Enter String: ", inputstr=>{

const val = `${inputstr}`

reader.question("Select Case 1-Uppercase 2-Lowercase:", caseis=>

{

if(caseis==='1')

{

console.log("String in Uppercase:"+val.toUpperCase());

}

else if(caseis==='2')

{

console.log("String in Lowercase:"+val.toLowerCase());

}

reader.close()

});

});

--------------------------------------------------------------------------------------------------------------------------------------

1. Write a program to create a calculator using Node JS. (Install and configure Node JS and Server)

const readline = require('readline');

const rl = readline.createInterface({

input: process.stdin,

output: process.stdout

});

function add(num1, num2) {

return num1 + num2;

}

function subtract(num1, num2) {

return num1 - num2;

}

function multiply(num1, num2) {

return num1 \* num2;

}

function divide(num1, num2) {

return num1 / num2;

}

function calculate() {

rl.question('Enter the first number: ', (num1) => {

rl.question('Enter the second number: ', (num2) => {

rl.question('Enter the operation (+, -, \*, /): ', (operation) => {

let result;

switch (operation) {

case '+':

result = add(parseFloat(num1), parseFloat(num2));

break;

case '-':

result = subtract(parseFloat(num1), parseFloat(num2));

break;

case '\*':

result = multiply(parseFloat(num1), parseFloat(num2));

break;

case '/':

result = divide(parseFloat(num1), parseFloat(num2));

break;

default:

console.log('Invalid operation.');

rl.close();

return;

}

console.log(`Result: ${result}`);

rl.close();

});

});

});

}

// Call the calculate function to start the calculator

calculate();

--------------------------------------------------------------------------------------------------------------------------------------

1. Write program for Form validation in Angular.

--------------------------------------------------------------------------------------------------------------------------------------

1. Program to demonstrate the ngif, ngfor, ngswitch statements.

--------------------------------------------------------------------------------------------------------------------------------------

1. Create angular project which will demonstrate the usage of component directive, structural directive and attribute directives

--------------------------------------------------------------------------------------------------------------------------------------

1. Create angular project which has HTML template and handle the click event on click of the button (Installation of Angular and Bootstrap 4 CSS Framework)

--------------------------------------------------------------------------------------------------------------------------------------

1. Program to get uppercase and lowercase strings using AngularJS filters.

--------------------------------------------------------------------------------------------------------------------------------------

1. Program for basic operations, array and user interface handling.

--------------------------------------------------------------------------------------------------------------------------------------

1. Program to demonstrate session management using various techniques.

<?php

session\_start();

$\_SESSION['username'] = 'John ';

$username = $\_SESSION['username'];

if (isset($\_SESSION['username']))

{

echo "Hello, $username!";

}

else

{

echo "You are not logged in.";

}

session\_destroy();

?>

--------------------------------------------------------------------------------------------------------------------------------------

1. Program to insert 10 records in database and read any random data using laravel framework.

--------------------------------------------------------------------------------------------------------------------------------------

1. Program to print "Hello World" in PHP using echo and print statement.

<?php

echo "Hello World , this is echo statement.<br>";

print "Hello World , this is print statement.";

?>

--------------------------------------------------------------------------------------------------------------------------------------

1. Program to demostarte variables in PHP. Use local, global and static keywords to access variables.

<?php

$txt="Demonstration of variables in php.";

$a=20;

$b=30;

$add=$a+$b;

echo"$txt<br>";

echo"Value of A = $a <br>";

echo"Value of B = $b <br>";

print"Addition of to variables = $add";

?>

--------------------------------------------------------------------------------------------------------------------------------------

1. Write script to demonstrate superglobals (predefined variable) in PHP.

<html>

<body>

<h1>Superglobals Demo</h1>

<form method="POST" action="<?php echo $\_SERVER['PHP\_SELF']; ?>">

<label for="name">Enter your name:</label>

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

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

</form>

<?php

if ($\_SERVER['REQUEST\_METHOD'] === 'POST') {

$name = $\_POST['name'];

echo '<h2>Welcome, ' . $name . '!</h2>';

echo '<p>Your name was submitted using the $\_POST superglobal.</p>';

}

?>

</body>

</html>

--------------------------------------------------------------------------------------------------------------------------------------

1. Write PHP Script to demonstrate Constants.

<?php

$r=10;

define("PI",3.14);

$area=PI\*$r\*$r;

echo "Area of circle = $area";

?>

--------------------------------------------------------------------------------------------------------------------------------------

1. Program to demonstate concept of $$ variable in PHP.

<?php

$x = "abc";

$$x = 200;

echo "$x <br/>";

echo "Variable using $$ = ". $$x ."<br/>";

echo "$abc";

?>

--------------------------------------------------------------------------------------------------------------------------------------

1. Write PHP Script to demonstrate different operators in PHP.

<?php

$a = 20;

$b = 10;

$x = 100;

$y = "100";

echo "<h3>Arithmatic Operators</h3>";

echo "Addition = " , $a + $b ," <br>";

echo "Substraction = ", $a - $b ,"<br>";

echo "Multiplication = ", $a \* $b ," <br>";

echo "Division = ", $a / $b ," <br>";

echo "Modulus = ", $a % $b ," <br>";

echo "<h3>Assignment Operators</h3>";

echo "Addition = " , $a += $b ," <br>";

echo "Substraction = ", $a -= $b ,"<br>";

echo "Multiplication = ", $a \*= $b ," <br>";

echo "Division = ", $a /= $b ," <br>";

echo "Modulus = ", $a %= $b ," <br>";

echo "<h3>Comparison Operators</h3>";

var\_dump($x == $y);

var\_dump($x === $y);

var\_dump($x != $y);

var\_dump($x <> $b);

var\_dump($x > $b);

var\_dump($x < $b);

echo "<h3>Incremental / Decremental Operators</h3>";

echo "Pre-increment = ", ++$x ,"<br>";

echo "Post-increment = ", $x++ ,"<br>";

echo "Pre-decrement = ", --$x ,"<br>";

echo "Post-decrement ", $x-- ,"<br>";

?>

--------------------------------------------------------------------------------------------------------------------------------------

1. Write PHP Script to demonstrate String functions.

<?php

echo "Length of String = ".strlen("Strings in PHP")."<br>";

echo "Word count of String = ".str\_word\_count("Strings in PHP")."<br>";

echo "Reverse a String = ".strrev("Strings in PHP")."<br>";

echo "Search For a Text Within a String = ".strpos("Strings in PHP","PHP")."<br>";

echo "Replace Text Within a String = ".str\_replace("PHP","JAVA","Strings in PHP")."<br>";

echo "Randomly shuffle all characters of a string = ".str\_shuffle("Strings in PHP")."<br>";

echo "Convert a String into Lowercase = ".strtolower("Strings in PHP")."<br>";

echo "Convert a String into uppercase = ".strtoupper("Strings in PHP")."<br>";

?>

--------------------------------------------------------------------------------------------------------------------------------------

1. Write PHP script to demonstarte Different Data Types in PHP.

<?php

$a="Hypertext Pre-Proccessor";

$b=10;

$c=10.5;

$d=true;

$e= array("PHP","JAVA","PYTHON","C");

var\_dump($a);

var\_dump($b);

var\_dump($c);

var\_dump($d);

var\_dump($e);

?>

--------------------------------------------------------------------------------------------------------------------------------------

1. Write PHP script to demonstarte Indexed Arrays in PHP.

<?php

$cars = array("Volvo", "BMW", "Toyota");

echo "I like " . $cars[0] . ", " . $cars[1] . " and " . $cars[2] . ".<br>";

$cars[] = "Honda";

echo "I also like " . $cars[3] . ".<br>";

$length = count($cars);

echo "The array has " . $length . " elements.<br>";

foreach ($cars as $car)

{

echo $car . "<br>";

}

?>

--------------------------------------------------------------------------------------------------------------------------------------

1. Write PHP script to demonstarte Assosiative Arrays in PHP.

<?php

$person = array("name" => "John", "age" => 30);

echo "The person's name is " . $person["name"] . " and they are " . $person["age"] . " years old.<br>";

$person["age"] = 31;

echo "The person's name is " . $person["name"] . " and they are " . $person["age"] . " years old.<br>";

$length = count($person);

echo "The array has " . $length . " elements.<br>";

foreach ($person as $key => $value)

{

echo $key . ": " . $value . "<br>";

}

?>

--------------------------------------------------------------------------------------------------------------------------------------

1. Write PHP script to demonstarte Multidiamentional Arrays in PHP.

<?php

$cars = array(array("Volvo", 2018) , array("BMW", 2019) , array("Toyota", 2020) );

echo "I have the following cars:<br>";

foreach ($cars as $car)

{

echo $car[0] . ", " . $car[1] . "<br>";

}

$length = count($cars);

echo "I have " . $length . " cars.<br>";

foreach ($cars as $car)

{

echo $car[0] . " is a " . $car[1] . " model.<br>";

}

?>

--------------------------------------------------------------------------------------------------------------------------------------

1. Write PHP script to demonstarte sort function Arrays in PHP.

<?php

$numbers = array(50, 100, 20, 1, 400);

sort($numbers);

echo "The array in ascending order is:<br>";

foreach ($numbers as $number)

{

echo $number . "<br>";

}

rsort($numbers);

echo "The array in descending order is:<br>";

foreach ($numbers as $number)

{

echo $number . "<br>";

}

?>

--------------------------------------------------------------------------------------------------------------------------------------

1. Write PHP script to find leap year.

<?php

function isLeapYear($year)

{

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

{

return true;

}

else

{

return false;

}

}

$year = 2024;

if (isLeapYear($year))

{

echo $year . " is a leap year.";

}

else

{

echo $year . " is not a leap year.";

}

?>

--------------------------------------------------------------------------------------------------------------------------------------

1. Write PHP script for retrieving top 10 records from database. (Assume suitable data)

<?php

$conn = new mysqli('localhost', 'root', '', 'names');

if ($conn->connect\_error)

{

die("Connection failed: " . $conn->connect\_error);

}

$sql = "SELECT \* FROM name";

$result = $conn->query($sql);

if ($result->num\_rows > 0)

{

while ($row = $result->fetch\_assoc())

{

echo "ID: " . $row["id"] . " - Name: " . $row["name"] . "<br>";

}

}

else

{

echo "No records found.";

}

$conn->close();

?>

--------------------------------------------------------------------------------------------------------------------------------------

1. Write PHP code to display students belongs to management department and age is in between 21-30 years and store found records into another table. (Assume suitable table structure)

<?php

$conn = new mysqli('localhost', 'root', '', 'student');

if ($conn->connect\_error)

{

die("Connection failed: " . $conn->connect\_error);

}

$sql = "SELECT \* FROM students WHERE department = 'management' AND age BETWEEN 21 AND 30";

$result = $conn->query($sql);

if ($result->num\_rows > 0)

{

$insertStmt = $conn->prepare("INSERT INTO newtable (name, age, department) VALUES (?, ?, ?)");

$insertStmt->bind\_param("iss",$name, $age, $department);

while ($row = $result->fetch\_assoc())

{

$name = $row["name"];

$age = $row["age"];

$department = $row["department"];

$insertStmt->execute();

}

$insertStmt->close();

echo "Records stored successfully";

}

else

{

echo "No records found.";

}

$conn->close();

?>

--------------------------------------------------------------------------------------------------------------------------------------

1. Write PHP program to fill online form for AADHAR card registration (Design registration form with suitable fields) and insert into database. Write PHP script to display details on different pages using $\_GET and $\_POST.

aadhar.php:

<!DOCTYPE html>

<html>

<head>

<title>Aadhar Card Registration</title>

</head>

<body>

<h2>Aadhar Card Registration Form</h2>

<form action="submit.php" method="post">

<label for="full\_name">Full Name:</label>

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

<label for="gender">Gender:</label>

<select name="gender" required>

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

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

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

</select><br>

<label for="dob">Date of Birth:</label>

<input type="date" name="dob" required><br>

<label for="address">Address:</label>

<textarea name="address" required></textarea><br>

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

</form>

</body>

</html>

submit.php:

<?php

$conn = new mysqli('localhost', 'root', '', 'aadhar');

if ($conn->connect\_error)

{

die("Connection failed: " . $conn->connect\_error);

}

$name = $\_POST['name'];

$gender = $\_POST['gender'];

$dob = $\_POST['dob'];

$address = $\_POST['address'];

$stmt = $conn->prepare("INSERT INTO aadhar\_registration (name, gender, dob, address) VALUES (?, ?, ?, ?)");

$stmt->bind\_param("ssss", $name, $gender, $dob, $address);

$stmt->execute();

$stmt->close();

$conn->close();

header("Location: success.php");

exit();

?>

success.php:

<!DOCTYPE html>

<html>

<head>

<title>Aadhar Card Registration Successful</title>

</head>

<body>

<h2>Registration Successful!</h2>

<p>Your Aadhar card registration has been successfully submitted.</p>

<p>Details:</p>

<?php

$conn = new mysqli('localhost', 'root', '', 'aadhar');

if ($conn->connect\_error)

{

die("Connection failed: " . $conn->connect\_error);

}

$sql = "SELECT \* FROM aadhar\_registration";

$result = $conn->query($sql);

if($result)

{

if ($result->num\_rows > 0)

{

$row = $result->fetch\_assoc();

echo "<ul>";

echo "<li>Name: " . $row['name'] . "</li>";

echo "<li>Gender: " . $row['gender'] . "</li>";

echo "<li>Date of Birth: " . $row['dob'] . "</li>";

echo "<li>Address: " . $row['address'] . "</li>";

echo "</ul>";

}

}

$conn->close();

?>

</body>

</html>

--------------------------------------------------------------------------------------------------------------------------------------

1. Write PHP script to update specific record in database. Assume student table with required fields in database. May update address.

update1.php:

<html>

<body align="center">

<h1>Update Student Department</h1>

<form action="update.php" method="post">

Enter student id = <input type="text" name="id"><br>

Enter new department = <input type="text" name="department"><br>

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

</form>

</body>

</html>

update.php:

<?php

$conn = new mysqli("localhost", "root", "","student");

if ($conn->connect\_error)

{

die("Connection failed: " . $conn->connect\_error);

}

echo "conn success";

$department=$\_POST['department'];

$id=$\_POST['id'];

$sql = "UPDATE students SET department='$department' WHERE id='$id'";

if ($conn->query($sql) === TRUE)

{

echo "Record updated successfully";

}

else

{

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

}

?>

--------------------------------------------------------------------------------------------------------------------------------------

1. Write PHP script to create and retrieve cookie and modify a cookie value. Check if cookies are enabled.

<?php

$cookiesEnabled = false;

if (isset($\_COOKIE['test\_cookie']))

{

$cookiesEnabled = true;

}

else

{

setcookie('test\_cookie', 'test\_value', time() + 3600);

if (isset($\_COOKIE['test\_cookie'])) {

$cookiesEnabled = true;

setcookie('test\_cookie', '', time() - 3600);

}

}

?>

<!DOCTYPE html>

<html>

<head>

<title>Cookie Test</title>

</head>

<body>

<h2>Cookie Test</h2>

<?php

if ($cookiesEnabled)

{

echo "Cookies are enabled.<br>";

if (isset($\_COOKIE['user']))

{

echo "Welcome back, " . $\_COOKIE['user'] . "!<br>";

$newUser = $\_COOKIE['user'] . " (Updated)";

setcookie('user', $newUser, time() + 3600);

echo "Your cookie value has been updated. Refresh the page to see the new value.";

}

else

{

setcookie('user', 'John Doe', time() + 3600);

echo "A new 'user' cookie has been created.";

}

}

else

{

echo "Cookies are disabled. Please enable cookies in your browser settings.";

}

?>

</body>

</html>

--------------------------------------------------------------------------------------------------------------------------------------

1. Write a PHP script to Create a function with return value.

<?php

function addNumbers($num1, $num2) {

$sum = $num1 + $num2;

return $sum;

}

$result = addNumbers(5, 10);

echo "The sum is: " . $result;

?>

--------------------------------------------------------------------------------------------------------------------------------------