**Tutorial 7 - PHP**

Repo link: <https://github.com/tinkerness/S7_Web_Programming/tree/main/tutorials/tut7>

Hosted link: <https://tinkerness.github.io/S7_Web_Programming/tutorials/tut7/index.html>

1. **Create a PHP form that inputs a number and tells the user if the number 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</title>

</head>

<body>

<h1>Even or Odd Number Checker</h1>

<form method="post">

Enter a number: <input type="text" name="number" />

<input type="submit" value="Check" />

<br/><br/>

</form>

<?php

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

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

if (is\_numeric($number)) {

if ($number % 2 == 0) {

echo "$number is even.";

} else {

echo "$number is odd.";

}

} else {

echo "Please enter a valid number.";

}

}

?>

</body>

</html>

1. **Create a PHP form that creates a calculator application using a switch statement.**

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

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

<title>Calculator</title>

</head>

<body>

<h1>Calculator</h1>

<form method="post">

Enter the first number: <input type="text" name="num1" /><br/><br/>

Enter the second number: <input type="text" name="num2" /><br/><br/>

Select an operation:

<select name="operation">

<option value="add">Addition (+)</option>

<option value="subtract">Subtraction (-)</option>

<option value="multiply">Multiplication (\*)</option>

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

</select><br/><br/>

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

</form>

<?php

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

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

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

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

switch ($operation) {

case "add":

$result = $num1 + $num2;

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

break;

case "subtract":

$result = $num1 - $num2;

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

break;

case "multiply":

$result = $num1 \* $num2;

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

break;

case "divide":

if ($num2 == 0) {

echo "Cannot divide by zero.";

} else {

$result = $num1 / $num2;

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

}

break;

default:

echo "Invalid operation selected.";

}

}

?>

</body>

</html>

1. **Create a PHP program that counts from 1 to 10 using a while loop.**

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

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

<title>While Loop</title>

</head>

<body>

<h1>Counting from 1 to 10</h1>

<?php

$count = 1;

while ($count <= 10) {

echo $count . "<br>";

$count++;

}

?>

</body>

</html>

1. **Create a PHP program that displays the first 5 multiples of 3 using a for loop.**

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

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

<title>For Loop</title>

</head>

<body>

<h1>Multiples of 3</h1>

<?php

for ($i = 1; $i <= 5; $i++) {

echo "3 \* $i = " . ($i \* 3) . "<br/>";

}

?>

</body>

</html>

1. **Create a PHP program that prompts the user to enter a positive number and keeps prompting until a positive number is provided.**

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

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

<title>Positive Number</title>

</head>

<body>

<h1>Positive Number</h1>

<form method="post">

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

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

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

<br/><br/>

</form>

<?php

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

$number = filter\_input(INPUT\_POST, 'number', FILTER\_VALIDATE\_FLOAT);

if ($number !== false && $number > 0) {

echo "You entered a positive number: $number";

} else {

echo "Invalid input. Please enter a positive number.";

}

}

?>

</body>

</html>