PHP-III

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Pass by reference

index.php

In case of MAMP the file extension is php

server.php

```
<!DOCTYPE html>
<html>
<head>
        <title>Pass by Reference
Example</title>
</head>
<body>

<?php

include 'server.php';
$num = 5;
echo "Original Value: $num<br>";
modifyValue($num);
echo "Modified Value: $num<br>";
?>


</body>
</html>
```

```
<?php

function modifyValue(&$value) {
        $value *= 2;
}
?>
```

include keyword

___

index.php

```
<!DOCTYPE html>
<html>
<head>
  <title>PHP Pass by Reference</title>
</head>
<body>

<?php
include 'server.php';
?>

</body>
</html>
```

server.php

```php
<?php

function addOneByReference(&$number) {
  $number++;
}

$number = 10;

echo "<p>The number before passing to the function is $number.</p>";

addOneByReference($number);

echo "<p>The number after passing to the function is $number.</p>";

?>
```

Variable length argument

—

index.php

```
<!DOCTYPE html>
<html>
<head>
  <title>PHP Variable Length
Argument</title>
</head>
<body>

<?php
include 'server.php';
?>

</body>
</html>
```

server.php

```php
<?php

function sum(...$numbers) {
 $result = 0;
 foreach ($numbers as $number) {
      $result += $number;
 }
 return $result;
}

echo "<p>The sum of 1, 2, 3, and 4 is " . sum(1, 2, 3, 4) . ".</p>";
echo "<p>The sum of 5 and 6 is " . sum(5, 6) . ".</p>";
echo "<p>The sum of no numbers is " . sum() . ".</p>";

?>
```

Variable length argument

index.php

```php
<!DOCTYPE html>
<html>
<head>
  <title>PHP Variable Length Argument</title>
</head>
<body>

<?php
include 'server.php';
?>

</body>
</html>
```

server.php

```php
<?php

function printStrings(...$strings) {
 foreach ($strings as $string) {
        echo $string . "<br>";
 }
}

printStrings("Hello, world!");
printStrings("This", "is", "an", "example", "of", "variable",
"length", "arguments.");

?>
```

Variable length argument

```
<!DOCTYPE html>
<html>
<head>
        <title>Variable Length Arguments Example</title>
</head>
<body>
<?php
function sum() {
        $numArgs = func_num_args();
        $args = func_get_args();
        $total = 0;

        for ($i = 0; $i < $numArgs; $i++) {
        $total += $args[$i];
        }

        return $total;
}

$result1 = sum(5, 10, 15);
$result2 = sum(2, 3, 4, 5, 6);
echo "Result 1: $result1<br>";
echo "Result 2: $result2<br>";
?>

</body>
</html>
```

for loop

```
<!DOCTYPE html>
<html>
<head>
  <title>PHP For Loop Example</title>
</head>
<body>

<?php

$numbers = [1, 2, 3, 4, 5];

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

  echo $numbers[$i] . "<br>";
}

?>

</body>
</html>
```

for loop

```
<!DOCTYPE html>
<html>
<head>
  <title>PHP For Loop Example</title>
</head>
<body>

<?php

function factorial($number) {
 if ($number <= 1) {
        return 1;
 } else {
        return $number * factorial($number - 1);
 }
}

$numbers = [1, 2, 3, 4, 5];
for ($i = 0; $i < count($numbers); $i++) {
 $factorial = factorial($numbers[$i]);

 echo "<p>The factorial of {$numbers[$i]} is $factorial.</p>";
}

?>

</body>
</html>
```

loop

```php
<!DOCTYPE html>
<html>
<head>
 <title>PHP For Loop Example</title>
</head>
<body>

<?php
function generateFibonacciSequence($length) {
 $sequence = [0, 1];

 for ($i = 2; $i < $length; $i++) {
        $nextNumber = $sequence[$i - 1] + $sequence[$i - 2];
        $sequence[] = $nextNumber;
 }

 return $sequence;
}
$fibonacciSequence = generateFibonacciSequence(10);

foreach ($fibonacciSequence as $number) {
 echo $number . "<br>";
}

?>

</body>
</html>
```

Multidimensional array

```php
<!DOCTYPE html>
<html>
<head>
 <title>PHP Multidimensional Array Example</title>
</head>
<body>

<?php

$array = [
 'Alice' => ['age' => 25, 'occupation' => 'Software Engineer'],
 'Bob' => ['age' => 30, 'occupation' => 'Doctor'],
 'Carol' => ['age' => 35, 'occupation' => 'Teacher'],
];

foreach ($array as $name => $person) {
 echo "<p>{$name} is {$person['age']} years old and works as a
{$person['occupation']}.</p>";
}

?>

</body>
</html>
```

Thank you

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See you all in the next class