

PHP Multidimensional Arrays

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In the previous pages, we have described arrays that are a single list of key/value pairs.

However, sometimes you want to store values with more than one key. For this, we have multidimensional arrays.

PHP - Multidimensional Arrays

A multidimensional array is an array containing one or more arrays.

PHP supports multidimensional arrays that are two, three, four, five, or more levels deep. However, arrays more than three levels deep are hard to manage for most people.

The dimension of an array indicates the number of indices you need to select an element.

For a two-dimensional array you need two indices to select an element For a three-dimensional array you need three indices to select an element

PHP 1 Two-dimensional_Arrays

To get access to the elements of the \$cars array we must point to the two indices (row and column):

```
<h4>Two-dimensional_Arrays</h4>
<p></p>
<?php
$cars = array(
    array("Volvo", 22, 18),
    array("BMW", 15, 13),
    array("Saab", 5, 2),
    array("Land Rover", 17, 15)
);

echo $cars[0][0] . ": In stock: " . $cars[0][1] . ", sold: " . $cars[0][2]
. ".<br>";
echo $cars[1][0] . ": In stock: " . $cars[1][1] . ", sold: " . $cars[1][2]
```

```
. ".<br>";
echo $cars[2][0] . ": In stock: " . $cars[2][1] . ", sold: " . $cars[2][2]
. ".<br>";
echo $cars[3][0] . ": In stock: " . $cars[3][1] . ", sold: " . $cars[3][2]
. ".<br>";
?>
```

Two-dimensional_Arrays

Volvo: In stock: 22, sold: 18.

BMW: In stock: 15, sold: 13.

Saab: In stock: 5, sold: 2.

Land Rover: In stock: 17, sold: 15.

Example 1

Result [View Example](#)

PHP 2 Two-dimensional_Arrays_for_Loops

```
<h4>Two-dimensional_Arrays_for_Loops</h4>
<p>We can also put a for loop inside another for loop to get the elements
of the $cars array (we still have to point to the two indices):</p>
<?php
$cars = array (
    array("Volvo",22,18),
    array("BMW",15,13),
    array("Saab",5,2),
    array("Land Rover",17,15)
);

for ($row = 0; $row < 4; $row++) {
    echo "<p><b>Row number $row</b></p>";
    echo "<ul>";
    for ($col = 0; $col < 3; $col++) {
        echo "<li>".$cars[$row][$col]."</li>";
    }
    echo "</ul>";
}
?>
```

Two-dimensional_Arrays_for_Loops

We can also put a for loop inside another for loop to get the elements of the \$cars array (we still have to point to the two indices):

Row number 0

- Volvo
- 22
- 18

Row number 1

- BMW
- 15
- 13

Row number 2

- Saab
- 5
- 2

Row number 3

- Land Rover
- 17
- 15

Example 2

Result [View Example](#)

Document

Document in project

You can [Download PDF](#) file.

Reference