

The `switch` statement is used to perform different actions based on different conditions.

The PHP switch Statement

Use the `switch` statement to **select one of many blocks of code to be executed**.

```
<!DOCTYPE html>
<html>
<body>

<?php
$favcolor = "red";

switch ($favcolor) {
    case "red":
        echo "Your favorite color
is red!";
        break;
    case "blue":
        echo "Your favorite color
is blue!";
        break;
    case "green":
        echo "Your favorite color
is green!";
        break;
    default:
        echo "Your favorite color
is neither red, blue, nor
green!";
}
?>

</body>
</html>
```

Your favorite color is red!

What is an Array?

An array is a special variable, which can hold more than one value at a time.

If you have a list of items (a list of car names, for example), storing the cars in single variables could look like this:

```
$cars1 = "Volvo";  
$cars2 = "BMW";  
$cars3 = "Toyota";
```

Create an Array in PHP

In PHP, the `array()` function is used to create an array:

```
array( );
```

In PHP, there are three types of arrays:

- **Indexed arrays** - Arrays with a numeric index
- **Associative arrays** - Arrays with named keys
- **Multidimensional arrays** - Arrays containing one or more arrays

Get The Length of an Array - The `count()` Function

The `count()` function is used to return the length (the number of elements) of an array:

```
<!DOCTYPE html>
<html>
<body>

<?php
$cars = array("Volvo", "BMW", "Toyota");
echo count($cars);
?>

</body>
</html>
```

PHP Indexed Arrays

There are two ways to create indexed arrays:

The index can be assigned automatically (index always starts at 0), like this:

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

or the index can be assigned manually:

```
$cars[0] = "Volvo";  
$cars[1] = "BMW";  
$cars[2] = "Toyota";
```

```
<!DOCTYPE html>
<html>
<body>

<?php
$cars = array("Volvo", "BMW", "Toyota");
echo "I like " . $cars[0] . ", " . $cars[1] . " and " .
$cars[2] . ".";
?>

</body>
</html>
```

I like Volvo, BMW and Toyota.


```
<!DOCTYPE html>
<html>
<body>

<?php
$cars = array("Volvo", "BMW", "Toyota");
$arlength = count($cars);

for($x = 0; $x < $arlength; $x++) {
    echo $cars[$x];
    echo "<br>";
}
?>

</body>
</html>
```

Volvo
BMW
Toyota

PHP Associative Arrays

Associative arrays are arrays that use named keys that you assign to them.

There are two ways to create an associative array:

```
$age = array( "Peter" => "35", "Ben" => "37", "Joe" => "43" );
```

or:

```
$age[ 'Peter' ] = "35";  
$age[ 'Ben' ]   = "37";  
$age[ 'Joe' ]   = "43";
```

The named keys can then be used in a script:

```
<html>
<body>

<?php
$age = array("Peter"=>"35", "Ben"=>"37", "Joe"=>"43");
echo "Peter is " . $age['Peter'] . " years old.";
?>

</body>
</html>
```

Peter is 35 years old.

```
<html>
<body>

<?php
$age = array("Peter"=>"35", "Ben"=>"37", "Joe"=>"43");

foreach($age as $x => $x_value) {
    echo "Key=" . $x . ", Value=" . $x_value;
    echo "<br>";
}
?>

</body>
</html>
```

Key=Peter, Value=35

Key=Ben, Value=37

Key=Joe, Value=43

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

First, take a look at the following table:

Name	Stock	Sold
Volvo	22	18
BMW	15	13
Saab	5	2
Land Rover	17	15

We can store the data from the table above in a two-dimensional array, like this:

```
$cars = array (  
    array("Volvo",22,18),  
    array("BMW",15,13),  
    array("Saab",5,2),  
    array("Land Rover",17,15)  
);
```

```
<!DOCTYPE html>
<html>
<body>

<?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>";
?>

</body>
</html>
```

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.

```

<html>
<body>

<?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>";
}
?>

</body>
</html>

```

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