

WT - 5 (PHP)

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- PHP is a server scripting language, and a powerful tool for making dynamic and interactive Web pages.
- PHP is a widely-used, free, and efficient alternative to competitors such as Microsoft's ASP.

From <<https://www.w3schools.com/php/>>

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

<?php
echo "Hello World !";
?>
</body>
</html>
```

- PHP is an acronym for "PHP: Hypertext Preprocessor"
- PHP is a widely-used, open source scripting language
- PHP scripts are executed on the server
- PHP is free to download and use

From <https://www.w3schools.com/php/php_intro.asp>

PHP is an amazing and popular language!

It is powerful enough to be at the core of the biggest blogging system on the web (WordPress)!

It is deep enough to run large social networks!

It is also easy enough to be a beginner's first server side language!

From <https://www.w3schools.com/php/php_intro.asp>

- PHP files can contain text, HTML, CSS, JavaScript, and PHP code
- PHP code is executed on the server, and the result is returned to the browser as plain HTML
- PHP files have extension ".php"

From <https://www.w3schools.com/php/php_intro.asp>

What Can PHP Do?

- PHP can generate dynamic page content
- PHP can create, open, read, write, delete, and close files on the server
- PHP can collect form data
- PHP can send and receive cookies
- PHP can add, delete, modify data in your database
- PHP can be used to control user-access
- PHP can encrypt data

From <https://www.w3schools.com/php/php_intro.asp>

With PHP you are not limited to output HTML. You can output images, PDF files, and even Flash movies. You can also output any text, such as XHTML and XML.

From <https://www.w3schools.com/php/php_intro.asp>

- PHP runs on various platforms (Windows, Linux, Unix, Mac OS X, etc.)
- PHP is compatible with almost all servers used today (Apache, IIS, etc.)

From <https://www.w3schools.com/php/php_install.asp>

To start using PHP, you can:

- Find a web host with PHP and MySQL support
- Install a web server on your own PC, and then install PHP and MySQL

From <https://www.w3schools.com/php/php_install.asp>

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

```
<?php
$age = 22;
echo "Hello World !";
echo "You are $age years old.";
?>
</body>
</html>
```

- A PHP script can be placed anywhere in the document.
- A PHP script starts with <?php and ends with ?>

From <https://www.w3schools.com/php/php_syntax.asp>

- The default file extension for PHP files is ".php".
A PHP file normally contains HTML tags, and some PHP scripting code.
Below, we have an example of a simple PHP file, with a PHP script that uses a built-in PHP function "echo" to output the text "Hello World!" on a web page:

From <https://www.w3schools.com/php/php_syntax.asp>

- In PHP, keywords (e.g. if, else, while, echo, etc.), classes, functions, and user-defined functions are not case-sensitive.

From <https://www.w3schools.com/php/php_syntax.asp>

- Echo "You are \$age years old.";
- Above example is also true.

Note: However; all variable names are case-sensitive!

From <https://www.w3schools.com/php/php_syntax.asp>

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

<?php
$age = 22;
echo "Hello World !<br>";
Echo "You are $age years old.<br>";
$name = "Nishant";
Echo "Welcome, ".$name."<br>";
?>
</body>
</html>
```

- # This is single line comment
- //This is also single line comment.
- /*
- This is multi line comments
- */

PHP has three different variable scopes:

- local
- global
- static

From <https://www.w3schools.com/php/php_variables_scope.asp>

- ❖ Function in php defined as :

```
<?php

Function my_name(){
    echo "Hello World";
}

My_name();

?>
```

The global keyword is used to access a global variable from within a function.

To do this, use the global keyword before the variables (inside the function):

From <https://www.w3schools.com/php/php_variables_scope.asp>

- ❖ Normally, when a function is completed/executed, all of its variables are deleted. However, sometimes we want a local variable NOT to be deleted. We need it for a further job.
To do this, use the static keyword when you first declare the variable:

From <https://www.w3schools.com/php/php_variables_scope.asp>

- ❖ echo and print are more or less the same. They are both used to output data to the screen.
The differences are small: echo has no return value while print has a return value of 1 so it can be used in expressions. echo can take multiple parameters (although such usage is rare) while print can take one argument. echo is marginally faster than print.

From <https://www.w3schools.com/php/php_echo_print.asp>

- ❖ The echo statement can be used with or without parentheses: echo or echo().

From <https://www.w3schools.com/php/php_echo_print.asp>

- ❖ PHP supports the following data types:
 - String
 - Integer
 - Float (floating point numbers - also called double)
 - Boolean
 - Array
 - Object
 - NULL
 - Resource

From <https://www.w3schools.com/php/php_datatypes.asp>

- ❖ A string is a sequence of characters, like "Hello world!".
A string can be any text inside quotes. You can use single or double quotes:

From <https://www.w3schools.com/php/php_datatypes.asp>

- ❖ In the following example \$x is an integer. The PHP var_dump() function returns the data type and value:

From <https://www.w3schools.com/php/php_datatypes.asp>

- ❖ PHP Boolean :
\$x = true;
\$y = false;

From <https://www.w3schools.com/php/php_datatypes.asp>

- ❖ PHP Arrays:
<!DOCTYPE html>
<html>
<body>

<?php

```
$students = array("jk", "hj", "ha");  
echo $students."<br>";  
echo var_dump($students);
```

```
?>  
</body>  
</html>
```

- ❖ PHP Classes:
Classes and objects are the two main aspects of object-oriented programming.
A class is a template for objects, and an object is an instance of a class.

From <https://www.w3schools.com/php/php_datatypes.asp>

Constructor in PHP:

If you create a `__construct()` function, PHP will automatically call this function when you create an object from a class.

From <https://www.w3schools.com/php/php_datatypes.asp>

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

<?php
class Car {
    public $color;
    public $model;
    public function __construct($color, $model) {
        $this->color = $color;
        $this->model = $model;
    }
    public function message() {
        return "My car is a " . $this->color . " " . $this->model . "!";
    }
}

$myCar = new Car("black", "Volvo");
echo $myCar -> message();
echo "<br>";
$myCar = new Car("red", "Toyota");
echo $myCar -> message();
?>

</body>
</html>
```

- ❖ Null is a special data type which can have only one value: NULL.
A variable of data type NULL is a variable that has no value assigned to it.
Tip: If a variable is created without a value, it is automatically assigned a value of NULL.
Variables can also be emptied by setting the value to NULL:

From <https://www.w3schools.com/php/php_datatypes.asp>

```
$x = null;
```

From <https://www.w3schools.com/php/php_datatypes.asp>

- ❖ The PHP strlen() function returns the length of a string.

From <https://www.w3schools.com/php/php_string.asp>

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- ❖ The PHP str_word_count() function counts the number of words in a string.

From <https://www.w3schools.com/php/php_string.asp>

- ❖ The PHP strrev() function reverses a string.

From <https://www.w3schools.com/php/php_string.asp>

- ❖ The PHP strpos() function searches for a specific text within a string. If a match is found, the function returns the character position of the first match. If no match is found, it will return FALSE.

From <https://www.w3schools.com/php/php_string.asp>

- ❖ The PHP str_replace() function replaces some characters with some other characters in a string.

```
<?php
echo str_replace("world", "Dolly", "Hello world!"); // outputs Hello Dolly!
?>
```

From <https://www.w3schools.com/php/php_string.asp>

- ❖ PHP_INT_MAX - The largest integer supported
- ❖ PHP_INT_MIN - The smallest integer supported

- ❖ PHP_INT_SIZE - The size of an integer in bytes

From <https://www.w3schools.com/php/php_numbers.asp>

- ❖ is_int()
- ❖ is_integer() - alias of is_int()
- ❖ is_long() - alias of is_int()

From <https://www.w3schools.com/php/php_numbers.asp>

- ❖ The PHP is_numeric() function can be used to find whether a variable is numeric. The function returns true if the variable is a number or a numeric string, false otherwise.

From <https://www.w3schools.com/php/php_numbers.asp>

- ❖ The pi() function returns the value of PI:

From <https://www.w3schools.com/php/php_math.asp>

- ❖ The min() and max() functions can be used to find the lowest or highest value in a list of arguments:

From <https://www.w3schools.com/php/php_math.asp>

- ❖ The abs() function returns the absolute (positive) value of a number:

From <https://www.w3schools.com/php/php_math.asp>

- ❖ The sqrt() function returns the square root of a number:

From <https://www.w3schools.com/php/php_math.asp>

- ❖ The rand() function generates a random number:

From <https://www.w3schools.com/php/php_math.asp>

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

From <https://www.w3schools.com/php/php_arrays.asp>

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

From <https://www.w3schools.com/php/php_arrays.asp>