

Lesson: 05 (PHP Basic)

PHP

- PHP is a scripting language originally designed for producing dynamic web pages and interactive Web pages. It has evolved to include a command line interface capability and can be used in standalone graphical applications. PHP scripts are executed on the server.
- PHP is a widely-used general-purpose scripting language that is especially suited for Web development and can be embedded into HTML.
- PHP stands for PHP: Hypertext Preprocessor.
- PHP supports many databases (MySQL, Informix, Oracle, Sybase, Solid, PostgreSQL, Generic ODBC, etc.).
- PHP is open source software and free to download and use.

PHP File

- PHP files can contain text, HTML tags and scripts and PHP files are returned to the browser as plain HTML.
- PHP files have a file extension of ".php", ".php3", or ".phtml"

PHP Example

```
<html>
  <head>
    <title>PHP Test</title>
  </head>
  <body>
    <?php echo '<p>Hello World</p>'; ?>
  </body>
</html>
```

MySQL

- MySQL is a database server and ideal for both small and large applications.
- MySQL supports standard SQL and compiles on a number of platforms.
- MySQL is free to download and use.
- PHP combined with MySQL are cross-platform (you can develop in Windows and serve on a UNIX platform).

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Advantage of using PHP for web development

- PHP runs on different platforms (Windows, Linux, Unix, etc.)
- PHP is compatible with almost all servers used today (Apache, IIS, etc.)
- PHP is FREE to download from the official PHP resource: www.php.net
- PHP is easy to learn and runs efficiently on the server side

PHP Installation

- Install Apache (or IIS) on your own server, install PHP, and MySQL
- Or find a web hosting plan with PHP and MySQL support

Download PHP for free here: <http://www.php.net/downloads.php>

Download MySQL for free here: <http://www.mysql.com/downloads/index.html>

Download Apache for free here: <http://httpd.apache.org/download.cgi>

PHP Syntax

A PHP scripting block always starts with `<?php` and ends with `?>`. A PHP scripting block can be placed anywhere in the document.

On servers with shorthand support enabled you can start a scripting block with `<?` and end with `?>`.

```
<?php
?>
```

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

Comments in PHP

In PHP, we use `//` to make a single-line comment or `/*` and `*/` to make a large comment block.

```
<html>
<body>
<?php
//This is a comment
/*
```

```
This is  
a comment  
block  
*/  
?>  
</body>  
</html>
```

PHP Variables

Variables are used for storing values, like text strings, numbers or arrays. When a variable is declared, it can be used over and over again in your script.

All variables in PHP start with a \$ sign symbol.

The correct way of declaring a variable in PHP:

```
$var_name = value;  
<?php  
$txt="Hello World!";  
$x=16;  
?>
```

PHP is a Loosely Typed Language, Which means In PHP, a variable does not need to be declared before adding a value to it.

Naming Rules for Variables

- A variable name must start with a letter or an underscore "_"
- A variable name can only contain alpha-numeric characters and underscores (a-z, A-Z, 0-9, and _)
- A variable name should not contain spaces. If a variable name is more than one word, it should be separated with an underscore (\$my_string), or with capitalization (\$myString)

PHP Operators

Operators are used to operate on values.

Arithmetic Operators:

Operator	Description	Example	Result
+	Addition	x=2 x+2	4
-	Subtraction	x=2 5-x	3

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*	Multiplication	x=4 x*5	20
/	Division	15/5 5/2	3 2.5
%	Modulus (division remainder)	5%2 10%8 10%2	1 2 0
++	Increment	x=5 x++	x=6
--	Decrement	x=5 x--	x=4

Note: Example One

Assignment Operators:

Operator	Example	Is The Same As
=	x=y	x=y
+=	x+=y	x=x+y
-=	x-=y	x=x-y
=	x=y	x=x*y
/=	x/=y	x=x/y
.=	x.=y	x=x.y
%=	x%=y	x=x%y

Note: Example Two

Comparison Operators:

Operator	Description	Example
==	is equal to	5==8 returns false
!=	is not equal	5!=8 returns true
>	is greater than	5>8 returns false
<	is less than	5<8 returns true
>=	is greater than or equal to	5>=8 returns false
<=	is less than or equal to	5<=8 returns true

Logical Operators:

Operator	Description	Example
&&	and	x=6 y=3 (x < 10 && y > 1) returns true

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	or	x=6 y=3 (x==5 y==5) returns false
!	not	x=6 y=3 !(x==y) returns true

Conditional Statements

Conditional statements are used to perform different actions based on different conditions. PHP have the following conditional statements:

- if statement - use this statement to execute some code only if a specified condition is true
- if...else statement - use this statement to execute some code if a condition is true and another code if the condition is false
- if...elseif....else statement - use this statement to select one of several blocks of code to be executed
- switch statement - use this statement to select one of many blocks of code to be executed

if Statement: if statement is use to execute some code only if a specified condition is true.

Syntax:

```
if (condition) {code to be executed if condition is true};
```

Note: Example Three

if...else Statement: if....else statement use to execute some code if a condition is true and another code if a condition is false.

Syntax:

```
if (condition){ code to be executed if condition is true; }
```

```
else {code to be executed if condition is false;}
```

Note: Example Four

<!--Example one--> <html> <head> </head> <body> <?php \$x=10;	<!--Example Two--> <html> <head> </head> <body> <?php \$a = 3;
--	---

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<pre>\$y = 3; \$z = \$x % \$y; echo "\$z
\n"; echo (10 % 3)."
\n"; ?> </body> </html></pre>	<pre>\$a += 5; \$b = "Hello "; \$b .= "There!"; echo "\$a
"; echo "\$b
"; ?> </body> </html></pre>
<p><!--Example Three--></p> <pre><html> <head> </head> <body> <?php \$d=date("D"); if (\$d=="Fri") echo "Have a nice weekend!"; ?> </body> </html></pre>	<p><!--Example Four--></p> <pre><html> <head> </head> <body> <?php \$d=date("D"); if (\$d=="Fri") echo "Have a nice weekend!"; else echo "Have a nice day!"; ?> </body> </html></pre>