

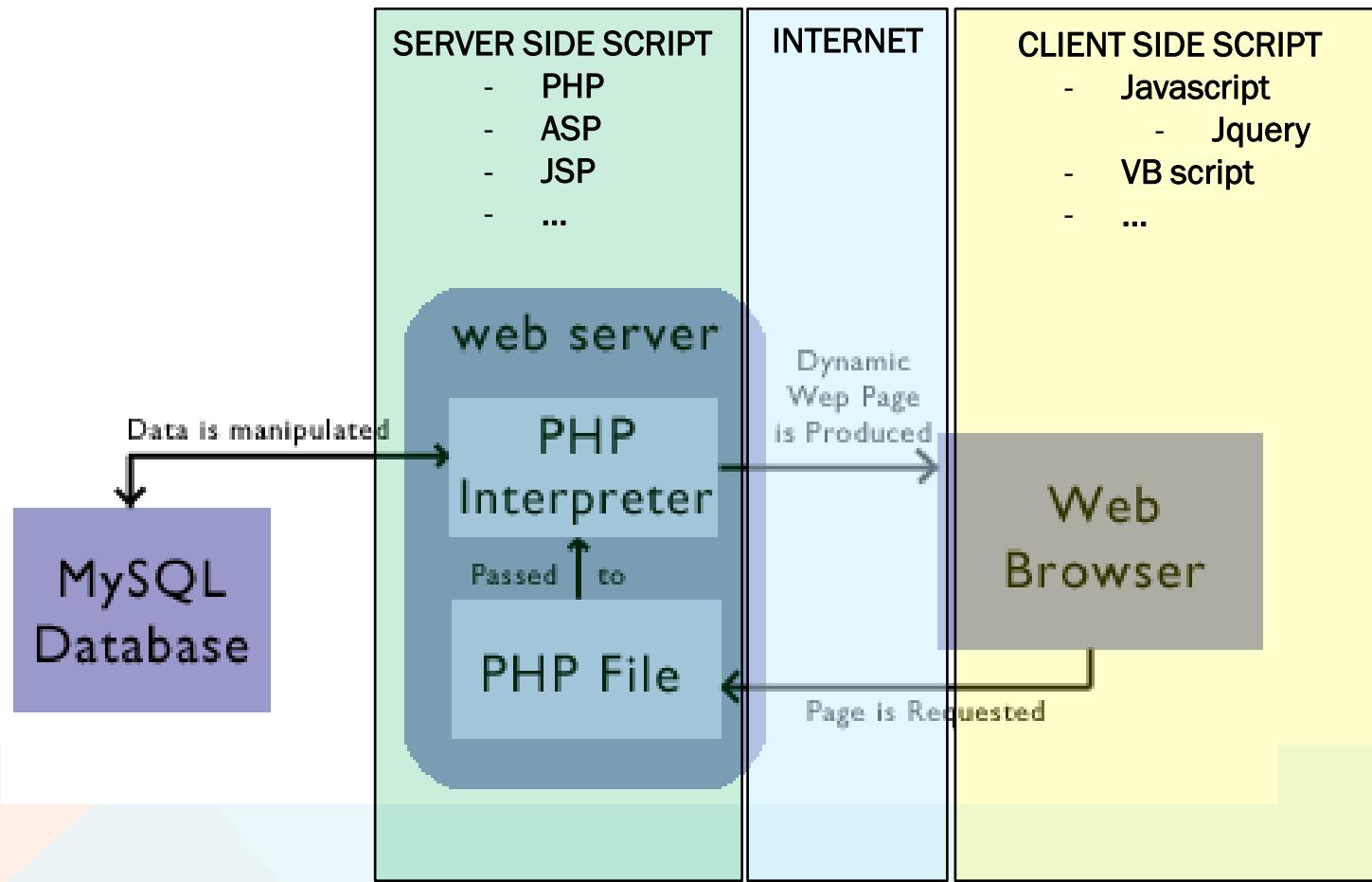
PHP

PHP: HYPERTEXT PREPROCESSOR
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PHP INTRODUCTION



PHP INTRODUCTION

What You Should Already Know

Before you continue you should have a basic understanding of the following:

- HTML/XHTML
- JavaScript

What is PHP?

- PHP stands for PHP: Hypertext Preprocessor
- PHP is a server-side scripting language, like ASP
- PHP scripts are executed on the server
- PHP supports many databases (MySQL, Informix, Oracle, Sybase, Solid, PostgreSQL, Generic ODBC, etc.)
- PHP is an open source software
- PHP is free to download and use

PHP INTRODUCTION

What is a PHP File?

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

What is MySQL?

- MySQL is a database server
- MySQL is ideal for both small and large applications
- MySQL supports standard SQL
- MySQL compiles on a number of platforms
- MySQL is free to download and use

PHP INTRODUCTION

PHP + MySQL

- PHP combined with MySQL are cross-platform (you can develop in Windows and serve on a Unix platform)

Why PHP?

- 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

Where to Start?

To get access to a web server with PHP support, you can:

- Install Apache (or IIS) on your own server, install PHP, and MySQL
- Or find a web hosting plan with PHP and MySQL support
- Install XAMPP (XAMPP is an easy to install Apache distribution containing MySQL, PHP and Perl.)
- Install MAMP ("MAMP" stands for: Macintosh, Apache)
 - Apache, PHP and MySQL for Mac OS X

PHP INSTALLATION

What do you Need?

- If your server supports PHP you don't need to do anything.
 - Just create some .php files in your web directory, and the server will parse them for you.
 - Because it is free, most web hosts offer PHP support.

However, if your server does not support PHP, you must install PHP.

- Here is a link to a good tutorial from PHP.net on how to install PHP5:
 - <http://www.php.net/manual/en/install.php>
- Download
 - Download PHP for free here: <http://www.php.net/downloads.php>
 - Download MySQL for free here: <http://www.mysql.com/downloads/>
 - Download Apache for free here: <http://httpd.apache.org/download.cgi>

PHP SYNTAX

Basic PHP Syntax

- A PHP script always starts with <?php and ends with ?>.
- A PHP script can be placed anywhere in the document.
- On servers with shorthand-support, you can start a PHP script with <? and end with ?>.
- For maximum compatibility, we recommend that you use the standard form (<?php) rather than the shorthand form.
- A PHP file must have a .php extension.
- A PHP file normally contains HTML tags, and some PHP scripting code.

Below, we have an example of a simple PHP script that sends the text "Hello World" back to the browser:

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

In the example above we have used the echo statement to output the text "Hello World".

PHP SYNTAX

Comments in PHP

- Each code line in PHP must end with a semicolon.
- The semicolon is a separator and is used to distinguish one set of instructions from another.
- There are two basic statements to output text with PHP: echo and print.

In PHP, we use // to make a one-line comment or /* and */ to make a comment block:

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

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

PHP VARIABLES

A variable can have a short name, like x, or a more descriptive name, like carName.

Rules for PHP variable names:

- Variables in PHP starts with a \$ sign, followed by the name of the variable
- The variable name must begin with a letter or the underscore character
- A variable name can only contain alpha-numeric characters and underscores (A-z, 0-9, and _)
- A variable name should not contain spaces
- Variable names are case sensitive (y and Y are two different variables)

PHP has no command for declaring a variable.

```
$myCar="Volvo";
```

- After the execution of the statement above, the variable myCar will hold the value Volvo.
- Tip: If you want to create a variable without assigning it a value, then you assign it the value of null.

Let's create a variable containing a string, and a variable containing a number:

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

PHP VARIABLES

The scope of a variable is the portion of the script in which the variable can be referenced.

PHP has four different variable scopes:

- local
- global
- static
- Parameter

PHP VARIABLES - LOCAL SCOPE

- A variable declared within a PHP function is local and can only be accessed within that function. (the variable has local scope):

```
<?php  
$a = 5; // global scope
```

```
function myTest()  
{  
echo $a; // local scope  
}
```

```
myTest();  
?>
```

- The script above will not produce any output because the echo statement refers to the local scope variable \$a, which has not been assigned a value within this scope.
- You can have local variables with the same name in different functions, because local variables are only recognized by the function in which they are declared.
- Local variables are deleted as soon as the function is completed.

PHP VARIABLES - GLOBAL SCOPE

- Global scope refers to any variable that is defined outside of any function.
- Global variables can be accessed from any part of the script that is not inside a function.
- To access a global variable from within a function, use the global keyword:

```
<?php  
$a = 5;  
$b = 10;  
  
function myTest()  
{  
global $a, $b;  
$b = $a + $b;  
}  
  
myTest();  
echo $b;  
?>  
  
<?php  
$a = 5;  
$b = 10;  
  
function myTest()  
{  
GLOBAL['b'] = $GLOBAL['a'] +  
$GLOBAL['b'];  
}  
  
myTest();  
echo $b;  
?>
```

- The script above will not produce any output because the echo statement refers to the local scope variable \$a, which has not been assigned a value within this scope.
- You can have local variables with the same name in different functions, because local variables are only recognized by the function in which they are declared.
- Local variables are deleted as soon as the function is completed.

PHP VARIABLES - STATIC SCOPE

- When a function is completed, all of its variables are normally deleted. However, sometimes you want a local variable to not be deleted.
- To do this, use the static keyword when you first declare the variable:

```
static $rememberMe;
```

- Then, each time the function is called, that variable will still have the information it contained from the last time the function was called.
- Note: The variable is still local to the function.

PHP VARIABLES - PARAMETERS

- A parameter is a local variable whose value is passed to the function by the calling code.
- Parameters are declared in a parameter list as part of the function declaration:

```
function myTest($para1,$para2,...)  
{  
// function code  
}
```

- Parameters are also called arguments. We will discuss them in more detail when we talk about functions.

PHP STRING VARIABLES

- The Concatenation Operator
- There is only one string operator in PHP.
- The concatenation operator (.) is used to put two string values together.
- To concatenate two string variables together, use the concatenation operator:

```
<?php  
$txt1="Hello World!";  
$txt2="What a nice day!";  
echo $txt1 . " " . $txt2;  
?>
```

The output of the code above will be:

Hello World! What a nice day!

- If we look at the code above you see that we used the concatenation operator two times. This is because we had to insert a third string (a space character), to separate the two strings.

PHP STRING VARIABLES

- The `strlen()` function is used to return the length of a string.
- Let's find the length of a string:

```
<?php  
echo strlen("Hello world!");  
?>
```

The output of the code above will be:

12

- The length of a string is often used in loops or other functions, when it is important to know when the string ends. (i.e. in a loop, we would want to stop the loop after the last character in the string).

PHP STRING VARIABLES

- The strpos() function is used to search for a character/text within a string.
- If a match is found, this function will return the character position of the first match. If no match is found, it will return FALSE.
- Let's see if we can find the string "world" in our string:

```
<?php  
echo strpos("Hello world!", "world");  
?>
```

The output of the code above will be:

6

- The position of the string "world" in the example above is 6. The reason that it is 6 (and not 7), is that the first character position in the string is 0, and not 1.

PHP OPERATORS - ARITHMETIC OPERATORS

The table below lists the arithmetic operators in PHP:

Operator	Name	Description	Example	Result
$x + y$	Addition	Sum of x and y	$2 + 2$	4
$x - y$	Subtraction	Difference of x and y	$5 - 2$	3
$x * y$	Multiplication	Product of x and y	$5 * 2$	10
x / y	Division	Quotient of x and y	$15 / 5$	3
$x \% y$	Modulus	Remainder of x divided by y	$5 \% 2$ $10 \% 8$ $10 \% 2$	1 2 0
$-x$	Negation	Opposite of x	-2	
$a . b$	Concatenation	Concatenate two strings	"Hi" . "Ha"	HiHa

PHP OPERATORS - ASSIGNMENT OPERATORS

The basic assignment operator in PHP is "`=`". It means that the left operand gets set to the value of the expression on the right. That is, the value of "`$x = 5`" is 5.

Assignment	Same as...	Description
<code>x = y</code>	<code>x = y</code>	The left operand gets set to the value of the expression on the right
<code>x += y</code>	<code>x = x + y</code>	Addition
<code>x -= y</code>	<code>x = x - y</code>	Subtraction
<code>x *= y</code>	<code>x = x * y</code>	Multiplication
<code>x /= y</code>	<code>x = x / y</code>	Division
<code>x %= y</code>	<code>x = x % y</code>	Modulus
<code>a .= b</code>	<code>a = a . b</code>	Concatenate two strings

PHP OPERATORS - INCREMENTING/DECREMENTING OPERATORS

Operator	Name	Description
<code>++ x</code>	Pre-increment	Increments <code>x</code> by one, then returns <code>x</code>
<code>x ++</code>	Post-increment	Returns <code>x</code> , then increments <code>x</code> by one
<code>-- x</code>	Pre-decrement	Decrements <code>x</code> by one, then returns <code>x</code>
<code>x --</code>	Post-decrement	Returns <code>x</code> , then decrements <code>x</code> by one

PHP OPERATORS - COMPARISON OPERATORS

Comparison operators allows you to compare two values:

Operator	Name	Description	Example
<code>x == y</code>	Equal	True if x is equal to y	<code>5==8</code> returns false
<code>x === y</code>	Identical	True if x is equal to y, and they are of same type	<code>5==="5"</code> returns false
<code>x != y</code>	Not equal	True if x is not equal to y	<code>5!=8</code> returns true
<code>x <> y</code>	Not equal	True if x is not equal to y	<code>5<>8</code> returns true
<code>x !== y</code>	Not identical	True if x is not equal to y, or they are not of same type	<code>5!== "5"</code> returns true
<code>x > y</code>	Greater than	True if x is greater than y	<code>5>8</code> returns false
<code>x < y</code>	Less than	True if x is less than y	<code>5<8</code> returns true
<code>x >= y</code>	Greater than or equal to	True if x is greater than or equal to y	<code>5>=8</code> returns false
<code>x <= y</code>	Less than or equal to	True if x is less than or equal to y	<code>5<=8</code> returns true

PHP OPERATORS - LOGICAL OPERATORS

Operator	Name	Description	Example
x and y	And	True if both x and y are true	x=6 y=3 (x < 10 and y > 1) returns true
x or y	Or	True if either or both x and y are true	x=6 y=3 (x==6 or y==5) returns true
x xor y	Xor	True if either x or y is true, but not both	x=6 y=3 (x==6 xor y==3) returns false
x && y	And	True if both x and y are true	x=6 y=3 (x < 10 && y > 1) returns true
x y	Or	True if either or both x and y are true	x=6 y=3 (x==5 y==5) returns false
! x	Not	True if x is not true	x=6 y=3 !(x==y) returns true

PHP OPERATORS - ARRAY OPERATORS

Operator	Name	Description
$x + y$	Union	Union of x and y
$x == y$	Equality	True if x and y have the same key/value pairs
$x === y$	Identity	True if x and y have the same key/value pairs in the same order and of the same types
$x != y$	Inequality	True if x is not equal to y
$x <> y$	Inequality	True if x is not equal to y
$x !== y$	Non-identity	True if x is not identical to y

CONDITIONAL STATEMENTS - PHP IF...ELSE STATEMENTS

- The if Statement
 - Use the if statement to execute some code only if a specified condition is true.
- Syntax
 - *if (condition) code to be executed if condition is true;*
 - The following example will output "Have a nice weekend!" if the current day is Friday:

```
<html>
<body>

<?php
$d=date("D");
if ($d=="Fri") echo "Have a nice weekend!";
?>

</body>
</html>
```

- Notice that there is no ..else.. in this syntax. The code is executed **only if the specified condition is true.**

CONDITIONAL STATEMENTS - PHP IF...ELSE STATEMENTS

- The if...else Statement
- Use the if....else statement 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;
}
```

Example

The following example will output "Have a nice weekend!" if the current day is Friday, otherwise it will output "Have a nice day!".

```
<html>
<body>

<?php
$d=date("D");
if ($d=="Fri")
{
    echo "Have a nice weekend!";
}
else
{
    echo "Have a nice day!";
?>

</body>
</html>
```

CONDITIONAL STATEMENTS - PHP IF...ELSE STATEMENTS

- The if...elseif....else Statement
- Use the if....elseif...else statement to select one of several blocks of code to be executed.
- Syntax

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

- Example
- The following example will output "Have a nice weekend!" if the current day is Friday, and "Have a nice Sunday!" if the current day is Sunday. Otherwise it will output "Have a nice day!"

```
<html>
<body>

<?php
$d=date("D");
if ($d=="Fri")
{
    echo "Have a nice weekend!";
}
elseif ($d=="Sun")
{
    echo "Have a nice Sunday!";
}
else
{
    echo "Have a nice day!";
?>

</body>
</html>
```

PHP SWITCH STATEMENT

- The PHP Switch Statement
- Use the switch statement to select one of many blocks of code to be executed.
- Syntax

```
switch (n)
{
    case label1:
        code to be executed if n=label1;
        break;
    case label2:
        code to be executed if n=label2;
        break;
    default:
        code to be executed if n is different from both label1 and label2;
}
```

- This is how it works: First we have a single expression *n* (most often a variable), that is evaluated once.
- The value of the expression is then compared with the values for each case in the structure. If there is a match, the block of code associated with that case is executed.
- Use **break** to prevent the code from running into the next case automatically. The default statement is used if no match is found.

PHP SWITCH STATEMENT

- Example

```
<html>
<body>

<?php
$x=1;
switch ($x)
{
case 1:
    echo "Number 1";
    break;
case 2:
    echo "Number 2";
    break;
case 3:
    echo "Number 3";
    break;
default:
    echo "No number between 1 and 3";
}
?>

</body>
</html>
```

PHP ARRAYS

- A variable is a storage area holding a number or text. The problem is, a variable will hold only one value.
- An array is a special variable, which can store multiple values in one single variable.
 - 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="Saab";
 - \$cars2="Volvo";
 - \$cars3="BMW";
- However, what if you want to loop through the cars and find a specific one? And what if you had not 3 cars, but 300?
 - The best solution here is to use an array!
- An array can hold all your variable values under a single name. And you can access the values by referring to the array name.
- Each element in the array has its own index so that it can be easily accessed.
 - In PHP, there are three kind of arrays:
 - **Numeric array** - An array with a numeric index
 - **Associative array** - An array where each ID key is associated with a value
 - **Multidimensional array** - An array containing one or more arrays

PHP ARRAYS - NUMERIC ARRAYS

- A numeric array stores each array element with a numeric index.
- There are two methods to create a numeric array.

1. In the following example the index are automatically assigned (the index starts at 0):

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

2. In the following example we assign the index manually:

```
$cars[0]="Saab";
$cars[1]="Volvo";
$cars[2]="BMW";
$cars[3]="Toyota";
```

Example

In the following example you access the variable values by referring to the array name and index:

```
<?php
```

```
$cars[0]="Saab";
$cars[1]="Volvo";
$cars[2]="BMW";
$cars[3]="Toyota";
echo $cars[0] . " and " . $cars[1] . " are Swedish cars.";
```

```
?>
```

The code above will output:

Saab and Volvo are Swedish cars.

PHP ARRAYS - ASSOCIATIVE ARRAYS

- An associative array, each ID key is associated with a value.
- When storing data about specific named values, a numerical array is not always the best way to do it.
- With associative arrays we can use the values as keys and assign values to them.

- Example 1
 - In this example we use an array to assign ages to the different persons:
 \$ages = array("Peter"=>32, "Quagmire"=>30, "Joe"=>34);

- Example 2
 - This example is the same as example 1, but shows a different way of creating the array:

```
$ages['Peter'] = "32";  
$ages['Quagmire'] = "30";  
$ages['Joe'] = "34";
```

The ID keys can be used in a script:

```
<?php  
$ages['Peter'] = "32";  
$ages['Quagmire'] = "30";  
$ages['Joe'] = "34";  
  
echo "Peter is " . $ages['Peter'] . " years old.";  
?>
```

The code above will output:
Peter is 32 years old.

PHP ARRAYS - MULTIDIMENSIONAL ARRAYS

- In a multidimensional array, each element in the main array can also be an array.
- And each element in the sub-array can be an array, and so on.

Example

In this example we create a multidimensional array, with automatically assigned ID keys:

```
$families = array
(
    "Griffin"=>array
    (
        "Peter",
        "Lois",
        "Megan"
    ),
    "Quagmire"=>array
    (
        "Glenn"
    ),
    "Brown"=>array
    (
        "Cleveland",
        "Loretta",
        "Junior"
    )
);
```

PHP ARRAYS - MULTIDIMENSIONAL ARRAYS

The array previous would look like this if written to the output:

```
Array
(
    [Griffin] => Array
        (
            [0] => Peter
            [1] => Lois
            [2] => Megan
        )
    [Quagmire] => Array
        (
            [0] => Glenn
        )
    [Brown] => Array
        (
            [0] => Cleveland
            [1] => Loretta
            [2] => Junior
        )
)
```

PHP ARRAYS - MULTIDIMENSIONAL ARRAYS

Example 2

Lets try displaying a single value from the array above:

```
echo "Is " . $families['Griffin'][2] . " a part of the Griffin family?";
```

The code above will output:

Is Megan a part of the Griffin family?

PHP LOOPING

- Often when you write code, you want the same block of code to run over and over again in a row. Instead of adding several almost equal lines in a script we can use loops to perform a task like this.
- In PHP, we have the following looping statements:
 - **while** - loops through a block of code while a specified condition is true
 - **do...while** - loops through a block of code once, and then repeats the loop as long as a specified condition is true
 - **for** - loops through a block of code a specified number of times
 - **foreach** - loops through a block of code for each element in an array

PHP LOOPING - WHILE LOOPS

- The while Loop, The while loop executes a block of code while a condition is true.
- Syntax

```
while (condition)
{
    code to be executed,
}
```

- The example below defines a loop that starts with i=1. The loop will continue to run as long as i is less than, or equal to 5. i will increase by 1 each time the loop runs:

```
<html>
<body>

<?php
$i=1;
while($i<=5)
{
    echo "The number is " . $i . "<br />";
    $i++;
}
?>

</body>
</html>
```

Output:

```
The number is 1
The number is 2
The number is 3
The number is 4
The number is 5
```

PHP LOOPING - WHILE LOOPS

- The do...while statement will always execute the block of code once, it will then check the condition, and repeat the loop while the condition is true.
- Syntax

```
do
{
    code to be executed;
}
while (condition);
```

- The example below defines a loop that starts with i=1. It will then increment i with 1, and write some output. Then the condition is checked, and the loop will continue to run as long as i is less than, or equal to 5:

```
<html>
<body>

<?php
$i=1;
do
{
    $i++;
    echo "The number is " . $i . "<br />";
}
while ($i<=5);
?>

</body>
</html>
```

Output:

The number is 2
The number is 3
The number is 4
The number is 5
The number is 6

PHP LOOPING - FOR LOOPS

- The for loop is used when you know in advance how many times the script should run.
- Syntax

```
for (init; condition; increment)
{
    code to be executed;
}
```

Parameters:

- init*: Mostly used to set a counter (but can be any code to be executed once at the beginning of the loop)
- condition*: Evaluated for each loop iteration. If it evaluates to TRUE, the loop continues. If it evaluates to FALSE, the loop ends.
- increment*: Mostly used to increment a counter (but can be any code to be executed at the end of the iteration)

Note: The *init* and *increment* parameters above can be empty or have multiple expressions (separated by commas).

Example

- The example below defines a loop that starts with *i*=1. The loop will continue to run as long as *i* is less than, or equal to 5. *i* will increase by 1 each time the loop runs:

```
<html>
<body>

<?php
for ($i=1; $i<=5; $i++)
{
    echo "The number is " . $i . "<br />";
}
?>

</body>
</html>
```

Output:

```
The number is 1
The number is 2
The number is 3
The number is 4
The number is 5
```

PHP LOOPING - FOR LOOPS

- The foreach loop is used to loop through arrays.
- Syntax

```
foreach ($array as $value)
{
    code to be executed;
}
```

- For every loop iteration, the value of the current array element is assigned to \$value (and the array pointer is moved by one) - so on the next loop iteration, you'll be looking at the next array value.
- Example
 - The following example demonstrates a loop that will print the values of the given array:

```
<html>
<body>

<?php
$x=array("one","two","three");
foreach ($x as $value)
{
    echo $value . "<br />";
}
?>

</body>
</html>
```

Output:

```
one
two
three
```

PHP FUNCTIONS

- Create a PHP Function
- A function will be executed by a call to the function.
- Syntax

```
function functionName()  
{  
    code to be executed,  
}
```

- PHP function guidelines:
 - Give the function a name that reflects what the function does
- The function name can start with a letter or underscore (not a number)
 - Example
 - A simple function that writes my name when it is called:

```
<html>  
<body>  
  
<?php  
function writeName()  
{  
echo "Kai Jim Refsnes";  
}  
  
echo "My name is ";  
writeName();  
?>  
  
</body>  
</html>
```

Output:

My name is Kai Jim Refsnes

PHP FUNCTIONS - ADDING PARAMETERS

- PHP Functions - Adding parameters
- To add more functionality to a function, we can add parameters. A parameter is just like a variable.
- Parameters are specified after the function name, inside the parentheses.
 - Example 1
 - The following example will write different first names, but equal last name:

```
<html>
<body>

<?php
function writeName($fname)
{
echo $fname . " Refsnes.<br />";
}

echo "My name is ";
writeName("Kai Jim");
echo "My sister's name is ";
writeName("Hege");
echo "My brother's name is ";
writeName("Stale");
?>

</body>
</html>
```

Output:

My name is Kai Jim Refsnes.
My sister's name is Hege Refsnes.
My brother's name is Stale Refsnes.

PHP FUNCTIONS - ADDING PARAMETERS

- Example 2
 - The following function has two parameters:

```
<html>
<body>

<?php
function writeName($fname,$punctuation)
{
echo $fname . " Refsnes" . $punctuation . "<br />";
}

echo "My name is ";
writeName("Kai Jim", ".");
echo "My sister's name is ";
writeName("Hege","!");
echo "My brother's name is ";
writeName("Ståle","?");
?>

</body>
</html>
```

Output:

My name is Kai Jim Refsnes.
My sister's name is Hege Refsnes!
My brother's name is Ståle Refsnes?

PHP FUNCTIONS - RETURN VALUES

- To let a function return a value, use the return statement.
- Example

```
<html>
<body>

<?php
function add($x,$y)
{
    $total=$x+$y;
    return $total;
}

echo "1 + 16 = " . add(1,16);
?>

</body>
</html>
```

Output:

1 + 16 = 17

PHP FORMS - USER INPUT

- The most important thing to notice when dealing with HTML forms and PHP is that any form element in an HTML page will **automatically** be available to your PHP scripts.
 - Example
 - The example below contains an HTML form with two input fields and a submit button:

```
<html>
<body>

<form action="welcome.php" method="post">
Name: <input type="text" name="fname" />
Age: <input type="text" name="age" />
<input type="submit" />
</form>

</body>
</html>
```

- When a user fills out the form above and clicks on the submit button, the form data is sent to a PHP file, called "welcome.php": "welcome.php" looks like this:

```
<html>
<body>

Welcome <?php echo $_POST["fname"]; ?>!<br />
You are <?php echo $_POST["age"]; ?> years old.

</body>
</html>
```

Output could be something like this:

Welcome John!
You are 28 years old.

PHP FORMS - \$_GET VARIABLE

- The predefined `$_GET` variable is used to collect values in a form with `method="get"`
- Information sent from a form with the GET method is visible to everyone (it will be displayed in the browser's address bar) and has limits on the amount of information to send.
 - Example

```
<form action="welcome.php" method="get">
Name: <input type="text" name="fname" />
Age: <input type="text" name="age" />
<input type="submit" />
</form>
```

- When the user clicks the "Submit" button, the URL sent to the server could look something like this:
 - `http://www.w3schools.com/welcome.php?fname=Peter&age=37`
- The "welcome.php" file can now use the `$_GET` variable to collect form data (the names of the form fields will automatically be the keys in the `$_GET` array):
 - Welcome <?php echo \$_GET["fname"]; ?>.

 - You are <?php echo \$_GET["age"]; ?> years old!

PHP FORMS - \$_POST VARIABLE

- The predefined `$_POST` variable is used to collect values from a form sent with `method="post"`.
- Information sent from a form with the POST method is invisible to others and has no limits on the amount of information to send.
 - **Note:** However, there is an 8 Mb max size for the POST method, by default (can be changed by setting the `post_max_size` in the `php.ini` file).
 - Example

```
<form action="welcome.php" method="post">
Name: <input type="text" name="fname" />
Age: <input type="text" name="age" />
<input type="submit" />
</form>
```

- When the user clicks the "Submit" button, the URL will look like this:
 - `http://www.w3schools.com/welcome.php`
- The "welcome.php" file can now use the `$_POST` variable to collect form data (the names of the form fields will automatically be the keys in the `$_POST` array):
 - Welcome <?php echo `$_POST["fname"]`; ?>!

 - You are <?php echo `$_POST["age"]`; ?> years old.

REFERENCES

W3Schools

- <http://www.w3schools.com/php/default.asp>

PHP: Hypertext Preprocessor

- <http://www.php.net/>

XAMPP

- <http://www.apachefriends.org/en/xampp.html>

APACHE

- <http://www.apache.org/>

MYSQL

- <http://www.mysql.com/>

คำถาม

1. สร้างหน้า php เพื่อแสดงชื่อและนามสกุลของตนเอง ?
2. ทำให้ ชื่อ และ นามสกุล เป็นตัวแปร และนำมาต่อ กัน เพื่อแสดงบน Browser ?
3. นับตัวอักษร ของชื่อ และ นับตัวอักษรของนามสกุล เพื่อแสดงบนหน้าจอ
4. ให้หน้าเว็บแสดง เกรด ให้ถูกต้องโดยใช้ php Conditional statement
 - “A” เมื่อคะแนน มากกว่า หรือ เท่ากับ 80
 - “B” เมื่อคะแนนอยู่ที่ระหว่าง 70 - 79
 - “C” เมื่อคะแนนอยู่ที่ระหว่าง 60 - 69
 - “D” เมื่อคะแนนอยู่ที่ระหว่าง 50 – 59
 - “F” เมื่อคะแนนน้อยกว่า 50
5. ให้หน้าเว็บสามารถเปลี่ยนภาษา ได้โดย ให้ผลลัพธ์เป็นตัวแปร (เปลี่ยนภาษาที่ตัวแปร ก่อนแสดงผล)
 - “ดีมากๆ” เมื่อคะแนน มากกว่า หรือ เท่ากับ 80
 - “ดีมาก” เมื่อคะแนนอยู่ที่ระหว่าง 70 - 79
 - “ดี” เมื่อคะแนนอยู่ที่ระหว่าง 60 - 69
 - “พอใช้” เมื่อคะแนนอยู่ที่ระหว่าง 50 – 59
 - “ควรปรับปรุง” เมื่อคะแนนน้อยกว่า 50

คำถาม

6. จากข้อ 5-6 ทำให้เป็น Function
7. จากข้อ 5-7 ทำให้สามารถรองรับ คะแนน คู่กับ การเลือกวากาชา จาก Array ได้
8. สร้างตารางสี
 - 9.1 ไลสี หนึ่งสี
 - 9.2 ไลสี สองสี
 - 9.3 ไลสี สามสี
9. ทำ from เพื่อ เป็นหน้าจอ เครื่องคิดเลขเพื่อส่งค่า ผ่าน get ของ php เพื่อคำนวณผลลัพธ์แล้วแสดงผลเมื่อกดคำนวณ
10. สร้างตารางปฏิทิน โดยผ่านหน้า Form โดย Input คือ
 - ภาษาที่ต้องการแสดงผล
 - วัน เริ่มต้นของเดือน
 - จำนวนวันสุดภายในเดือน