Building Block of

PHP

///

<!DOCTYPE *html*>

<html *lang*="en">

<head>

    <meta *charset*="UTF-8">

    <meta *name*="viewport" *content*="width=device-width, initial-scale=1.0">

    <meta *http-equiv*="X-UA-Compatible" *content*="ie=edge">

    <title>Document</title>

</head>

<body>

</body>

</html>

//

<?php **echo** "Hello PHP"; ?>

//

<?php **echo** "Hello PHP"; ?> <br>

<?php **echo** "Hello MySQL"; ?>

//

  <?php

*//this is a comment, helps describing your code*

*/\**

*this is a*

*multiline*

*comment*

*\*/* ;?>

// Variable Names

* Start with $
* Followed by letter or underscore
* Can contain letters, numbers, underscore, dashes
* No spaces
* Case Sensitive

Examples:

$item

$Item

$myVariable

$this\_variable

$this-variable (BAD)

$product3

$\_book

$bookpage

$\_\_bookpage (BAD)

//

    $num1 = 100;

    $num2 = 50;

**echo** $num1;

**echo** "<br/>";

**echo** $num2;

// Variables with String Values

 <?php

*//String Values*

    $firstName = "John";

    $lastName = "Doe";

**echo** $firstName;

**echo** "<br/>";

**echo** $lastName;

    ?>

// Concatenation

    <?php

*//Concatenation*

**echo** "Hello" . $firstName . $lastName . "<br/>";

**echo** "Hello " . $firstName . " " .  $lastName . "<br/>";

**echo** "Hello, {$firstName} {$lastName} </br>";

    ?>

//Constants

*//Constants*

   $price = 30;

**echo** $price . "<br/>";

   $price = 50;

**echo** $price;

**define**("pi", 3.14);

**echo** "<br/>";

    ?>

// String Functions

    $firstName = "john";

    $lastName = "doE";

**echo** "Full Name: ";

    $fullName = "{$firstName} {$lastName}";

**echo** $fullName;

**echo** "<br/>";

*//UPPERCASE FUNCTION*

**echo** "Full Name in Uppercase - First Letter: ";

**echo** **ucfirst**($fullName) . "<br/>";

**echo** "Full Name in Uppercase - First letter of every word :";

**echo** **ucwords**($fullName) . "<br/>";

**echo** "lowercase : ";

**echo** **strtolower**($fullName) . "<br/>";

**echo** "UPPERCASE: ";

**echo** **strtoupper**($fullName);

// String Functions

*//String functions*

    $firstName = "john";

    $lastName = "doE";

**echo** "Full Name: ";

    $fullName = "{$firstName} {$lastName}";

**echo** $fullName;

**echo** "<br/>";

*//UPPERCASE FUNCTION*

**echo** "Full Name in Uppercase - First Letter: ";

**echo** **ucfirst**($fullName) . "<br/>";

**echo** "Full Name in Uppercase - First letter of every word :";

**echo** **ucwords**($fullName) . "<br/>";

**echo** "lowercase : ";

**echo** **strtolower**($fullName) . "<br/>";

**echo** "UPPERCASE: ";

**echo** **strtoupper**($fullName);

**echo** "<hr>";

*//REPEAT*

**echo** **str\_repeat**($fullName, 3) . "<br/>";

**echo** $text3;

*//SUBSTRING*

**echo** "<br/>";

**echo** "Substring: " . **substr**($text3, 0,5);

**echo** "<br/>";

**echo** "Find Position of fox: " . **strpos**($text3, "fox");

**echo** "<br/>";

**echo** "Find character (brown) : " . **strchr**($text3,"brown");

**echo** "<br/>";

**echo** "Length: " . **strlen**($text3);

**echo** "<br/>";

**echo** "Replace by String: " . **str\_replace**("brown","red",$text3);

// Number functions

    <?php

**echo** "<hr/>";

*//Number Functions*

    $number = 200 ?>

    Absolute Value: <?php **echo** **abs**($number-400) ?><br>

    Exponential: pow(base,exp) <?php **echo** **pow**(2,10) ?> <br>

    Square Root: sqrt(value) <?php **echo** **sqrt**(144) ?>   <br>

    Modulo: fmod(float,float) <?php **echo** **fmod**(2650,100) ?> <br>

    Random: rand(); <?php **echo** **rand**() ?><br>

    Random(min,max): rand(min,max) <?php **echo** **rand**(0,100) ?><br>

    Ceil () <?php **echo** **ceil**(74.45) ?> <br>

    Floor () <?php **echo** **floor**(74.45)  ?> <br>

    Number Format <?php **echo** **number\_format**(100/70,3)?> <br>

    Increment : <?php

    $number++;

**echo** $number ?><br>

    Decrement: <?php

    $number--;

**echo** $number ?>

// ARRAYS

<?php

    $numbers = **array**(23,45,64,34,13,4);

**echo** $numbers[5]

    ?>

    <?php $mixed = **array**(23, "dog", "cat", **array**("x","y","z")); ?> <br>

    <?php **echo** $mixed[2];?>

    <pre>

    <?php **echo** **print\_r**($mixed); ?>

    </pre>

    <?php **echo** $mixed[3][1] ?>

    <?php $mixed[2] = "Lion"; ?> <br>

    <?php **echo** $mixed[2] ?> <br>

*<!-- ASSOCIATIVE ARRAY -->*

    <?php $data = **array**("fname"=>"John","lname"=>"Doe")?>

    <?php **echo** "Your name is ". $data["fname"];?> <br>

// Array Functions

<?php $numbers = **array**(13, 43, 2, 23, 5, 44, 3) ?>

    count:count(); <br>

    <?php **echo** "Count:" . **count**($numbers) ?>

    max value: max() <br>

    <?php **echo** "MAX" . **max**($numbers) ?>; <br>

    Min value: min(); <br>

    <?php **echo** "MIN: " . **min**($numbers) ?>; <br>

    Sort: sort(); <br>

    <?php **echo** "SORT: " . **sort**($numbers) ?>; <br>

    <?php **echo** $numbers ?>

    reverse Sort:rsort(); <br>

*<!-- check an item in an array -->*

    15 in array?: in\_array(value,array)  <br>

    <?php **echo** "Is 43 present?" .  **in\_array**(43, $numbers) ?> <br>

    43 in array?:

// Conditions

<?php *// Only welcome new users*

*//CONDITIONS*

      $new\_user = true;

      if ($new\_user) {

**echo** "<h1>Welcome!</h1>";

**echo** "<p>We are glad you decided to join us.</p>";

      }

    ?>

    <br />

    <?php *// don't divide by zero*

      $numerator = 20;

      $denominator = 0;

      $result = 0;

      if ($denominator > 0) {

        $result = $numerator / $denominator;

      }

**echo** "Result: {$result}";

    ?>

//OPERATORS

 <?php

*//OPERATORS*

      $a = 4;

      $b = 3;

      $c = 1;

      $d = 20;

      if (($a >= $b) || ($c >= $d)) {

*// || or operator: if one of the condition is true*

*// then the result is true.*

*//  && <- AND : if one of the condition is false*

*// then the result is false.*

**echo** "a is larger than b OR ";

**echo** "c is larger than d";

      }

    ?>

    <br />

    <?php

*// $e = 100;*

      if (!**isset**($e)) {

        $e = 200;

      }

**echo** $e;

    ?>

    <br />

    <?php

*// don't reject 0 or 0.0*

      $quantity = "";

      if (**empty**($quantity) && !**is\_numeric**($quantity)) {

**echo** "You must enter a quantity.";

      }

    ?>

    <br>

    <?php

    $var1 = 0;

*//empty if 0 or "";*

    if(**empty**($var1))

    {

**echo** "Yes, var 1 is empty";

    }

    else{

**echo** "Var1 is not empty";

    }

    $var0 = null;

    ?>

//LOOPS

 <?php *// for and while loop example*

      $count = 100;

      while ($count > 10) {

**echo** "hi DAVE" . ", ";

        $count-=10;

      }

    ?>

    <br />

    <?php

      for($count = 0; $count <= 10; $count++) {

**echo** $count . ", ";

      }

    ?>

    <br />

    <?php

      for ($count = 20; $count > 0; $count--) {

        if ($count % 2 == 0) {

**echo** "{$count} is even.<br />";

        } else {

**echo** "{$count} is odd.<br />";

        }

      }

    ?>

//Foreach loop

<?php

      $ages = **array**(4,8,15,16,23,42);

      foreach($ages as $age) {

**echo** "Age: {$age}<br />";

      }

    ?>

    <br />

    <?php *// foreach using assoc. array*

      $person = **array**(

                  "first\_name" => "Kevin",

                  "last\_name"  => "Skoglund",

                  "address"    => "123 Main Street",

                  "city"       => "Beverly Hills",

                  "state"      => "CA",

                  "zip\_code"   => "90210"

                );

      foreach($person as $attribute => $data) {

        $attr\_nice = **ucwords**(**str\_replace**("\_", " ", $attribute));

**echo** "{$attr\_nice}: {$data}<br />";

      }

    ?>

    <br />

    <?php

      $prices = **array**("Brand New Computer" => 2000,

                      "1 month of Netflix.com" => 25,

                      "Learning PHP" => null);

      foreach($prices as $item => $price) {

**echo** "{$item}: ";

        if (**is\_int**($price)) {

**echo** "$" . $price;

        } else {

**echo** "priceless";

        }

**echo** "<br />";

      }

    ?>

      <?php

      $users = **array**(

        "username" => "jdoe2019",

        "password" => **md5**("P@ssw0rd"),

        "created" => "2-3-19",

        "account\_type" => "premium",

        "payment\_type" => "annual",

        "address" => "Ohio",

        "active" => "yes"

      )

      ?>

// Switch

 <?php

      $a = 2;

      switch ($a) {

        case 0:

**echo** "a equals 0<br />";

          break;

        case 1:

**echo** "a equals 1<br />";

          break;

        case 2:

**echo** "a equals 2<br />";

          break;

        case 3:

**echo** "a equals 3<br />";

          break;

        default:

**echo** "a is not 0, 1, 2, or 3<br />";

          $month ="";

          break;

      }

      if(!**empty**($month)){

**echo** "{$number} is a month of {$month}";

      }

    ?>

    <?php

*// ChineseZodiac*

*// whitespace doesn't matter*

*// colons, semicolons and breaks do*

    $year = 2013;

    switch (($year - 4) % 12) {

      case  0: $month = 'January';

      break;

      case  1: $zodiac = 'Ox';

      break;

      case  2: $zodiac = 'Tiger';   break;

      case  3: $zodiac = 'Rabbit';   break;

      case  4: $zodiac = 'Dragon';   break;

      case  5: $zodiac = 'Snake';   break;

      case  6: $zodiac = 'Horse';   break;

      case  7: $zodiac = 'Goat';     break;

      case  8: $zodiac = 'Monkey';  break;

      case  9: $zodiac = 'Rooster'; break;

      case 10: $zodiac = 'Dog';     break;

      case 11: $zodiac = 'Pig';     break;

    }

**echo** "{$year} is the year of the {$zodiac}.<br />";

    ?>

    <?php *// case with multiple values*

      $user\_type = 'customer';

      switch ($user\_type) {

        case 'student':

**echo** "Welcome!";

          break;

        case 'press':

        case 'customer':

        case 'admin':

**echo** "Hello!";

          break;

      }

    ?>

// Defining Function

<?php

function say\_hello() {

echo "Hello World!<br />";

}

say\_hello();

function say\_hello\_to($word,$greet) {

echo "Hello {$word} and {$greet}!<br />";

}

say\_hello\_to("World","Goordmorning");

say\_hello\_to("Everyone","Hello");

say\_hello\_loudly();

function say\_hello\_loudly() {

echo "HELLO WORLD!<br />";

}

// function say\_hello\_loudly() {

// echo "We can't redefine a function.";

// }

?>

// Function Defaults

<?php

function paint($room="office",$color="red") {

return "The color of the {$room} is {$color}.<br />";

}

echo paint();

echo paint("bedroom", "blue");

echo paint("bedroom", null);

echo paint("bedroom");

echo paint("blue");

?>

//Array in Functions

<?php $numbers = array(8,23,15,42,16,4); ?>

Count: <?php echo count($numbers); ?><br />

Max value: <?php echo max($numbers); ?><br />

Min value: <?php echo min($numbers); ?><br />

<br />

<pre>

Sort: <?php sort($numbers); print\_r($numbers); ?><br />

Reverse sort: <?php rsort($numbers); print\_r($numbers); ?><br />

</pre>

<br />

Implode: <?php echo $num\_string = implode(" \* ", $numbers); ?><br />

Explode: <?php print\_r(explode(" \* ", $num\_string)); ?><br />

<br />

15 in array?: <?php echo in\_array(15, $numbers); // returns T/F ?><br />

19 in array?: <?php echo in\_array(19, $numbers); // returns T/F ?><br />

// Function Scope

<?php

function say\_hello\_to($word) {

echo "Hello {$word}!<br />";

}

$name = "John Doe";

say\_hello\_to($name);

?>

<?php

function better\_hello($greeting, $target, $punct) {

echo "Welcome {$greeting} {$target} {$punct} " . "<br />";

}

better\_hello("Hello", $name, "!");

better\_hello("Greetings", $name, "!!!");

better\_hello("Greetings", $name, null);

?>

//Function Arguments

<?php

function say\_hello\_to($word) {

echo "Hello {$word}!<br />";

}

$name = "John Doe";

say\_hello\_to($name);

?>

<?php

function better\_hello($greeting, $target, $punct) {

echo "Welcome {$greeting} {$target} {$punct} " . "<br />";

}

better\_hello("Hello", $name, "!");

better\_hello("Greetings", $name, "!!!");

better\_hello("Greetings", $name, null);

?>

// Return Values

<?php

function add($val1, $val2) {

$sum = $val1 + $val2;

return $sum;

}

$result1 = add(3,4);

$result2 = add(5,$result1);

$result3 = add($result1,$result2);

echo $result3 . "<br>";

echo "Result1? exist? " . isset($result4)

?>

<br />

<?php // Chinese Zodiac as a function

function chinese\_zodiac($year) {

switch (($year - 4) % 12) {

case 0: return 'Rat';

case 1: return 'Ox';

case 2: return 'Tiger';

case 3: return 'Rabbit';

case 4: return 'Dragon';

case 5: return 'Snake';

case 6: return 'Horse';

case 7: return 'Goat';

case 8: return 'Monkey';

case 9: return 'Rooster';

case 10: return 'Dog';

case 11: return 'Pig';

}

}

$zodiac = chinese\_zodiac(2013);

echo "2013 is the year of the {$zodiac}.<br />";

echo "2027 is the year of the " . chinese\_zodiac(2027) . ".<br />";

?>

<br />

<?php

function better\_hello($greeting, $target, $punct) {

return $greeting . " " . $target . $punct . "<br />";

}

echo better\_hello("Hello", "John Doe", "!");

?>

// Multitple Return Values

<?php

function add($val1, $val2) {

$sum = $val1 + $val2;

return $sum;

}

$result1 = add(3,4);

$result2 = add(5,$result1);

$result3 = add($result1,$result2);

echo $result3 . "<br>";

echo "Result1? exist? " . isset($result4)

?>

<br />

<?php // Chinese Zodiac as a function

function chinese\_zodiac($year) {

switch (($year - 4) % 12) {

case 0: return 'Rat';

case 1: return 'Ox';

case 2: return 'Tiger';

case 3: return 'Rabbit';

case 4: return 'Dragon';

case 5: return 'Snake';

case 6: return 'Horse';

case 7: return 'Goat';

case 8: return 'Monkey';

case 9: return 'Rooster';

case 10: return 'Dog';

case 11: return 'Pig';

}

}

$zodiac = chinese\_zodiac(2013);

echo "2013 is the year of the {$zodiac}.<br />";

echo "2027 is the year of the " . chinese\_zodiac(2027) . ".<br />";

?>

<br />

<?php

function better\_hello($greeting, $target, $punct) {

return $greeting . " " . $target . $punct . "<br />";

}

echo better\_hello("Hello", "John Doe", "!");

?>