

### Strings and variables

Print as html	<code>echo "This is my string";</code>	This is my string
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String	<code>"Hello World!";</code>	Hello World!
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Escape sequence	<code>"Hello \"World!\"";</code>	Hello "World!"
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Concatenation (Literal)	<code>echo "one" . "two";</code>	onetwo
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Variable creation and assignment	<code>\$var = "Hello";</code>	
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Variable concatenation	<code>echo \$var . "you";</code>	Hello you
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Variable parsing	<code>echo "\$var you";</code>	Hello you
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Expanding string	<code>echo "\${var}oo! you!";</code>	Hellooo! you!
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Concatenating assignment	<code>\$var .= "world";</code>	Hello world
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Assign by reference	<code>\$var1 = \$var2;</code>	
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### Types and operators

String	<code>\$string = "Hello";</code>	
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Int	<code>\$int = 4;</code>	
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Float	<code>\$float = 4.2;</code>	
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Exponentiation	<code>4**2 --&gt; (4^2) = 64</code>	
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Modulo	<code>7 % 3 --&gt; 1</code>	
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Mathematical assignment operator	<code>\$int += 3;</code>	
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Increment and decrement	<code>\$int ++;</code>	
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### Types and operators (cont)

Global variable `global %var;` //Inside a function to access a value declared outside the function

- Result of adding up two floats 9.9 and 1.0 will return an integer, since the result is 10 and evaluates to a whole number. Applies to every calculation. The reverse is also true.

- Operations order: `() >> * >> and / >> + and -`

### Functions

```
function greeting($value = "Sam") // Default value = Sam
{
    return " Hello $value !";
}
```

```
$return_value = greeting("Tom");
```

```
echo $return_value; //Prints: Hello Tom!
```

```
echo greeting(); //Prints: Hello Sam!
```

```
function addXPercently (&$param) // Passed by reference
{
```

```
    $param = $param . " X";
    echo $param;
};
```

```
$word = " Hello";
```

```
addXPercently ($word); // Prints: HelloX
```

```
echo $word; // Prints: HelloX
```

### Built-in Functions

<code>gettype(4); // Prints: integer</code>	Get the type of the parameter given as a string
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<code>var_dump(4); // Prints: int(100000)</code>	Prints details about the argument
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<code>strrev("Hello"); // Prints: olleH</code>	Prints the string in reversed order
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### Built-in Functions (cont)

<code>strtolower("Hello"); // Prints: hello</code>	Lower case the string
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<code>str_repeat("Hello", 2); // Prints: HelloHello</code>	Repeats the string the number of times specified
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<code>substr_count(\$string, \$substring);</code>	Number of instances of a substring within a string
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<code>abs(-2); // Returns 2</code>	Returns the absolute value
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<code>round(3.8); // Returns 4</code>	Rounds a number
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<code>rand();</code>	Returns a random number between 0 and the largest allowed
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<code>rand(3, 10);</code>	Returns a number between 3 and 10 inclusive
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<code>getrandmax();</code>	Returns the largest random number value possible
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### Data Structures

Array	<code>\$my_array = array(0, 1, "A");</code>
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Array	<code>\$my_array = [0, 1, "A"];</code>
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Print array	<code>print_r(\$my_array);</code>
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Returns array separated by value	<code>implode(" ", \$my_array);</code>
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Access array index	<code>\$y_array[1];</code>
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Adds the element at the end of the array	<code>\$my_array = "new element";</code>
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Replace the element	<code>\$my_array[0] = "new first element";</code>
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Pops the last element and returns it	<code>array_pop(\$my_array);</code>
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### Data Structures (cont)

Push the elements to the end of the array and return its size

```
array_push("A", "B");
```

`count($array);` // Returns the number of elements in the array

- Different types are allowed in an array

### Map

#### Associative array

```
$my_array = ["panda" => "very cute", "lizard" => "cute", "crocodile" => "not very cute"];
```

#### Array function

```
$about_me = array(
    "fullname" => "Aisle Nevertell",
    "social" => 123456789
);
```

```
echo implode($my_array); // Prints only the values
print_r($my_array); // Prints keys and values
```

```
$my_array["new"] = "new item"; // Adds new element
$favorites = ["favorite_food" => "pizza", "favorite_place" => "my dreams", "favorite_case" => "CAPS", "favorite_person" => "myself"];
```

```
echo $favorites["favorite_food"]; // Prints: pizza
```

```
$key = "favorite_place";
echo $favorites[$key]; // Prints: my dreams
```

```
echo $favorites[strtoupper("favorite_case")]; // Prints: CAPS
```

```
unset($my_array["new"]); // Delete the "new" element if exists
```

key => value

### Libraries

`<?php include 'footer.html';?>` Includes the HTML file where specified

`<?php require 'somefile.php';?>` Requires the specified file

### PHP & HTML

### Data access in Forms

`$_GET` Non sensible information

`$_POST` Used to send sensitive information

`$_GET['user']` Retrieves the value sent through the user get form

`isset($_POST['send'])` Check if send has a value

When a form is submitted values are received contained in an associative array.

Works as a dictionary. Arrays are maps where the key is the index.  
Key can be number or characters.

```
<?php
$lucky_number = 5 * 2 - 1;

echo " <h1 >Your lucky number is
${lucky_number} </h1>";
?>

<?php
function makeHello greeting
($name){
    return " <h1 >Hello,
$name! </h1 >";
}

echo makeHello greeting (
"World ");
?>

$about_me = [
    " name" => " Aisle Nevertell ",
    " birth_year" => 1902,
    " favorite_food" => " -
pizza"
];
function calculateAge ($person_arr){
    $current_year =
date("Y ");
    $age = $current_year -
$person_arr[" birth_year"];
    return $age;
}
?>
<h1 >Welcome! </h1 >
<h2 >About me:</h2 >
<?php
    echo " <h3 >Hello! I'm
${about_me["name"]}! </h3 >";
    echo " <p> I'm " . calculateAge ($about_me) . " years
old! That's pretty cool,
right? </p >";
    echo " <div>What more is
there to say? I love {about_me["favorite_food"]},
and that's pretty much it!</div > ";
?>
```

