



INTRODUCTION TO PHP

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INTRODUCTION

- ▶ `<?php phpinfo(); ?>`
- ▶ case sensitive
- ▶ simple statements are terminated using semi-colons (;)
- ▶ white-space & line-breaks are ignored
- ▶ single line comments begin with // and #
- ▶ multi-line comments appear between /* and */

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KEYWORDS

- ▶ reserved words that is used by language for core functionality
- ▶ cannot use keywords to name variables, constants, function, etc
- ▶ are case sensitive

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VARIABLES

- ▶ begins with dollar (\$) sign & are case-sensitive
 - ▶ `$number = 100;`
- ▶ should always begin with alphabet or _ sign
 - ▶ `$key`, `$_POST`, **`$11street`**
- ▶ cannot contain spaces
 - ▶ **`$first name`**

CONSTANTS

- ▶ identifiers for simple values
- ▶ `define('HOSTNAME', 'localhost');`
- ▶ once set, value of a constant cannot change

DATA TYPES

- ▶ integers - 100, 1979
- ▶ floating point numbers - 3.14, -7.1
- ▶ booleans - true | false
- ▶ strings
 - ▶ 'string value' | "string value"
- ▶ a variable can hold any data type

PRINTING TO HTML

- ▶ `echo 'Hello World!!!';`
- ▶ `$var = 'Students!!!';`
`echo 'Hello ' . $var;`
`echo "Hello $var";`
- ▶ dot operator (.) concatenates two string variables
- ▶ `print()`
- ▶ `print_r(), var_dump()`
- ▶ `<?= $var; ?>`

VARIOUS OPERATORS

- ▶ (arithmetic)
 - ▶ `+, -, *, /, %`
- ▶ (increment & decrement)
 - ▶ `++, --`
- ▶ (comparison)
 - ▶ `==, ===, !=, <>, !==, >, >=, <, <=`
- ▶ (logical)
 - ▶ `&&, ||, !`
- ▶ (assignment)
 - ▶ `=, +=, -=, ., *=, /=, %=`

IF-STATEMENTS

- ▶ *if (expression) statement*
 - ▶ statement is executed if expression is evaluated to true
- ▶ specify alternative statement with else
 - ▶ *if(expr) stmt1*
else stmt2
- ▶ multiple statements can be chained using *if-elseif-else*

FOR-LOOPS

- ▶ *for(start; condition; increment)*
statements;
- ▶ *for(\$i=0; \$i<10; \$i++)*
echo \$i;

WHILE & DO-WHILE LOOPS

- ▶ *while(expression) statement*
 - ▶ statement is executed when expression evaluates to true
- ▶ *do*
statement
while(expression)

ARRAYS

- ▶ indexed or associative
- ▶ *\$arr = array();*
 - ▶ *\$days = array('Sun', 'Mon', 'Tue', 'Wed', 'Thu', 'Fri', 'Sat');*
 - ▶ *\$days = array(1 => 'Sun', 'Mon', 'Tue', 'Wed', 'Thu', 'Fri', 'Sat');*
 - ▶ *\$dates = range(1,31) // array(1, 2, 3, ..., 31)*
- ▶ *\$person = array('fname' => 'Ram', 'lname' => 'Bahadur');*
- ▶ size of array: *count(\$days)*

ARRAYS

- ▶ `array_keys(array), array_values(array)`
- ▶ `array_key_exists(key, array)`
- ▶ `extract(), compact()`
 - ▶ `$name = 'Ram'; $age = 10;`
 - ▶ `$arr = compact("name", "age")`
 - ▶ `array("name" => 'Ram', "age" => 10)`
 - ▶ `extract($arr)`
 - ▶ `$name = 'Ram'; $age = 10;`
- ▶ `in_array(find, array)`
- ▶ `array_merge($arr1, $arr2 [, $arr3])`

ARRAYS

- ▶ traversing arrays with foreach loop
 - ▶ `foreach($days as $day)`
`echo $day;`
 - ▶ `foreach($person as $key=>$val)`
`echo "{$key}: {$val}";`

FUNCTIONS

- ▶ `$val = function_name([parameter,...]);`
 - ▶ `$len = strlen("PHP");`
- ▶ `function function_name([parameter,...]) {`
statement list;
`}`
 - ▶ `function sum_of_numbers($num1, $num2) {`
return `$num1 + $num2;`
`}`
- ▶ default parameters can be specified
 - ▶ `function repeat($times = 5) { ... }`

STRINGS

- ▶ `trim(str), ltrim(str), rtrim(str)`
- ▶ `strtoupper(str), strtolower(str)`
- ▶ `rawurlencode(str), rawurldecode(str), urlencode(str), urldecode(str)`
- ▶ `strlen(str)`
- ▶ `substr(string, start [, length]), str_replace(old,new,string)`
- ▶ `explode(separator, string), implode(separator, array)`
- ▶ `strpos(haystack, needle), stripos() [compare with ===]`
- ▶ `parse_url(url) [returns array of URL components]`
- ▶ `isset(string), empty(string)`

INCLUDES & REQUIRES

- ▶ `<?php include "file.php"; ?>`
- ▶ `<?php include_once "file.php"; ?>`
- ▶ `<?php require "file.php"; ?>`
- ▶ require is more stricter than include statements
- ▶ include - headers and footers
- ▶ require - loading libraries and functions