

6. PHP Operators

The assignment operator = is used to assign values to variables in PHP.

The arithmetic operator + is used to add values together in PHP.

6.1. PHP Arithmetic Operators

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	1
			10 % 8	2
			10 % 2	0
- x	Negation	Opposite of x	- 2	-2
a . b	Concatenation	Concatenate two strings	"Hi" . "Ha"	HiHa

6.2. PHP 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
x = y	x = y	The left operand gets set to the value of the expression on the right
x += y	x = x + y	Addition
x -= y	x = x - y	Subtraction
x *= y	x = x * y	Multiplication
x /= y	x = x / y	Division
x %= y	x = x % y	Modulus
a .= b	a = a . b	Concatenate two strings

6.3. PHP Incrementing/Decrementing Operators

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

6.4. PHP 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

6.5. PHP Logical Operators

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

6.6. PHP 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 are of the same type
$x != y$	Inequality	True if x is not equal to y
$x \neq y$	Inequality	True if x is not equal to y
$x !== y$	Non-identity	True if x is not identical to y