Assignment Operators

We'll cover the following

- Basic Assignment
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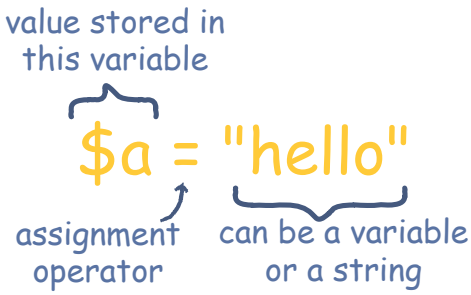
- Combined Assignment
  - Example
  - Other Combined Assignment Operators
    - Example
- Quick Quiz on Assignment Operators

Basic Assignment

PHP allows you to do the basic arithmetic assignment by using the `=` operator.



The above statement results in `$a` having the value “hello”. The result of an assignment expression is the value being assigned. Note that a single equal sign = is NOT for comparison!

Example

Run the following code to see what happens:

```
<?php
$a = 3;
echo "\$a = " . $a; //prints $a = 3
```

```
$b = ($a = 5); //assigns 5 to $a and then assigns the value of $a to $b
echo "\n\$a = " . $a; //prints $a = 5

echo "\n\$b = " . $b; //prints $b = 5
?>
```

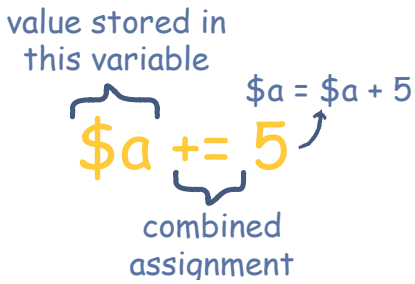
Explanation

1. Line 2 assigns `3` to `$a`.
2. Line 4 assigns `5` to `$a`, and later assigns the result of the expression in parentheses (`$a=5`) to `$b`.

Thus, both `$a` and `$b` now have the value `5`.

Combined Assignment

The combined assignment operators are a shortcut for an operation on some variable and subsequently assigning this new value to that variable.



Example

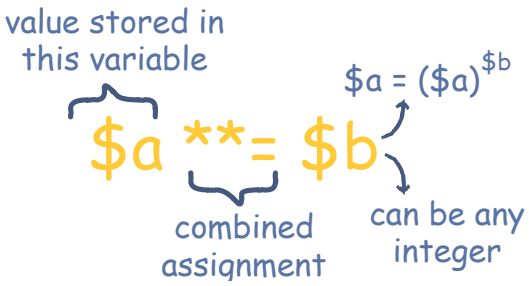
Run the code below to see how combined assignment works:

```
<?php
$a = 1; // basic assignment
echo ($a += 2) . "\n"; // read as '$a = $a + 2'; $a now is (1 + 2) => 3
echo ($a -= 1) . "\n"; // $a now is (3 - 1) => 2
echo ($a *= 2) . "\n"; // $a now is (2 * 2) => 4
echo ($a /= 2) . "\n"; // $a now is (4 / 2) => 2
echo ($a %= 5) . "\n"; // $a now is (2 % 5) => 2 (modulus or remainder)

?>
```

Other Combined Assignment Operators

You can also calculate the power of a number using the combined assignment operator.



Example

Run the code below to see how this is done:

```
<?php
$a = 2;
$b = 4;
echo $a**=$b; // $a now is (2^4) => 16 (2 raised to the power of 4)
echo "\n";
echo $b**=3; // $b now is (4^3) => 64 (4 raised to the power of 3)
?>
```

Quick Quiz on Assignment Operators

Q

What will the following program print?

```php
<?php
$a = 2;
$b = 3;
$b = ($a += ($b **= 5));
echo "\$b = ".$b;
?>
```

Retake Quiz

Now that you know all about operators, let’s move on to conditional statements in the next chapter.