# PHP – String Operators

There are two operators in PHP for working with string data types: concatenation operator (".") and the concatenation assignment operator (".="). Read this chapter to learn how these operators work in PHP.

## Concatenation Operator in PHP

The dot operator (".") is PHP's concatenation operator. It joins two string operands (characters of right hand string appended to left hand string) and returns a new string.

```
$third = $first . $second;
```

## Example

The following example shows how you can use the concatenation operator in PHP −

```php
<?php
   $x="Hello";
   $y=" ";
   $z="PHP";
   $str=$x . $y . $z;
   echo $str;
?>
```

It will produce the following **output** −

```
Hello PHP
```

## Concatenation Assignment Operator in PHP

PHP also has the ".=" operator which can be termed as the concatenation assignment operator. It updates the string on its left by appending the characters of right hand operand.

```
$leftstring .= $rightstring;
```

## Example

The following example uses the concatenation assignment operator. Two string operands are concatenated returning the updated contents of string on the left side −

```php
</>                                                    Open Compiler

<?php
   $x="Hello ";
   $y="PHP";
   $x .= $y;
   echo $x;
?>
```

It will produce the following **output** −

```
Hello PHP
```