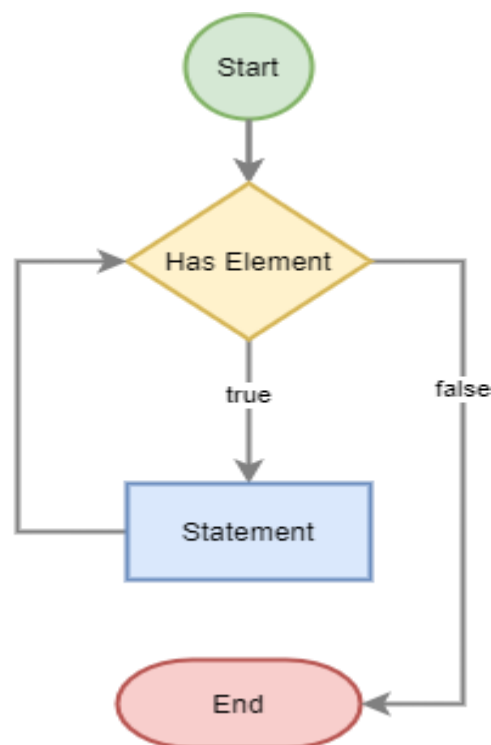


PHP foreach

PHP provides you with the **foreach** statement that allows you to iterate over elements of an [array](#), either an [indexed array](#) or an [associative array](#).

The **foreach** statement iterates over all elements in an array, one at a time. It starts with the first element and ends with the last one. Therefore, you don't need to know the number of elements in an array upfront.

The following flowchart illustrates how the **foreach** statement works:



PHP **foreach** with indexed arrays

To iterate over all elements of an indexed array, you use the following syntax:

```
<?php
```

```
foreach ($array_name as $element) {  
    // process element here  
}
```

When PHP encounters a foreach statement, it assigns the first element of the array to the variable following the as keyword (\$element).

In each iteration, PHP assigns the next array element to the \$element variable. If PHP reaches the last element, the loop ends.

The following example uses the foreach statement to display elements of the \$colors array:

```
<?php  
  
$colors = ['red', 'green', 'blue'];  
  
foreach ($colors as $color) {  
    echo $color . '<br>';  
}
```

Output:

```
red  
green  
blue
```

PHP foreach with an associative array

To iterate over elements of an [associative array](#), you use the following syntax:

```
<?php  
foreach ($array_name as $key => $value) {  
    //process element here;  
}
```

When PHP encounters the foreach statement, it accesses the first element and assigns:

- The key of the element to the **\$key** variable.
- The value of the element to the **\$value** variable.

In each iteration, PHP assigns the key and value of the next element to the variables (**\$key** and **\$value**) that follows the `as` keyword. If the last element is reached, PHP ends the loop.

The following example illustrates how to use the `foreach` statement to iterate over elements of the **capitals** array:

```
<?php
```

```
$capitals = [
    'Japan' => 'Tokyo',
    'France' => 'Paris',
    'Germany' => 'Berlin',
    'United Kingdom' => 'London',
    'United States' => 'Washington D.C.'
];
```

```
foreach ($capitals as $country => $capital) {
    echo "The capital city of {$country} is $capital" . '<br>';
}
```

Output:

```
The capital city of Japan is Tokyo
The capital city of France is Paris
The capital city of Germany is Berlin
The capital city of United Kingdom is London
The capital city of United States is Washington D.C.
```

Summary

- Use the `foreach ($array_name as $element)` to iterate over elements of an indexed array.
- Use the `foreach ($array_name as $key => $value)` to iterate over elements of an associative array.