

# What is Looping in PHP?

Looping is used to execute a block of code repeatedly until a given condition is satisfied.

## Types of Loops in PHP

PHP mainly supports **4 types of loops**:

1. for loop
2. while loop
3. do...while loop
4. foreach loop

### 1. for Loop

Used when the number of iterations is known.

#### Syntax:

```
for(initialization; condition; increment/decrement) {  
    // code  
}
```

#### Example:

```
<?php  
for($i = 1; $i <= 5; $i++) {  
    echo $i . "<br>";  
}  
?>
```

### 2. while Loop

Used when condition is checked **before** execution.

#### Syntax:

```
while(condition) {  
    // code  
}
```

```
}
```

#### Example:

```
<?php
$i = 1;
while($i <= 5) {
    echo $i . "<br>";
    $i++;
}
?>
```

## 3. do...while Loop

Executes at least **once**, condition checked **after** execution.

#### Syntax:

```
do {
    // code
} while(condition);
```

#### Example:

```
<?php
$i = 1;
do {
    echo $i . "<br>";
    $i++;
} while($i <= 5);
?>
```

## 4. foreach Loop

Used mainly for **arrays**.

#### Syntax:

```
foreach($array as $value) {
    // code
}
```

#### Example (Indexed Array):

```
<?php
$colors = array("Red", "Green", "Blue");
```

```
foreach($colors as $color) {  
    echo $color . "<br>";  
}  
?>
```

### Example (Associative Array):

```
<?php  
$student = array("name"=>"Amit", "age"=>21);  
  
foreach($student as $key => $value) {  
    echo $key . " : " . $value . "<br>";  
}  
?>
```

## Loop Control Statements

### break

Stops the loop.

```
if($i == 3) break;
```

### continue

Skips current iteration.

```
if($i == 3) continue;
```