What is a Function in PHP?

A function is a block of code that performs a specific task and can be reused whenever needed.

Why Use Functions?

- Avoid **repetition** of code
- Improve **readability**
- Easy to **maintain and debug**

Syntax of Function

```
function functionName() {
   // code
}
```

1 Function Without Parameter

```php
<?php
function greet() {
   echo "Hello, Welcome to PHP!";
}

greet();
?>
```

2. Function With Parameter

```php
<?php
function add($a, $b) {
   echo $a + $b;
}

add(10, 20);
?>
```

3. Function With Return Value

```php
<?php
function square($n) {
    return $n * $n;
}

$result = square(5);
echo $result;
?>
```

4.Function With Default Parameter

```php
<?php
function showName($name = "Guest") {
    echo $name;
}

showName();
showName("Rahul");
?>
```

5. Function With Multiple Parameters

```php
<?php
function student($name, $course, $age) {
    echo "Name: $name <br>";
    echo "Course: $course <br>";
    echo "Age: $age";
}

student("Amit", "MCA", 22);
?>
```

6. Call by Value

```php
<?php
function change($x) {
    $x = 50;
}

$a = 10;
change($a);
echo $a;  // 10
```

```php
?>
```

7. Call by Reference

```php
<?php
function change(&$x) {
    $x = 50;
}

$a = 10;
change($a);
echo $a;  // 50
?>
```

Built-in Functions (Examples)

- strlen() – string length
- count() – array size
- date() – date & time
- sqrt() – square root

```php
<?php
echo strlen("PHP");
?>
```