

## PHP vs Python – Advanced Syntax Differences (20 Examples)

### 1. Exception Handling

PHP: try { ... } catch (Exception \$e) { }

Python: try: ... except Exception as e:

### 2. Multiple Exceptions

PHP: catch (A|B \$e)

Python: except (A, B) as e:

### 3. Namespaces / Modules

PHP: namespace App\Utils;

Python: from app.utils import \*

### 4. Static Methods

PHP: class A { public static function x() {} }

Python: class A: @staticmethod def x():

### 5. Class Properties

PHP: private \$x;

Python: self.x = ...

### 6. Constructors

PHP: function \_\_construct(\$x)

Python: def \_\_init\_\_(self, x):

### 7. Type Declarations

PHP: function add(int \$a): int

Python: def add(a: int) -> int

### 8. Anonymous Functions

PHP: \$f = function(\$x){ return \$x+1; };

Python: f = lambda x: x+1

### 9. Arrow Functions

PHP: fn(\$x) => \$x+1

Python: lambda x: x+1

## 10. String Formatting

PHP: `sprintf("%s %d", $a, $b)`

Python: `"{} {}".format(a, b)`

## 11. Multiline Strings

PHP: `"line1\nline2"`

Python: `"""line1 line2"""`

## 12. File Read

PHP: `$txt = file_get_contents("a.txt")`

Python: `txt = open("a.txt").read()`

## 13. File Write

PHP: `file_put_contents("a.txt", $x)`

Python: `open("a.txt", "w").write(x)`

## 14. JSON Encode/Decode

PHP: `json_encode($x); json_decode($s, true)`

Python: `json.dumps(x); json.loads(s)`

## 15. Class Inheritance

PHP: `class B extends A`

Python: `class B(A):`

## 16. Interfaces / Abstract Classes

PHP: `interface A { public function x(); }`

Python: `from abc import ABC, abstractmethod`

## 17. Traits vs Mixins

PHP: `use MyTrait;`

Python: `class C(Mixin):`

## 18. Command-line args

PHP: `$argv[1]`

Python: `sys.argv[1]`

## 19. Pattern Matching / Match

PHP 8: `match($x) { 1 => "a", 2 => "b" }`

Python: `match x: case 1: "a"`

## 20. Generators

PHP: `function gen() { yield 1; }`

Python: `def gen(): yield 1`