

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`