HOORVIA ? PYTHON SYNTAX CHEAT SHEET: PRINTABLE PYTHON 3

Quick Reference Cheat Sheet · US Letter & A4 Printable

Tech & Software · Sheet #493

Construct / Feature	Python 3 Syntax Example	Output / Behavior	Core Use Case
F-String Formatting	f"Price: ${cost:.2f}"	'Price: $19.50'	Embed variables and round decimals cleanly inside strings
List Slicing	items[1:4] / items[::-1]	Elements 1?3 / Reversed list	Extract sub-lists or reverse sequences [start:stop:step]
List Comprehension	[x**2 for x in range(5) if x % 2 == 0]	[0, 4, 16]	Filter and transform iterables in a single readable line
Dictionary Safe Lookup	user.get("role", "guest")	'guest' (if key missing)	Retrieve dictionary values without raising a KeyError
Dictionary Merge (3.9+)	merged = defaults | custom	Combined dict (right wins)	Merge two dictionaries cleanly using the union operator
Unpacking & Splat	first, *rest = [10, 20, 30, 40]	first=10, rest=[20, 30, 40]	Capture head/tail elements from lists or tuples dynamically
Enumerate Loop	for idx, val in enumerate(seq, 1):	Yields (1, item0), (2, item1)	Loop over an iterable while tracking a 1-based counter
Zip Parallel Iteration	for a, b in zip(names, scores):	Pairs (name0, score0)	Iterate over two or more lists simultaneously
Function with Type Hints	def calc(x: int, rate: float = 0.1) -> float:	Returns typed float value	Define reusable functions with default args and type safety
Lambda Anonymous Func	sort_fn = sorted(rows, key=lambda r: r[1])	List sorted by index 1	Pass short inline sorting or filtering logic
Exception Handling	try: ... except ValueError as e: ... finally:	Catches error safely	Handle runtime errors without crashing the script
Context Manager (with)	with open("data.txt", "r", encoding="utf-8") as f:	Auto-closes file handle	Read or write files safely without memory or handle leaks
Structural Match (3.10+)	match status: case 200: ... case _:	Matches value pattern	Clean multi-branch alternative to long if/elif chains

PRO TIP: Indentation Rule: Python uses 4 spaces (never mixed tabs and spaces) per indentation level to define code blocks instead of curly braces.