

Python Style Guidelines & Naming Conventions (PEP 8)

Chris N John · Cleveland, OH

January 13, 2026

Quick Reference: Naming Conventions

Element	Convention	Example
Variable	snake_case	total_score
Function	snake_case	calculate_sum()
Class	PascalCase	UserProfile
Constant	ALL_CAPS	MAX_RETRIES
Module	lowercase_with_underscores	data_utils.py

Checklist

Checklist:

- Use 4 spaces for indentation (never tabs).
- Max line length: 79 chars for code, 72 for comments.
- Blank lines: 2 before top-level defs/classes, 1 between methods.
- Imports: stdlib, third-party, local (one per line).
- Comments: # followed by space; docstrings for modules/classes/functions.
- Avoid mutable default args; use None and initialize inside.
- Spaces around operators: x = a + b (not x=a+b).

Good vs Bad Examples

Good vs Bad Examples:

```
# Good:
def calculate_total(price, tax):
    '''Return total price including tax.'''
    return price + tax

# Bad:
def CALCULATETOTAL(Price,Tax):
    return Price+Tax

# Good:
x = 10  # store initial value

# Bad:
x=10#store initial value
```