

Syntax and Style

Reference: <https://www.python.org/dev/peps/pep-0008/> for official style guidance.

Indentation

Python enforces a line indentation style which distinguishes it from other languages. The indentation-level of a given line of Python code is very important. Always start at the left-margin, and if you need to indent a new line of code, do so using four spaces:

```
some line of code:
    an indented line of code
    another line of code at the first indentation level:
        a line of code at a nested indentation level
        this is starting to look like a snake maybe?
        hence the name "Python"
```

Unlike other languages, when you start a statement in Python, you don't need to also specify an explicit "end" of that statement. In other words, it is not necessary to close the statement at the same indentation-level from which it began.

Naming

Always observe lower-case variable and function names. If your variable or function name is comprised of two words, use snake case, not camel-case. As usual, only use title case for class names. Use snake case for Python (`.py`) files as well.

DO:

- `name`
- `first_name`
- `last_name`
- `first_and_last_name`
- `Human` - use title case for classes only
- `SuperHuman` - use title case for classes only

DON'T:

- `firstName`
- `lastName`
- `firstAndLastName`

PROFESSOR'S SIDE-NOTE: When in doubt, use lowercase snake case like `my_var = ...` or `def my_func(): ...`. You'll see me sometimes use all caps variable names like `CSV_FILEPATH = ...` which I think is the cause of some confusion. In other languages, a variable name in all caps like this is a "constant", or a variable whose value can't be changed. Although this behavior does not apply to Python, I have carried over this convention into my Python out of habit, perhaps providing you with a poor example. I also generally do this when I'm converting environment variables into Python variables, for consistency there. But this isn't a rule and I encourage each of you to adopt a pattern that makes sense to you!

Style Checking

Resources:

- <https://pypi.org/project/autopep8/>
- <http://pep8online.com/>
- <https://codeclimate.com/>