Python Programming Identifier

Mostafa S. Ibrahim
Teaching, Training and Coaching since more than a decade!

Artificial Intelligence & Computer Vision Researcher PhD from Simon Fraser University - Canada Bachelor / Msc from Cairo University - Egypt Ex-(Software Engineer / ICPC World Finalist)



Identifier (variable name)

- Identifier: Variable name: sum = 10 => sum is identifier
- Identifier consist of: letters, digits, _
 - status1, total_sum, _valid, is_valid
- It can't start with digit: [7Core is wrong]
- It can't contain space or:, <>/\?!()@#\$%^&~+-* [my-var is wrong]
- It is case sensitive: sum != SUM
- You shouldn't use reserved keyword (built in)
 - and, as, assert, break, class, continue, def, del, elif, else, except, finally, for, from, global, if, import, in, is, lambda, not, or, pass, raise, return, try, while, with, yield
- Common guideline: Use a lowercase single letter, word, or words.
 - Separate words with underscores to improve readability. (e.g. total_sum)

Some from software Engineering

- Readability
 - A good code should be <u>easy to read</u>`
 - Think in meaningful variable names
 - \blacksquare s = 0 \Rightarrow bad name: says nothing
 - I may use such names for shorter coding or educational purposes. You don't
 - total_sum = $0 \Rightarrow$ good name: seems something will be summed (e.g. salaries)

Code Review

- When you finish a coding task in a company. One or more guys review it
- Code needs to be correct + readable + following coding guidelines

Coding guidelines

- A list of dos and don'ts for coding programs.
- Google Python Style Guide

Your turn

- Create different variables (int, float, string)
- Print them
- Print expressions over them using + * /
- Intend to create errors and read the error message
- Try to create variables with invalid identifier

"Acquire knowledge and impart it to the people."

"Seek knowledge from the Cradle to the Grave."