

Programming

Lesson 23 - Code convention

الدرس 23 - كتابة الكود المتفق عليها

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Case styles

Where:

- ▶ Variables
- ▶ Functions
- ▶ Classes
 - ▶ Class name
 - ▶ Members
 - ▶ Methods
- ▶ Files
- ▶ Directories
- ▶ ...

Styles:

- ▶ camelCase
- ▶ PascalCase
- ▶ snake_case
- ▶ kebab-case

Camel Case & Snake case

Word: this is my line

Camel case

▶ thisIsMyLine

Rules:

- ▶ Capitalizing all words following the first word

Snake case:

▶ this_is_my_line

Rules:

- ▶ _ between words
- ▶ All small letters or All Capital letters
- ▶ THIS_IS_MY_LINE

Pascal case & Kebab case

Word: this is my line

Pascal case

▶ ThisIsMyLine

Rules:

- ▶ Capitalizing all words (Including the first word)

Kebab case:

▶ this-is-my-line

Rules:

- ▶ - between words
- ▶ All small letters or All Capital letters

Snake case

Small letters

- ▶ Variables:
 - ▶ `this_is_variable`
- ▶ Functions:
 - ▶ `my_new_function()`
- ▶ Files:
 - ▶ `new_file.py`
- ▶ Directory
 - ▶ `functions/`
- ▶ Class member and methods
 - ▶ `self.name`

Capital letters

- ▶ Constants
 - ▶ `THIS_IS_CONSTANT`

Pascal Case

- ▶ Class Name
 - ▶ class Person:
...
 - ▶ class NewClass:
...

Style

- ▶ Use snake and Pascal case
- ▶ Short lines: ~80 character
 - ▶ Break line if needed
- ▶ Short functions
- ▶ Comments
 - ▶ Functions comments
 - ▶ Inline comments
- ▶ Readable and understandable naming

Style correct vs wrong

	Correct	Wrong
Import different libraries	<pre>import pandas import numpy</pre>	<pre>import pandas, numpy</pre>
Import per library	<pre>from pandas import DataFrame, DataFrame</pre>	<pre>from pandas import DataFrame from pandas import DataFrame</pre>
Spaces	<pre>x = x + 1 i += 1 x = x*2 + 1</pre>	<pre>x=x+1 i+=1 / i +=1 x = x * 2 + 1</pre>
Functions arguments spaces	<pre>def new_func(args1, arg2, arg3) print('one', 'two', 'three')</pre>	<pre>def new_func(args1,arg2,arg3) print('one','two','three')</pre>
Conditions spaces	<pre>if x == 1: while x > 1:</pre>	<pre>if x==1: while x>1:</pre>
Brackets when needed	<pre>if (x > 1 and y > 3) or (x < 3 and y > 6)</pre>	<pre>if x > 1 and y > 3 or x < 3 and y > 6:</pre>
Comments	<pre># Checking if num is even if (x % 2) == 0:</pre>	<pre>if x % 2 == 0:</pre>
Relevant names	<pre>def calculate_avg(lst):</pre>	<pre>def foo():</pre>

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Thank you 😊!

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Stay tuned for more!