

How to write Pythonic Python Code

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Agenda

- ◆ Pythonic
- ◆ Examples

Pythonic

- ◆ Pythonic means code that doesn't just get the syntax right but that follows the conventions of the Python community and uses the language in the way it is intended to be used.
- ◆ Beautiful, clear, concise and maintainable.
- ◆ PEP8 is a good standard to follow

Variables Exchange

```
>>> a = 1
```

```
>>> b = 2
```

```
>>> tmp = a
```

```
>>> a = b
```

```
>>> b = tmp
```

```
>>> a, b = b, a
```

Print all elements in list

```
>>> for i in [0, 1, 2, 3, 4, 5]:  
>>>     print (i)
```

Python 2:

```
>>>for i in xrange(6):  
>>>     print (i)
```

Python 3:

```
>>>for i in range(6):  
>>>     print (i)
```

String join

```
>>>names = ['Richard', 'Jenny', 'Coco',...]
```

```
>>>s = names[0]
```

```
>>>for name in names[1:]:
```

```
>>>    s += ', ' + name
```

```
>>>print (s)
```

```
>>>print (' , '.join(names))
```

Get List Elements

```
>>>p = 'Richard', 'male', 18,  
'info@qaclub.org'
```

```
>>>name = p[0]
```

```
>>>gender = p[1]
```

```
>>>age = p[2]
```

```
>>>email = p[3]
```

```
>>>name, gender, age, email = p
```

File open/close

```
>>> f = open('data.txt')
```

```
>>> try:
```

```
>>>     data = f.read()
```

```
>>> finally:
```

```
>>>     f.close()
```

```
>>> with open('data.txt') as f:
```

```
>>>     data = f.read()
```


If / else

```
>>> if gender == 'm':  
>>>     text = 'male'  
>>> else:  
>>>     text = 'female'
```

```
>>> text = 'male' if gender == 'm' else  
'female'
```

Boolean

```
>>> if attr == True:
>>>     do_something()
>>> if attr:
>>>     do_something()

>>> if len(values) != 0:
>>>     # if the list is not null
>>>     do_something()
>>> if values:
>>>     do_something()
```

Get Dictionary Element

```
>>>dict = {'name': 'foo'}  
>>>if d.has_key('name'):  
>>>    print(d['name'])  
>>>else:  
>>>    print('unknown')
```

```
>>>dict.get("name", "unknown")
```

Thank you !