

# ***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

# ***PEP8 Style Guide***

## **(Python Enhancement Proposal #8)**

- <http://www.python.org/dev/peps/pep-0008>

### **Naming Rules:**

- Functions\_1, variables\_2, and attribute my\_function,
- protected instance attributes & private instance attributes

`_common_attributes_, __main__`

- Classes and Exceptions

`Class_example, Exception_sql`

- Module-level CONSTANTS

`PI, VERSION, QA_TOOLS`

# *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', 'James', 'Alpha',...]
```

```
>>>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
```



## *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 !