

# Outils Python & C++

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**VOUS**

- > hauteurs
- > position
- > distances

Adaptez votre environnement



bépo.fr  
ergol.org

**STYLE**

- > Code is read much more often than it is written
  - Guido Van Rossum

<https://peps.python.org/pep-0008/>

```
print ( "hello" )
```

```
↳$ flake8 hello-spaces.py
```

```
hello-spaces.py:1:6: E211 whitespace before '('
```

```
hello-spaces.py:1:8: E201 whitespace after '('
```

```
hello-spaces.py:1:16: E202 whitespace before ')'
```

```
https://github.com/psf/black
```

```
↳$ black hello-spaces.py  
reformatted hello-spaces.py
```

All done!

1 file reformatted.

```
-print ( "hello" )  
+print("hello")
```

<https://clang.llvm.org/docs/ClangFormat.html>

```
↳ $ clang-format -i QGVScene.cpp
```

```
-for( auto node : _nodes ) {  
-  node->update_layout();  
-}
```

```
+for (auto *node : _nodes) node->update_layout();
```

# **ANALYSE STATIQUE**

```
def add(a: int, b: int) -> int:
    """Performs addition on integers.

    >>> add(3, 4)
    7
    """
    return a + b

if __name__ == "__main__":
    import sys
    print(add(sys.argv[1], sys.argv[2]))
```

```
└─>$ python add.py 3 4
```

```
34
```

```
└─>$ mypy add.py
```

```
add.py:13: error: Argument 1 to "add" has incompatible  
type "str"; expected "int"
```

```
add.py:13: error: Argument 2 to "add" has incompatible  
type "str"; expected "int"
```

```
Found 2 errors in 1 file (checked 1 source file)
```

<https://github.com/asottile/pyupgrade>

```
class C(Base):  
    def f(self):  
-         super(C, self).f()  
+         super().f()
```

En C++: clang-tidy

**MÉTA**

Bring your own ;)

<https://github.com/pre-commit/pre-commit>

```
↳ $ cat .pre-commit-config.yaml
```

```
repos:
```

```
- repo: https://github.com/psf/black  
  rev: 22.8.0
```

```
hooks:
```

```
- id: black
```

```
- repo: https://github.com/pre-commit/mirrors-clang-format  
  rev: v14.0.6
```

```
hooks:
```

```
- id: clang-format
```

<https://github.com/pre-commit/pre-commit>

```
↳$ pre-commit run -a
```

```
↳$ pre-commit install
```

<https://pre-commit.ci/>

**RUST**

- > black + isort → ruff format
- > flake8 + pyupgrade → ruff check

> pip → uv

**GIT**

<https://homepages.laas.fr/matthieu/talks/git.pdf>

<https://learngitbranching.js.org>

<https://jj-vcs.github.io>