

Checking your code for PEP 8 standard

"Code is read much more often than it is written"

- PEP 8: Python Enhancement Protocol 8
- PEP 8 is the defacto style guide for python code
- PEP 8 let us know how to format our code to be as readable as possible
- PEP 8 official page: <https://www.python.org/dev/peps/pep-0008/> (<https://www.python.org/dev/peps/pep-0008/>)

How to keep up with many rules defined in PEP 8?

1. IDEs: Most of the IDEs will flag a violation as soon as we write a bad line of code
2. pycodestyle package: Checks code in multiple files at once and outputs description of the violations along with information where we need to fix them

Intall pycodestyle

- pip install pycodestyle [from command line or conda prompt]
- pycodestyle can be run from a command line and also from a python script

I have prepared two python codes [before_check.py and after_check.py] to demonstrate usage of pycodestyle. you can find the script [here \(https://github.com/jay-pm/Python/tree/master/PEP8_standard_check_with_pycodestyle\)](https://github.com/jay-pm/Python/tree/master/PEP8_standard_check_with_pycodestyle).

From command line

run pycodestyle before_check.py at command line

```
(base) C:\Users\Jay\Test_Jay>pycodestyle before_check.py
before_check.py:1:3: E114 indentation is not a multiple of four (comment)
before_check.py:1:3: E116 unexpected indentation (comment)
before_check.py:2:6: E225 missing whitespace around operator
before_check.py:2:13: E231 missing whitespace after ','
before_check.py:2:21: E231 missing whitespace after ','
before_check.py:2:38: E261 at least two spaces before inline comment
before_check.py:2:38: E262 inline comment should start with '#'
before_check.py:5:7: E201 whitespace after '('
before_check.py:5:16: W292 no newline at end of file
```

fix the above erros in after_check.py and run pycodestyle on after_check.py from command line

```
(base) C:\Users\Jay\Test_Jay>pycodestyle after_check.py
after_check.py:5:13: W292 no newline at end of file
```

Note: I have to check how to fix "W292 no newline at end of file"

Reference: <https://github.com/PyCQA/pycodestyle/issues/365>

(<https://github.com/PyCQA/pycodestyle/issues/365>) W391 blank line at end of file introduces --> W292 no newline at end of file

pycodestyle output message

"before_check.py:2:6: E225 missing whitespace around operator"

- before_check.py: File name
- 2: line number
- 6: column number
- E225: Error code
- missing whitespace around operator: Error drscription

Note: The output does not use zero based indexing

From python code

In [1]:

```
# Import needed package
import pycodestyle

# pycodestyle docstring: Check Python source code formatting, according to PEP 8

# Create a StyleGuide instance
style_checker=pycodestyle.StyleGuide()

# Init signature: pycodestyle.StyleGuide(*args, **kwargs)
## Docstring: Initialize a PEP-8 instance with few options.
```

In [2]:

```
# Run PEP 8 check on "before_check.py"
# to run it on multiple files at once, just add file names in square bracket with quotes
style_checker.check_files(['before_check.py'])
```

```
before_check.py:1:3: E114 indentation is not a multiple of four (comment)
before_check.py:1:3: E116 unexpected indentation (comment)
before_check.py:2:6: E225 missing whitespace around operator
before_check.py:2:13: E231 missing whitespace after ','
before_check.py:2:21: E231 missing whitespace after ','
before_check.py:2:38: E261 at least two spaces before inline comment
before_check.py:2:38: E262 inline comment should start with '#'
before_check.py:5:7: E201 whitespace after '('
before_check.py:5:16: W292 no newline at end of file
```

Out[2]:

```
<pycodestyle.StandardReport at 0x52e07f0>
```

In [4]:

```
# Fix above mentioned pep 8 violations and run PEP 8 check on "after_check.py"
style_checker.check_files(['after_check.py'])
```

```
after_check.py:5:13: W292 no newline at end of file
```

Out[4]:

```
<pycodestyle.StandardReport at 0x52e07f0>
```

