

| # | Original PEP-8 | Modified Rule | Reason | PyLint Code | Positive Example | Negative Example |
|---|---|---------------------------------------|---|------------------------------|---|--|
| 1 | Indentation is 4 spaces | Indentation is 2 spaces | Compact code is easier to read | indent-after-paren=2 | Each indentation level uses 2 spaces | Each indentation level uses 4 spaces |
| 2 | Snake Case | Any | Easier to read | method-naming-style=any | def CalculateTotal(): return 100 | def calculate_total(): return 100 |
| 3 | Keeping number of arguments small | Allowing up to 7 arguments | Gives flexibility in constructors | max-args=7 | def create_user(a, b, c, d, e, f, g): return a | def create_user(a, b, c, d, e, f, g, h): return a |
| 4 | Max positional arguments is 5 | Allowing up to 7 positional arguments | Consistency with args | max-positional-arguments=8 | def example(a, b, c, d, e, f, g, h): return a | def example(a, b, c, d, e, f, g, h, i): return a |
| 5 | Module names should be snake_case | Ignore module name | Existing module names (EnterpriseManager, EnterpriseRequest) are PascalCase; easier than renaming files | module-naming-style=any | EnterpriseManager.py | enterprise_manager.py |
| 6 | Class names should be PascalCase | Ignore class name style | Flexibility to avoid lint errors | class-naming-style=any | class enterprise_manager: pass | class EnterpriseManager: pass |
| 7 | Modules, classes, and functions must include docstrings | Docstrings are optional | For small academic or internal modules, mandatory documentation may be unnecessary | disable=C0114,C0115, C0116 | def example(): return 5 | def example(): """Returns 5""" return 5 |
| 8 | Const naming style is all caps | Flexible naming style | Flexibility to avoid lint errors | class-const-naming-style=any | class Example: maxValue = 10 | class Example: MAX_VALUE = 10 |

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|----|---|--|---|-------------------------------|---|---|
| 9 | Function has snake case | Any | Flexibility to avoid lint errors | function-naming-style=any | def calculate_total(): return 100 | def CalculateTotal(): return 100 |
| 10 | Attribute name is snake case | Any | Flexibility to avoid lint errors | attr-naming-style=any | self.time_stamp = 123 | self.timeStamp = 123 |
| 11 | Argument naming style has to be snake | Any | Flexibility to avoid lint errors | argument-naming-style =any | def example(Cif, phOnE, ENAME): return Cif | def example(cif, phone, enterprise_name): return cif |
| 12 | Private attributes (like __timeStamp) should be used in the code. | Allow unused private members without warnings. | Some private members are stored for future use or intentionally unused. | disable=unused-private-member | class Example: def __init__(self): self.__timeStamp = 123 | class Example: def __init__(self): self.__timeStamp = 123 # flagged as unused |
| 13 | Max locals is 15 | Max locals is 20 | CIF validation | max-locals=20 | def example(): a1=a2=a3=a4=a5=a6=a7=a8=a9=a10=0 a11=a12=a13=a14=a15=a16=a17=a18=0 | def example(): a1=a2=a3=a4=a5=a6=a7=a8=a9=a10=0 a11=a12=a13=a14=a15=a16=a17=a18=a19=a20=a21=0 |
| 14 | Max returns is 6 | Changing max returns to 10 | improves clarity with more return statements | max-returns=10 | def example(x): if x==1: return 1 if x==2: return 2 if x==3: return 3 return 0 | Too many return statements beyond 10. |
| 15 | Max statements is 50 | Changing max statements to 80 | Makes sure functions don't split in random places | max-statements=80 | Function with 60–70 statements | Function exceeding 80 statements |

Before editing:

```
***** Module uc3m_consulting.EnterpriseManagementException
uc3m_consulting/EnterpriseManagementException.py:1:0: C0114: Missing module docstring (missing-module-docstring)
uc3m_consulting/EnterpriseManagementException.py:1:0: C0103: Module name "EnterpriseManagementException" doesn't conform to snake_case naming style (invalid-name)
uc3m_consulting/EnterpriseManagementException.py:1:0: C0115: Missing class docstring (missing-class-docstring)
uc3m_consulting/EnterpriseManagementException.py:7:4: C0116: Missing function or method docstring (missing-function-docstring)
***** Module uc3m_consulting.EnterpriseManager
uc3m_consulting/EnterpriseManager.py:1:0: C0103: Module name "EnterpriseManager" doesn't conform to snake_case naming style (invalid-name)
uc3m_consulting/EnterpriseManager.py:10:0: C0115: Missing class docstring (missing-class-docstring)
uc3m_consulting/EnterpriseManager.py:14:4: C0116: Missing function or method docstring (missing-function-docstring)
uc3m_consulting/EnterpriseManager.py:14:4: C0103: Method name "ValidateCIF" doesn't conform to snake_case naming style (invalid-name)
uc3m_consulting/EnterpriseManager.py:14:26: C0103: Argument name "Cif" doesn't conform to snake_case naming style (invalid-name)
uc3m_consulting/EnterpriseManager.py:46:4: C0116: Missing function or method docstring (missing-function-docstring)
uc3m_consulting/EnterpriseManager.py:46:4: C0103: Method name "ReadproductcodefromJSON" doesn't conform to snake_case naming style (invalid-name)
uc3m_consulting/EnterpriseManager.py:50:16: C0103: Variable name "DATA" doesn't conform to snake_case naming style (invalid-name)
uc3m_consulting/EnterpriseManager.py:57:12: C0103: Variable name "T_CIF" doesn't conform to snake_case naming style (invalid-name)
uc3m_consulting/EnterpriseManager.py:58:12: C0103: Variable name "T_PHONE" doesn't conform to snake_case naming style (invalid-name)
uc3m_consulting/EnterpriseManager.py:59:12: C0103: Variable name "E_NAME" doesn't conform to snake_case naming style (invalid-name)
uc3m_consulting/EnterpriseManager.py:71:4: C0103: Constant name "valid_cif" doesn't conform to UPPER_CASE naming style (invalid-name)
uc3m_consulting/EnterpriseManager.py:72:4: C0103: Constant name "invalid_cif" doesn't conform to UPPER_CASE naming style (invalid-name)
***** Module uc3m_consulting.EnterpriseRequest
uc3m_consulting/EnterpriseRequest.py:1:0: C0114: Missing module docstring (missing-module-docstring)
uc3m_consulting/EnterpriseRequest.py:1:0: C0103: Module name "EnterpriseRequest" doesn't conform to snake_case naming style (invalid-name)
uc3m_consulting/EnterpriseRequest.py:5:0: C0115: Missing class docstring (missing-class-docstring)
uc3m_consulting/EnterpriseRequest.py:7:8: C0103: Attribute name "__EnterpriseNAME" doesn't conform to snake_case naming style (invalid-name)
uc3m_consulting/EnterpriseRequest.py:8:8: C0103: Attribute name "__cIF" doesn't conform to snake_case naming style (invalid-name)
uc3m_consulting/EnterpriseRequest.py:9:8: C0103: Attribute name "__pHONE" doesn't conform to snake_case naming style (invalid-name)
uc3m_consulting/EnterpriseRequest.py:11:8: C0103: Attribute name "__timeStamp" doesn't conform to snake_case naming style (invalid-name)
uc3m_consulting/EnterpriseRequest.py:6:23: C0103: Argument name "Cif" doesn't conform to snake_case naming style (invalid-name)
uc3m_consulting/EnterpriseRequest.py:6:27: C0103: Argument name "phOnE" doesn't conform to snake_case naming style (invalid-name)
uc3m_consulting/EnterpriseRequest.py:6:34: C0103: Argument name "ENAME" doesn't conform to snake_case naming style (invalid-name)
uc3m_consulting/EnterpriseRequest.py:17:4: C0116: Missing function or method docstring (missing-function-docstring)
uc3m_consulting/EnterpriseRequest.py:17:4: C0103: Attribute name "ENTERPRISE_CIF" doesn't conform to snake_case naming style (invalid-name)
uc3m_consulting/EnterpriseRequest.py:20:4: C0103: Attribute name "ENTERPRISE_CIF" doesn't conform to snake_case naming style (invalid-name)

uc3m_consulting/EnterpriseRequest.py:34:4: C0103: Attribute name "ENTERprise_Name" doesn't conform to snake_case naming style (inv
***** Module uc3m_consulting
uc3m_consulting/_init_.py:1:0: C0114: Missing module docstring (missing-module-docstring)

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Your code has been rated at 5.65/10 (previous run: 9.65/10, -4.00)
```

After Pylint:

```
Your code has been rated at 10.00/10 (previous run: 8.71/10, +1.29)
```

```
preethisenthilnathan@Preethis-MacBook-Pro-2 G87.2026.TSS.GE1 % PYTHONPATH=. pylint uc3m_consulting/*.py
```

```
-----  
Your code has been rated at 10.00/10 (previous run: 10.00/10, +0.00)
```

```
preethisenthilnathan@Preethis-MacBook-Pro-2 G87.2026.TSS.GE1 % █
```

Code:

```
[...]  
/usr/local/bin/python3 /Users/preethisenthilnathan/G87.2026.TSS.GE1/UC3M_Consulting/EnterpriseManager.py  
Validating A58818501: True  
Validating B12345678: False  
  
Process finished with exit code 0
```