

- Secrets
- ABAP
- Apex
- C
- C++
- CloudFormation
- COBOL
- C#
- CSS
- Flex
- Go
- HTML
- Java
- JavaScript
- Kotlin
- Objective C
- PHP
- PL/I
- PL/SQL
- Python
- RPG
- Ruby
- Scala
- Swift
- Terraform
- Text
- TypeScript
- T-SQL
- VB.NET
- VB6
- XML



# Python static code analysis

Unique rules to find Bugs, Vulnerabilities, Security Hotspots, and Code Smells in your PYTHON code

All rules (216) Vulnerability (29) Bug (55) Security Hotspot (31) Code Smell (101)

Tags ▾

Search by name... 🔍

Functions should not have too many lines of code	Code Smell
Track uses of "NOSONAR" comments	Code Smell
Track comments matching a regular expression	Code Smell
Statements should be on separate lines	Code Smell
Functions should not contain too many return statements	Code Smell
Files should not have too many lines of code	Code Smell
Lines should not be too long	Code Smell
Methods and properties that don't access instance data should be static	Code Smell
New-style classes should be used	Code Smell
Parentheses should not be used after certain keywords	Code Smell
Track "TODO" and "FIXME" comments that do not contain a reference to a person	Code Smell
Module names should comply with a naming convention	

## Two branches in a conditional structure should not have exactly the same implementation

Analyze your code

Code Smell Major ? design suspicious

Having two branches in the same if structure with the same implementation is at best duplicate code, and at worst a coding error. If the same logic is truly needed for both instances, then they should be combined.

### Noncompliant Code Example

```
if 0 <= a < 10:
    do_first()
    do_second()
elif 10 <= a < 20:
    do_the_other_thing()
elif 20 <= a < 50:
    do_first()           # Noncompliant; duplicates first c
    do_second()
```

### Exceptions


Blocks in an if chain that contain a single line of code are ignored.

```
if 0 <= a < 10:
    do_first()
elif 10 <= a < 20:
    do_the_other_thing()
elif 20 <= a < 50:
    do_first()           # no issue, usually this is done c
```


But this exception does not apply to if chains without else-s when all branches have the same single line of code. In case of if chains with else-s rule {rule:python:S3923} raises a bug.

```
if 0 <= a < 10:
    do_first()
elif 20 <= a < 50:
    do_first()           # Noncompliant, this might have be
```


Available In:  
sonarlint | sonarcloud | sonarqube

 Code Smell


Comments should not be located at the end of lines of code

 Code Smell


Lines should not end with trailing whitespaces

 Code Smell

Files should contain an empty newline at the end

 Code Smell

Long suffix "L" should be upper case

 Code Smell