Flake8 Python linter

CONCEPTS

Flake8 wraps pycodestyle (E, W), pyflakes (F) and mccabe (C90). It only reports; it never rewrites your code.

Python files found by path
↓ parse
Plugins E W F C90 + extras
↓ filter
select / ignore config + CLI + noqa
↓ report
Output exit 1 if any

Codes are prefixes: E501 is one rule, E5 a group, E all style errors. Options take comma-separated prefixes.

Config is read from setup.cfg, tox.ini or .flake8 in the current directory; pyproject.toml is not supported without a plugin.

RUN

`flake8`
Check all Python files here

`flake8 <path> ...`
Check files or directories

`flake8 -`
Read source from stdin

`flake8 --version`
Show versions of flake8 and plugins

OUTPUT

`flake8 --show-source`
Print the offending source line

`flake8 --statistics`
Count violations per code

SELECT AND IGNORE

`flake8 --select=<codes>`
Report only these codes or prefixes

`flake8 --extend-select=<codes>`
Add codes to the default selection

`flake8 --ignore=<codes>`
Replace the default ignore list

`flake8 --extend-ignore=<codes>`
Ignore more codes, keep the defaults

SELECT AND IGNORE (cont.)

`flake8 --per-file-ignores='<glob>:<codes>'`
Ignore codes for matching files

`flake8 --max-complexity=<n>`
Enable C901 above this complexity

`flake8 --max-line-length=<n>`
Line length limit for E501

FILES

`flake8 --extend-exclude=<patterns>`
Skip more paths, keep defaults

`git diff --name-only -- '*.py' | xargs flake8`
Lint only changed files

INLINE CONTROL

`# noqa`
Silence all codes on this line

`# noqa: <code>[, <code>]`
Silence only these codes on this line

CONFIG

`flake8 --config <file>`
Use only this config file

A [flake8] section in setup.cfg, tox.ini or .flake8; option names use dashes or underscores, e.g. max-line-length.

COMMON CODES

Frequent codes

Code	Meaning
E501	line too long
E302	expected 2 blank lines
E231	missing whitespace after ','
E203	whitespace before ':'
W291	trailing whitespace
W605	invalid escape sequence
F401	imported but unused
F841	local variable assigned, never used
F821	undefined name
E722	bare except
E741	ambiguous variable name
C901	function too complex