SQLFluff SQL linter and formatter

Template jinja / dbt → render → **Lex + parse** per dialect → rules → **Lint** violations → fix → **Fixed SQL** written back

CONCEPTS

Always set a dialect (--dialect or in .sqlfluff); without one SQLFluff cannot lint most real SQL.

Config is read from .sqlfluff, tox.ini, setup.cfg or pyproject.toml in the current and parent dirs; closer files win.

LINT

sqlfluff lint *<path>*
Lint a file or directory

sqlfluff lint .
Lint the current directory

sqlfluff lint -d *<dialect>* *<path>*
Set the dialect

sqlfluff lint -r *<rules>* *<path>*
Check only these rules

sqlfluff lint -e *<rules>* *<path>*
Skip these rules

sqlfluff lint -f json *<path>*
Machine-readable output

sqlfluff lint --nofail *<path>*
Always exit 0

LINT (cont.)

sqlfluff lint -p *<n>* *<path>*
Parallel processes

FIX AND FORMAT

sqlfluff fix *<path>*
Fix violations in place

sqlfluff format *<path>*
Autoformat in place

sqlfluff fix -r *<rules>* *<path>*
Fix only these rules

sqlfluff fix --check *<path>*
Preview, then confirm

sqlfluff fix -x _fixed *<path>*
Write to a suffixed copy

cat *<file>* **| sqlfluff fix -**
Fix stdin to stdout

INSPECT

sqlfluff parse *<file>*
Print the parse tree

sqlfluff parse -c *<file>*
Code elements only

sqlfluff render *<file>*
Show templated SQL

sqlfluff rules
List all rules

INSPECT (cont.)

sqlfluff dialects
List all dialects

OPTIONS

--templater / -t *<name>*
raw, jinja, python, placeholder

--config *<file>*
Add an extra config file

CONFIG

[sqlfluff]
Core settings section

dialect = *<name>*
Default dialect

templater = jinja
Choose the templater

exclude_rules = *<list>*
Rules to skip

rules = *<list>*
Rules to run only

max_line_length = *<n>*
Line length limit (LT05)

[sqlfluff:rules:<*rule*>**]**
Per-rule settings

[tool.sqlfluff]
Section in pyproject.toml

capitalisation_policy = *<p>*
consistent, upper or lower

CONFIG (cont.)

.sqlfluffignore
Paths to skip

IGNORING CODE

-- noqa
Ignore all rules on this line

-- noqa: *<rules>*
Ignore listed rules on this line

-- noqa: disable=*<rules>*
Ignore from here on

-- noqa: enable=*<rules>*
Resume checking

COMMON RULES

LT01
Spacing

LT02
Indentation

LT05
Line too long

LT12
Single trailing newline

LT09
Select targets on own lines

CP01
Keyword capitalisation

CP02
Identifier capitalisation

COMMON RULES (cont.)

AL01
Table alias with AS

AL05
Unused table alias

RF01
Unresolvable references

RF02
Qualify multi-table columns

ST03
Unused CTE

ST05
Subquery instead of CTE

INTEGRATION

id: sqlfluff-lint
pre-commit hook: lint

id: sqlfluff-fix
pre-commit hook: fix

pip install sqlfluff
Install

RECIPES

Minimal .sqlfluff

```
[sqlfluff]
dialect = postgres
exclude_rules = LT05, ST07
max_line_length = 100

[sqlfluff:indentation]
tab_space_size = 4
```