# isort Python import sorter

**Imports** top of each file → `classify` → **Sections** FUTURE, STDLIB, THIRDPARTY, FIRSTPARTY, LOCALFOLDER → `sort` → **Order in section** import x, then from x import y → `wrap` → **Output** line length, multi-line mode

## CONCEPTS

isort rewrites files in place by default. Run it with --diff first or commit before the first run. With Black, always set --profile black (or the config equivalent), or the two tools fight over wrapping.

Config is found automatically: pyproject.toml ([tool.isort]), .isort.cfg, setup.cfg, tox.ini or .editorconfig. Command-line flags override it.

## RUN

`isort .`
Sort every Python file below here

`isort <file.py> <dir>`
Sort given files and folders

`isort --check-only .`
Exit 1 if any file would change

`isort --diff .`
Print the changes, write nothing

## RUN (cont.)

`isort --check-only --diff .`
Show why a CI check fails

`isort --diff --check-only <file.py>`
Diff plus failing exit code, one file

`isort -d <file.py>`
Print sorted result to stdout

`isort -c -q .`
Check, print errors only

`isort --color --diff .`
Colored diff

`isort -j <n> .`
Process files in parallel

## STYLE

`isort --profile black .`
Use a preset (black, django, google, ...)

`isort -l <n> .`
Maximum import line length

`isort -m <mode> .`
Multi-line wrap mode (GRID, VERTICAL, 3, ...)

`isort --tc --up .`
Trailing comma and parentheses

`isort --sl .`
One imported name per line

## STYLE (cont.)

`isort --ca .`
Combine 'as' imports on one line

`isort --fss .`
Sort by module, ignore import / from style

`isort --float-to-top .`
Move mid-file imports to the top

## SECTIONS

`isort -p <pkg> .`
Treat <pkg> as first party

`isort --src <dir> .`
Add a source path (finds first-party code)

`isort -o <pkg> .`
Treat <pkg> as third party

`isort --py <ver> .`
Stdlib list for a Python version (310, auto)

### Sections, in order

| Section | Holds |
|---|---|
| `FUTURE` | __future__ |
| `STDLIB` | Python standard library |
| `THIRDPARTY` | Installed packages |
| `FIRSTPARTY` | Your own packages |
| `LOCALFOLDER` | Relative imports (from . import x) |

## IMPORTS AND FILES

`isort -a '<import>' .`
Add an import to every file

`isort --rm '<import>' .`
Remove an import from every file

`isort -s <name> .`
Skip a file or directory

`isort --extend-skip <name> .`
Skip more, keep the default skips

`isort --sg '<glob>' .`
Skip by glob pattern

`isort --gitignore .`
Skip files listed in .gitignore

`isort --filter-files <file.py>`
Apply skips to explicitly named files

`isort --show-files .`
List files isort would process

## CONFIG

`isort --show-config <file.py>`
Show settings and where they came from

## CONFIG (cont.)

`isort --settings-path <path> .`
Use a specific config file or folder

### Skip markers in code

| Marker | Effect |
|---|---|
| `# isort: skip` | Leave this import line alone |
| `# isort: skip_file` | Ignore the whole file |
| `# isort: off / on` | Pause and resume sorting |
| `# isort: split` | Sort above and below separately |

## EXIT CODES

| Code | Meaning |
|---|---|
| 0 | Done, or nothing to change with --check-only |
| 1 | --check-only: files would change |
| 2 | Bad command-line arguments |

## RECIPES

### pyproject.toml

```
[tool.isort]
profile = "black"
line_length = 100
src_paths = ["src", "tests"]
skip = ["migrations"]
```