# ripgrep Fast recursive search

**START HERE**

`rg <pattern>`
Search recursively

`rg -g '<glob>' <pattern>`
Filter by path glob

`rg -i <pattern>`
Ignore case

`rg -C 3 <pattern>`
Show context

`rg -F <text>`
Literal, not regex

`rg -l <pattern>`
List matching files

`rg -t <type> <pattern>`
Only one file type

`rg --hidden <pattern>`
Include dotfiles

## CONCEPTS

rg skips ignored, hidden and binary files by default. If a match is missing, try rg -uu before blaming the pattern.

**Walk tree** from . or <path>
↓ skip ignored
**Filter** globs, types, hidden
↓ skip binary
**Match** regex per line
↓ format
**Print** path:line:text
What happens to each file

ripgrep never edits files: --replace only changes what is printed.

## SEARCHING

`rg <pattern> [<path>...]`
Search paths recursively (default .)

`rg -e <pat1> -e <pat2>`
Match any of several patterns

`rg -i <pattern>`
Case-insensitive

`rg -S <pattern>`
Smart case: ignore case unless uppercase used

`rg -F <text>`
Fixed string, no regex

`rg -w <word>`
Match whole words only

`rg -v <pattern>`
Show non-matching lines

`rg -x <pattern>`
Match whole lines only

`rg -f <file>`
Read patterns from a file, one per line

`rg -s <pattern>`
Case-sensitive (override config)

`rg -m <n> <pattern>`
Stop after n matches per file

## FILTERING FILES

`rg -g '<glob>' <pattern>`
Only paths matching the glob

`rg -g '!<glob>' <pattern>`
Exclude paths matching the glob
*The ! means exclude here, the reverse of .gitignore. If any positive glob is given, files must match one of them.*

`rg -t <type> <pattern>`
Only files of a type (py, rust, md...)

`rg -T <type> <pattern>`
Exclude a file type

## FILTERING FILES (cont.)

`rg --type-list`
List known types and their globs

`rg --type-add '<name>:<glob>' -t<name> <pat>`
Define a type for this run only
*Not persistent: put it in an alias or the config file.*

`rg --iglob '<glob>' <pattern>`
Case-insensitive glob

`rg --max-depth <n> <pattern>`
Limit directory depth

`rg --files`
List files that would be searched

`rg --files -g '<glob>'`
Fast file finder by glob

## IGNORE RULES

`rg --hidden <pattern>`
Search hidden files and dirs

`rg --no-ignore <pattern>`
Ignore .gitignore, .ignore and .rgignore

`rg -u <pattern>`
Stop honouring ignore files

`rg -uu <pattern>`
Also search hidden files

`rg -uuu <pattern>`
Also search binary files

`rg -a <pattern>`
Treat binary files as text
*Can print control characters to your terminal.*

`rg -L <pattern>`
Follow symlinks

`rg --no-require-git <pattern>`
Apply .gitignore outside a git repo

`rg --debug <pattern>`
Show why files are skipped

`!<dir>/`
Whitelist an ignored path in a .ignore file

## OUTPUT

`rg -n <pattern>`
Show line numbers
*On by default in a terminal, off when piped.*

`rg -N <pattern>`
Hide line numbers

`rg --column <pattern>`
Show column of the first match

## OUTPUT (cont.)

`rg --vimgrep <pattern>`
path:line:col format for editors

`rg -o <pattern>`
Print only the matched text

`rg -l <pattern>`
List files with matches

`rg --files-without-match <pattern>`
List files with no match

`rg -c <pattern>`
Count matching lines per file

`rg --count-matches <pattern>`
Count every match, not lines

`rg -A <n> / -B <n> / -C <n>`
Lines after, before, around a match

`rg --heading / --no-heading`
Group by file or one line each

`rg -I <pattern>`
Omit file names

`rg -M <n> <pattern>`
Truncate lines longer than n columns
*-M0 removes the limit.*

`rg --trim <pattern>`
Strip leading whitespace

`rg --sort path <pattern>`
Sort by path (disables parallelism)

`rg --stats <pattern>`
Print match and timing statistics

`rg --json <pattern>`
Machine-readable JSON lines

`rg --passthru <pattern>`
Print all lines, highlighting matches

`rg -0 -l <pattern>`
NUL-separate file names for xargs -0

## REGEX AND REPLACE

`rg -r '<text>' <pattern>`
Replace matches in the output only

`rg 'a(\w+)' -r 'b$1'`
Use capture group $1 in replacement

`rg -o -r '$1' '<pat>(<grp>)'`
Extract just a capture group

`rg -U '<a>\n<b>'`
Multiline match across lines

`rg -U --multiline-dotall '<a>.*<b>'`
Let . match newlines

## REGEX AND REPLACE (cont.)

`rg -P '<pattern>'`
PCRE2 engine: lookaround, backrefs
*Needs a build with PCRE2 support.*

`rg --engine auto '<pattern>'`
Fall back to PCRE2 when needed

`rg '(?-u:\xFF)'`
Match raw bytes, Unicode off

`rg -E <enc> <pattern>`
Set input encoding (none = raw bytes)

## CONFIG AND TOOLING

`export RIPGREP_CONFIG_PATH=<file>`
Point rg at a config file
*rg never looks for a config file on its own.*

`rg --no-config <pattern>`
Ignore the config file

`rg --pre <cmd> <pattern>`
Run a preprocessor per file (pdf, docs)

`rg --pre <cmd> --pre-glob '<glob>' <pat>`
Preprocess only matching files

`rg -z <pattern>`
Search inside compressed files

`rg --version`
Show version and build features

`rg --help`
Short help; --help is the long form

## RECIPES

### Files that mention a symbol

```
rg -l 'parse_args' -t py
rg -c 'parse_args' -t py | sort -t: -k2 -nr
```

### Persistent defaults

```
# ~/.ripgreprc
--smart-case
--max-columns=150
--glob=!.git/
# in your shell profile
export RIPGREP_CONFIG_PATH=$HOME/.ripgreprc
```

### Preview a refactor

```
rg 'old_name' -r 'new_name' --passthru <file>
# apply with sed after review
rg -l 'old_name' -0 | xargs -0 sed -i 's/old_name/new_name/g'
```

### Search hidden but not .git

```
rg --hidden -g '!.git' 'TODO'
rg -uu -g '!node_modules' 'TODO'
```