

# find, search, grep

## find

### use cases:

- `find ./subfolder -name sample.txt` - Search a file with specific name
- `find ./subfolder -name *.txt` - Search a file with pattern
- `find ./GFG -name sample.txt -exec rm -i {} \;` - find and delete a file with confirmation
- `find ./subfolder -empty` - Search for empty files and directories
- `find ./subfolder -perm 664` - Search for file with entered permissions
- `find ./ -type f -name "*.txt" -exec grep 'some Phrase' {} \;` - Search text within multiple files

### more examples

```
find /path -name *.txt
find /path -type f -name test.txt
find /path -name failed*.* -type f
find /path -type f -not -name "*.html"
find / -name "file.txt" -size +4M
find /dev/ -type b -name "sda*"
find /*file*
```

## grep

```
grep [OPTION]... PATTERNS [FILE]...
```

- options
  - `-B <numb>` - show numb lines before match
  - `-A <numb>` - show numb lines after match
  - `-i` - ignore case distinctions in patterns and data
  - `-r`, `--recursive` - like `--directories=recurse`
  - `-v`, `--invert-match` - To display only the lines that do not match a search pattern

- `--exclude-dir=<foldername>` - exclude folder from search
- `-n`, `--line-number` - Prefix each line of output with the 1-based line number within its input file.

## examples

- `grep -ir --exclude-dir=vendor skeleton .` - find all occurrences of "skeleton" in the current working dir
- `grep -i "some string" path/**/*.log` - search string in log files

## sed

```
sed -i 's/SEARCH_REGEX/REPLACEMENT/g' INPUTFILE
```

- `-i` - By default, sed writes its output to the standard output. This option tells sed to edit files in place. If an extension is supplied (ex `-i.bak`), a backup of the original file is created.
- `s` - The substitute command, probably the most used command in sed.
- `///`` - Delimiter character. It can be any character but usually the slash (/) character is used.
- `SEARCH_REGEX` - Normal string or a regular expression to search for.
- `REPLACEMENT` - The replacement string.
- `g` - Global replacement flag. By default, sed reads the file line by line and changes only the first occurrence of the `SEARCH_REGEX` on a line. When the replacement flag is provided, all occurrences are replaced.
- `INPUTFILE` - The name of the file on which you want to run the command.