

IDEs

- Visual Studio Code (VSCode)
- Atom
- Sublime Text
- PyCharm
- Spyder
- Thonny
- IDLE

Terminal shortcuts

- Up arrow (scroll backward through your previously executed commands)
- Tab (autocomplete of file name or command)
- Ctrl + a (jump to the beginning)
- Ctrl + e (jump to the end)
- Ctrl + c (halt a running command)

Checking it out

- What machine am I working on?
`hostname`
- What directory am I in?
`pwd`
- Who am I?
`whoami`
- Who else is working on this system?
`users`
- Manual
`man [command]`
- Clear the terminal
`clear`

Files & directories

- Create a directory
`mkdir foo`
`mkdir foo/baz`

- Create an empty file
`touch bar`
- Move files/directories
`mv bar foo`
- Change directories
`cd foo`
`cd ..`
`cd .`
- List all files in a directory
`ls`
`ls -t`
`ls -l -h`
- Copy a file
`cp bar baz/bar2`
- Copy a directory
`cp -R foo foobaz`
- Remove a file
`rm bar`
- Remove a directory
`rm -r foo`

Text file search & edit

- Display first line
`head -1 foo.txt`
- Display last line
`tail -1 foo.txt`
- Redirect output to a file
`tail -1 foo.txt > last_line`
- Print out text file content to terminal (standard output)
`cat last_line`
- Combine (concatenate) files
`cat last_line first_line > lf`
- Searching for patterns and print matches (global regular expression print)
`grep string foo.txt`
- Display strings passed as arguments
`echo string`
- Sort a file (lexicographically)
`sort foo.txt`

- Pipe symbol (connects stdout of one process to stdin of the second process)

```
sort foo.txt | uniq
sort foo.txt | uniq -c | sort -n
```

Practice

- Create a directory called `Practicum`.
- Navigate to this directory and create a text file called `methods`.
- Go to <https://www.wellformedness.com/courses/LING83800/> and copy to the clipboard all text starting with the word “SYNOPSIS” and ending with the word “ASSIGNMENTS”.
- Go back to `methods`, paste text from clipboard, save and close.
- In the terminal, save the last line of `methods` to a new file, call it `last_line`. Make sure it worked by printing its content to standard output.
- Do the same for the first two lines and save them to a file `first_two_lines`.
- Concatenate `last_line` and `first_two_lines` and save the output to `three_lines`.
- Find all words in `three_lines` that start with the letter `l` by running this command (where `-o` tells `grep` to only output the matched parts of a matching line):

```
grep -o "\<[a-zA-Z]*\>" three_lines
```
- Find and highlight the word *linguistics* in `three_lines`:

```
grep linguistics three_lines --color
```
- Add another line to `three_lines`:

```
echo "Adding one more occurrence of linguistics" >>
three_lines
```

Easter Eggs

```
python
import this
import antigravity
```