

Homework 4 (some text utils, input/output redirection, pipe, command chaining)

In all cases, write the solution as one-line command (often pipe is needed).

- 1 Write a one line command that writes out the permission string (e.g. drwxr-xr-x) of the largest file starting with "X" (or any letter) in a directory (see man ls, use pipe).
- 2 Write out the sorted list of the 3rd last letter capitalized (a-z->A-Z) of all usernames (from /etc/passwd, hint: rev)
- 3 Write a command that counts the number of letters in the 1st word on the 2nd last line of any file.
- 4 Write a command that counts the number of columns in the /etc/passwd file (hint: wc)
- 5 Write a command that tries to see a file content with "cat" and in case of "no permission", something is written out to the standard output.
- 6 In this construction, will commands2 and command3 be executed? `command1 || ! command1 || command2 && command3` (yes or no and why?)
- 7 Write a command that prints the filenames and the permission strings in a directory using input/output redirection and the "paste" with the ":" as delimiter (one line command of course!!!), again, pipe will help and some smart stdin redirection) e.g.

```
test.file:drwxr-xr-x
tornado.txt:-rw-rw-r-
UpdatedCAF-V1.0.0-IGAC.pdf:-rw-rw-r-
Videos:-rw-rw-r-
west.mp4:drwxr-xr-x
```