Note: You must rely on <u>UNIX commands only</u> to solve the problems. No manipulation on Windows is allowed (such as scrolling the PuTTY screen).

## Pre-step: Run the command "source /lab2/prac/prep.sh" exactly once.

Note:

You must use a single command for each of the following operations unless specified otherwise.

- 1. Remove the directory "empty". (<u>rmdir empty</u> or <u>rm –rf empty</u>) (You can run "ls" to confirm the remove)
- Remove the directory "nonempty" along with its files. (You may use multiple commands but a single command can do this.) (remove all files in nonempty directory, and then remove nonempty directory, by running following commands:
  <u>cd nonempty; rm \*; cd ..; rmdir nonempty</u>
  or remove the nonempty directory directly, by running following command:
  <u>rm -r nonempty</u>
- 3. Create a directory named "new". (mkdir new)
- 4. Move the file "great" from the current directory to the directory "wow". After that, you can list the content of the wow directory to check whether file "great" has been moved to that location

(mv great wow/)

- 5. Rename the directory "wow" to "yeah". (<u>mv wow yeah</u>)
- 6. Copy the file "moth" to a file named "butterfly". (<u>cp moth butterfly</u>)
- 7. Remove the file "moth". (<u>rm moth</u>)
- 8. Move all the files of which the name starts with "dust" to the directory named "sandbox". (<u>mv dust\* sandbox/</u>)
- Copy all the <u>files and directories</u> of which the name ends with "xyz" from the current directory to the directory named "sandbox". (<u>cp -r \*xyz sandbox/</u>)
- Remove all the <u>files and directories</u> of which the name ends with "xyz" under the current directory. (<u>rm -r \*xyz</u>)
- 11. Save the value of the environment variable PATH to a file named "env.txt" without using an editor.

(echo \$PATH > env.txt)

- 12. Add the line of "An additional line." to the end of file "env.txt" without using an editor. (echo 'An additional line' >> env.txt)
- 13. Check the content of the file "env.txt" (cat env.txt)
- 14. Save the output of an 'ls' command to a file named 'out', overwriting the content of 'out'. (ls > out)
- 15. Check the content of the file "out" (cat out)

- 16. Append the output of an 'ls' command to the file 'out'. (<u>ls >> out</u>)
- 17. Check the content of the file "out" again (cat out)
- 18. Save the error output of a command to a file named 'err', overwriting the content of 'err'. (cp 2> err)
- 19. Check the content of the file "err" again. (cat err)
- 20. Append the error output of a command to the file 'err'. (mv 2>> err)
- 21. Check the content of the file "err" again. (cat err)
- 22. Shows the content of the file "longcode.txt" screen by screen (more longcode.txt click 'space bar' to switch to next screen/page, click 'q' to exit)
- 23. Shows the content of the file "longcode.txt" screen by screen through **pipe** (cat longcode.txt | more click 'space bar' to switch to next screen/page, click 'q' to exit)