

Introduction to command's line in Linux by Seyed Danial Movahed

Some references

- [1] Tansley, David SW, and David V. Tansley. *Linux and UNIX shell programming*. Addison-Wesley Professional, 2000.
- [2] Greenberg, Michael, Konstantinos Kallas, and Nikos Vasilakis. "Unix shell programming: the next 50 years." *Proceedings of the Workshop on Hot Topics in Operating Systems*. 2021.
- [3] Kidwai, Abdullah, et al. "A comparative study on shells in Linux: A review." *Materials Today: Proceedings* 37 (2021): 2612-2616.
- [4] Kappelmann-Fenzl, Melanie. "Introduction to Command Line (Linux/Unix)." *Next Generation Sequencing and Data Analysis*. Cham: Springer International Publishing, 2021. 71-78.

Lecture no.	Topics
Lecture 1	1) Linux and Unix 2) Why Linux? 3) What is Shell? 4) Installation of packages
Lecture 2	5-1) Common Commands (sudo, ls, file, df, du, whoami, awk, sort, hed, more, less, man, curl, wget,...)
Lecture 3	5-2) Common Commands (sudo, ls, file, df, du, whoami, awk, sort, hed, more, less, man, curl, wget ...)
Lecture 4	6) File permission and Ownership 7) Find and locate
Lecture 5	8) Running commands (top, nohup, kill, kill signal, killall, ...) 9) Variables (environmental variables, path, ...) 10) Command execution order
Lecture 6	11) cat and Editors 12) Grep and Regular expression
Lecture 7	13-1) Shell script (read, if, for, echo, ...)
Lecture 8	13-2) Shell script (read, if, for, echo, ...)
Lecture 9	14) alias and login environment, shell functions 15) Connection to clusters (ssh, scp, ...) and multiplexers (tmux, screen,..)
Lecture 10	16) init systems 17) Version controls