

Research Computing

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Abstract

Abstract of this course

1 Terminal Command lines

Navigation `ls pwd cd`

Ownership `chmod, chown, cumask`

Search `grep find`

Modify `touch mv rm, mkdir, rmdir`

Read `cat more less`

Wildcards `globbing (files) regexp -(text)`

Help `man`

Convenience `tab, up error, down arrow to go through commands`

File manipulation `file, tar, zip, unzip, diff, cut`

- **tar** `-czf` (c:create, z:zip f:file)
- **tar** `-xf` (x: extract)
- **tar** vs **zip**, tar creates smaller zipped files, can only zip and unzip all the files together
- **diff** tells you what has changed
- **diff** Git uses a bunch of diff files to keep track of the file changes for version control

Redirection `STDIN - (CMD) = STDOUT + STDERR ;`

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1.1 Shell

BASH = Bourne-Again Shell, it is a type of shell, like ksh csh tcsh and zsh Bash is the complete programming language

You can use `./compile` to run the commands You can define your own commands using alias that runs a python or c++ files