

# Filesystem and shell

## IT WS I - Lecture 2

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# Contents

- 1 Filesystem
  - About files / directories
  - Working with files / directories
- 2 Introduction to shell
  - Shell commands



# About files / directories

- What is file?



# About files / directories

- What is file?
- What is directory?



# About files / directories

- What is file?
- What is directory?
- Windows Drives



# About files / directories

- What is file?
- What is directory?
- Windows Drives
- Linux root



# About files / directories

- What is file?
- What is directory?
- Windows Drives
- Linux root
- Path
  - Absolute path



# About files / directories

- What is file?
- What is directory?
- Windows Drives
- Linux root
- Path
  - Absolute path
  - Relative path





# Working with files / directories

- Creating / Editing / Deleting simple text files using GUI editor



# Working with files / directories

- Creating / Editing / Deleting simple text files using GUI editor
- Cut / Copy / Paste text



# Working with files / directories

- Creating / Editing / Deleting simple text files using GUI editor
- Cut / Copy / Paste text
- Creating / Deleting / Moving directories



# Working with files / directories

- Creating / Editing / Deleting simple text files using GUI editor
- Cut / Copy / Paste text
- Creating / Deleting / Moving directories
- Information of file size / folder size



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- Creating / Editing / Deleting simple text files using GUI editor
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- Creating / Deleting / Moving directories
- Information of file size / folder size
- Zipping files, Creating .zip, .tar, .tar.gz, .tar.bz2



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- Explain storage units like bits, bytes, nibble, KB, MB, GB



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- Cut / Copy / Paste text
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- Explain storage units like bits, bytes, nibble, KB, MB, GB
- Data transfer units bits/sec and storage device specication units.





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# Shell commands - 1

- `ls`, `ls -l`, `ls -a`



# Shell commands - 1

- `ls`, `ls -l`, `ls -a`
- `mkdir`, `mkdir -p`



# Shell commands - 1

- `ls`, `ls -l`, `ls -a`
- `mkdir`, `mkdir -p`
- `rmdir`



# Shell commands - 1

- `ls`, `ls -l`, `ls -a`
- `mkdir`, `mkdir -p`
- `rmdir`
- `touch`



# Shell commands - 1

- `ls`, `ls -l`, `ls -a`
- `mkdir`, `mkdir -p`
- `rmdir`
- `touch`
- `rm`, `rm -r`, `rm -f`



# Shell commands - 1

- `ls`, `ls -l`, `ls -a`
- `mkdir`, `mkdir -p`
- `rmdir`
- `touch`
- `rm`, `rm -r`, `rm -f`
- `cd`



# Shell commands - 1

- `ls`, `ls -l`, `ls -a`
- `mkdir`, `mkdir -p`
- `rmdir`
- `touch`
- `rm`, `rm -r`, `rm -f`
- `cd`
- `echo`





# Shell commands - 1

- `ls`, `ls -l`, `ls -a`
- `mkdir`, `mkdir -p`
- `rmdir`
- `touch`
- `rm`, `rm -r`, `rm -f`
- `cd`
- `echo`
- `clear`



# Shell commands - 2

- `gedit` (Not shell command, GUI editor)



# Shell commands - 2

- `gedit` (Not shell command, GUI editor)
- `tree`



# Shell commands - 2

- `gedit` (Not shell command, GUI editor)
- `tree`
- `mv`



# Shell commands - 2

- gedit (Not shell command, GUI editor)
- tree
- mv
- cp, cp -r, cp -u, cp -p



# Shell commands - 2

- gedit (Not shell command, GUI editor)
- tree
- mv
- cp, cp -r, cp -u, cp -p
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# Shell commands - 2

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# Shell commands - 2

- gedit (Not shell command, GUI editor)
- tree
- mv
- cp, cp -r, cp -u, cp -p
- cat
- more
- less
- head, head -<number>



# Shell commands - 2

- gedit (Not shell command, GUI editor)
- tree
- mv
- cp, cp -r, cp -u, cp -p
- cat
- more
- less
- head, head -<number>
- tail, tail -<number>



# Shell commands - 2

- gedit (Not shell command, GUI editor)
- tree
- mv
- cp, cp -r, cp -u, cp -p
- cat
- more
- less
- head, head -<number>
- tail, tail -<number>
- wc



# Shell commands - 3

- `du`, `du -s`, `du -h`, `du -sh`



# Shell commands - 3

- `du`, `du -s`, `du -h`, `du -sh`
- `tar cvf` `tar xvf`



# Shell commands - 3

- `du`, `du -s`, `du -h`, `du -sh`
- `tar cvf` `tar xvf`
- `gzip`



# Shell commands - 3

- `du`, `du -s`, `du -h`, `du -sh`
- `tar cvf` `tar xvf`
- `gzip`
- `gunzip`



# Shell commands - 3

- `du`, `du -s`, `du -h`, `du -sh`
- `tar cvf` `tar xvf`
- `gzip`
- `gunzip`
- `bzip2`





# Shell commands - 3

- `du`, `du -s`, `du -h`, `du -sh`
- `tar cvf` `tar xvf`
- `gzip`
- `gunzip`
- `bzip2`
- `bunzip2`



# Shell commands - 3

- `du`, `du -s`, `du -h`, `du -sh`
- `tar cvf` `tar xvf`
- `gzip`
- `gunzip`
- `bzip2`
- `bunzip2`
- `zip`



# Shell commands - 3

- `du`, `du -s`, `du -h`, `du -sh`
- `tar cvf` `tar xvf`
- `gzip`
- `gunzip`
- `bzip2`
- `bunzip2`
- `zip`
- `unzip`



# Shell commands - 4

- `which`



# Shell commands - 4

- which
- whereis



# Shell commands - 4

- which
- whereis
- apropos



# Shell commands - 4

- which
- whereis
- apropos
- man, man -aK



# Shell commands - 4

- which
- whereis
- apropos
- man, man -aK
- find





# Shell commands - 4

- which
- whereis
- apropos
- man, man -aK
- find
- locate



# Shell commands - 4

- which
- whereis
- apropos
- man, man -aK
- find
- locate
- grep, grep -v, grep -A<n>, grep -B<n>



# Shell commands - 4

- which
- whereis
- apropos
- man, man -aK
- find
- locate
- grep, grep -v, grep -A<n>, grep -B<n>
- cut



# Shell commands - 4

- which
- whereis
- apropos
- man, man -aK
- find
- locate
- grep, grep -v, grep -A<n>, grep -B<n>
- cut
- history



# Shell commands - 4

- which
- whereis
- apropos
- man, man -aK
- find
- locate
- grep, grep -v, grep -A<n>, grep -B<n>
- cut
- history
- diff



# Shell commands - 5

- W



# Shell commands - 5

- w
- who



# Shell commands - 5

- w
- who
- whoami





# Shell commands - 5

- w
- who
- whoami
- /sbin/ifconfig



# Shell commands - 5

- w
- who
- whoami
- /sbin/ifconfig
- ping



# Shell commands - 5

- w
- who
- whoami
- /sbin/ifconfig
- ping
- ln, ln -s



# Shell commands - 5

- w
- who
- whoami
- /sbin/ifconfig
- ping
- ln, ln -s
- free, free -m



# Shell commands - 5

- w
- who
- whoami
- /sbin/ifconfig
- ping
- ln, ln -s
- free, free -m
- script



# Shell commands - 5

- w
- who
- whoami
- /sbin/ifconfig
- ping
- ln, ln -s
- free, free -m
- script
- df, df -h



# Shell commands - 5

- w
- who
- whoami
- /sbin/ifconfig
- ping
- ln, ln -s
- free, free -m
- script
- df, df -h
- chmod



# Shell commands - 6

- ssh





# Shell commands - 6

- ssh
- scp



# Shell commands - 6

- ssh
- scp
- rsync



# Shell commands - 6

- ssh
- scp
- rsync
- passwd

