NAVIGATION

Imagine that you are in a file browser. You have folders (directories) and stuff in the folders.

- **cd** – Moves you to where you want to go

```
cd folder
```

- **pwd** – Tells you where you are

```
pwd
/an/example/folder
```

- **ls** – Lists your stuff: -a → hidden files; -l → permissions

```
ls
stuff_in_folder.dat
ls -a
stuff_in_folder.dat   .hidden_stuff_in_folder.dat
ls -l
-rw-r--r-- 1 me me 26978 Feb 14:41 file.dat
```

- **history** – Lists previously run commands

PERMISSIONS

You are not root! You can only access your own data without root access!

- **chmod** – Change access mode

```
chmod +x file
```

- **sudo** – Envokes the power of root for one command.

```
sudo command
[sudo] password for user:
```

- **su** – You become root (use root password)

FILE MANIPULATION

Everything short of text editing

- **mkdir** – Makes a directory
- **rmdir** – Removes a directory

```
rmdir/mkdir folder
```

- **touch** – Initializes file

```
touch file
```

- **rm** – Removes a file

```
rm file
rm -r directory
```

- **cp** – Copies a file
- **mv** – Moves a file

```
mv old_file_location new_file_location
```

- **cat** – Prints text from file

```
cat file
```

- **head** –Prints top of file
- **tail** – Prints bottom of file

```
head/tail -n 5 file
```

PIPING

From A to B

- Symbols:
  - | – Parses command output
  - >> / > – Appends to / rewrites file with output
- **echo** – Repeats what you just said

```
echo "hey" >> file
```

- **grep** – Prints lines matching a pattern

```
lspci | grep VGA
```

INFORMATION

All the stuff you need to know about your pc

- **man** – Provides manual

```
man program
```

- **top** – Info on what's running
- **free -m** – Info on free memory
- **ps** – Lists active processes

```
ps -ef | grep chromium
```

- **kill, pkill, killall** – kills a process

```
pkill process
```

- **lsblk** – Info on partitioning scheme
- **du** – Lists size of file

```
du -h file
```

- **df** – Info on free space

```
df -h
```

- **lspci** – Info on all devices

```
lspci | grep VGA
```

USEFUL SHORTCUTS

Things you might want to know...

- **TAB** autocompletes commands or files. Hit twice to ls.
- "∗" means "everything with this component."

```
ls *bear*
right_to_bear_arms.dat   bear_grills.docx
    bear_it.groan   I_am_beary_funny.not
```

- Stuck program? Press **CTRL+C**!
- Stuck in a text editor? Try the following:
- ESC, then q (nano)
- ESC, then ":q!", then ENTER (vi / vim)
- ESC, then CTRL+C (emacs)
- **CTRL+D** logs out
- **CTRL+L** clears the terminal
- **CTRL+A** moves cursor to start of line
- **CTRL+E** moves cursor to end of line
- Spaces are "\ " [BACKSLASH + SPACE] in the terminal
- "~" means "/home/user"
- "." is your current directory and ".." is the directory under yours