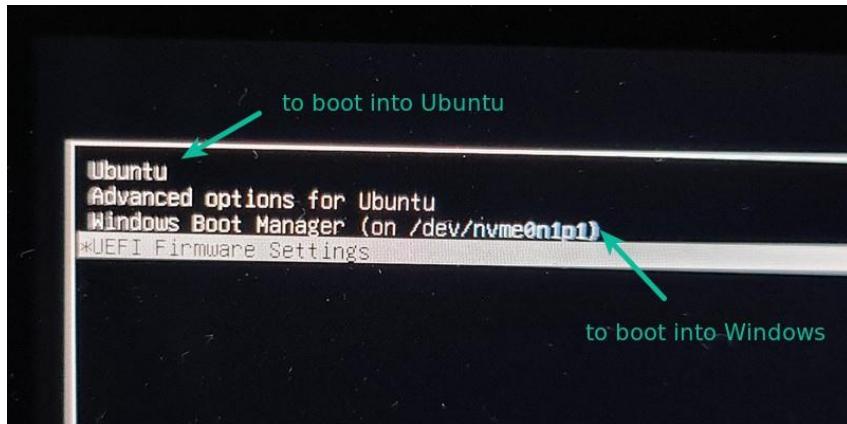


# Linux Cheat Sheet

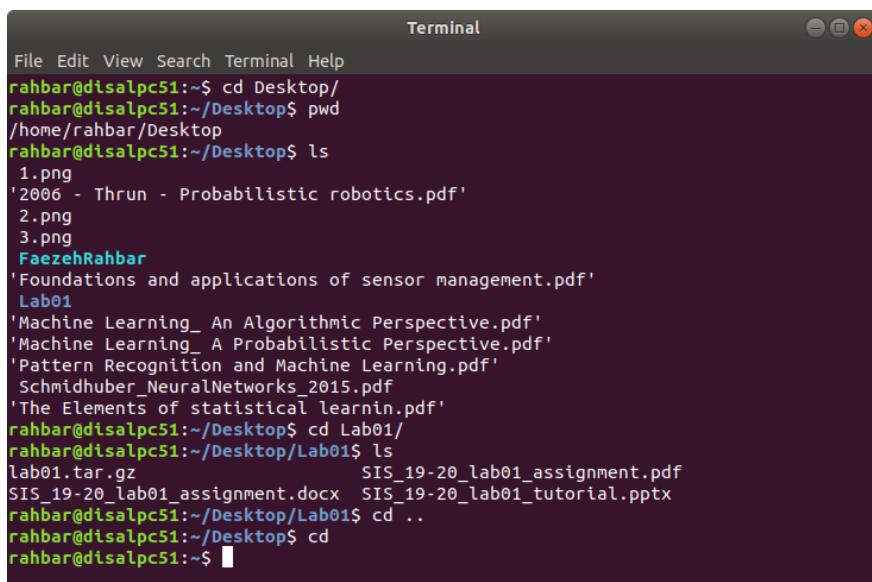
## Dual boot

Both Windows 10 and Ubuntu are installed on the machines. During startup we need to select the desired operating system during startup using the arrows (up/down) of your keyboard. If the machine is already booted into windows, you need to restart it.



## Linux terminal

To quickly open a Terminal window at any time, press **Ctrl+Alt+T**.



```
Terminal
File Edit View Search Terminal Help
rahbar@disalpc51:~$ cd Desktop/
rahbar@disalpc51:~/Desktop$ pwd
/home/rahbar/Desktop
rahbar@disalpc51:~/Desktop$ ls
1.png
'2006 - Thrun - Probabilistic robotics.pdf'
2.png
3.png
FaezehRahbar
'Foundations and applications of sensor management.pdf'
Lab01
'Machine Learning_ An Algorithmic Perspective.pdf'
'Machine Learning_ A Probabilistic Perspective.pdf'
'Pattern Recognition and Machine Learning.pdf'
Schmidhuber_NeuralNetworks_2015.pdf
'The Elements of statistical learnin.pdf'
rahbar@disalpc51:~/Desktop$ cd Lab01/
rahbar@disalpc51:~/Desktop/Lab01$ ls
lab01.tar.gz           SIS_19-20_lab01_assignment.pdf
SIS_19-20_lab01_assignment.docx  SIS_19-20_lab01_tutorial.pptx
rahbar@disalpc51:~/Desktop/Lab01$ cd ..
rahbar@disalpc51:~/Desktop$ cd
rahbar@disalpc51:~$
```

## File permissions

r: read  
w: write  
x: execute

```
chris@disallap14: ~/homework
File Edit View Terminal Help
chris@disallap14:~/homework$ ls -l
total 16
-rwxr-xr-- 1 chris chris 8471 2011-02-24 00:30 hello_world
-rw-r--r-- 1 chris chris 80 2011-02-24 00:30 hello_world.c
chris@disallap14:~/homework$
```

Owner      Group      Other users

can be changed through `chmod <mode> <filename>` where `<mode>` is:

u: file owner	r: read		
g: file group	+	-	w: write
o: other users	x: execute		

Example: Make file executable for everyone:

`chmod ugo+x filename.txt`

## Useful linux commands

COMMAND	DESCRIPTION
<code>ps</code>	displays the current programs (processes) that are running (similar to the “task manager” of Windows)
<code>kill &lt;PID&gt;</code>	stop the program with the specified PID (process ID).
<code>&lt;command&gt;   grep &lt;search term&gt;</code>	Searching for text in the output of a given command (e.g., searching in the output of <code>ls -l</code> )
<code>cd &lt;folder name&gt;</code>	‘change directory’ to folder name. can be specified using absolute or relative paths. (e.g., <code>cd /temp/</code> or <code>cd testfolder</code> ). Parent directory is accessed using “..”
<code>pwd</code>	Prints the current path
<code>mkdir &lt;directory name&gt;</code>	Make directory/folder of name <folder name> in the current directory
<code>ls</code>	Lists all files in the current directory. Helpful option: “-l” which lists permissions as well
<code>chmod</code>	File permission changes as explained above
<code>touch &lt;filename&gt;</code>	Creates file with name filename in the current directory