How To Unix

CS234

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• Windows
  Use putty to remotely login to a Unix server

• Mac
  Fire up Terminal (to quit: type exit, then press ⌘-Q)
• To get help on any command, use the manual

```bash
~$ man ls
```
• Clear the screen
  ~$ clear

• Recall a command
  Use up / down arrow keys

• Edit command
  Recall command, use left / right arrow keys, make changes, press <return>
- List contents of directory
  ~$ ls (normal listing)
  ~$ ls -l (long listing)
• `~$ ls -a (all)`
  shows . (current), .. (parent) directories and . files
Wildcards

* match any character(s)

? match a single character

[] match any of the indicated characters

{}, match any of the indicated patterns
Wildcards

```
$ ls
Desktop/  Movies/  Public/  chapla.txt  dbConnect/
Documents/ Music/  Sites/  chap2.txt  old.txt
Downloads/ NetBeansProjects/ Xcode Projects/ chap2a.old.txt  test
Library/  Pictures/  chap0.txt  chap3.txt

$ ls ch*
chap0.txt  chapla.txt  chap2.txt  chap2a.old.txt  chap3.txt

$ ls chap[0-1]*
chap0.txt  chapla.txt

$ ls chap[1-2]*
chap1.txt  chap2.txt

$ ls chap[0,2]*
chap0.txt  chap2.txt

$ ls
```
Directory contents

-rw-r--r-- 1 stornarSIUE staff 0 Aug 16 13:23 test

drkwr-xr-x 5 stornarSIUE staff 170 Jul 26  2013 uploads/

File type:   [ - ]: file,  [d ]: directory
Privileges:  [ r ]: read,  [w ]: write,  [x ]: execute
groups:     [ u ]: user,  [g ]: group,  [o ]: other
links:        1

file owner:  stornarSIUE
user's group: staff

size:         170
date:         Jul 26 2013
name:         uploads/
• ~$ cat filename
  List file contents to the screen all at once

• ~$ less filename
  List file contents to the screen, one screenful at a time. Press the `<spacebar>` for the next screenful. Press `<q>` to quit.
File management

- cd: change directory
- mkdir: make directory
- rmdir: remove directory

- cp: copy file
- mv: move file
- rm: remove file
cd

- $ cd /
- $ cd
- $ cd Documents
Documents$
mkdir, rmdir

```
-$ ls
Desktop/  Movies/  Public/  uploads/
Documents/  Music/  Sites/
Downloads/  NetBeansProjects/  Xcode Projects/
Library/  Pictures/  dbConnect/

-$ mkdir TEST

-$ ls
Desktop/  Movies/  Public/  dbConnect/
Documents/  Music/  Sites/  uploads/
Downloads/  NetBeansProjects/  TEST/
Library/  Pictures/  Xcode Projects/

-$ rmdir test

-$ ls
Desktop/  Movies/  Public/  uploads/
Documents/  Music/  Sites/
Downloads/  NetBeansProjects/  Xcode Projects/
Library/  Pictures/  dbConnect/
```
cp, mv, rm

```bash
$ ls
Desktop/  Movies/  Public/  test
Documents/  Music/  Sites/  uploads/
Downloads/  NetBeansProjects/  Xode Projects/
Library/  Pictures/  dbConnect/

$ cp test test1
$ ls
Desktop/  Movies/  Public/  test
Documents/  Music/  Sites/  test1
Downloads/  NetBeansProjects/  Xode Projects/  uploads/
Library/  Pictures/  dbConnect/

$ mv test.txt test
test.txt
$ ls
test

$ rm test*
$ ls
Desktop/  Movies/  Public/
Documents/  Music/  Sites/
Downloads/  NetBeansProjects/  Xode Projects/
Library/  Pictures/  dbConnect/
$ ls
$ ls
```
File permissions

```bash
$ ls -l test
-rw-r--r-- 1 stornarSIUE staff 0 Aug 16 16:28 test
$ chmod o+w test
$ ls -l test
-rw-r--r-- 1 stornarSIUE staff 0 Aug 16 16:28 test
$ chmod o=x test
$ ls -l test
-rw-r--r-- 1 stornarSIUE staff 0 Aug 16 16:28 test
$ chmod 744 test
$ ls -l test
-rwxr-x-- 1 stornarSIUE staff 0 Aug 16 16:28 test
$ 
```