

Linux Command Summary

Directory Navigation and Listing	
cd	change to home directory
cd ..	go up to parent directory
cd subdir	change to subdirectory <code>subdir</code>
ls	list content of current directory
ls -l	list content with details
ls -a	list content including hidden files

File Commands	
cp src dest	copy <code>src</code> file to <code>dest</code> file
cp -r sDir dDir	copy "recursively" <code>sDir</code> directory to <code>dDir</code> directory (copies subdirectories too)
mv src dest	move - renames <code>src</code> as <code>dest</code>
rm fileName	removes file <code>fileName</code>
rm -r dirName	removes directory recursively
rmdir dirName	removes empty <code>dirName</code>
mkdir dirName	makes directory called <code>dirName</code>
chmod 750 file1	change permission of <code>file1</code> by specifying a three digit octal # where digits are owner, group, world each octal digit in binary are: read (4), write (2), execute (1)
cat file1	display <code>file1</code> to screen
less file1	display <code>file1</code> with pagination (space - next page, q-exit, ↑,↓- keys)

Programs you can use to ssh to a machine:

- Terminal (on Mac or Linux) + ssh command
- Bash for Windows + ssh command
- Putty

ssh command:

```
$> ssh user_name@server_name
```

Programs you can use to transfer files to/from Linux server:

- WinSCP
- FileZilla

Process Management	
ps	List processes with pid
top	Shows the real-time processes
kill -9 pid	Kills the process with pid #

Keyboard Shortcuts	
<tab>	Auto-complete partial file name
<Ctrl>+c	Kill current command/program
<Ctrl>+z	Sleep current program
<↑>	Recall previous command(s)
<Ctrl>+d exit	log-off and close terminal

Programming Tools	
nano file.c	Simple text-editor
javac Test.java	Compile and run java program
java Test	
python3 test.py	Run python3 program
gcc file.c -o file	Compile and run a C program. (-o option allows executable to be named <code>file</code> instead of <code>a.out</code>)
./file	Run a C executable by typing <code>./</code> in front of it