Useful Tool

Terminal Usage

scp Remotely Transfer Files

Copy files from one machine to another

- **<source>** → the path to a local file
- $\langle destination \rangle \rightarrow the path to a remote file$
- $-\mathbf{r} \rightarrow \text{copy files recursively}$

pwd Print working directory

This tells you what directory you are currently in

cd Change directory(cd)

This let you move into another directory

Important Diretory Names

- ~ The home directory
- . The current directory
- .. The parent directory
- / The root directory
 - This is the folder that contains everything
 - i.e. It has no parent

ls [path], tree[path] Listing Files

- -a print all contents, including the hidden files
- -1 give you more informaiton

cat <filename> Printing files

Quickly print the content of the file to the console

less <filename> Display and scroll through files

It is useful if you want to view the contents of a long file that doesn't fit on one screen

cp <source> <destination> Copy files

mv <source> <destination> Move or Rename files

rm <file> PERMANENTLY delete files

• -r remove files recursively, i.e. remove a directory

mkdir < directory > Make directory

touch <files> Create an empty file

D Exiting from a REPL

- REPL: read-eval-print-loop
- REPL will stop when there is no more input
- **D** will trigger the "EOF" signal and stop the program

°C Quitting a Program

Vim

Navigation

\mathbf{Key}	Description
W	Move left
j	Move down
k	Move up
1	Move right
W	Forwardone word, start at next word
е	Forward one word, stop at end of current word
Ъ	Back to nearest word start
W	Same as \mathbf{w} , but only use spaces for a word boundaries
E	Same as e ,but only use spaces for a word boundaries
D	Same as d, but only use spaces for a word boundaries
gg	Nove to top of file
G	Move to bottom of file
:20	Move to line of 20
}	Move to the next empty line
0	Move to the start of current line
\$	Move to the end of current line
%	Move to the corresponding parenthesis and bracket

Editing

Key	Description
i	Insert right before current character
a	Insert right after current character
I	Insert at the begining of the line (skipping whitespace)
A	Insert at the end of the line
0	Insert new line below this line

0	Insert new line above this line

Searching

Key	Description
/foo <enter></enter>	Search 'foo' in the line
n	Go to the next occurence of the current search term
Р	Go to the previous occurence of the current search term

Visual mode

Key	Description
v	Enter VISUAL mode, selecting from a cursor start position to a cursor end position
V	Enter VISUAL LINE mode, selecting from a starting line to an ending line

Single character

Command	Action
x	Delete character under the cursor
r	Replace character under cursor with another character
s	Delete character under cursor and move to insert mode

Action and Motion

Command	Action
d	Delete text specified by motion
С	Delete text specified by motion and go into insert mode
У	Yank (copy) text specified by motion

Command	Motion
\$	Go to the end of the line
G	Go to the end of the file
f.	Go to the next occurrence of '.' on the current line

Example

- d\$ delete to the end of the line
- cf) change through the next closing parenthness")"
- yG copy everything through the end of the file
- ciw delete the word under current cursor and enter into INSERT mode

Tabs & Splits

Key	Description
:tabe <filename></filename>	Open <filename> in a new tab</filename>
gt	Cycle forward through your open tabs q
gT	Cycle backward through your open tabs
Ngt	Go to the Nth tab
:vs <filename></filename>	Open <filename> in a vertical split</filename>
:sp <filename></filename>	Open <filename> in a horizontal split</filename>
^W h	Go to the split to the left
^W j	Go to the split to the below
^W k	Go to the split to the above
~W l	Go to the split to the right