

# Introduction to Linux

## Part 2a: the vi editor

Brett Milash and Wim Cardoen  
Center for High Performance Computing

# Vi editor

- ❑ Editor provided with the OS
  - ❑ There are other choices such as nano (easy) and emacs (hard)
  - ❑ It is better to edit in a linux shell than to move a file to your laptop for editing
- ❑ To start – command is **vi** (usage: `vi filename`)
  - ❑ If filename exists, it will open it up in the editor
  - ❑ If filename does not exist, it will create it and put you in insert mode
- ❑ Use arrow keys to move cursor to location
- ❑ Two modes – command, input
  - ❑ in command mode – the characters typed are interpreted as commands
    - ❑ There is also an external command mode – access with ‘:’
  - ❑ In insert mode – the characters typed are added to the file
    - ❑ The esc key exists the insert mode
- ❑ Many commands, we are just mentioning some basic ones to get you started

# Exiting the vi editor

- ❑ **ZZ** – will exit and save as same filename
- ❑ **:q** – quit; will let you know if you have unsaved changes
- ❑ **:q!** – quit discarding changes
- ❑ **:wq** – write and quit; same as doing **:w** followed by **:q**
  - ❑ saves as same filename
- ❑ To change name add new name after the **:w** or **:wq**
- ❑ Note – if you **ctrl Z** to suspend the editor – it saves a swap filename to save current status of the edits. File is named `.filename.swp`. Next time you try to edit this same file it will let you know the swp file exists and asks you how to proceed. If you do not want to keep changes, delete this file

# Moving around a file

- ❑ **down arrow** or **j** moves down one line
- ❑ **up arrow** or **k** moves up one line
- ❑ **right arrow** or **l** moves right by one character
- ❑ **left arrow** or **h** moves left by one character
- ❑ **0** or **^** moves to start of current line
- ❑ **\$** moves to end of current line
- ❑ **w** moves to beginning of next word
- ❑ **b** moves to beginning of previous word
- ❑ **:0** or **:1** or **1G** moves to start of first line
- ❑ **:n** or **nG** moves to start of nth line
- ❑ **:\$** or **G** moves to start of last line
- ❑ **cntl-f (^f)** moves forward one screen
- ❑ **cntrl-b (^b)** moves back one screen

# Inserting or Adding Text

❑ Remember – **esc** to exit command mode

❑ **i** – insert at position of cursor

❑ **I** – insert at end of line

❑ **a** – append after position of cursor

❑ **A** – append at end of line

❑ **o** – new line below current line

❑ **O** – new line above current line

# Changing and Deleting Text

- ❑ **r** – replace single character
- ❑ **R** – replace characters, starting at cursor position, until **esc** hit
- ❑ **x** – delete character that cursor is on (**nx** for n characters starting with one cursor is on)
- ❑ **dd** – delete current line (can do n lines with **ndd**)
- ❑ **D** – delete from cursor to end of line
- ❑ **dw** – delete word

## Cutting and Pasting Text

- ❑ **Y** – puts current line in buffer (can use **nY** for n lines, current plus following lines)
- ❑ **P** – paste lines in buffer before current line

## Other Useful Commands

- ❑ **/pattern** – goes to next occurrence of pattern, then **n** goes to next occurrence; can also use **/** and **?** to move to previous and next occurrence
- ❑ **u** – to undo results of last command (use multiple times to revert back through multiple commands)

# External commands

- ❑ already mentioned some of these in the moving around and exiting vi
- ❑ **:s/old\_text/new\_text/** – replaces next occurrence of old\_text in current line
- ❑ **:1,\$s/old\_text/new\_text/g** – replaces all occurrences of old\_text in file



Exercise – Practice these commands!