



# **Mines GP Workshop**

**14 December 2023**

# Using the command line

- Navigating:
  - `cd /your/directory` takes you to that location
  - Using `~/folder` is the same as `/home/username/folder`
  - `pwd` shows your current location
  - `cd ..` goes back one folder and `cd ../..` goes back two
  - `cd -` is like a 'back' button on a browser
  - `pushd /new/folder` goes to the new location AND:
    - `pushd` again goes to the folder before using `pushd`
    - `popd` does is a second `pushd` but removes previous location

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- Exploring:
  - `ls` lists all files in the folder
    - `ls -l` lists the long form of file information (creation date, size, owner, permissions)
    - `ls -t` lists the files by time last touched, not alphabetic
    - All can be combined (e.g., `ls -ltr` lists long form organised by reverse time touched)

# Using the command line

- More exploring:
  - `ls SCo*` lists all files starting with SCo
    - Try using other search characters like `??`, `[abcde]`, etc
  - `cat file.txt` shows the file contents
    - Try using `more`, `less`, etc
  - Commands can be 'piped' using `|`
    - `ls | wc` is a word count and shows number of files
  - `find ~/file *.sh` will find all files with .sh extension in all sub-directories of ~/file (partial `find ./ -iname "*name*"`)
  - `grep -n Result SConstruct` shows all instances of Result in file named SConstruct

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- Creating:
  - `mkdir folder1` creates a folder in your current directory
  - `touch file2` creates an empty file in your current directory
  - `vim file3` creates the file and immediately allows editing

# Using vim

- vim is a text editor!

- Open a file from command line: `vim filename`

- Arrow keys navigate the file

- Information is always at the bottom of the window:



Inputting text:

- `i` to start inserting text at the cursor location
- `r` to start replacing text
- `a` to start inserting text after the cursor
- `A` to start inserting text at the end of the current line
- Commands
  - A colon defines the beginning of a command
  - Write/save the file is `:w`, quit vim is `:q`
  - Can be combined like this → `:wq`

# Using vim

- Finding a string
  - `/text` will find all instances of 'text' and highlight them
  - `n` will bring you to the next instance
- Replacing a string
  - `:%s/old/new/g`
- `dd` cuts the current line
  - `2dd` cuts the current line and the next line (2 lines)
- `yy` yanks the current line (like copy)
  - `2yy` yanks two lines
- `p` places the last cut or yanked line at the cursor
  - `P` places that line below the current line
- vim is very robust and has many commands and lots of online help (e.g., <https://vim.rtorr.com/>)



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