

Week 5 Notes

› Command Line Editors

- Working with text files in the terminal
- Editors
 - Line Editors (Present in almost every flavour of UNIX / GNU Linux)
 - `ed`
 - `ex` (improved version of `ed`)
 - Terminal Editors
 - `pico` (Came along with the pine email application)
 - `nano` (Features added to `pico`)
 - `vi` (most popular and complex)
 - `emacs`
 - GUI Editors
 - KDE
 - `kate`
 - `kwrite`
 - GNOME
 - `gedit`
 - `sublime`
 - `atom` (popular among github users)
 - `brackets` (Popular for those writing html code)
 - IDE
 - `eclipse`
 - `Bluefish`
 - `NetBeans`
- Features of text editors
 - Scrolling , view modes, current position in file
 - Navigation (char,word,line,pattern)
 - Insert, Replace, Delete
 - Cut-Copy-Paste
 - Search-Replace
 - Language-aware syntax highlighting
 - Key-maps, init scripts, macros
 - Plugins
 - Both `vi` and `emacs` editors satisfy all the above requirements

› ed commands

| Action | Command |
|-----------------|---------------------------------------|
| Show the Prompt | <code>P</code> |
| Command Format | <code>[addr[,addr]]cmd[params]</code> |

| Action | Command |
|---------------------------------|-----------------------|
| Commands for location | 2 . \$ % + - , ; /RE/ |
| Commands for editing | f p a c d i j s m u |
| Execute a Shell command | !command |
| edit a file | e filename |
| read file contents into buffer | r filename |
| read command output into buffer | r !command |
| write buffer to filename | w filename |
| quit | q |

› Using ed

- `man ed` doesn't give much info . Use `info ed`
- `ed test.txt` shows a number indicating number of bytes read into memory
- `1` displays the first line
- `$` displays the last line
- `,p` and `%p` shows the contents of the entire buffer
- `2,3p` range - 2nd to 3rd line
- `/hello/` matches and shows first occurrence of the pattern
- `+` and `-` to scroll by line
- `;p` from current position to end of buffer
- `.` displays the current line
- `!date` running the date command within `ed`
- `r !date` read output of date command to buffer at current position
- `w` writes the file (saves it)
- `d` delete current line
- `a` to append after current line. Press `.` and `enter` when done
- `s/appended/Appended/` Substitute - Search and replace from current line.
- `f` shows the name of the file being edited
- `p` shows the contents of the current line
- `j` for joining lines . Usage `5,6j` to join line 5 and 6
- `m` to move a line to a particular position. Usage `m1` to move current line to just below line 1. `m0` to move it right to the top
- `u` to undo previous change
- To add something to every line `%s/\(.*\)/PREFIX \1/`
 - `\1` is the back substitution
 - `\(.*\)` indicates any character that can be matched
 - `PREFIX` is the replacement string
- `3,5s/PREFIX/prefix/` substitutes prefix for PREFIX from line 3 to 5

› Commands for editing in ed / ex

| Command | Action |
|----------|-------------------------------------|
| f | show name of file being edited |
| p | print the current line |
| a | append at the current line |
| c | change the line |
| d | delete the current line |
| i | insert line at the current position |
| j | join lines |
| s | search for regex pattern |
| m | move current line to position |
| u | undo latest change |

› Using nano

- [Link](#)

› Using vi

- [Link](#)

› Using emacs

- [Link](#)