

# Text editing and more basic commands



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CS 2204

Class meeting 3



# Text editing

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- So far, we've manipulated files in the file system and viewed their contents
- Now we need to know how to modify the contents of files
- Most UNIX editors work on plain ASCII text files, not special formats
- Common text editors: vi, emacs, pico
- Window systems have own window-based editors



# Why vi?

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- Available on practically all UNIX systems
- Can be used with a remote login (no windows)
- Balance of simplicity and power
- That's what your professor had to learn, so, darn it, you're going to learn it too! 😊



# vi basics

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- Invoke with: `vi [filename(s)]`
  - The vi editor takes over your screen
  - Various *modes*:
    - command mode – typed characters send commands to system
    - insert mode
    - append mode
    - change mode
- } typing changes the text



# Command mode

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- vi starts in this mode
- From other modes, enter command mode by typing Esc
- Commands for:
  - Cursor movement
  - Editing
  - File operations
  - Search
  - Entering other modes



# Cursor movement

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- Move the cursor with j (down), k (up), l (right), h (left), or with arrow keys
- Larger movements:
  - 4j – move four lines down
  - CTRL-F, CTRL-B – page down, page up
  - w – move to beginning of next word
  - ]], [[ - next/previous section
  - 0, \$ - beginning/end of current line
  - :n – move to line n



# Editing commands

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- u – undo last typing
- x – delete current character\*
- dd – delete current line\*
- dw – delete current word\*
- rx – replace current char. with x\*
- yy – copy current line\*
- p – paste copied/deleted items
- J – join two lines

\* can be preceded by a number to do operation multiple times



# File operations

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- ZZ, :wq – save and quit
- :w – save
- :w *filename* – save as filename
- :q – quit
- :q! – quit without saving
- :e <filename> - load another file
- :n – load next file



# Search

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- */string* – search forward for *string*
- *?string* – search backward for *string*
- n – repeat previous search
- N – repeat search opposite direction
- % - find match of current (, [, {



# Entering other modes

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- i – insert text before current char.
- I – insert text at beginning of line
- a – append text after current char.
- A – append text at end of line
- O, o – open line above/below current
- cw – change (overwrite) current word
- C – change text after cursor



## Additional info

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- *UNIX in a nutshell*, ch. 8 lists all vi commands
- Trivia: vi uses all lowercase characters except 'v' (and many uppercase and punctuation characters) for commands
  - Be careful!
  - Use 'u', 'U', and ':q!' if you mess up
- *UIAN*, ch. 7 covers emacs



# More shell commands: communication

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- `talk` – interactive chat with another user (not on lab machines)
- `Mail` – text-based email program
- `ftp` – text-based FTP program
- `telnet`, `ssh` – connect to other machines directly
- `lynx` – text-based web browser



# More shell commands: processes

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- `ps` – list current processes
- `top` – dynamic display of system's utilization by processes
- `kill` – terminate a process
- `time` – keep timing information for a process