

- Visual Editor
- Started by Bill Joy in 1976 (co-founder of Sun Microsystems which is taken over by Oracle)
- Similar editors nano, ex, ed, kedit, gedit and more

### vi editor characteristics

- Comes with every version of Linux/Unix
- Most popular editor among unix users and new version is called as "vim"
- vi is unformatted editor. No fonts, no graphics
- Case sensitive
- Multiple files editing vi file1 file2 file3

## vi editor starting

- Type vi <file name> at the shell prompt "\$, # ..."
- After pressing enter you will see blank screen with "~" character at the beginning of all the lines.
- "~" character indicates that line is blank

### vi editor modes

#### 1. Command mode

- All the keys pressed by user are interpreted as editor commands.
- Accessed by pressing "ESC"

#### 2. Insert mode

- permits insertion, deletion, replacement of text
- Accessed by pressing "i"

#### 3. External command mode

- For executing regular linux commands
- Accessed by in command mode "!<command>"

### **Position by Character**

| Command       | Function                                |
|---------------|---|
| h             | Moves the cursor one character to left  |
| Backspace key | Moves the cursor one character to left  |
| l             | Moves the cursor one character to right |
| Space bar key | Moves the cursor one character to right |
| 0             | Moves the cursor beginning of line      |
| \$            | Moves the cursor end of line            |

### **Position by Line**

| Command | Function                              |
|---------|---------------------------------------|
| j       | Moves the cursor one line down        |
| k       | Moves the cursor one line up          |
| +       | Moves the cursor one line down to     |
|         | beginning of next line                |
| -       | Moves the cursor one line up to       |
|         | beginning of previous line            |
| Enter   | Moves the cursor down to beginning of |
|         | next line                             |

### **Position by Word**

| Command | Function  |
|---------|---|
| W       | Moves the cursor right to first character of next word    |
| e       | Moves the cursor to end of current word                   |
| b       | Moves the cursor back to first character of previous word |

#### **Position in window**

| Command | Function                               |
|---------|--|
| Н       | Moves the cursor first line on screen  |
| M       | Moves the cursor middle line on screen |
| L       | Moves the cursor last line fo screen   |

### **Scrolling**

| Command | Function                               |
|---------|--|
| Ctrl f  | Scrolls screen forward by full window  |
| Ctrl b  | Scrolls screen backward by full window |

### **Positioning on number line**

| Command | Function                               |
|---------|--|
| G       | Moves cursor to beginning of last line |
| nG      | Moves cursor to beginning of nth line  |

### **Commands for inserting text**

| Command | Function  |
|---------|---|
| a       | Text input mode and appends after cursor                  |
| i       | Text input mode and inserts at cursor position            |
| A       | Text input mode and appends at end of current line        |
| 1       | Text input mode and inserts at beginning of current line  |
| 0       | Text input mode and open new line above current line      |
| 0       | Text input mode and open new line below current line      |
| R       | Text input mode and replaces from current cursor position |

### **Commands for deleting text**

| Command  | Function                                    |
|----------|---|
| X        | Delete character in current position        |
| X        | Delete character in left of curent position |
| dd       | Delete current line                         |
| dw       | Delete a word                               |
| Ndw, ndd | Deletes n words and n lines                 |
| d0       | Deletes till beginning of line              |
| d\$      | Deletes till end of line                    |

### Commands for quitting vi

| Command      | Function                          |
|--------------|-----------------------------------|
| ZZ           | Save and quit vi                  |
| !wq          | Save and quit vi                  |
| !w filename  | Save contents to new file         |
| :w! filename | Overwrite existing file           |
| :q!          | Quit without saving               |
| :q           | Quit if changes are already saved |

### **Commands for search and replace**

| Command        | Function                      |
|----------------|-------------------------------|
| :s/str1/str2   | Replace str1 with str2 in     |
|                | current line                  |
| :s/str1/str2/g | Replace str1 with str2 from   |
|                | current line till end         |
|                |                               |
| :m,n           | Replace str1 with str2 from m |
| s/str1/str2/g  | to n line                     |
| Nyy            | Copy n lines                  |
| Nyyp           | Copy n lines and paste.       |

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|----------------|-------------------------------|
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| :s/str1/str2/g | Replace str1 with str2 from   |
|                | current line till end         |
| :m,n           | Replace str1 with str2 from m |
| s/str1/str2/g  | to n line                     |
| Nyy            | Copy n lines                  |
| Nyyp           | Copy n lines and paste.       |

### **Commands for search and replace**

| Command        | Function                   |
|----------------|----------------------------|
| :set num       | Display line numbers on    |
| :set ic        | Ignore case sensitive      |
| :set mesg      | Permit receipt of messages |
| :set show-mode | Show mode of operation     |
| :set eb        | Beep speaker               |

.exrc file stores these settings in home dir.

#### nano text editor - CHEAT SHEET

| ☑ Editing Text    |       |
|-------------------|-------|
| Cut Line          | ^K    |
| Paste             | ^U    |
| Justify Paragraph | ^J    |
| Replace           | ^\    |
| Indent            | Alt-{ |
| Unindent          | Alt-} |

| - ♣ Moving in File         |    |
|----------------------------|----|
| Goto Line                  | ^_ |
| Move Back One Character    | ^B |
| Move Forward One Character | ^F |
| Move to Previous Line      | ^P |
| Move to Next Line          | ^N |
| Move to Beginning of Line  | ^A |
| Move to End of Line        | ^E |

| Exiting File |    |
|--------------|----|
| Close File   | ^X |
| Save         | ^O |

| i Utilities    |    |
|----------------|----|
| Display Cursor | ^C |
| Help           | ^G |
| Search         | ^W |
| Spell Checker  | ^T |



 $\verb|http://harlankellaway.com/documents/nano_cheatsheet.pdf|$ 

#### Vi Editor Cheat Sheet

#### **Movement Commands**

Character

h, j, k, 1 Left, down, up, right

**Text** 

w, W, b, B Forward, backward by word

e.E End of word

(,) Beginning of next, previous sentence **{, }** Beginning of next, previous paragraph [[1,1]]Beginning of next, previous section

Lines

0,\$ First, last position of current line First non-blank character of current line +. -First character of next, previous line

H Top line of screen M Middle line of screen Last line of screen

nH, nLLine n from top, bottom of screen

**Scrolling** 

[Ctrl]**F**, [Ctrl]**B** Scroll forward, backward one screen [Ctrl]**D**, [Ctrl]**U** Scroll down, up one-half screen

[Ctrl]**E**, [Ctrl]**Y** Show one more line at bottom, top of window Scroll until line with cursor is at top of screen **z**[Enter] Scroll until line with cursor is at middle of screen Z. Scroll until line with cursor is at bottom of screen z-

**Searches** 

/pattern Search forward for pattern ?pattern Search backward for pattern

Repeat last search in same, opposite direction n. N /,? Repeat previous search forward, backward  $\mathbf{f}_{\mathcal{X}}$ search forward for character x in current line search backward for character x in current line  $\mathbf{F}x$ search forward for character before *x* in current line **t**x  $\mathbf{T}x$ search backward for character after x in current line

Repeat previous current-line search

Repeat previous current-line search in opposite direction

Line Number

[Ctrl]G Display current line number Move to line number n $n\mathbf{G}$ Move to last line in file G move to line number n

**Marking Position** 

Mark current position as x  $\mathbf{m}x$ 

Move cursor to x

Return to previous mark or context

'*x* Move to beginning of line containing mark x

Return to beggining of line containing previous mark

#### **Editing Commands**

#### Insert

i, a Insert text before, after cursor I. A Insert text at beginning, end of line

0,0 Open new line for text below, above cursor

Change

Replace with next typed characer r

Change between uppercase and lowercase

Change text block defined by movement command m (e.g., cw changes next word)

CC Change current line
C Change to end of line
R Type over characters

S Delete character and continue typingS Delete current line and continue typing

Delete, Move

**x** Delete character

X Delete character to the left of the cursor

 $d_m$  Delete text block defined by movement command m (e.g., dw deletes next word)

dd Delete current line
Delete to end of line

**p**, **P** Put deleted text before, after cursor

"np Put text from delete buffer number n after cursor (for last nine deletions)

Yank (copy)

 $\mathbf{y}_m$  Yank (copy) text block defined by movement command m (e.g., yw yanks next word)

**yy**, **Y** Yank current line

"ayy
 p, P
 "aP
 Yank current line into named buffer a
 Put yanked text before, after cursor
 Put text from buffer a before cursor

**Other Commands** 

Repeat last edit command

**u** Undo last edit

Undo changes to current line

J Join two lines [Ctrl]L, [Ctrl]R Redraw screen

#### Invoking vi

**vi** *file* Invoke vi editor on *file* 

vi file1 file2Invoke vi editor on files sequentiallyview fileInvoke vi editor on file in read-only modevi -R fileInvoke vi editor on file in read-only modevi -r fileRecover file and recent edits after system crash

vi + fileOpen file at last linevi +n fileOpen file at line number nvi +/pattern fileOpen file at pattern

#### **Exit and Save Commands**

ZZ Save file and quit

Save file and quit

**Save** ("write") file and quit

:w Save file

:w! Save file (overriding protection)

:30,60w newfile
 :30,60w>> file
 :w %.new
 Save lines 30 through 60 as file newfile
 Append lines 30 through 60 to file file
 Save current buffer named file as file.new

:q Quit

:q! Quit, discarding any changesQ Quit vi and invoke ex:e file2 Edit file2 without leaving vi

Edit filez without leaving vi

**:e!** file2 Discard changes to current file, then edit file2 without leaving vi

**:n** Edit next file

**:e!** Discard all changes since last save

**:e#** Edit alternate file