



# VI Tutorial



조영일  
2012.03~

# VI의 역사

---

- ▶ line editor
  - ▶ TECO
    - ▶ 1962
  - ▶ qed
    - ▶ 1965
  - ▶ ed
    - ▶ 1969
    - ▶ Ken Thompson
    - ▶ PDP-7





# VI의 역사

---

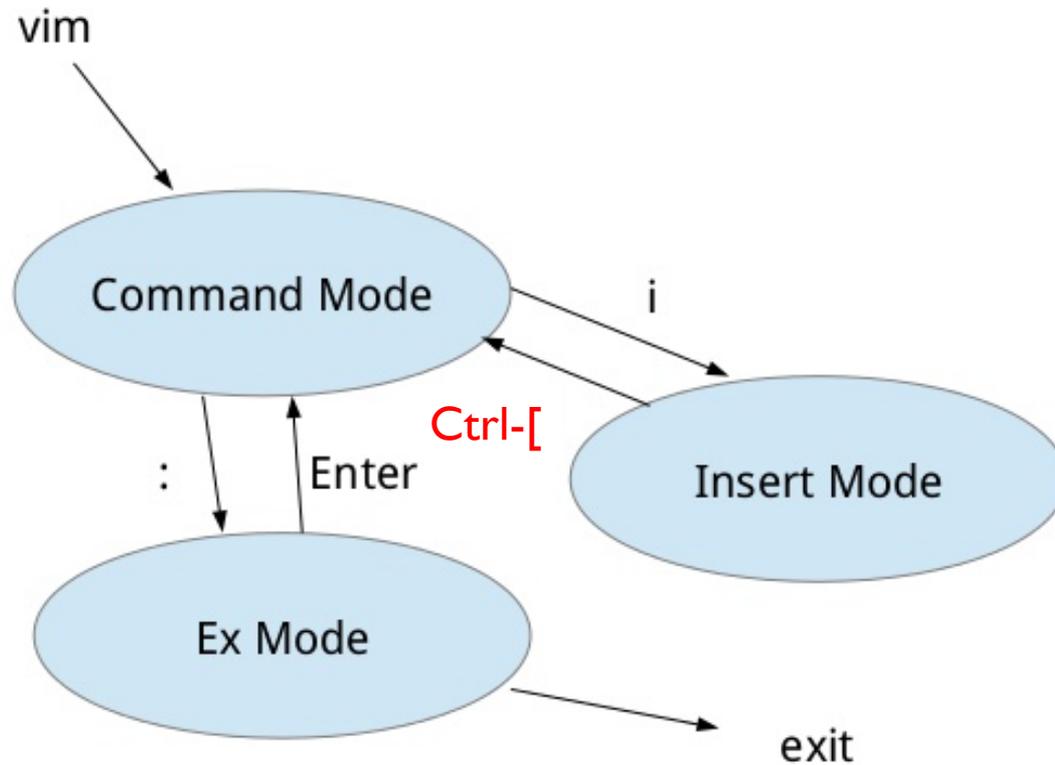
- ▶ visual editor
  - ▶ ex and vi
    - ▶ 1976
    - ▶ Bill Joy
    - ▶ BSD
    - ▶ ADM-3A terminal



mode

---

## Switching Modes



# Cursor

---

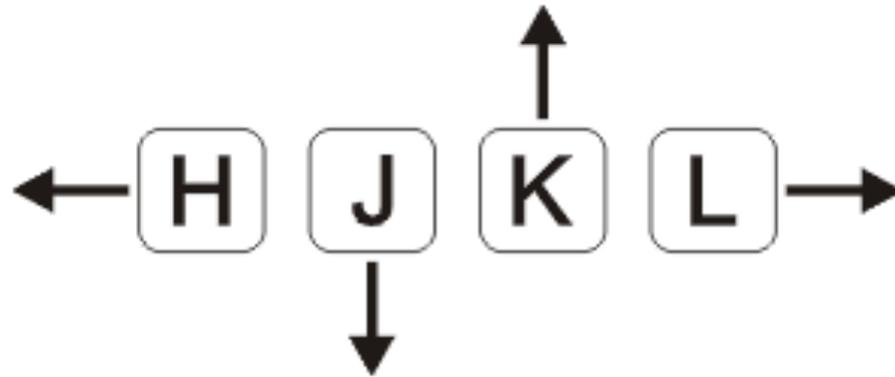
- ▶ cursor movement
  - ▶ up/down/left/right
  - ▶ Q: alternative?



# Cursor

---

- ▶ cursor movement
  - ▶ A: k / j / h / l



# ADM-3A terminal



# Cursor

---

- ▶ cursor movement
  - ▶ Q: another key to move right?



# Cursor

---

- ▶ cursor movement
  - ▶ A: spacebar



# Cursor

---

- ▶ cursor movement
  - ▶ Q:
    - ▶ first column of next line
    - ▶ first column of previous line



# Cursor

---

- ▶ cursor movement

- ▶ A:

- ▶ +

- ▶ -



# Cursor

---

- ▶ cursor movement
  - ▶ Q:
    - ▶ beginning of line
    - ▶ end of line



# Cursor

---

- ▶ cursor movement

- ▶ A:

- ▶ 0

- ▶ \$



# Cursor

---

- ▶ cursor movement
  - ▶ Q:
    - ▶ word forward
    - ▶ word backward



# Cursor

---

- ▶ cursor movement

- ▶ A:

- ▶ w

- ▶ b



# Cursor

---

- ▶ Big step
  - ▶ Q:
    - ▶ scroll forward one half of a page
    - ▶ scroll backward one half of a page



# Cursor

---

- ▶ Big step
  - ▶ A:
    - ▶ ctrl-d
    - ▶ ctrl-u



# Cursor

---

- ▶ Bigger step
  - ▶ Q:
    - ▶ scroll forward one page
    - ▶ scroll backward one page



# Cursor

---

- ▶ Bigger step
  - ▶ A:
    - ▶ ctrl-f
    - ▶ ctrl-b



# Cursor

---

- ▶ Bigger step

- ▶ Q:

- ▶ to middle of page
    - ▶ to top of page
    - ▶ to bottom of page



# Cursor

---

- ▶ Bigger step

- ▶ A:

- ▶ M

- ▶ H

- ▶ L



# Cursor

---

- ▶ Whole file
  - ▶ Q:
    - ▶ first position of file?
    - ▶ last position of file?



# Cursor

---

- ▶ Whole file
  - ▶ A:
    - ▶ :0, gg, [[
    - ▶ G, ]]



# Editing

---

- ▶ insert
  - ▶ i
  - ▶ I ???
- ▶ append
  - ▶ a
  - ▶ A ???
- ▶ open ???
  - ▶ o
  - ▶ O ???



# Editing

---

- ▶ Change
  - ▶ CC
  - ▶ CW
  - ▶ C ???



# Editing

---

- ▶ Change

- ▶ r



# Editing

---

- ▶ Delete
  - ▶ dd
  - ▶ dw
  - ▶ D ???



# Editing

---

- ▶ Undo

- ▶ u

- ▶ U ???

- ▶ Redo

- ▶ Ctrl-r



# Editing

---

- ▶ **Combination**

- ▶ 4dw

- ▶ dG



# Editing

---

- ▶ Repetition

- ▶ .



# Termination

---

- ▶ Save and/or die
  - ▶ Q:
    - ▶ save and quit
    - ▶ quick save and quit
    - ▶ save to the file
    - ▶ force quit (without saving)



# Termination

---

- ▶ Save and/or die
  - ▶ A:
    - ▶ :wq
    - ▶ :x
    - ▶ :w <filename>
    - ▶ :q!



# Search/Replace

---

- ▶ search

- ▶ Q:

- ▶ forward search
      - (down to end of file)
    - ▶ backward search



# Search/Replace

---

- ▶ search

- ▶ A:

- ▶ /

- ▶ ?



# Search/Replace

---

- ▶ Next repetitive action
  - ▶ n
  - ▶ N ???



# Search/Replace

---

- ▶ Replace

- ▶ Q:

- ▶ 파일 전체에 대해 특정 단어를 치환



# Search/Replace

---

- ▶ Replace

- ▶ A:

- ▶ :%s/hello/music/



# Search/Replace

---

- ▶ Replace

- ▶ Q:

- ▶ 10행부터 25행까지만 치환



# Search/Replace

---

- ▶ Replace

- ▶ A:

- ▶ :10,25s/world\$/java/



# Search/Replace

---

- ▶ Replace

- ▶ Q:

- ▶ 현재 행부터 마지막 행까지 치환



# Search/Replace

---

- ▶ Replace

- ▶ A:

- ▶ :.,\$/coffee/tea/



# Search/Replace

---

- ▶ Replace

- ▶ Q:

- ▶ 한 행에 같은 단어가 두번 이상 나온다면 모두 치환될까?



# Search/Replace

---

- ▶ Replace

- ▶ A:

- ▶ :.,10s/coffee/tea/**g**



# Search/Replace

---

- ▶ Search & Delete
  - ▶ `:g/pattern/d`



# Shell

---

▶ Q:

- ▶ vi 바깥에서 shell command를 실행해보기
- ▶ vi 바깥에서 실행된 shell command의 결과를 현재 파일 버퍼 내부로 가져오기



# Shell

---

- ▶ **A:**
  - ▶ `:!cmd`
    - ▶ ex) `:!ls`
  - ▶ `:r !cmd`
    - ▶ ex) `:r !cat test.txt`



# Buffer

---

- ▶ **Mark**

- ▶ **ma**

- ▶ mark the start position of buffer

- ▶ move somewhere

- ▶ to the current position

- ▶ **d'a**

- ▶ **Yank**

- ▶ means 'copy'

- ▶ ma & move & y'**a** & p

- ▶ yy & p

- ▶ copy & paste 1 line



# Buffer

---

- ▶ Visual Block
  - ▶ v
    - ▶ mark the start position of buffer
  - ▶ move somewhere
    - ▶ to the current position
  - ▶ d
    - ▶ action such as deletion
  - ▶ p
  - ▶ V ???



# Customization

---

- ▶ autoindent
  - ▶ :set ai
  - ▶ :set smartindent
  - ▶ :set cindent
  - ▶ :set paste
- ▶ number
  - ▶ :set nu



# Customization

---

- ▶ **tabstop**
  - ▶ `:set ts=4` \t 문자의 폭
  - ▶ `:set sts=4` TAB키 입력 시 폭
  - ▶ `:set sw=4` 자동 줄 맞추기 폭
  - ▶ `:set expandtab`
- ▶ **syntax on**
  - ▶ `:syntax on`



# Customization

---

- ▶ matching braces
  - ▶ `:set showmatch`
- ▶ encoding priority
  - ▶ `:set fileencodings=utf8,cp949`
  - ▶ `:set fileencoding=utf8`
- ▶ search
  - ▶ `:set hlsearch`
  - ▶ `:set ignorecase`
  - ▶ `:set smartcase`



# Customization

---

- ▶ `.vimrc`
  - ▶ 첫글자로 오는 `:`를 제외한 `ex` 명령을 저장





## VIM 특수기능

# VIM의 특수 기능

---

- ▶ 탭 분할
  - ▶ :tabnew
  - ▶ :tabedit *파일명*
  - ▶ :tabclose
  - ▶ **gt** 또는 gT로 탭 간 이동



# VIM의 특수 기능

---

- ▶ 윈도우 분할
  - ▶ :split
  - ▶ :vsplit
  - ▶ Ctrl-w 방향키
  - ▶ Ctrl-w Ctrl-w



# VIM의 특수 기능

---

- ▶ 스트림 편집

- ▶ ls | vim -



# VIM의 특수 기능

---

## ▶ 매핑 (매크로)

- ▶ `:map <F2> GoDate: <Esc>:read !date<CR>kJ`
- ▶ `:imap <F3> <C-R>=strftime('%c')<CR>`
- ▶ `nmap, imap, vmap, smap, xmap, cmap, omap`
- ▶ 다른 매핑을 피하기 위해 `map` 대신 `noremap` 추천



# VIM의 특수 기능

---

- ▶ Autocompletion
  - ▶ Ctrl-n
  - ▶ Ctrl-p
  - ▶ 기능이 제한적임



# References

---

- ▶ <http://www.openvim.com/>
- ▶ [http://vimdoc.sourceforge.net/html/doc/usr\\_toc.html](http://vimdoc.sourceforge.net/html/doc/usr_toc.html)
- ▶ <http://web.mit.edu/merolish/Public/vi-ref.pdf>



