Introduction to VIM

Unit objectives

After completing this unit, you will learn to:

Describe VIM

Perform VIM navigation

Use Vim command mode

Use Vim **insert** mode

Use Vim **visual** mode

Use Vim **search** and **replace/delete**

Describe purpose of vimrc file

Describe VIM

Text Editors: vi → emacs → ed ➔ cot → gedit --> vim → nano

Based on VI but with visual & some enhancement

Not universal

dnf install vim or apt install vim

export EDITOR=vim

Uses vimrc to set default options

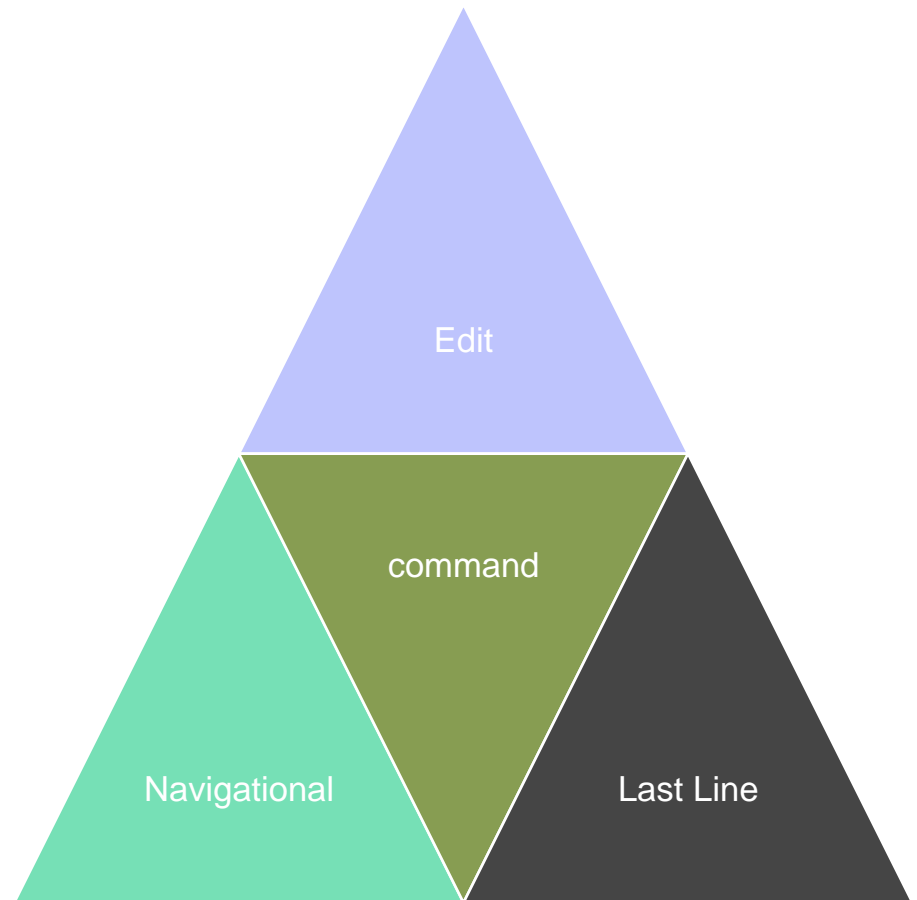Uses single letter for any action (case sensitive)

Changes always in memory

Can specify number of execution prior to any action

Can use macro (shorthand)

Command mode

- Command mode : default mode
- Last Line:
  - Saving file
  - Quiting file
  - Undo all changes
  - Search content in file
  - Copying or Moving lines
  - etc
- **Press ESC before any other action**

Edit

command

Navigational

Last Line

Edit mode

Letter	Description
i / I	Insert text at cursor / at start of line
a / A	Append text at cursor / at end of line
o / O	Insert line above or below
r / R	Replace single character / continous replace text
cw / 5cw	Change one word / Change next five words
dw / 2dw	Delete one word / Delete next 2 words
dd / 10dd	Delete one line / Delete next 10 lines
yy / 10yy	Copy one line / Copy next 10 lines
p / P	Paste copied lines below / above (works with deletion too)
x	Delete a character
shift+j / J	Join two lines
~	Convert case
u / U	Undo last action / whole line
:e!	Restore file to last saved content

Navigational mode

Letter	Description
h	Move cursor left
l	Move cursor right
j	Move cursor downward
k	Move cursor upward
w	Jump next word
b	Jump back one word
0 / home	Place cursor at beginning of line
shft+4 / $ / end	Place cursor at end of line
5G	Go to line number 5
:55	Jump to line 55
ctrl+g	Show status line
{ }	Jump next paragraph
.	Repeat last action

Last line mode

Letter	Description
:w	Save file
:q	Attempt to quit file
:q!	Force quit (quit without saving)
:w!	Force save
:wq!	Force save and quit
:w /tmp/copy1	Save as /tmp/copy1
:set number / :set nonu	Show line number / Remove line number
:set list / :set nolist	Reveal hidden characters / Don't reveal
:set ignorecare / :set ic	Ignore case
:set all	Show all options
:set tabstop=2	Set tab stop by 2 white spaces
/<pattern>	Search downward by pattern
?<pattern>	Search upward by pattern
:%s/<old_text>/<new_text>/g	Global change
.	Repeat last action
:!<command>	Execute command from vi

More Last line mode

Letter	Description
:5,10 co 20	Copy line between 5 and 10 to line 20
:5,10 mov 20	Move line between 5 and 10 to line 20
:5,10 delete	Delete line between 5 and 10
:r file1	Copy whole content of file1 into current file
:wq!	Force save and quit
:w /tmp/copy1	Save as /tmp/copy1
:55	Jump to line 55
:set number / :set nonu	Show line number / Remove line number
:set list / :set nolist	Reveal hidden characters / Don't reveal
:set ignorecare / :set ic	Ignore case
:set all	Show all options
:set tabstop=2	Set tab stop by 2 white spaces
/<pattern>	Search downward by pattern
?<pattern>	Search upward by pattern
:%s/<old_text>/<new_text>/g	Global change

Use Vim search and replace/delete

Search from current position and towards end of file for pattern

```
Using /<pattern>
```

Search from current position and towards start of file for pattern

```
Using ?<pattern>
```

Search and replace orange with apple

```
Specify word to find with either /<pattern> or ?<pattern>
Then change word(s)
Press "n" to keep searching next occurrent of pattern
Press "." to repeat action
```

Search and replace orange with apple

```
:%s/orange/apple/
```

Search and globally replace orange with apple

```
:%s/orange/apple/g
```

Describe purpose of vimrc file

To control option settings at every newly open vim session

File ~/.vimrc

Setting	Description
Expand tab / etc	Expand tab by using spaces
Tabstop / ts	How many spaces when expanding tabs
Shift width / sw	Number of spaces inserted after indentation
List	Show indentation, spaces, ending characters
Number	Show line number
autocmd filetype	Applies settings on selected file types

Best Settings

autocmd FileType yaml,yml,json setlocal ts=2 sts=2 sw=2 et

Quiz

1. How do you reveal hidden characters in vi editor?
    a) :set list
    b) :!list -a
    c) :!ls –a
    d) :!set list

Quiz

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    a)   :set list

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    c)   :!ls –a

    d)   :!set list

Quiz

2. How do you quickly delete line between 500 and 700?
- a) Goto line 500 by :500, then 700dd
- b) Goto line 500 by enter 500 then shift+g, then 700dd
- c) :500,700 dd
- d) :500,700 de

Quiz

2. How do you quickly delete line between 500 and 700?
- a) Goto line 500 by :500, then 700dd
- b) Goto line 500 by enter 500 then shift+g, then 700dd
- c) :500,700 dd
- d) :500,700 de

Quiz

3. You have made so many mistakes, and you haven't save the file. How do you quickly undo all changes you made since last save?

    a)   Save it to another file :w /tmp/file1, close and re-open the file

    b)   Quit with force, then close and re-open the file

    c)   Goto last line :e!

    d)   Goto last line, then press 100u

Quiz

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   a) Save it to another file :w /tmp/file1, close and re-open the file

   b) Quit with force, then close and re-open the file

   c) Goto last line :e!

   d) Goto last line, then press 100u

Unit summary

Having completed this unit, you should be able to:

Describe VIM

Perform VIM navigation

Use Vim command mode

Use Vim **insert** mode

Use Vim **visual** mode

Use Vim **search** and **replace/delete**

Describe purpose of vimrc file