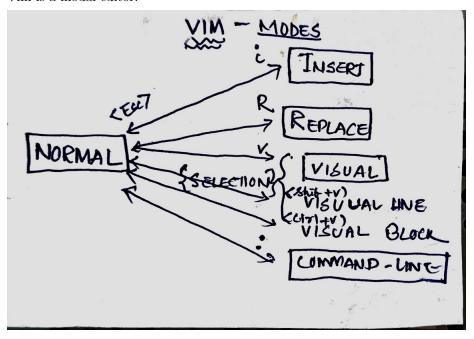
VIM

Vim is a modal editor.



undo in vim: u redo in vim: ctrl r # Let's start

Start program typing: vim

 $\begin{array}{l} \mbox{vim filename.md} : \mbox{Open a file } q: \mbox{quit file if we're not make any changes. } q!: \\ \mbox{quit file with out saving any changes } w: \mbox{write/ save the file with changes } wq: \\ \mbox{save and quit the file. } x: \mbox{save and quit the file.} \end{array}$

NORMAL MODE

NORMAL x:Delete a text.

Navigation:

Navigation:

h:LEFT 1: RIGHT k:UP j:DOWN w:Move cursor forward by one word. W:Move to next word ignoring special character. b:Move cursor backward by one word. B: Move backward one word ignoring special character.

e: Move end of word. \$: Move end of line. 991: Move end of Line. 0 :Move beginning of line 99h: Moving beginning of line. caret: Move to first non empty character of line. ctrl u:Move up. ctrl d:Move down.

G: All the way down. gg: All the way up. line number > G: To go to perticular line. 1%: To go to top of file. 100%: To go to bottom of file.

L:Lowest line of the screen: M:Middle of Screen: H:Highest line of Screen:

Find: f <char>: you are in a line want to move to word "owl" you need to press in normal mode: fo

For back word : F<char>

Similarly you can you t and T just before the letter, forward and backward respectively.

INSERT MODE

INSERTMODE

TO ENTER IN TO INSERT MODE: i

BACK TO NORMAL MODE :<esc>

Editing COMMANDS:

o: opens a new line below my curser $\tt O$: opens a new line above my curser $\tt a$: append insert mode after the character. $\tt A$: append insert mode end of line. . : repeats previous editing command Deleting key $\tt d$ binding with movement commands

dw : Delete the word dd :Delete line de : Delete to end of word When the curser
is beginning of line <Linenumber > D : delete that number of line, you can
paste later. 999D : delete everything.

Note: Y: yanks entire line D: deletes from curser to end of line. C: change from curser to end of line.

CHANGE COMMAND

CHAGE COMMAND: c followed by bind and put you in insert mode. Take motion as arguments

ce: change up to end of word cc: delete the line then insert mode. cw: change the word, while cursor is on first letter. ciw: change in word, irrespective cursor on character of word. x: detele that perticular character r: replace the particular character r: change the case of single character. R: replace until pressing COPY AND PASTE

y : copy take motion as argument yy : copy the line. yw : copy the word 2Y : Three lines yanked p : paste below the line P : paste above the line

COMMAND MODE

COMMAND LINE MODE

ENTER IN TO COMMAND LINE MODE: :

BACK TO NORMAL MODE: <esc>

After pressing: in normal mode, you can type and enter commands as usual.

 $\operatorname{Quit}: \operatorname{:q} \operatorname{or} \operatorname{:quit}$

Save a file::w

Help::help:w to find help for particular key.

Vim has separate tabs and windows

Opening a tab: :tabnew

closing tab: :q

Closing all windows ::qa

:<arrow up key> : show previous command.

VISUAL MODE

VISUAL MODE (REGULAR) < v >

Use regular mode command to move your pointer.

Once you select. Press y it copies and come back to normal mode

 $\mathtt{i"}$: To select with in double quotes. In visual mode when we yank the text between ".

We cannot paste same text more than once as every time we paste new text saved in buffer.

VISUAL LINE MODE

VISUAL LINE MODE <V>

Select whole line

VISUAL BLOCK MODE

VISUAL BLOCK MODE < ctrl v>

Selecting block of character as a column. When press I insert more, when we write something new, it changes in all the block at once:

 ${\tt I}$: inserts to the left of visual block. A :appends to the right of the visual block. c :to change the visual block. d :to delete the visual block. o :change of corner in visual block mode.

COUNTS

COUNTS:

4j: it does j four times 7dw: delete 7 lines

MODIFIER

MODIFIER:(i : i for in)

da[: delete everything include parenthesis. ciw: change in word, irrespective cursor on character of word.

We can use this for yank also

yi(: yank everything with in the bracket. This also works for tags.

INDENT, REPEAT AND TAB

INDENT, REPEAT AND TAB

It follows the rule.[NORMAL MODE]

> h or > 1 : indent to the write >> : indent the current line RIGHT << : indent the current line LEFT

>i : indent current and line below.

< j : outdent current and line below.

2>2j: indent four line. . : repeat any command

IN VISUAL MODE WE TO PRESS > ONE TIME FOR INDENT

IN INSERT MODE PRESS TAB KEY. ^I is the tab character. (:set list)

check vim is checking file type :filetype Set in .vimrc

auto format example

vi{: selection and then pressing == equal.

Select the lines for auto indent And press == .

Auto indent gets from a file :e \$VIMRUNTIME/indent To see the file which used :scriptnames

SEARCH

SEARCH

*: search for the word the cursor is on.

n: To find next occurrence. N: To find backward next occurrence. #: backward search for the word cursor is on.:/searchword: all the searchword highlighted.:?searchword: search upward:/\cdatabase: ignore case.:/\Cdatabase: case sensitive.:\/\sin\>: search particular word:/\/**: search for special character.:/\sarrow up key>: show previous search.:?\sarrow up key>: Show previous search in reverse order. q/: show search history. q/: show reverse history.:q: To quit out of this. q:: show the command history.

SEARCH AND REPLACE

SEARCH AND REPLACE :4,7s/two/VIM: from line 4 to 7 search word "two" and replace with "VIM". works in *first occurrence* of each line. :4,7s/two/VIM/g: from line 4 to 7 search word "two" and replace with "VIM". works in first occurrence of each line *global*. line. :4,7s/two/VIM/gi: from line 4 to 7 search word "two" and replace with "VIM". works in first occurrence

of each line global and case insensitive. :4,7s/two/VIM/gI: from line 4 to 7 search word "two" and replace with "VIM". works in first occurrence of each line global and force case sensitive. :4,7s/two/VIM/gic: from line 4 to 7 search word "two" and replace with "VIM". works in first occurrence of each line global, case insensitive and query for change.

%s/two/VIM: anywhere in the document search for "two" and replace with "VIM".

PAGING, HIGH LOW MIDFLE SCROLLOFFSET

PAGING, HIGHLOWMIDDLE, SCROLLOFFSET

 $\label{eq:ctrl} \begin{tabular}{ll} $\tt Ctrl f: one page forward Ctrl b: one page backward 3 ctrl f: Three pages forward Ctrl d: Half of page Down Ctrl u: Half of page up H: Highest line of the page L: Lowest line of the page M: Middle line of the page zt: taking current line to top of screen. \\ \end{tabular}$

Scroll offset :set scrolloff=999 : cursor always middle of the page.

LINE INFO PASTE VIEW EDIT JOIN SORT

LINE INFO, Paste, View, Edit, Join, Sort

Ctrl g : show current file name. :w newfilename.txt.backup : creating backup file.

To open a file in read only mode

Open vim without file name then; view filename. To edit the file

edit filename or e filename

J: join the below line to the current line. 3J: join below 3 line to current line.

:r filename: join another file to current file at cursor.

SORT LINES

SORT LINES: :10,19sort : sort lines from 10 to 19. :10,19sort! : sort lines in reverse order. %sort : sort every lines in the file.

CHANGE LIST, JUMP LIST

CHANGE LIST, JUMP LIST

g; : go to last (previous change).

g, : go forward to last change.

:changes: To see whole list of changes.

 $: \mathtt{jumps}: \mathtt{jump}$ list \mathtt{Ctrl} o : takes to previous $\mathtt{jump}.$ \mathtt{Ctrl} i : take to forward $\mathtt{jump}.$

MARKS

MARKS > consider mark as book mark.

ma: set mark "a". My bookmark is letter an and is on the character where cursor is present. 'a: go to the line with mark "a". "'a ": go to the mark in the line marked.

[': go to previous mark line.]': go to next line mark

':marks : To see the visible marks

Upper case marks

mA: set mark uppercase A. Uppercase mark behave as lower case as long as we are on same text file.

'A: takes to the file where uppercase letter is marked.

:delmarks a-z or :delmarks a, A or :delmarks! : delete marks.

FIND IN A LINE

FIND IN A LINE

fr : find "r" Fr : find backward "r" tr : go the the left of letter "r" Tr : go
the the left of letter "r" backward. dt. : delete to the period. d/input :delete
from the cursor to "input". d?filename : delete from cursor to filename (right
to left).

BUFFERS

BUFFERS

Buffer is a just a space in ram memory.

:buffers or :1s :bp : buffer previous :bn : buffer next :set hidden : no warning for unsaved document. b4 : just buffer 4

bd: To close the buffer e!: remove all changes :q: quit all buffers

SPLIT WINDOW

SPLIT WINDOWS

 $: \verb"sp": split window horizontally Ctrl w w: switch to next window : \verb"q: close" the window. : \verb"vsp": vertical split window Ctrl w s: split the window Ctrl w v: split window vertically$

vsp filename : open different fine in vertical window. Ctrl w x : exchange the
window :set splitright : new windows in right Ctrl w r : rotate window
Ctrl w R : rotate window in reverse direction Ctrl w t : go to top left window
Ctrl w b : go to bottom right window Ctrl w p : previous window Ctrl w h :
left window :resize 20 : change selected window size to 20 vertical resize
-10 : change selected window vertical. Ctrl w = : make all windows to same
size.

Ctrl w _ : maximise the height Ctrl w | : maximise the width

 $\mathtt{Ctrl}\ \mathtt{w}\ \mathtt{o}:$ To see single split window : $\mathtt{ba}:$ show all buffers horizontally : $\mathtt{vert}\ \mathtt{ba}:$ show all buffers vertically

:vsp | b3 : current and buffer3 help ctrl-w : to see all the commands

WINDOW TABS

WINDOW TABS

:tabe vtpim : open file in new tab. :tabn : go to next tab. :tabp : go to
previous tab. :tabn 3 : go to tab no 3. gt : go to next tab. gT : go to previous
tab. :tabnew : open new blank tab :tabm : move my tab to right :tabm 3:
move to 3 position :q or :tabclose : to close the single tab :tab ball : to
open all buffers in tab. :tabonly : close all other tabs. :tabclose 3 : close tab
3 :tabe samefile : open same file in different tab. :drop file2 : it open file2
and drop current file. :tab split : open a window in tab. Ctrl w T : open a
window in tab :qa : close all my tabs

FOLDING TEXT

FOLDING TEXT (Hiding the lines)

To see the fold method in use now

:set foldmethod or :set fdm: to see the current fold method.

Select the lines which we want to hide then:

 ${\tt zf}$: create fold ${\tt zo}$: open fold ${\tt zc}$: close the fold

To save the fold mkdir ~/.vim mkdir ~/.vim/view :mkview

When you open a file; :loadview: to see the fold

zd : delete fold

 ${\tt zf10j}$: fold up next ten lines and the line on which cursor present. Total 11 lines.

zf10k: fold up prev ten lines. :148,158fold: fold from 148 to 158. : ,+10
fo: fold from current position to 10 lines below. zfa{: fold text in {}

 $\tt zn:$ open all the folds $\tt zN:$ set all the folds as they were before. :% foldopen: open all the folds:% foldclose: close all the folds

zj: jump to next fold [z: top of the current fold]z: bottom of current fold zk: jump to previous fold zE: Eliminate all the folds.

NESTED FOLD

z0: open all nested folds.

: set fdm indent : indented fold method zC: close all the nested folds. zr: reduce all folds one level. (Same as zo for all folds.

 $\mathtt{z}\mathtt{R}:$ Open all the folds. $\mathtt{z}\mathtt{m}:$ close all the fold at a time. $\mathtt{z}\mathtt{M}:$ Fold up all the folds.

Fold methods; 1. Manual 2. Indent 3. syntax 4. Expr (regex/ regular expressions) 6. Marker 7. diff

REGISTERS

REGISTERS

p: paste right side (normal mode) from default register. P: paste left side (normal mode) from default register. Ctrl r ": paste from default register (insert mode) > Registers we can vank in to are: a-z.

"ayiw : yank in word to register a. "ap :paste from register a (normal mode)
Ctrl r a : paste from register a (insert mode)

"by: yank into register b (visual mode). > To replace the test in visual mode, go to line, ctrl v for visual mode, select text, press c for change, this will put us in insert mode, ctrl r b paste from register b in insert mode.

 $"{\tt Ayiw}:$ it will append in the data present in register a.

SPECIAL REGISTER

SPECIAL REGISTER : register or :reg: to see what inside register.

"/: special register for path directory "%: special register for document name. ":: special register for last command we typed. "": default register "0: yank text register "-: delete register "1: deleteing line. >Deleted lines will be stored up to register 9 > you can check >/.viminfo file for registers

MACROS

MACROS

Record and play sequence of events.

q register letter:start recording a macro into that register. press q stop recording press Q to play your macro.

qm: start recording macro for register m q: quit recording @m: run macro which stored in register m. 3@m: run macro 3 times.

NUMBERS

NUMBERS when we put cursor on number or left of number and press ctrl a it will increment by 1.

when we put cursor on number or left of number and press ctrl C it will decrement by 1.

5 ctrl a: increment by 5 "ap: to print out macro a.

TERMINAL

TERMINAL

```
" vim-powered terminal in split window
map <Leader>t :term ++close<cr>
tmap <Leader>t <c-w>:term ++close<cr>
```

```
" vim-powered terminal in new tab
map <Leader>T :tab term ++close<cr>
tmap <Leader>T <c-w>:tab term ++close<cr>
```

ctrl-w N :to switch to "terminal-normal mode", which will let you navigate around. It could be useful to then copy content to the clipboard.

i: Return to terminal mode

ctrl-w: will open command mode like in regular Vim.

```
ctrl-w "":will paste
```

ctrl-w :dis: to see all available registers and their content.

 $\verb|:ctrl-w| " \{reg\}| : you can paste recent or saved clipboard contents using, where reg identifies the register to paste. :vert term: open terminal in vertical window$

DICTIONARY

DICTIONARY

:set spell: turn on vim spell check

:set nospell: Turn off spell checking.

 $\tt]s:Jump$ to the next misspelled word. $\tt [s:Jump$ to the previous misspelled word. $\tt z=:Bring$ up the suggested replacements $\tt zg:good$ word, Add the word under the curser to the dictionary. $\tt zw:Whoops!$ Undo and remove the word from dictionary.

NETRW

NETRW(inbuild file explorer plugin) :q: quit from vim file explorer. vim .
: open vim file explorer in current directory. s: sorting the directory. :help quickhelp or F1: to go to quick help. Ctrl]: go to the topic want to look up. :q: to exit out. %: create a new file. d: create a new directory. :let g:netrw altv=1: open split to the right. :let g:netrw preview =1: vertical split preview. :Vex: vertical explorer window :Sex: Horizonal explorer window. gh: hiding . Files I: hide the banner

NETRW FIX FUZZY FIND

NETRW FIX FUZZY FIND :qa! : to quit out of netrw

:set path: to check the directory, sub directory and the files: find filename: to find a file

VIMGREP

```
VIMGREP (similar to find command)
```

```
:vimgrep /recsIn/g %: to find the word recsIn , g count them if found more than one in a line and \% means search only in open buffer.
```

:cope: all find show in list

:vim /recsIn/ g %: this is shortcut of above command.:vimgrep.

:cnext : takes to next find.

:cprev: takes to previous find. :c first: first find :c last: last find

pwd: project directory

:vimgrep /recsIn/g **/* : search entire project directory. cw: shortcut for :cope.

PLUGINS

PLUGINS

Install plugin with out plugin manager. Example: bad-wolf colour scheme

```
mkdir ~/.vim/color cd ~/.vim/color/wget "https://github.com/sjl/badwolf/archive/refs/heads/muzip master.zip
```

Go to vimrc file to tell where to find plugin

Add following lines to .vimrc file.

"For installing bad-wolf colour scheme. set runtimepath^=~/.vim/color/master

Then wq and open .vimrc

They enter command: :colorscheme badwolf

To turn this off Comment the plunging line and then wq.

To check pre install color scheme

:colorscheme <Tab> : chose the color scheme you like

With plugin manager "Vimplug" plugin manager.

vimplug

mkdir ~/.vim/autoload cd ~/.vim/autoload wget https://github.com/junegunn/vim-plug/archive/reunzip master.zip mv ~/.vim/autoload/master/plug.vim .

```
Now edit .vimrc file as following: "' "For Vimplug call plug#begin('~/.vim/plugged')
```

call plug#end()

Now put the [plugin](https://vimawesome.com/) in between begin and end call statement.

EXAMPLE:

call plug#begin() "The default plugin directory will be as follows: "- Vim (Linux/macOS): '~/.vim/plugged' "- Vim (Windows): '~/vimfiles/plugged' "- Neovim (Linux/macOS/Windows): stdpath('data') . '/plugged' "- You can specify a custom plugin directory by passing it as the argument "- e.g. call plug#begin('~/.vim/plugged') "- Avoid using standard Vim directory names like 'plugin'

[&]quot; Make sure you use single quotes

[&]quot; Shorthand notation for GitHub; translates to https://github.com/junegunn/vimeasy-align Plug 'junegunn/vim-easy-align'

[&]quot;Any valid git URL is allowed Plug 'https://github.com/junegunn/seoul256.vim.git'

[&]quot;Using a tagged release; wildcard allowed (requires git 1.9.2 or above) Plug 'fatih/vim-go', { 'tag': '*' }

[&]quot;Using a non-default branch Plug 'neoclide/coc.nvim', { 'branch': 'release' }

[&]quot; Use 'dir' option to install plugin in a non-default directory Plug 'junegunn/fzf', { 'dir': '~/.fzf' }

[&]quot; Post-update hook: run a shell command after installing or updating the plugin Plug 'junegunn/fzf', { 'dir': '~/.fzf', 'do': './install –all' }

[&]quot; Post-update hook can be a lambda expression Plug 'junegunn/fzf', { 'do': { -> fzf#install() } }

[&]quot; If the vim plugin is in a subdirectory, use 'rtp' option to specify its path Plug 'nsf/gocode', { 'rtp': 'vim' }

[&]quot;On-demand loading: loaded when the specified command is executed Plug 'preservim/nerdtree', { 'on': 'NERDTreeToggle' }

[&]quot;On-demand loading: loaded when a file with a specific file type is opened Plug 'tpope/vim-fireplace', { 'for': 'clojure' }

[&]quot; Unmanaged plugin (manually installed and updated) Plug ' \sim /my-prototype-plugin'

[&]quot;Initialize plugin system" - Automatically executes filetype plugin indent on and syntax enable. call plug#end() "You can revert the settings after the call like so: "filetype indent off" Disable file-type-specific indentation" syntax off "Disable syntax highlighting

```
***EXAMPLE :[syntax](https://vimawesome.com/plugin/syntastic)***
```

"For Vimplug call plug#begin('~/.vim/plugged') Plug 'scrooloose/syntastic' call plug#end() let g:syntastic_check_on_open = 1 "Check syntax while opening file let g:syntastic_check_on_wq = 0 "Do not check syntax while write and quit. "Then:x(save and quit) and again openvim~/.vimrcand run following command.:PlugInstall'

Procedure to remove the plugin

Comment out all the lines with respect to plugin

Then write and quit. Then open and type PlugClean

VIM AIRLINE PLUGIN

```
set t_Co=256
 "For Vimplug
 call plug#begin('~/.vim/plugged')
 Plug 'vim-airline/vim-airline'
Plug 'vim-airline/vim-airline-themes'
 call plug#end()
wq and PlugInstall
"TURNON AIRLINE POWERLINE FONTS let g:airline powerline fonts = 1
         we need POWER LINE FONTS.
         wget https://github.com/powerline/fonts/archive/refs/heads/master.zip
unzip master.zip cd master ./install.sh
In terminal, edit > profile preference > fonts > hack regular.
VIMDIFF
VIMDIFF(compare between two files)
vimdiff fileorg.version file update.version
:quitall: quit out of both files.
vimdiff -o fileorg.version file update.version: for phinail on top and
latter on bottom.
vim -d -o fileorg.version fileupdate.version: open one over the other.
```

c: jump to next change [c: jump to previous change:diffget: To bring

:set noscrollbind: now both the file will not scroll togather.

the line on left to right. :diffupdate : To rescan the vimdiff.

diffput: To bring the line on right to left. do: diff obtain diffget dp: diffput

VIMRC

VIMRC(.vimrc)(R.C: run command) set number : for line number set relative number : for relative number set no compatible : for increase compatibility. Mapping a key press "Map F3 to toggle on and off the line numbers in Normal mode" nmap <F3> : set nu!<CR> >nmap: map key in normal mode. >: press key f3 >: Enter/Return key >imap: map key in insert mode

```
imap <F3> <ESC> :set nu! <CR>i
```

<leader> : "backslash" is leader key by default. _Changeing of leader key_
"Map the leader to comma" let mapleader = ','

set rnu:relative line number. syntax on: TURN ON SYNTAX HIGHLIGHT-ING. set shortmess+=I:Disable vim start up message set relativenumber: show relative number set laststatus=2: Always show status line at the buttom.

set backspace=indent,eol,start: backspace over anything

set hidden: This is to prevent to show not saved while changing windows.

set ignorecase: case insensitive. set smartcase: help in searching

Unbind some useless/annoying default key bindings.

nmap Q <Nop> 'Q' in normal mode enters Ex mode. You almost never want this. set nohlsearc: no highlight search. set hlsearch: highlight search set noincsearch: no incremental highlighting set incsearch: incremental highlighting.

set scrolloff=5 : scroll offset set paste : enabling paste mode set list : shows end of line character.

"Disable audible bell because it's annoying.

```
set noerrbells visualbell t_vb=
```

" Enable mouse support. You should avoid relying on this too much, but it can sometimes be convenient.

set mouse+=a

"DISABLE ARROW KEY "IN NORMAL MODE

nnoremap <Left> :echoe "Use h"<CR>
nnoremap <Right> :echoe "Use 1"<CR>
nnoremap <Up> :echoe "Use 1"<CR>
nnoremap <Down> :echoe "Use j"<CR>

"IN INSERT MODE

```
inoremap <Left> <Esc> :echoe "Use h" <CR>
inoremap <Right> <Esc> :echoe "Use 1" <CR>
inoremap <Up> <Esc> :echoe "Use k" <CR>
inoremap <Down> <Esc> :echoe "Use j" <CR>
"DISABLING ARROW KEYS nnoremap <Up> <Nop>
AUTO CORRECT DICTIONARY
abbr ture true
abbr flase false
abbr emailF thefrugalcomputerguy@yahoo.com
Changing tab char to single charcter
line below will update: "# The tab charcter Unicode u2192 "# the end of line
charcter Unicode u21b2
set listchars=tab:ctrl+v u2192\ , eol:u2192
set expandtab: insert spaces instead of tab. set shiftwidth=4 insert mode
set tabstop=4: normal mode set softtabstop=4: insert mode
Setting for file type
"Turn file type on "Change tab setting for Perl program"
filetype indent on autocmd Filetype perl setlocal noexpandtab tabstop=4 sw=4
set tabpagemax=10: max number of tabs "LINE TO SAVE TEXT FOLDING
autocmd BufWinLeave *.* mkview
autocmd BufWinEnter *.* silent loadview
"this group of text starts the code the netrw plugin
"Map F5 to toggle on and off the line numbers in Normal mode
nmap <F5> gh
"THESE NEXT 2 LINES WILL HIDE THE DOT FILES ON START UP
let ghregex='(^{\s\s\})\zs\.\S'+'
let g:netrw_list_hide=ghregex
"MAP F6 to toggle on and off the Baner
nmap <F6> I
"TURN OF THE BANNER AT THE TOP OF THE SCREEN ON STARTUP
let g:netrw_liststyle= 0 "Default view (directory name / file name)
let g:netrw liststyle= 1 "Show time and size
let g:netrw_liststyle= 2 " Show listing in two columns
```

let g:netrw_liststyle= 3 " Show tree listing
"SET THE SPLIT WINDOWS TO ALWAYS BE EQUAL AND OPEN SPLITS
TO THE RIGHT

let g:netrw_winsize = 0 " set default size to be always equal
let g:netrw_preview = 1 " open splits to the right.

set wildmenu "Shows multiple matches in one line

15