Modes

Text Operations

```
Movement
Text Editing
Text Searching and Replacing
Visual mode (select text)
Enter visual mode
Navigation options
Operations
Special Operations
```

Command Mode

```
File Operations
Open Command
Quit or Save Command
Buffer Operations
Window Operations
Window Split
Navigate Cursor among window
```

Modes

1. Normal

Move Cursor, screen

Change file

Switch to other mode

2. Insert/Replace

Text editing (only the input and delete is valid, cannot change the cursor position)

3. Visual

4. Command

Interact with Vim

Text Operations

H2 Movement

```
1 1. cursor level
 2 h, j, k, l
 3 #left, down, up, right
4
 5 2. word level
 6 w, b, e, ge
7 # w, e is moving to next; b and ge is moving backward
8 #w move to the next start; e move to the next start
9 #ge back to the previous word end, b move to the beginning
10
11 3. line level
12 0, $
   #move to the beginning or end of the current line
   0 vs ^
14
15 # o move to the beginning of the line (include the whitespace); ^
   move to the first none-blank character
16
17
   4. paragraph level/parentheses level
18
   # jump to the previous/next paragraph
19
20
   # jump to other parentheses
21
22
```

```
4. page level
ctrl + u or d
25  # move half page up or down
ctrl + b or f
4  # move whole page backward or forward

5. file level
gg G # move to the bottom or the end of the file
Inumber] gg, G # jump to line
```

H2 Text Editing

```
1 | i I # insert mode
 2 | # i insert at the current position, I insert at ^
 3 a A # append
4 | # a append at the current position, A insert at $
 5 r R # replace
6 # r replace the current character, R enters the replace mode
7
   # [Replace mode] delete results in undo the replacement
8
9 o 0 # insert a new line below or above this line
10
11 u # undo
12 ctrl + r # redo
13
   . # repeat the last change
14
15 d D # deletion
16
   c C # change mode (delete + insert)
17
   x X #delete the current word
18
19
   \ll, \gg, = # indent change
20
   # del or insert or auto indent
21
22
```

```
y # copy the selected text

yy, Y # copy the whole line

-> p, P # paste the line above or below

yy$ or yy0 or yy^ #cursor to the position

p, P # paste after or before the cursor

gp, gP # paste and move the cursor after
```

Deletion Details (c -> change mode: do the deletion and then enter the insert mode)

```
d[movement] or c[movement]
d # the whole line

# the rest of the line

# the beginning till current position
w # to the beginning of the next word
b # to the beginning of the current word
h, j, k, l # left, down, up, right
[n] [movement]
```

H2 Text Searching and Replacing

```
1  1. search below
2  /[text] + n N # search text and then move to the next find or the
   previous find
3  2. search above
4  ?[text]
5
6  1. replace entire occurance in entire file
```

```
7 %s/[old]/[new]/g
8 2. replace with confirmation
9 %s/[old]/[new]/gc
10 [options]
11 y, n, a[this and the remainings], q[quit],
12
   :5,10s/old/new/g - replace in lines 5-10
13
   :.,$s/old/new/g - replace from current line to end
14
   :'<,'>s/old/new/g - replace in visual selection
15
16
17 char seach
18 | f[char] #move to the next char in the current line
19 F[char] #move to the previous char in the current line
20 ; , # repeat the last F or f
```

H2 Visual mode (select text)

H3 Enter visual mode

```
1  v
2  # select @ character level
3  V
4  # select @ line level
5  ctrl + v
6  # select @ block level
```

H3 Navigation options

```
h, j, k, l # move the cursor left, down, up, and right
w, b # move the selction forward/backward on word level
0, $ # line start or line end
gg, G # file start, end
```

H3 Operations

```
d # delete the selected text
y # yank the selected text
c # change the selected text

# indent right
c # indent left
c # change case (First letter uppercase and the left is lowercase)
u # change to lower case
U # change to upper case
```

H2 Special Operations

```
vi[delimiter] # select inside the delimiter
di[delimiter]
ci[delimiter]

va[delimiter] # select include the delimiter
da[delimiter]
ca[delimiter]

[exapmples]
viw - inner word
vaw - around word
```

```
vi" - inner quotes
va" - around quotes
vi' - inner single quotes
va' - around single quotes
vi( - inner parentheses
va( - around parentheses
vi{ - inner curly braces
va{ - around curly braces
vi[ - inner square brackets
va[ - around square brackets
vi - around square brackets
vi - around square brackets
vi - around HTML/XML tag
vat - around HTML/XML tag
```

Command Mode

```
1 :![command]
2 # external command
3
4 :sh
5 # open a shell
6
7 [n][actions/movements]
8 # do the action n times
```

H2 File Operations

H3 Open Command

```
1 :e [filename] -> open multiple buffers at a time
```

H3 Quit or Save Command

```
1 :q or ZQ # quit (only nothing changed)
2 :q! # quit and disgard all changes
3 :wq or ZZ # quit and save all changes
4 :x #same as :wq
5
6 :w # just save and not quit
7 :w [filename] # save as a new file
8 :wq! # force save and quit
```

H2 Buffer Operations

What is a buffer

- It's a temporary holding space for text
- Each file you open creates a new buffer
- You can have multiple buffers open at once

```
1 :ls
2 # list all the buffers
3
4 :b [number]
5 # switch buffer by number
6 :bn or bp
7 # switch to next buffer or previous buffer
8
9 :bd [number] (2,5 or 2-5)
10 # close the buffer with number
11 :bw [number]
12 # save + close the buffer with number
```

H2 Window Operations

H3 Window Split

```
vim -o/-0 [path_1] [path_2]

# outside vim

sp, :vsp [filename]

# split and open file

conly display one window only

close current window
```

H3 Navigate Cursor among window

. . .

1 Ctrl + w + h, j, k, l