

# Vim Quick Reference

Modes, navigation, editing, search, macros, buffers

## Modes

### Mode Switching

<b>i</b>	Insert mode (before cursor)
<b>a</b>	Insert mode (after cursor)
<b>o</b>	Insert line below and enter insert mode
<b>O</b>	Insert line above and enter insert mode
<b>v</b>	Visual mode (character)
<b>V</b>	Visual mode (line)
<b>Ctrl+v</b>	Visual block mode
<b>:</b>	Command-line mode
<b>R</b>	Replace mode
<b>Esc</b>	Return to normal mode

## Navigation

### Character & Line Motion

<b>h j k l</b>	Left, down, up, right
<b>0 / ^</b>	Start of line / first non-blank
<b>\$</b>	End of line
<b>w / W</b>	Next word / WORD
<b>b / B</b>	Previous word / WORD
<b>e / E</b>	End of word / WORD
<b>f{c} / F{c}</b>	Find char forward / backward
<b>t{c} / T{c}</b>	Till char forward / backward

### Screen & File Motion

<b>gg / G</b>	Go to first / last line
<b>:{n}</b>	Go to line n
<b>Ctrl+d / Ctrl+u</b>	Half-page down / up
<b>Ctrl+f / Ctrl+b</b>	Full page down / up
<b>H / M / L</b>	Top / middle / bottom of screen
<b>%</b>	Jump to matching bracket

## Editing

### Insert & Append

<b>I</b>	Insert at beginning of line
<b>A</b>	Append at end of line
<b>ea</b>	Append at end of word
<b>gi</b>	Insert at last insert position

### Delete & Change

<b>x / X</b>	Delete char under / before cursor
<b>dd</b>	Delete line
<b>dw</b>	Delete word
<b>d\$ / D</b>	Delete to end of line
<b>cc / S</b>	Change entire line
<b>cw</b>	Change word
<b>c\$ / C</b>	Change to end of line
<b>ci" / ci(</b>	Change inside quotes / parens

### Copy & Paste

<b>yy</b>	Yank (copy) line
<b>yw</b>	Yank word
<b>y\$</b>	Yank to end of line
<b>p / P</b>	Paste after / before cursor
<b>J</b>	Join line below to current line

### Undo & Repeat

<b>u</b>	Undo
<b>Ctrl+r</b>	Redo
<b>.</b>	Repeat last command

## Search & Replace

### Search

<b>/pattern</b>	Search forward
<b>?pattern</b>	Search backward
<b>n / N</b>	Next / previous match
<b>*</b>	Search word under cursor (forward)
<b>#</b>	Search word under cursor (backward)

### Substitute

<b>:s/old/new/</b>	" replace first on line
<b>:s/old/new/g</b>	" replace all on line
<b>:%s/old/new/g</b>	" replace all in file
<b>:%s/old/new/gc</b>	" replace all, confirm each

## Visual Mode

### Selection

<b>v</b>	Start character selection
<b>V</b>	Start line selection
<b>Ctrl+v</b>	Start block selection
<b>o</b>	Move to other end of selection
<b>gv</b>	Reselect last visual selection

### Actions on Selection

<b>d</b>	Delete selection
<b>y</b>	Yank selection
<b>c</b>	Change selection
<b>&gt;</b>	Indent selection
<b>&lt;</b>	Unindent selection
<b>~</b>	Toggle case
<b>U / u</b>	Uppercase / lowercase selection

## Buffers & Windows

### Buffers

<b>:ls</b>	List open buffers
<b>:bn / :bp</b>	Next / previous buffer
<b>:b{n}</b>	Go to buffer n
<b>:bd</b>	Close current buffer
<b>:e file</b>	Open file in new buffer

### Windows

<b>:sp file</b>	Horizontal split
<b>:vsp file</b>	Vertical split
<b>Ctrl+w h/j/k/l</b>	Navigate to window
<b>Ctrl+w =</b>	Equalize window sizes
<b>Ctrl+w q</b>	Close window

### Tabs

<b>:tabnew file</b>	Open file in new tab
<b>gt / gT</b>	Next / previous tab
<b>:tabclose</b>	Close current tab

## Registers

### Using Registers

<b>"ay</b>	Yank into register a
<b>"ap</b>	Paste from register a
<b>"Ay</b>	Append yank to register a
<b>:reg</b>	Show all registers

## Special Registers

<b>""</b>	Unnamed (last delete/yank)
<b>"0</b>	Last yank
<b>"+</b>	System clipboard
<b>"/"</b>	Last search pattern
<b>."</b>	Last inserted text
<b>"_</b>	Black hole (discard)

## Macros

### Recording & Playing

<b>q{a}</b>	Start recording macro into register a
<b>q</b>	Stop recording
<b>@{a}</b>	Play macro from register a
<b>@@</b>	Replay last macro
<b>5@a</b>	Play macro a 5 times

### Macro Example

```
qa      " start recording into a
I//     " insert // at line start
Esc j   " return to normal, move down
q       " stop recording
10@a    " comment next 10 lines
```

## Settings

### Common Options

```
:set number          " show line numbers
:set relativenumber  " relative line numbers
:set tabstop=4       " tab width
:set expandtab        " spaces instead of tabs
:set ignorecase      " case-insensitive search
```

### Display & Behavior

```
:set wrap / nowrap   " toggle line wrapping
:set hlsearch        " highlight search matches
:set incsearch       " incremental search
:set cursorline      " highlight current line
:syntax on           " enable syntax highlighting
```

## File Operations

### Save & Quit

<b>:w</b>	Save
<b>:w file</b>	Save as file
<b>:q</b>	Quit (fails if unsaved)
<b>:q!</b>	Quit without saving
<b>:wq / :x / ZZ</b>	Save and quit
<b>:wa</b>	Save all buffers
<b>:qa</b>	Quit all buffers

### File Info & External

<b>Ctrl+g</b>	Show file info
<b>!cmd</b>	Run shell command
<b>:r !cmd</b>	Insert command output
<b>:r file</b>	Insert file contents

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## Text Objects

### Inner & Around Objects

<b>iw</b> / <b>aw</b>	Inner / around word
<b>is</b> / <b>as</b>	Inner / around sentence
<b>ip</b> / <b>ap</b>	Inner / around paragraph
<b>i"</b> / <b>a"</b>	Inner / around double quotes
<b>i'</b> / <b>a'</b>	Inner / around single quotes
<b>i(</b> / <b>a(</b>	Inner / around parentheses
<b>i{</b> / <b>a{</b>	Inner / around braces
<b>it</b> / <b>at</b>	Inner / around HTML tag

### Common Combos

<b>ciw</b>	" change inner word
<b>di"</b>	" delete inside quotes
<b>ya{</b>	" yank around braces
<b>vip</b>	" select inner paragraph

## Marks & Jumps

### Marks

<b>m{a}</b>	Set mark a at cursor position
<b>'a</b>	Jump to line of mark a
<b>`a</b>	Jump to exact position of mark a
<b>:marks</b>	List all marks

### Jump List

<b>Ctrl+o</b>	Jump to previous position
<b>Ctrl+i</b>	Jump to next position
<b>:jumps</b>	Show jump list
<b>' '</b>	Jump to last jump position