

# VIM QUICK REFERENCE

Modes, navigation, editing, search, macros, buffers

## Modes

### Mode Switching

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

## Navigation

### Character & Line Motion

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

### Screen & File Motion

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

## Editing

### Insert & Append

**I** Insert at beginning of line  
**A** Append at end of line  
**ea** Append at end of word  
**gi** Insert at last insert position

### Delete & Change

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

### Copy & Paste

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

### Undo & Repeat

**u** Undo  
**Ctrl+r** Redo  
**.** Repeat last command

## Search & Replace

### Search

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

### Substitute

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

## Visual Mode

### Selection

**v** Start character selection  
**V** Start line selection  
**Ctrl+v** Start block selection  
**o** Move to other end of selection  
**gv** Reselect last visual selection

### Actions on Selection

**d** Delete selection  
**y** Yank selection  
**c** Change selection  
**>** Indent selection  
**<** Unindent selection  
**~** Toggle case  
**U / u** Uppercase / lowercase selection

## Buffers & Windows

### Buffers

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

### Windows

**:sp file** Horizontal split

**:vsp file** Vertical split  
**Ctrl+w h/j/k/l** Navigate to window  
**Ctrl+w =** Equalize window sizes  
**Ctrl+w q** Close window

## Tabs

**:tabnew file** Open file in new tab  
**gt / gT** Next / previous tab  
**:tabclose** Close current tab

## Registers

### Using Registers

**"ay** Yank into register a  
**"ap** Paste from register a  
**"Ay** Append yank to register a  
**:reg** Show all registers

### Special Registers

**""** Unnamed (last delete/yank)  
**"0** Last yank  
**"\*** System clipboard  
**"/"** Last search pattern  
**"\_** Last inserted text  
**"** Black hole (discard)

## Macros

### Recording & Playing

**q{a}** Start recording macro into register a  
**q** Stop recording  
**@{a}** Play macro from register a  
**@@** Repeat last macro  
**5@a** 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

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

### File Info & External

**Ctrl+g** Show file info  
**:!cmd** Run shell command  
**:x !cmd** Insert command output  
**:x file** Insert file contents

## Text Objects

### Inner & Around Objects

**iw / aw** Inner / around word  
**is / as** Inner / around sentence  
**ip / ap** Inner / around paragraph  
**i" / a"** Inner / around double quotes  
**i' / a'** Inner / around single quotes  
**i( / a(** Inner / around parentheses  
**i[ / a[** Inner / around brackets  
**i{ / a{** Inner / around braces  
**i< / a<** Inner / around HTML tag

### Common Combos

```
ciw " change inner word
di" " delete inside quotes
ya{ " yank around braces
vip " select inner paragraph
```

## Marks & Jumps

### Marks

**m{a}** Set mark a at cursor position  
**{a}** Jump to line of mark a  
**{a}** Jump to exact position of mark a  
**:marks** List all marks

### Jump List

**Ctrl+o** Jump to previous position  
**Ctrl+i** Jump to next position  
**:jumps** Show jump list  
**l** Jump to last jump position