

Vim Commands

Complete command reference — Learning Vim course

N Normal mode **I** Insert mode **C** Command mode **V** Visual mode **S** Shell / terminal **RC** .vimrc setting
ANY Any mode

Learning Vim

Appendix B — Vim Commands

A complete reference of every command introduced across all eight chapters of this course, grouped by topic. Use this alongside the lessons as a quick lookup or print it as a desk reference.

N Normal mode	I Insert mode	C Command mode	V Visual mode	S Shell / terminal	RC .vimrc setting	ANY Any mode
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Opening & Quitting

OPENING FILES

<code>vim <file></code>	Open or create a file	S	<code>vim +N <file></code>	Open file at line N	S
<code>vim +/pattern <file></code>	Open and jump to first match	S	<code>vim +"cmd" <file></code>	Run command after opening	S
<code>vim -R <file></code>	Open in read-only mode	S	<code>vim -u NONE <file></code>	Open without loading vimrc	S
<code>vim --version</code>	Show Vim version	S	<code>:e <file></code>	Open/edit a file (Tab completes)	C
<code>:e!</code>	Reload file from disk, discard changes	C	<code>:e .</code>	Open directory browser (netrw)	C

SAVING

<code>:w</code>	Write (save) the file	C	<code>:w <file></code>	Save to a new filename (Save As)	C
<code>:saveas <file></code>	Save to new filename and switch to it	C			

QUITTING

<code>:q</code>	Quit (fails if unsaved changes)	C	<code>:q!</code>	Force quit, discard changes	C
<code>:wq</code>	Write and quit	C	<code>:x</code>	Write (only if changed) and quit	C
<code>ZZ</code>	Write (if changed) and quit	N	<code>ZQ</code>	Force quit without saving	N
<code>:qa</code>	Quit all open buffers	C	<code>:qa!</code>	Force quit all buffers, discard all changes	C

Modes

<code>i</code>	Enter Insert mode at cursor	N	<code>Esc</code>	Return to Normal mode	ANY
<code>Ctrl+C</code>	Alternative to Esc — return to Normal	I	<code>v</code>	Enter character-wise Visual mode	N
<code>V</code>	Enter line-wise Visual mode	N	<code>Ctrl+V</code>	Enter block-wise (column) Visual mode	N

Ctrl+G	Show filename, line count, cursor position	N
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Navigation — Moving the Cursor

BASIC MOVEMENT

h / j / k / l	Left / down / up / right	N	{n}h/j/k/l	Move n times	N
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WORD MOVEMENT

w / W	Forward to start of next word / WORD	N	e / E	Forward to end of word / WORD	N
b / B	Backward to start of word / WORD	N	ge	Backward to end of previous word	N

LINE MOVEMENT

0	Start of line (column 1)	N	^	First non-whitespace character	N
\$	End of line	N	g_	Last non-whitespace character	N
f{char} / F{char}	Jump to char on line (forward/back)	N	t{char} / T{char}	Jump before/after char on line	N
; / ,	Repeat last f/t in same / opposite direction	N			

SENTENCE & PARAGRAPH

) / (	Next / previous sentence	N	} / {	Next / previous paragraph	N
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FILE-LEVEL JUMPS

gg	Jump to first line	N	G	Jump to last line	N
{n}G / :{n}	Jump to line n	N	{n}%	Jump to n% through the file	N

SCROLLING

Ctrl+F / Ctrl+B	Full page forward / backward	N	Ctrl+D / Ctrl+U	Half page down / up	N
Ctrl+E / Ctrl+Y	Scroll screen down / up one line	N	zz / zt / zb	Centre / top / bottom current line on screen	N

Search

/ {pattern}	Search forward for pattern	N	? {pattern}	Search backward for pattern	N
n / N	Next / previous search match	N	* / #	Search exact word under cursor (fwd/back)	N

<code>g* / g#</code>	Search partial word under cursor (fwd/back)	<code>N</code>	<code>:noh</code>	Clear search highlights	<code>C</code>
<code>:set hlsearch</code>	Highlight all search matches	<code>C</code>	<code>:set incsearch</code>	Incremental search as you type	<code>C</code>
<code>:set ignorecase</code>	Case-insensitive search	<code>C</code>	<code>:set smartcase</code>	Case-sensitive when pattern has uppercase	<code>C</code>

Editing Text

DELETING

<code>d{motion}</code>	Delete text covered by motion	<code>N</code>	<code>dd / {n}dd</code>	Delete current line / n lines	<code>N</code>
<code>D</code>	Delete from cursor to end of line	<code>N</code>	<code>x / X</code>	Delete character under / before cursor	<code>N</code>
<code>xp</code>	Swap current character with next	<code>N</code>			

CHANGING

<code>c{motion}</code>	Change text covered by motion	<code>N</code>	<code>cc / C</code>	Change line / from cursor to end of line	<code>N</code>
<code>s / S</code>	Substitute character / line + Insert mode	<code>N</code>	<code>ciw / caw</code>	Change inner / around word	<code>N</code>
<code>ci" / ca"</code>	Change inside / around double quotes	<code>N</code>	<code>ci(/ ca(</code>	Change inside / around parentheses	<code>N</code>

UNDO & REDO

<code>u</code>	Undo last change	<code>N</code>	<code>U</code>	Undo all changes to current line	<code>N</code>
<code>Ctrl+R</code>	Redo	<code>N</code>			

YANK (COPY) & PUT (PASTE)

<code>y{motion}</code>	Yank text covered by motion	<code>N</code>	<code>yy / {n}yy</code>	Yank current line / n lines	<code>N</code>
<code>p / P</code>	Put after / before cursor	<code>N</code>	<code>gp / gP</code>	Put and move cursor to end of paste	<code>N</code>

INSERT MODE EDITING

<code>Ctrl+W</code>	Delete word before cursor	<code>I</code>	<code>Ctrl+U</code>	Delete from cursor to start of line	<code>I</code>
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Registers

<code>"x{op}</code>	Use named register x (e.g. "ayy, "ap)	<code>N</code>	<code>"X{op}</code>	Append to named register x (uppercase)	<code>N</code>
<code>"0p</code>	Paste from yank register (safe after deletes)	<code>N</code>	<code>"+y / "+p</code>	Yank to / paste from system clipboard	<code>N</code>

<code>"_d{motion}</code>	Delete to black hole register (truly removes)	<code>:registers</code>	Show contents of all registers
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Substitution & Spell Checking

SUBSTITUTION			
<code>:s/old/new</code>	Replace first occurrence on current line	<code>:s/old/new/g</code>	Replace all on current line
<code>:s/old/new/gc</code>	Replace all on line with confirmation	<code>:%s/old/new/g</code>	Replace all in entire file
<code>:5,15s/old/new/g</code>	Replace in line range	<code>:'<,'>s/old/new/g</code>	Replace in Visual selection
SPELL CHECKING			
<code>:set spell</code>	Enable spell checking	<code>:set spelllang=en_gb</code>	Set spell check language
<code>:set nospell</code>	Disable spell checking	<code>]s / [s</code>	Jump to next / previous misspelled word
<code>z=</code>	Show spelling suggestions	<code>zg / zw</code>	Add to personal dictionary / bad-word list

Marks & the Jump List

SETTING & JUMPING TO MARKS			
<code>m{a-z}</code>	Set a local mark (current buffer)	<code>m{A-Z}</code>	Set a global mark (across files, persists)
<code>'{mark}</code>	Jump to start of line containing mark	<code>`{mark}</code>	Jump to exact position (line + column) of mark
<code>'' / ``</code>	Toggle back to line / exact position before last jump		
AUTOMATIC MARKS			
<code>`. / '.`</code>	Exact position / line of last change	<code>`[ and `]</code>	Start and end of last changed or yanked text
<code>`< and `></code>	Start and end of last Visual selection	<code>^`</code>	Position where Insert mode was last exited
MANAGING MARKS			
<code>:marks</code>	List all current marks	<code>:delmarks {letter}</code>	Delete a named mark
<code>:delmarks!</code>	Delete all lowercase marks in buffer		
MARKS AS OPERATOR TARGETS			
<code>y`{mark}</code>	Yank from cursor to exact position of mark	<code>d`{mark}</code>	Delete from cursor to line of mark

<code>c`{mark}</code>	Change from cursor to exact position of mark	N		
JUMP LIST				
<code>Ctrl+O</code>	Go to older (previous) position in jump list	N	<code>Ctrl+I</code>	Go to newer (next) position in jump list
<code>:jumps</code>	Display the full jump history	C		

Buffers, Windows & Tabs

BUFFERS				
<code>:ls</code>	List all open buffers	C	<code>:bn / :bp</code>	Next / previous buffer
<code>:bf / :bl</code>	First / last buffer	C	<code>:b {n} / :b {name}</code>	Switch to buffer by number / name
<code>Ctrl+^</code>	Toggle between current and alternate buffer	N	<code>:bd / :bd!</code>	Delete / force-delete current buffer
<code>:bw</code>	Wipe buffer (remove from list entirely)	C		
SPLITS				
<code>:split / :sp</code>	Horizontal split	C	<code>:vsplit / :vsp</code>	Vertical split
<code>Ctrl+W s / v</code>	Horizontal / vertical split (shortcut)	N	<code>Ctrl+W h/j/k/l</code>	Move to window left/down/up/right
<code>Ctrl+W w / W</code>	Cycle to next / previous window	N	<code>Ctrl+W =</code>	Equalise all window sizes
<code>Ctrl+W _ / </code>	Maximise window height / width	N	<code>Ctrl+W c</code>	Close current window
<code>Ctrl+W o / :only</code>	Close all other windows	N	<code>Ctrl+W H/J/K/L</code>	Move window to edge of screen
<code>:resize {n}</code>	Set window height to n lines	C	<code>:vertical resize {n}</code>	Set window width to n columns
TABS				
<code>:tabnew</code>	Open new tab	C	<code>:tabclose</code>	Close current tab
<code>gt / gT</code>	Next / previous tab	N	<code>{n}gt</code>	Go to tab n
<code>:tabs</code>	List all tabs	C		
READING FILES INTO BUFFER				
<code>:r {file}</code>	Insert file contents below current line	C	<code>:0r {file}</code>	Insert file at top of buffer
<code>:r! {cmd}</code>	Insert shell command output into buffer	C		

Diff Mode

<code>vim -d file1 file2</code>	Open two files in diff mode	S	<code>vimdiff file1 file2</code>	Alias for vim -d	S
<code>:diffsplit {file}</code>	Open file in diff mode (horizontal split)	C	<code>:vert diffsplit {file}</code>	Open file in diff mode (vertical split)	C
<code>]c / [c</code>	Jump to next / previous difference	N	<code>do</code>	Diff Obtain — pull change from other file	N
<code>dp</code>	Diff Put — push change to other file	N	<code>:diffupdate</code>	Recalculate and refresh diff highlights	C
<code>:set scrollbind</code>	Link scrolling of multiple windows	C	<code>set diffopt+=vertical</code>	Always use vertical diff layout	RC

File Navigation

<code>gf</code>	Open file whose name is under the cursor	N	<code>gF</code>	Open file under cursor at the line number shown	N
<code>Ctrl+W f</code>	Open file under cursor in a new split	N	<code>Ctrl+W gf</code>	Open file under cursor in a new tab	N
<code>vim {file}.zip</code>	Browse & edit files inside a ZIP archive	S	<code>vim {file}.tar.gz</code>	Browse & edit files inside a TAR archive	S
<code>:set path+=src/**</code>	Add directories to search path for gf	C			

External Commands & Shell Filters

<code>:! {cmd}</code>	Run shell command; show output in overlay	C	<code>:r ! {cmd}</code>	Insert shell output below cursor	C
<code>:0r ! {cmd}</code>	Insert shell output at top of file	C	<code>:%! {cmd}</code>	Filter entire buffer through external command	C
<code>:{range}! {cmd}</code>	Filter a line range through external command	C	<code>'<,'>! {cmd}</code>	Filter Visual selection through external command	V
<code>:%!jq .</code>	Format JSON with jq	C	<code>:%!sort</code>	Sort all lines alphabetically	C
<code>:%!xxd</code>	Convert buffer to hex dump	C	<code>:%!xxd -r</code>	Convert hex dump back to binary	C
<code>% (in :! commands)</code>	Expands to the current filename	C			

Configuration (.vimrc)

RELOADING

<code>:source ~/.vimrc</code>	Reload vimrc without restarting Vim	C	<code>:so %</code>	Source the current file	C
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QUERYING SETTINGS

<code>:set</code>	Show all non-default settings active	C	<code>:set all</code>	Show every setting with its current value	C
<code>:set {option}?</code>	Query the current value of an option	C	<code>:set no{option}</code>	Disable a boolean option	C
<code>:set {option}!</code>	Toggle a boolean option	C			

COMMON SETTINGS

<code>set nocompatible</code>	Disable Vi compatibility (always first)	RC	<code>set number / nonu</code>	Show / hide line numbers	RC
<code>set relativenumber</code>	Relative line numbers	RC	<code>set cursorline</code>	Highlight the current line	RC
<code>set hidden</code>	Allow switching buffers without saving	RC	<code>set wildmenu</code>	Enhanced Tab-completion menu	RC
<code>set tabstop=4</code>	Tab display width	RC	<code>set shiftwidth=4</code>	Indent width for >> and <<	RC
<code>set expandtab</code>	Insert spaces instead of tabs	RC	<code>set clipboard=unnamedplus</code>	Use system clipboard by default	RC
<code>set history=1000</code>	Increase command history size	RC	<code>set undolevels=1000</code>	Increase undo history depth	RC
<code>set backspace=indent,eol,start</code>	Sensible Backspace in Insert mode	RC			

COLOUR SCHEMES

<code>:syntax on / off</code>	Enable / disable syntax highlighting	C	<code>:colorscheme {name}</code>	Switch to a colour scheme	C
<code>:colorscheme <Tab></code>	Browse all available colour schemes	C			

KEY MAPPINGS

<code>nnoremap {key} {action}</code>	Map key in Normal mode (non-recursive)	RC	<code>inoremap {key} {action}</code>	Map key in Insert mode	RC
<code>vnoremap {key} {action}</code>	Map key in Visual mode	RC	<code>let mapleader = ","</code>	Set the leader key	RC

ABBREVIATIONS

<code>:ab {trigger} {expansion}</code>	Define an abbreviation interactively	C	<code>iabbrev {trigger} {expansion}</code>	Define an abbreviation in vimrc	RC
<code>Ctrl+V (in Insert)</code>	Prevent abbreviation from triggering	I			

CUSTOM COMMANDS & HELP

:command! {Name} {action}	Define a custom Command-mode command	C	:help	Open the built-in help index	C
:help {topic}	Open help for a specific topic	C	:help option-summary	Browse all available settings	C
Ctrl+] (in help)	Follow a help hyperlink	N			