Vi Editor Guide- IMPORTANT

Here's a beginner-friendly guide to using the `vi` editor, with simple explanations to help you get comfortable from the basics to more advanced techniques.

Getting Started with vi

The `vi` editor has two modes:

1. Command Mode: For moving around, deleting, copying, pasting, etc.
2. Insert Mode: For typing and editing text.

To switch to Insert Mode, press `i` (to insert at the cursor), `I` (to insert at the start of a line), `a` (to add after the cursor), or `A` (to add at the end of a line). Press `Esc` to return to Command Mode.

Basic Commands

Opening and Closing Files

- Open a file: `vi filename`
- Save and close: `:wq`
- Save without closing: `:w`
- Close without saving: `:q!`

Switching Between Modes

- To start editing: `i`, `I`, `a`, or `A` (whichever suits your need)
- To stop editing: Press `Esc` to return to Command Mode

Moving Around

- Left: `h`
- Down: `j`
- Up: `k`
- Right: `l`
- To the start of a line: `0`
- To the end of a line: `$`
- To the next word: `w`
- To the previous word: `b`
- Go to a specific line: `:number` (e.g., `:5` to go to line 5)

Editing Text

- Delete a character: `x`

- Delete the current line: `dd`
- Delete to the end of a line: `D`
- Copy (yank) a line: `yy`
- Paste: `p` (after cursor), `P` (before cursor)
- Undo last change: `u`
- Redo: `Ctrl + r`

Finding and Replacing Text

- Find a word: `/word` (forwards), `?word` (backwards)
- Next occurrence: `n` (forwards), `N` (backwards)
- Replace a word in line: `:s/old/new` (replaces first in the line)
- Replace all in line: `:s/old/new/g`
- Replace all in file: `:%s/old/new/g`

More Advanced Editing

Working with Multiple Files

- Open multiple files: `vi file1 file2`
- Switch to the next file: `:n`
- Switch to the previous file: `:N`

Selecting Text in Visual Mode

- Visual Mode: `v` (for characters), `V` (for lines), `Ctrl+v` (for blocks)
- Delete selected text: `d`
- Copy selected text: `y`

Using Multiple Windows

- Open new horizontal window: `:split filename`
- Open new vertical window: `:vsplit filename`
- Switch between windows: `Ctrl+w` then `w`

Handy Shortcuts

- Indent right: `>>`
- Indent left: `<<`
- Repeat last action: `.`
- Insert the filename: `:r %`
- Show line numbers: `:set number`
- Hide line numbers: `:set nonumber`

Customize Your Session

- Turn on line numbers: `:set nu`
- Turn off line numbers: `:set nonu`
- Enable auto-indent: `:set ai`

- Disable auto-indent: `:set noai`
- Enable syntax highlighting: `:syntax on`
- Disable syntax highlighting: `:syntax off`

Practice Tips

1. Start with Basic Navigation and Editing: Get comfortable moving around and making simple edits.
2. Try Visual Mode: Great for selecting and editing blocks of text.
3. Learn to Repeat: Use the `.` command to repeat your last action—it's a time-saver.

Here's a structured guide to using the `vi` editor in a clear table format.

Section	Command	Description
Command Mode		For moving around, deleting, copying, pasting, etc.
Insert Mode	i, I, a, A	For typing and editing text
Return to Command Mode	Esc	Exit Insert Mode
Opening and Closing Files		
Open a file	vi filename	Opens the specified file
Save and close		Saves changes and closes
Save without closing		Saves changes without closing
Close without saving	!	Closes without saving changes
Moving Around		
Left	h	Moves cursor left
Down	j	Moves cursor down
Up	k	Moves cursor up
Right	l	Moves cursor right
Start of line	0	Moves to the start of the current line
End of line	$	Moves to the end of the current line
Next word	w	Moves to the start of the next word

Section	Command	Description
Previous word	b	Moves to the start of the previous word
Go to specific line		Jumps to specified line number (e.g., :5)
Editing Text		
Delete character	x	Deletes the character at cursor
Delete current line	dd	Deletes the current line
Delete to end of line	D	Deletes from cursor to end of line
Copy (yank) line	yy	Copies the current line
Paste	p (after), P (before)	Pastes copied text after or before cursor
Undo last change	u	Undoes last change
Redo	Ctrl + r	Redoes undone change
Finding and Replacing Text		
Find word	/word (forward), ?word (backward)	Finds word in specified direction
Next occurrence	n (forward), N (backward)	Moves to next occurrence of the word
Replace word in line	/old/new	Replaces first occurrence in current line
Replace all in line	/old/new/g	Replaces all occurrences in current line
Replace all in file	:%s/old/new/g	Replaces all occurrences in the file
Working with Multiple Files		
Open multiple files	vi file1 file2	Opens multiple files
Switch to next file		Moves to the next open file
Switch to previous file		Moves to the previous open file
Selecting Text in Visual Mode		
Visual Mode	v (character), V (line), Ctrl+v (block)	Enters visual mode for selecting text
Delete selected text	d	Deletes selected text
Copy selected text	y	Copies selected text
Using Multiple Windows		
New horizontal window	filename	Splits window horizontally

Section	Command	Description
New vertical window	filename	Splits window vertically
Switch between windows	Ctrl+w then w	Moves between open windows
Handy Shortcuts		
Indent right	>>	Indents the current line to the right
Indent left	<<	Indents the current line to the left
Repeat last action	.	Repeats the last command
Insert filename	%	Inserts the current filename
Show line numbers	number	Displays line numbers
Hide line numbers	nonumber	Hides line numbers
Customize Your Session		
Turn on line numbers	nu	Enables line numbering
Turn off line numbers	nonu	Disables line numbering
Enable auto-indent	ai	Enables automatic indentation
Disable auto-indent	noai	Disables automatic indentation
Enable syntax highlighting	on	Turns on syntax highlighting
Disable syntax highlighting	off	Turns off syntax highlighting

This should cover most of what you'll need to work effectively with `vi`.