

# NeoVIM Basics

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- To start Neovim from the Shell, type `nvim FILENAME`
- Pressing `<esc>` places you in "normal mode"
- Check VIM's health `:checkhealth`
- To exit Vim, discarding changes `:q!`
- To exit Vim, saving changes `:wq!`
- Tutorial `:Tutor`
- To undo changes, press `<esc>` then `u`
- For help `:help`

## Navigation

- `h` Scroll Left
- `j` Scroll Down
- `k` Scroll Up
- `l` Scroll Right

## Editing

- To delete the character under the cursor `x`
- To insert text, press `i`. To exit this mode, press `<esc>`
- To append text, press `a`. To exit this mode, press `<esc>`

## Deletion Commands

- Type `dw` to make a word delete.
- Type `d$` to delete from the cursor to the end of the line.
- Type `de` to delete to the end of the current word.

## Counting Motions

- The format for a change command is:
  - `operator [number] motion`
- Typing a number before a motion repeats it that many times.
- Type `2w` to move the cursor 2 words forward.
- Type `3e` to move the cursor to the end of the 3rd word forward.
- Type `0` to move to the start of a line.

## Deleting Using Counts

- Typing a number with an operator repeats it that many times.
- Type `d2w` to delete the next 2 words, or `d3w` for 3.
- Type `dd` to delete a whole line, or `2dd` to delete 2 lines.

## The Undo Command

- Press `x` to delete the character where the cursor is at.
- Press `u` to undo the last command. Or `U` to undo the whole line.
- Press `<CTRL>+r` to redo an undo.

## The Put Command

- Type `p` to put previously deleted text after the cursor.
- You can also put text before the cursor with `P`.

## The Replace Command

- Type `rx` to replace the character where the cursor is located with x. Replace x with the appropriate character.

## The Change Operator

- Typing `ce` will replace the rest of the word from the cursor location.
- Notice that `ce` deletes the rest of the word and places you in insert mode.
- The change operator is a change command like delete.
  - `c2w`
  - `c5$`
  - `c3e`

## Cursor Location and File Status

- Press `<CTRL>+g` to see your location in a file and the file status.
- Press `G` to move to the end of a file.
- Press `gg` to move to the beginning of a file.
- Enter the line number followed by G to go to that location, ex: `145G` to go to line 145.

## The Search Command

- Type `/` followed by a phrase to search for said phrase.
- Type `?` followed by a phrase to search in the reverse direction for said phrase.
- To search for the same phrase again, simply type `n`. To search in the reverse direction, type `N`.

## Matching Parentheses Search

- Place the cursor over (, {, or [ and type % to find the matching one.
- This is very useful for debugging unmatched parenthesis and brackets.

## The Substitution Command

- Type :s/old/new/g to search for a word and replace it. g means global, and will replace every instance of that word on the line.
- To change every occurrence of a character string between two lines, type :#:s/old/new/g where :# are the numbers of the range of lines. :1,3:s/old/new/g
- Type :%s/old/new/g to replace every occurrence in the whole file.
- Type :%s/old/new/gc to find every occurrence in a whole file, and prompt whether to substitute each occurrence.

## Executing an External Command

- Type :! followed by the command (including arguments) and press <enter>.
- All : commands are executed when you press <enter>.

## Writing to a File

- To write to a file, type :w filename

## Visual Selection

- With cursor at the beginning of a line, press v and scroll to the bottom of where you wish to select. Press :. At the bottom of the screen, : '<', '>' will appear. To save to a file, type w filename directly after.
- Pressing v starts the visual selection. Pressing the operator determines the action. d will delete everything.

## Retrieving and Merging Files

- To retrieve the contents of a file, press :r filename.
- You can also retrieve the output of an external command: :r !ls -a.

## The Open Command

- Type a lowercase o to open a line in insert mode below the cursor. Type an uppercase O to open a line in insert mode above the cursor.

## The Append Command

- Type a to append text after the cursor. A appends at the end of the line.

## Replace Mode

- Replace mode is like Insert Mode, but every typed character replaces a character.
- Type `R`, enter the replacement text and press `<esc>` when done.

## Copy and Paste Text

- Start in visual mode (`m`), select all of the text you wish to copy. Press `y`. Move the cursor to where you wish to put the text. Press `p` to put the text after the cursor. Press `P` to put the text before the cursor.
- You can use `y` as an operator. `yw` yanks one word.

## Set Option

- Set options for search and substitute commands.
- To ignore case, `:set ic`.
- To set the hlsearch and incsearch options, type `:set hls is`.
- To disable ignoring case, type `:set noic`.
- To invert the value of a setting, prepend it with "inv", `:set invic`.
- To remove the highlighting of matches, type `:nohlsearch`.
- If you want to ignore case for just one search result, consider ending with `\c`, like so: `/ignore\c`.

## Getting Help

- Press the `<F1>` key or type `:help` for any command.