

# Vim Editor in Linux

---

## 1 Introduction to Text Editors in Linux

In Linux, to create or modify files, we use **text editors**.

Common editors available:

- **vi** – Basic editor (older version)
- **vim** – Vi Improved (advanced version of vi)
- **nano** – Beginner-friendly editor

👉 Just like we use **Microsoft Word in Windows**, in Linux we use editors like **vi**, **vim**, **nano** to edit files.

Among these, **vim is the most powerful and widely used editor** (especially for system administrators and DevOps engineers).

---

## 2 What is Vim?

**Vim (Vi Improved)** is a powerful command-line text editor used to:

- Create new files
- Edit existing files
- Write shell scripts
- Modify configuration files
- Edit application code

- View and analyze logs
- 

## 3 Opening Files in Vim

### ♦ Open Existing File

```
vim file.txt
```

If a file exists → It opens the file.

---

### ♦ Create New File

```
vim newfile.txt
```

If a file does not exist → Vim creates a new file when saved.

---

## 4 Modes in Vim (Very Important)

Vim works in different modes. Understanding modes is very important.

### ♦ 1. Normal Mode (Default Mode)

- When you open vim, it starts in Normal Mode.
- Used for navigation and commands.
- You cannot directly type text here.

To return to Normal Mode anytime:

```
Press ESC
```

---

## ◆ 2. Insert Mode

- Used for typing and editing text.
- Entered from Normal Mode.

### Enter Insert Mode Using:

Key	Action
i	Insert at cursor position
I	Insert at beginning of line
a	Insert after cursor
A	Append at end of line
o	Open new line below
O	Open new line above

To exit Insert Mode → Press **ESC**

---

## ◆ 3. Command Mode (Last Line Mode)

- Used for saving, quitting, searching, and settings.
- Start command with **:**

Example:

```
:w  
:q  
:wq
```

---

## **5 Basic Editing Operations**

---

### ◆ **Character Level Operations**

Command	Meaning
x	Delete single character
r	Replace single character
u	Undo last action
Ctrl + r	Redo

---

### ◆ **Line Level Operations**

Command	Meaning
dd	Delete (cut) one line
2dd	Delete 2 lines
ndd	Delete n lines
yy	Copy (yank) one line
nyy	Copy n lines
p	Paste below cursor
P	Paste above cursor

Example:

5dd → Deletes 5 lines

3yy → Copies 3 lines

---

## **6** Navigation in Vim

---

### ◆ Basic Cursor Movement

Key	Movement
-----	----------

h	Left
---	------

l	Right
---	-------

k	Up
---	----

j	Down
---	------

---

### ◆ Word Navigation

Command	Meaning
---------	---------

w	Move to next word
---	-------------------

b	Move to previous word
---	-----------------------

e	Move to end of word
---	---------------------

---

### ◆ File Navigation

Command	Meaning
---------	---------

gg	Go to beginning of file
----	-------------------------

G	Go to end of file
---	-------------------

10G	Go to line number 10
-----	----------------------

---

## **7** Searching in Vim

To search for a word:

/word

Press:

n

→ Next occurrence

Press:

N

→ Previous occurrence

---

## 8 Delete & Copy Blocks

Command	Meaning
d + }	Delete paragraph downward
d + {	Delete paragraph upward
y + }	Copy paragraph downward
y + {	Copy paragraph upward

---

## 9 Line Numbers

Show line numbers:

:se nu

Hide line numbers:

:se nonu

---

## Save and Exit Commands

Always press **ESC** first.

Command	Meaning
<code>:w</code>	Save file
<code>:q</code>	Quit
<code>:wq</code>	Save and quit
<code>:q!</code>	Quit without saving
<code>:w filename</code>	Save with new name

---

## Replace Text in Vim

**Replace first occurrence in line:**

```
:s/old/new
```

**Replace all occurrences in file:**

```
:%s/old/new/g
```

**Replace with confirmation:**

```
:%s/old/new/gc
```

---

## Visual Mode (Selection Mode)

Used to select text visually.

Command	Meaning
v	Select character-wise
V	Select line-wise
Ctrl + v	Block selection

After selecting:

- Press **d** → Delete
  - Press **y** → Copy
- 

## 13 Vim Tutor (Practice Tool)

Linux provides a built-in learning tool:

```
vimtutor
```

It opens interactive guided practice.

To exit:

```
:q!
```

---

## 14 Common Mistakes by Beginners

- ✗ Trying to type without entering Insert Mode
- ✗ Forgetting to press ESC before saving
- ✗ Confusing :q and :q!
- ✗ Panic when stuck (just press ESC)



