

Excercise VI editor

Exercise on using the `vi` editor to help you practice common commands and features. This exercise covers essential skills for navigating, editing, and saving files in `vi`.

VI Editor Exercise

Objective:

Familiarize yourself with the `vi` editor, learn basic navigation, editing, and file operations. You'll create and modify a file using various `vi` commands.

Instructions:

1. **Create a new file named** `vi_exercise.txt`:

```
1 vi vi_exercise.txt
```

2. **Insert Text into the File:**

- Press `i` to enter **insert mode**.
- Type the following lines into the file:

```
1 The vi editor is a text editor that is widely used in UNIX systems.
2 It offers two main modes: insert mode and command mode.
3 To enter insert mode, press 'i'. To return to command mode, press 'Esc'.
4 You can save the file with ':w' and quit with ':q'.
5 Let's learn some basic navigation and editing in vi!
```

3. **Save the File:**

- Press `Esc` to exit **insert mode**.
- Save the file without quitting by typing `:w` and pressing **Enter**.

4. **Basic Navigation:**

- Use the arrow keys or these keys to move the cursor:
 - `h` (left), `j` (down), `k` (up), `l` (right).
- Move the cursor to the word **UNIX**.
 - Use `w` to move forward by word.
 - Use `b` to move backward by word.
- Move to the beginning of the file by pressing `gg`.
- Move to the end of the file by pressing `G`.

5. **Delete Text:**

- Move to the line that contains **"command mode"**.
- Delete the entire line using the command `dd`.
- Undo the deletion by typing `u`.

6. **Replace Text:**

- Move to the word **"vi"** in the first line.
- Use `r` to replace **"v"** with **"V"** (make it "Vi").

7. **Delete a Word:**

- Move to the word **"insert"** in the third line.
- Delete the word using the command `dw`.

8. Search for Text:

- Search for the word **"mode"** in the file by typing `/mode` and pressing **Enter**.
- Use `n` to move to the next occurrence of the search result.

9. Copy and Paste a Line:

- Copy the line **"You can save the file with ':w'..."** by typing `yy`.
- Move to the end of the file by pressing `G`.
- Paste the line after the last line by typing `p`.

10. Edit a Line:

- Move to the line **"Let's learn some basic navigation..."**.
- Use `A` to append text at the end of the line (in **insert mode**).
- Add this text: **" with practical examples."**

11. Replace a Word:

- Replace the word **"basic"** with **"advanced"** using the command `cw` (change word).
- After typing `cw`, type **"advanced"** and press `Esc`.

12. Cut and Move a Block of Text:

- Move to the line **"The vi editor is a text editor..."**.
- Use `d2j` to cut (delete) two lines (the current line and the one below).
- Move to the end of the file using `G`.
- Paste the lines using `p`.

13. Visual Mode Selection:

- Use visual mode to select a block of text:
 - Press `v` to enter **visual mode**.
 - Use arrow keys to highlight the line **"To enter insert mode..."**.
- Once highlighted, press `d` to delete the selected text.

14. Exit Without Saving:

- Type `:q!` to exit **vi** without saving changes.

15. Additional Challenges:

- Open the file again using `vi vi_exercise.txt`.
- Change all occurrences of the word **"mode"** to **"state"** using the command:

```
1 :%s/mode/state/g
```

- Add a new line at the top of the file using `O` (uppercase "O"):
 - Type **"This is the VI editor exercise."** and save the file.

Commands Covered in This Exercise:

Insert Mode Commands:

- `i`: Insert before the cursor.
- `A`: Append at the end of the line.
- `O`: Open a new line above the current line.

Navigation:

- `h`, `j`, `k`, `l` : Move left, down, up, right.
- `w` : Move forward by word.
- `b` : Move backward by word.
- `gg` : Go to the beginning of the file.
- `G` : Go to the end of the file.

Editing Commands:

- `dd` : Delete a line.
- `dw` : Delete a word.
- `yy` : Copy (yank) a line.
- `p` : Paste after the cursor.
- `u` : Undo the last action.
- `r` : Replace a single character.
- `cw` : Change a word.
- `d2j` : Delete two lines.

Search and Replace:

- `/pattern` : Search for a pattern.
- `n` : Move to the next occurrence of the pattern.
- `:%s/old/new/g` : Replace all occurrences of `old` with `new` globally in the file.

File Commands:

- `:w` : Write (save) the file.
 - `:q` : Quit `vi`.
 - `:q!` : Quit without saving.
 - `:wq` : Write and quit.
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Optional Exercise:

- Open a new file and experiment with other advanced `vi` commands like `ctrl-d` (half-page down), `ctrl-u` (half-page up), working with multiple files in `vi` using `:n` to move between files, and using marks with `m` and ```.

By following these steps, you'll gain a solid understanding of how to use the `vi` editor efficiently!E