

**Made By**

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In this practical we are going to see  
how to use basic commands in

vi editor

The screenshot shows a MobaXterm window with a terminal session. The terminal window title is "root@ip-172-31-41-93:". The session bar includes "Terminal", "Sessions", "View", "Xserver", "Tools", "Games", "Settings", "Macros", and "Help". The toolbar includes icons for "Session", "Servers", "Tools", "Games", "Sessions", "View", "Split", "MultiExec", "Tunneling", "Packages", "Settings", and "Help". The status bar shows "X server" and "Exit".

The terminal window displays the following command-line session:

```
root@ip-172-31-41-93: ~
Terminal Sessions View Xserver Tools Games Settings Macros Help
Session Servers Tools Games Sessions View Split MultiExec Tunneling Packages Settings Help
X server Exit
Quick connect...
Name
.ssh
.bash_history
.bash_logout
.bash_profile
.bashrc
/home/ec2-user/
ls -lt
total 2
-r----- 1 satis UsersGrp 1700 Feb  4 09:18 practical-7-keypair.pem

chmod 400 practical-7-keypair.pem

ssh -i "practical-7-keypair.pem" ec2-user@ec2-13-235-245-152.ap-south-1.compute.amazonaws.com
Warning: Permanently added 'ec2-13-235-245-152.ap-south-1.compute.amazonaws.com' (RSA) to the list of known hosts.
X11 forwarding request failed on channel 0
Last login: Fri Feb  4 03:53:20 2022 from 103.226.206.208

Amazon Linux 2 AMI

https://aws.amazon.com/amazon-linux-2/
[ec2-user@ip-172-31-41-93 ~]$ [ec2-user@ip-172-31-41-93 ~]$ [ec2-user@ip-172-31-41-93 ~]$ sudo su -
Last login: Fri Feb  4 03:53:57 UTC 2022 on pts/0
[root@ip-172-31-41-93 ~]# [root@ip-172-31-41-93 ~]# ls -lt
total 0
[root@ip-172-31-41-93 ~]# cd /
[root@ip-172-31-41-93 /]# ls -lt
total 12
dr-xr-x--- 3 root root 124 Feb  4 03:59 root
drwxrwxrwt  8 root root 172 Feb  4 03:49 tmp
drwxr-xr-x 28 root root 960 Feb  4 03:48 run
drwxr-xr-x 88 root root 8192 Feb  4 03:48 etc
drwxr-xr-x  3 root root  22 Feb  4 03:48 home
drwxr-xr-x 15 root root 2900 Feb  4 03:48 dev
drwxr-xr-x 19 root root 269 Feb  4 03:48 var
dr-xr-xr-x 161 root root   0 Feb  4 03:48 proc
dr-xr-xr-x 13 root root   0 Feb  4 03:48 sys
dr-xr-xr-x  4 root root 332 Jan 24 18:29 boot
drwxr-xr-x  4 root root  27 Jan 24 18:29 opt
drwxr-xr-x 13 root root 155 Jan 24 18:28 usr
```

The terminal window also displays a message: "UNREGISTERED VERSION - Please support MobaXterm by subscribing to the professional edition here: <https://mobaxterm.mobatek.net>".

- Login to your instance by **MobaXterm**

The screenshot shows a MobaXterm window with two main panes. The left pane is a terminal window titled 'root@ip-172-31-41-93:/pract7' displaying the command 'ls -lt' and its output. The right pane is a file browser titled '3. root@ip-172-31-41-93/pract7' showing the contents of the '/home/ec2-user/' directory, including files like .ssh, .bash\_history, .bash\_logout, .bash\_profile, and .bashrc.

```
[root@ip-172-31-41-93 /]# ls -lt
total 12
dr-xr-x---  3 root root 124 Feb  4 03:59 root
drwxrwxrwt  8 root root 172 Feb  4 03:49 tmp
drwxr-xr-x  28 root root 960 Feb  4 03:48 run
drwxr-xr-x  86 root root 8192 Feb  4 03:48 etc
drwxr-xr-x  3 root root 22 Feb  4 03:48 home
drwxr-xr-x  15 root root 2900 Feb  4 03:48 dev
drwxr-xr-x  19 root root 269 Feb  4 03:48 var
dr-xr-xr-x  161 root root  0 Feb  4 03:48 proc
dr-xr-xr-x  13 root root  0 Feb  4 03:48 sys
dr-xr-xr-x  4 root root 332 Jan 24 18:29 boot
drwxr-xr-x  4 root root 27 Jan 24 18:29 opt
drwxr-xr-x  13 root root 155 Jan 24 18:28 usr
lrwxrwxrwx  1 root root  7 Jan 24 18:28 bin -> usr/bin
lrwxrwxrwx  1 root root  7 Jan 24 18:28 lib -> usr/lib
lrwxrwxrwx  1 root root  9 Jan 24 18:28 lib64 -> usr/lib64
lrwxrwxrwx  1 root root  8 Jan 24 18:28 sbin -> usr/sbin
drwxr-xr-x  2 root root  6 Jan 24 18:27 local
drwxr-xr-x  2 root root  6 Apr  9 2019 media
drwxr-xr-x  2 root root  6 Apr  9 2019 mnt
drwxr-xr-x  2 root root  6 Apr  9 2019 srv
[root@ip-172-31-41-93 /]#
[root@ip-172-31-41-93 /]# mkdir pract7
[root@ip-172-31-41-93 /]# cd pract7
[root@ip-172-31-41-93 pract7]# ls -lt
total 0
[root@ip-172-31-41-93 pract7]#
```

The right pane also contains a Notepad++ window with a command history:

```
1
2 Command:
3
4
5 mkdir pract7
```

At the bottom of the screen, there is a taskbar with various icons and system status indicators.

- Make one directory use **mkdir pract7**

The screenshot shows a MobaXterm interface with a terminal window and a file viewer.

**Terminal Session:**

- Session: root@ip-172-31-41-93:/pract7
- Commands run:
  - [root@ip-172-31-41-93 pract7]#
  - [root@ip-172-31-41-93 pract7]#
  - [root@ip-172-31-41-93 pract7]#
  - [root@ip-172-31-41-93 pract7]#
  - [root@ip-172-31-41-93 pract7]# touch file.txt
  - [root@ip-172-31-41-93 pract7]#
  - [root@ip-172-31-41-93 pract7]# ls -lt
  - total 0
  - rw-r--r-- 1 root root 0 Feb 4 04:15 file.txt
  - [root@ip-172-31-41-93 pract7]# cat > file.txt
  - Hello how are you.
  - Good to see you.
  - [root@ip-172-31-41-93 pract7]# cat file.txt
  - Hello how are you.
  - Good to see you.
  - [root@ip-172-31-41-93 pract7]#

**File Viewer:**

- Path: /home/ec2-user/
- Content:
  - Name
  - ..
  - .ssh
  - .bash\_history
  - .bash\_logout
  - .bash\_profile
  - .bashrc

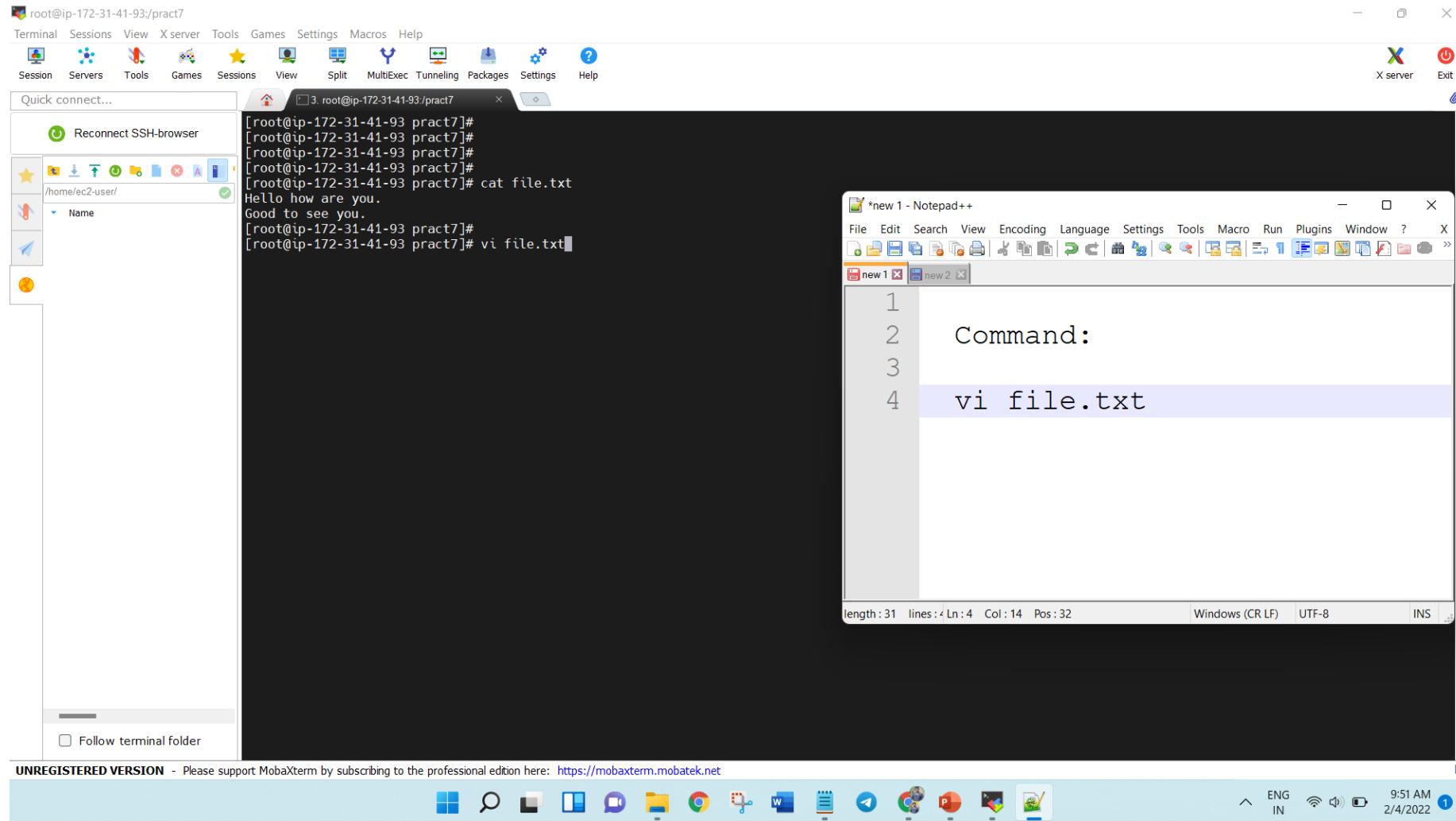
**Notepad++ Window:**

- Title: \*new 1 - Notepad++
- Content:
  - 1
  - 2 Command:
  - 3
  - 4 touch file.txt
  - 5
  - 6 cat > file.txt
  - 7
  - 8 cat file.txt
- Status bar: length: 76 lines: 8 Ln: 8 Col: 15 Pos: 77 Windows (CR LF) UTF-8 INS

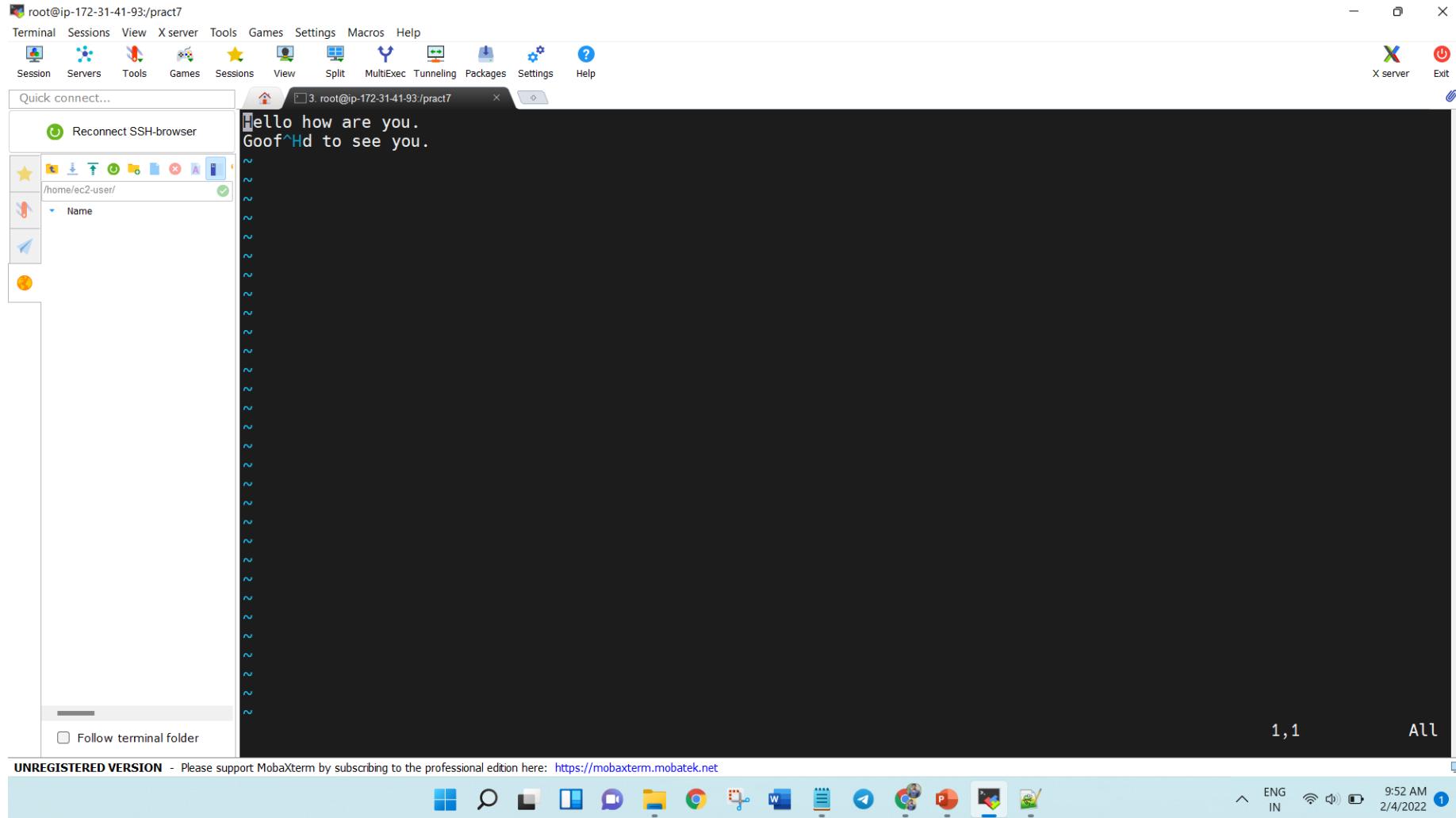
**Bottom Bar:**

- UNREGISTERED VERSION - Please support MobaXterm by subscribing to the professional edition here: <https://mobaxterm.mobatek.net>
- Icons for File Explorer, Task View, Start, Taskbar, and Notifications
- System tray icons: ENG IN, WiFi, Battery, and Date/Time (9:47 AM, 2/4/2022)

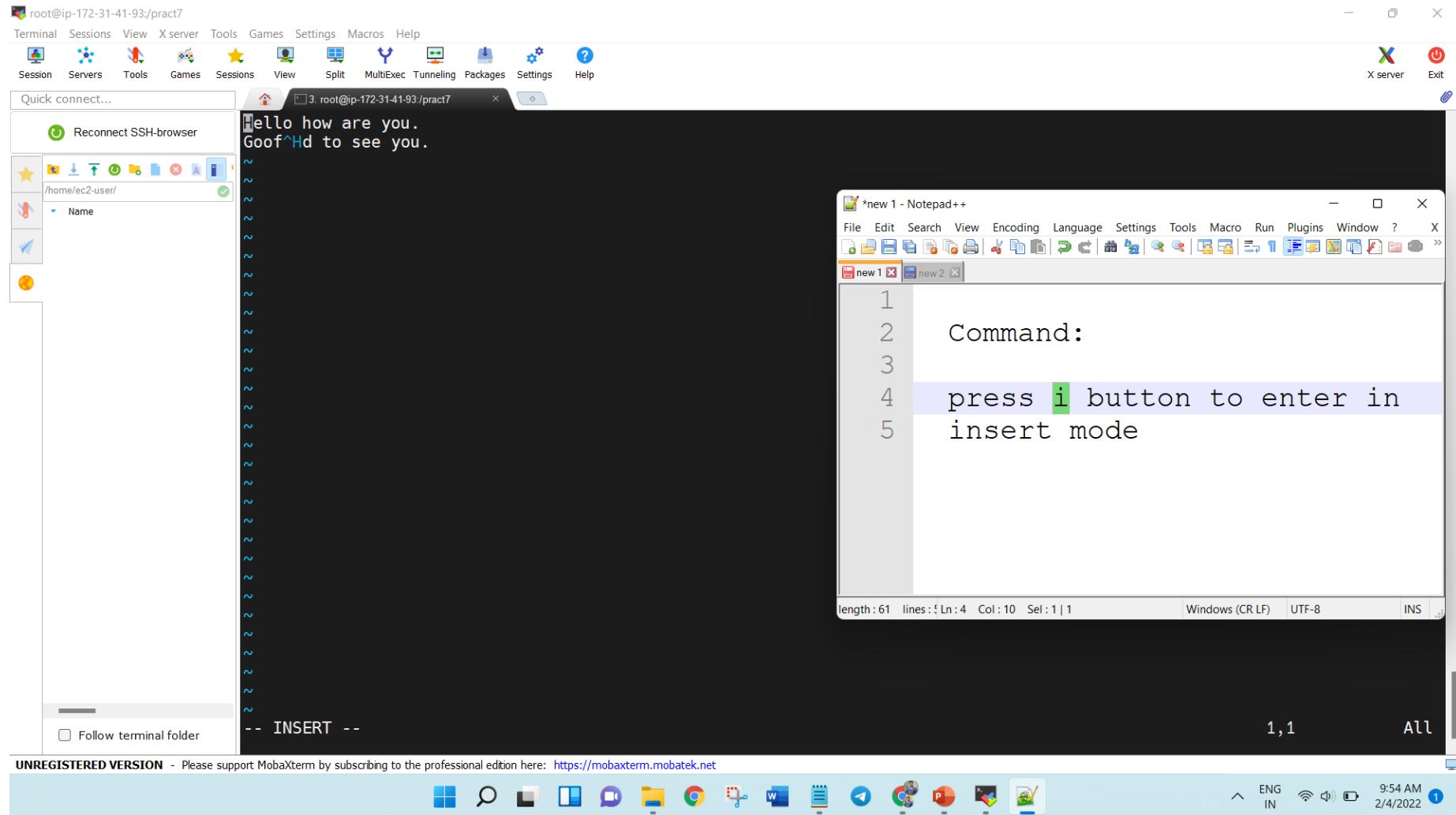
- Create file using **touch file.txt**
  - Edit file using **cat > file.txt**
  - You can see file by using **cat file.txt**



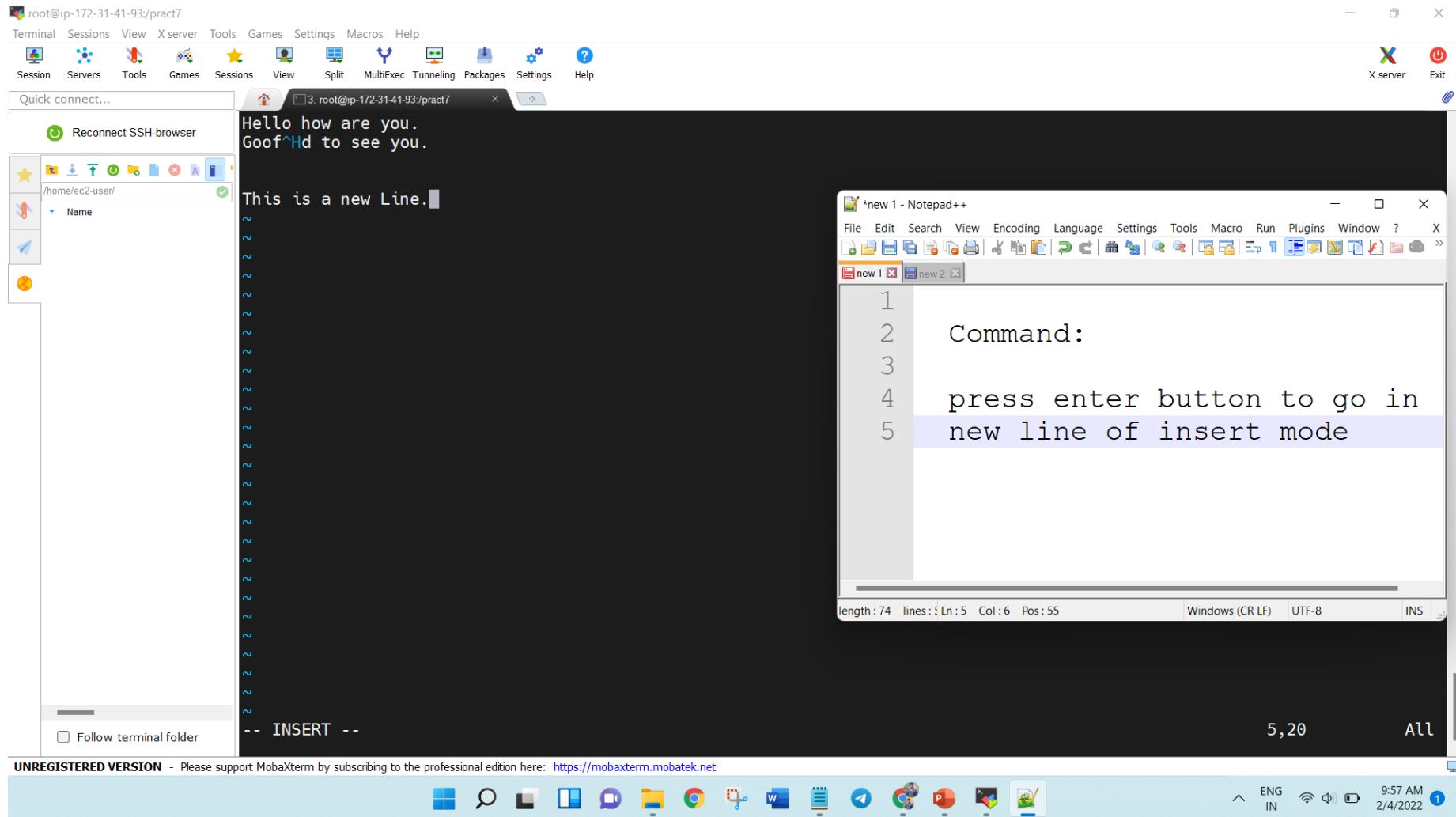
- Now use **vi file.txt**
- Then file will open in **vi editor**



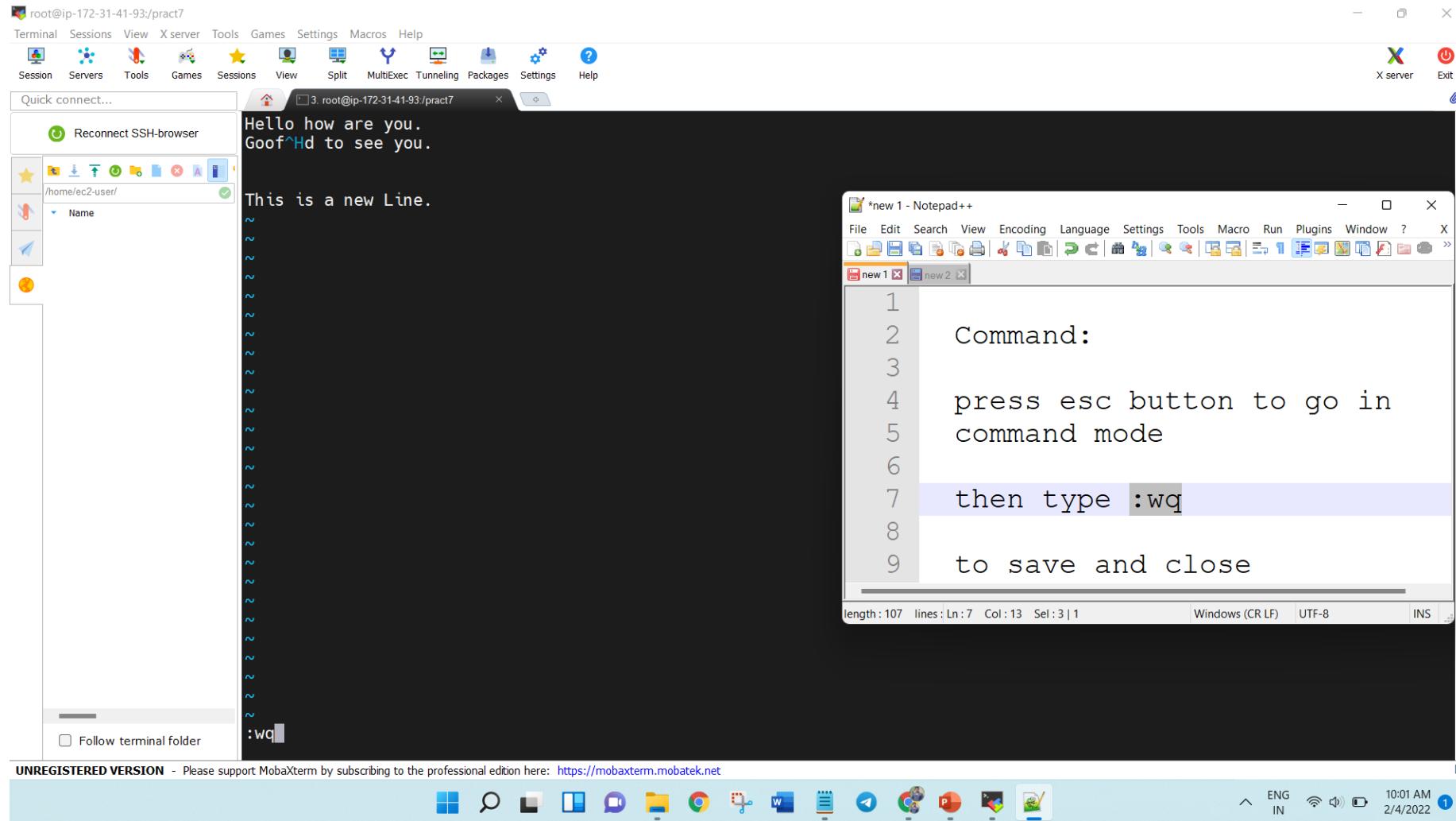
- Here you can see that file opened in **vi editor**



- Press **i** to enter in insert mode.



- For next line press **enter** button in insert mode



- Use :wq to save and close file in command mode

The screenshot shows a MobaXterm interface with a terminal window and a file viewer.

**Terminal Window:**

```
[root@ip-172-31-41-93 pract7]#
[root@ip-172-31-41-93 pract7]#
[root@ip-172-31-41-93 pract7]#
[root@ip-172-31-41-93 pract7]# cat file.txt
Hello how are you.
Good to see you.
[root@ip-172-31-41-93 pract7]#
[root@ip-172-31-41-93 pract7]# vi file.txt
[root@ip-172-31-41-93 pract7]#
[root@ip-172-31-41-93 pract7]# cat file.txt
Hello how are you.
Good to see you.

This is a new Line.
[root@ip-172-31-41-93 pract7]#
```

**File Viewer (Notepad++):**

```
*new 1 - Notepad++
File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
new 1 new 2

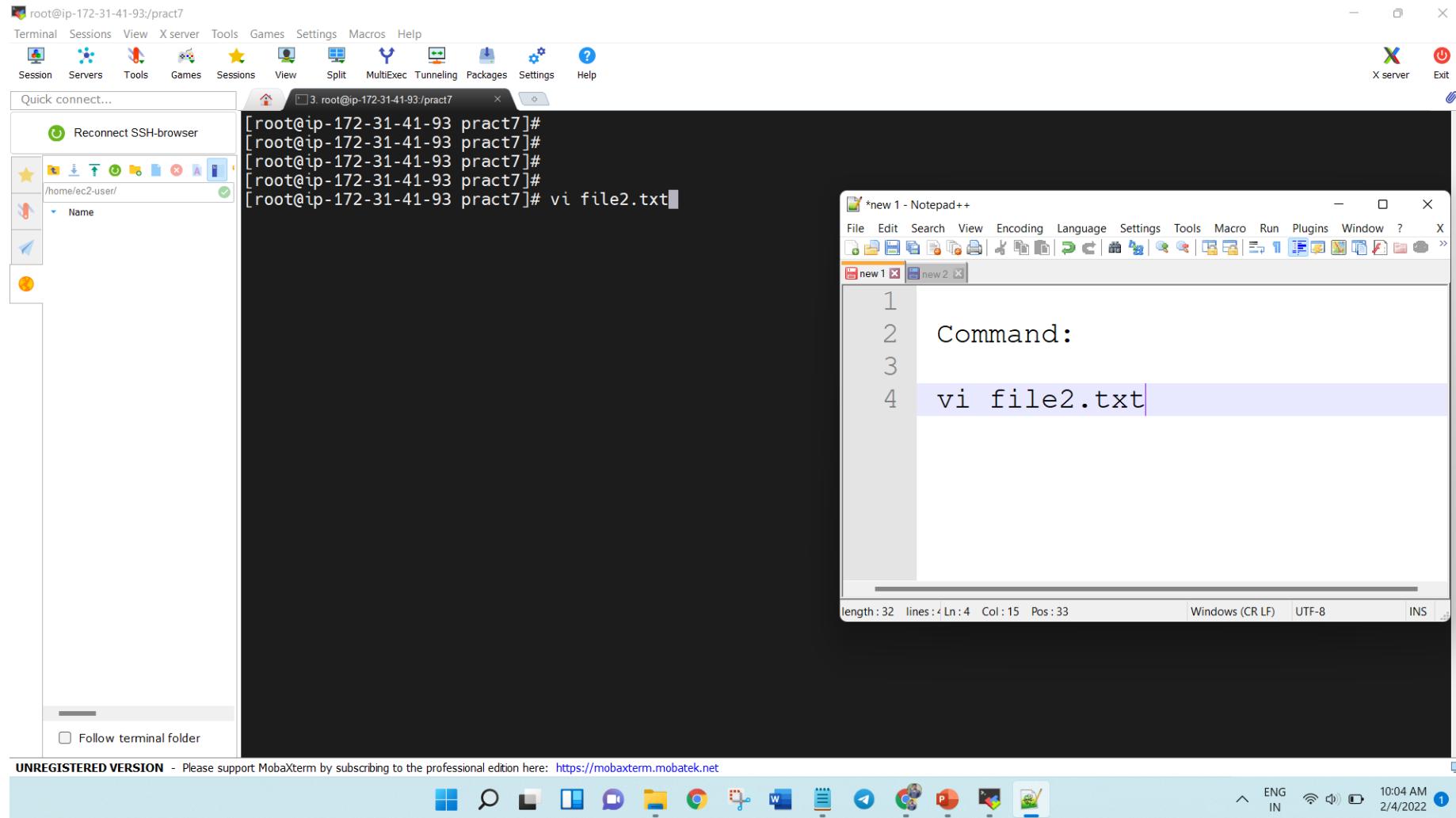
1
2 Command:
3
4 after type :wq
5 press enter
6
7 to view file use cat file.txt
```

Length: 86 Lines: 7 Col: 32 Pos: 87 Windows (CR LF) UTF-8 INS

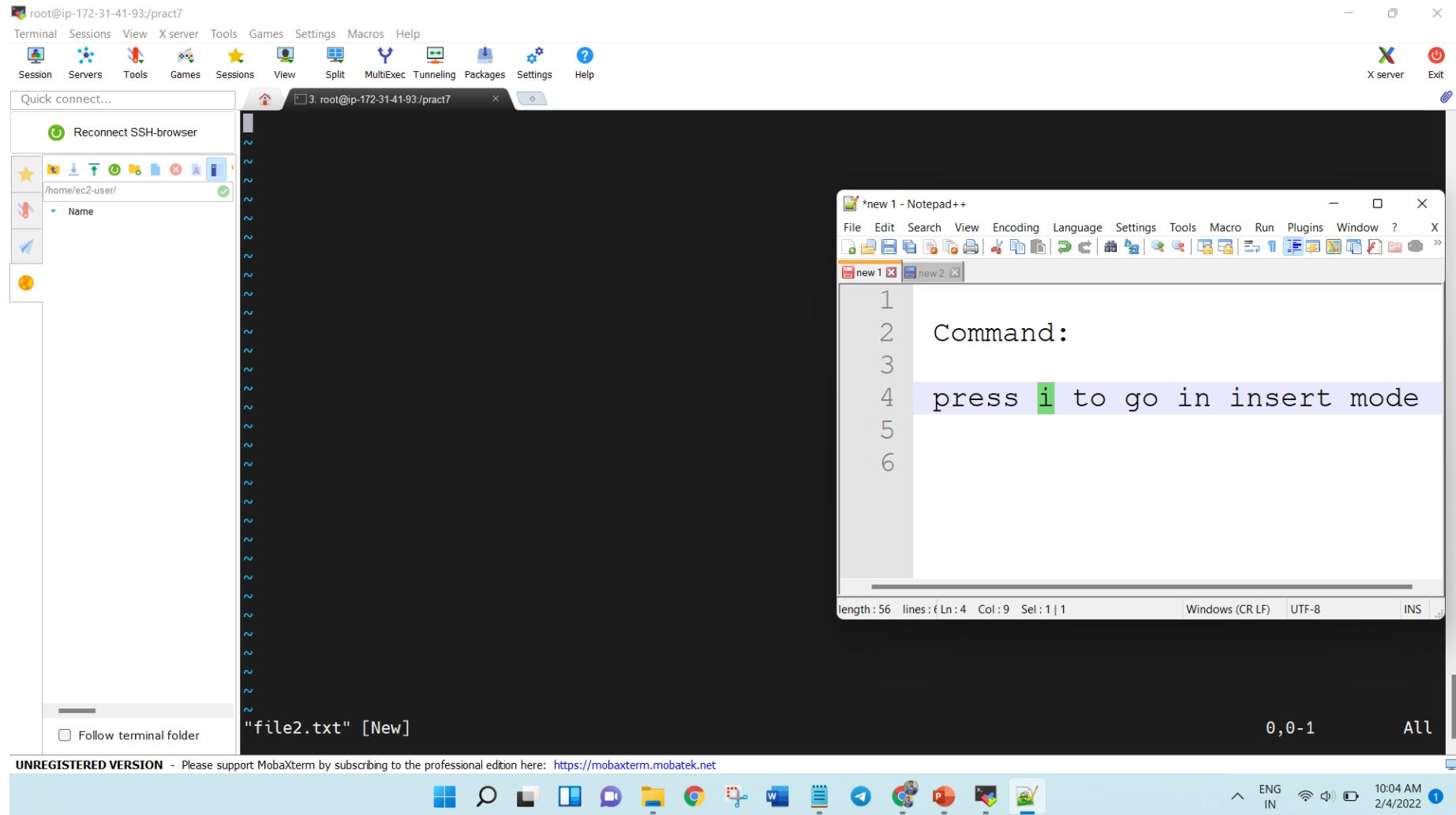
UNREGISTERED VERSION - Please support MobaXterm by subscribing to the professional edition here: <https://mobaxterm.mobatek.net>

ENG IN 10:03 AM 2/4/2022

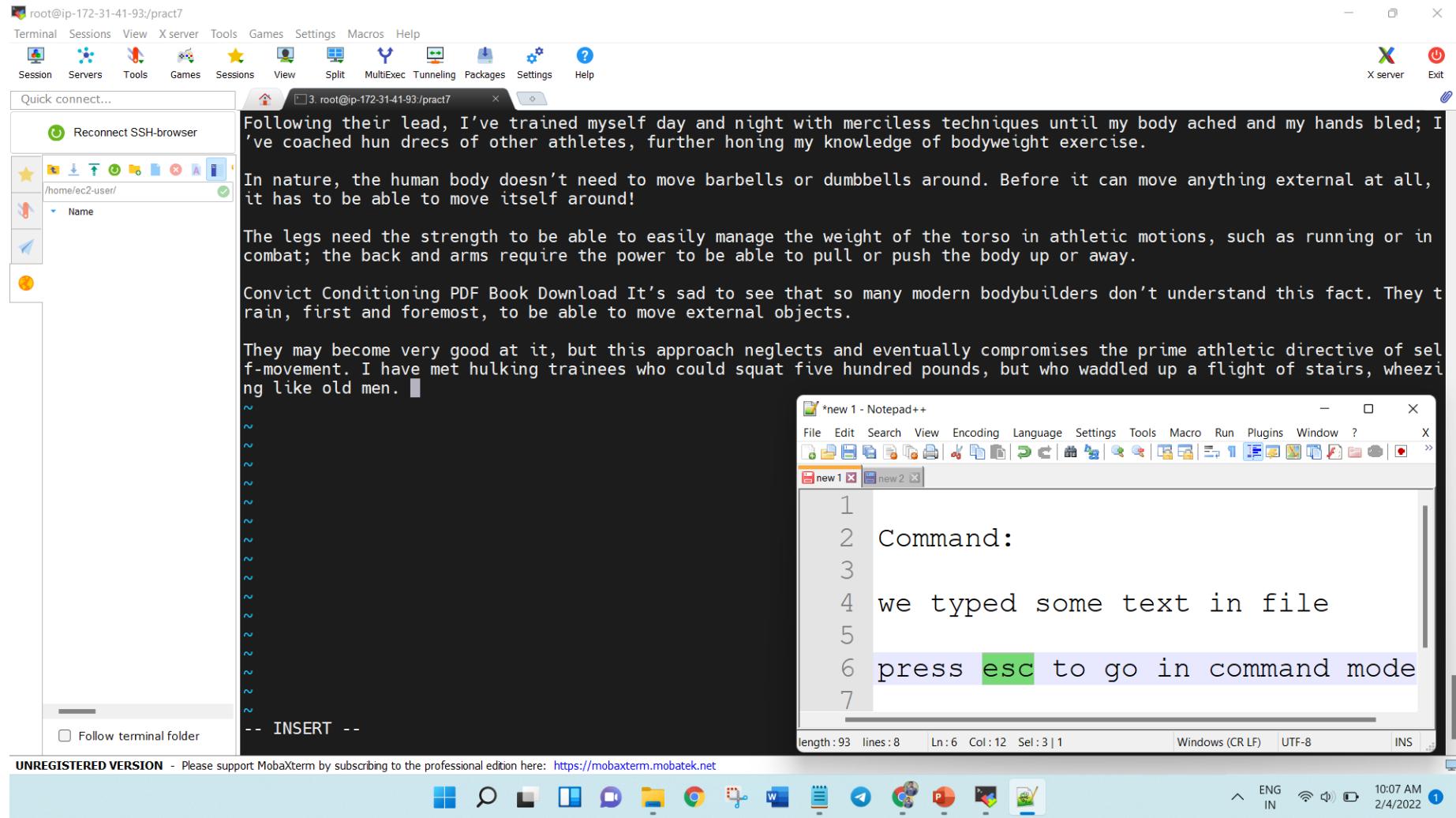
- Use **cat file.txt** to view saved content in file



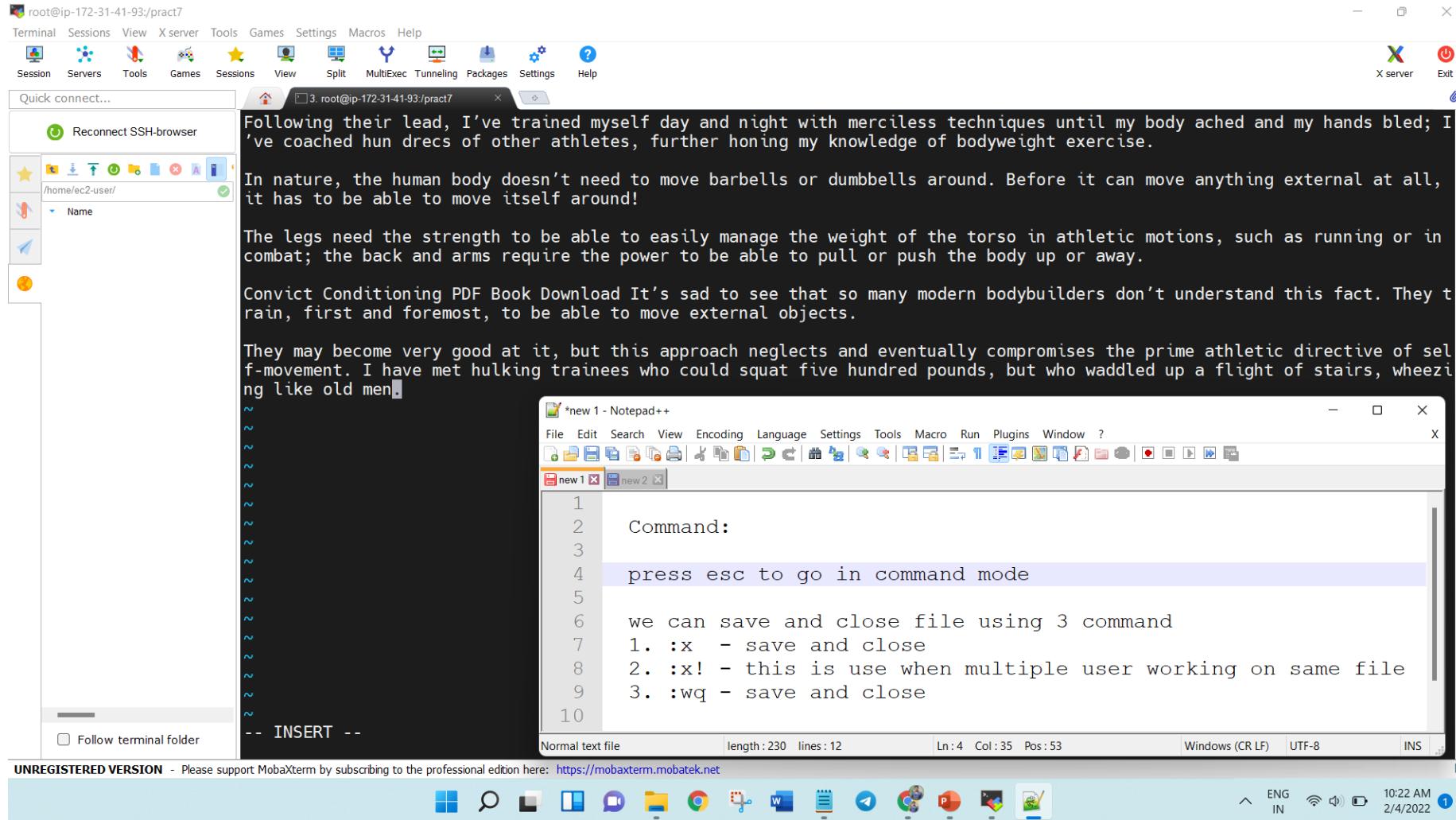
- You can use **vi file2.txt** to create file and it will directly open in the **vi editor**



- Here you can see **vi editor** is opened.
- Press **i** to go in insert mode.

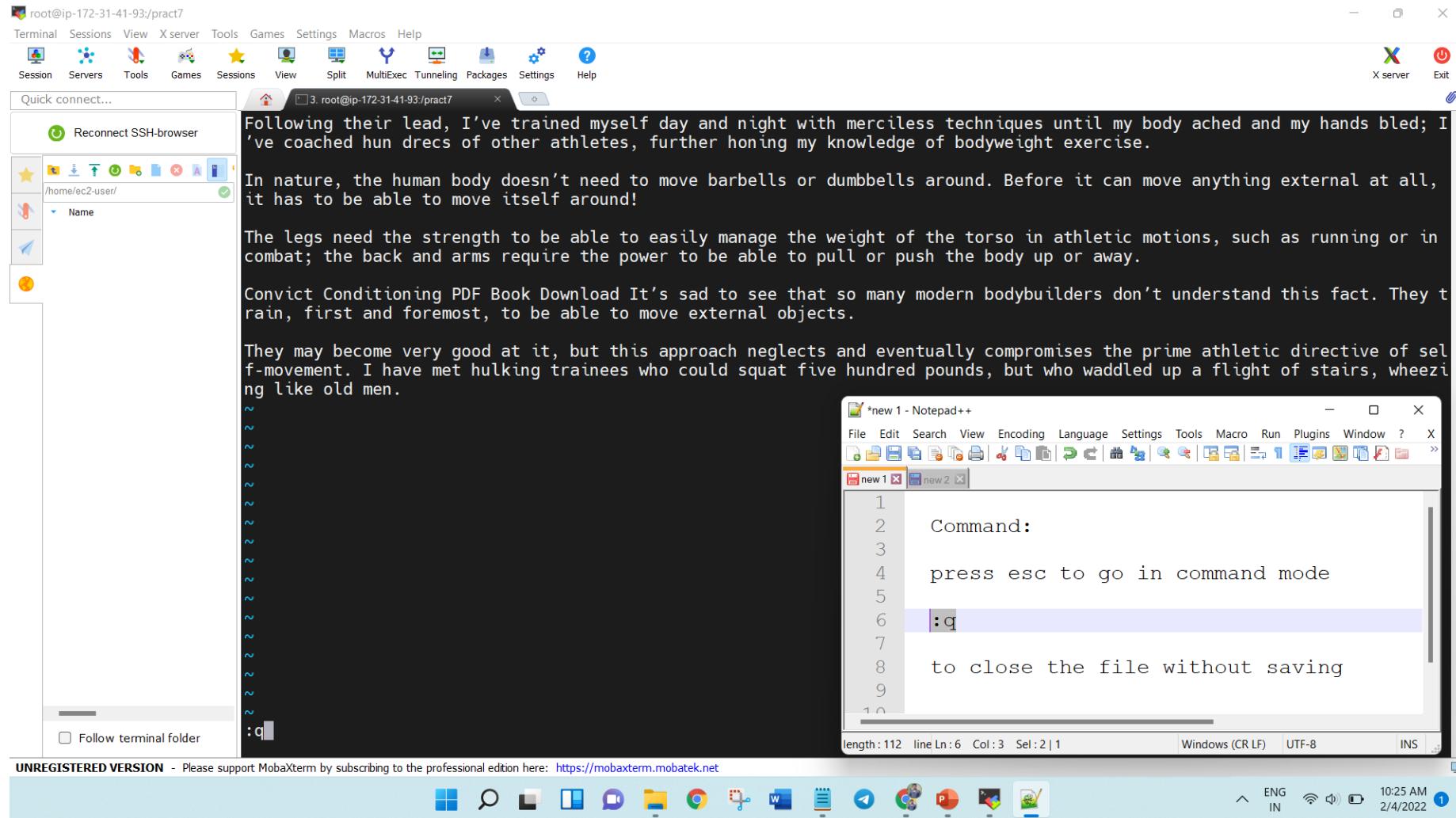


- Type some text.
- Press **esc** to go in command mode



- For saving file you can use following command and press enter.

1. **:x**
2. **:x!**
3. **:wq**



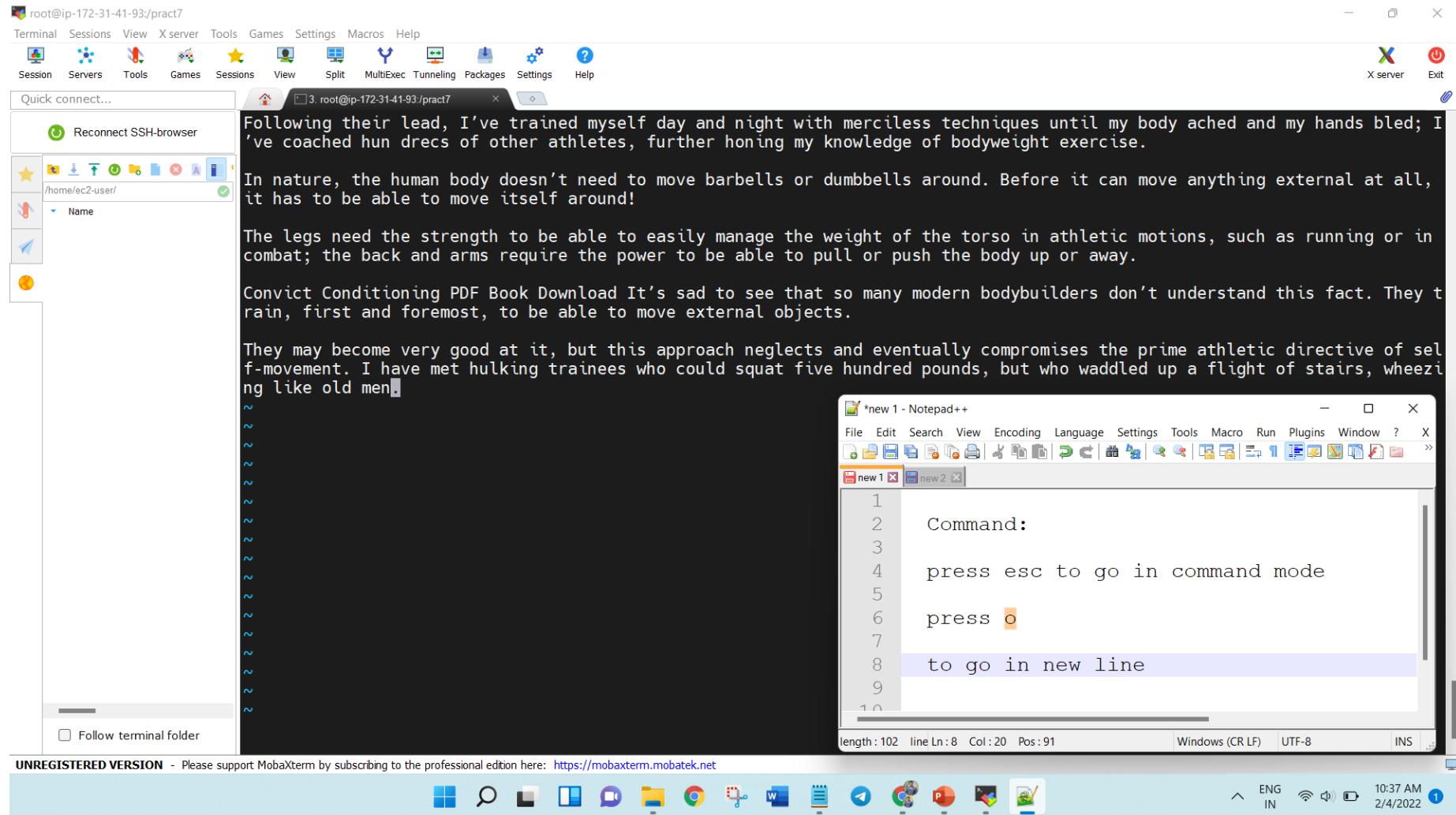
- If you opened any file in **vi editor** and read that file and you want to close it.
- Then use **:q** and press enter to close the **vi editor**

The screenshot shows a MobaXterm interface. On the left, there's a sidebar with icons for Session, Servers, Tools, Games, Sessions, View, Split, MultiExec, Tunneling, Packages, Settings, Help, and a Quick connect... field. The main terminal window (tab 3) displays a text document about bodyweight exercise. Below the terminal is a text editor window titled 'new 1 - Notepad++' containing the following text:

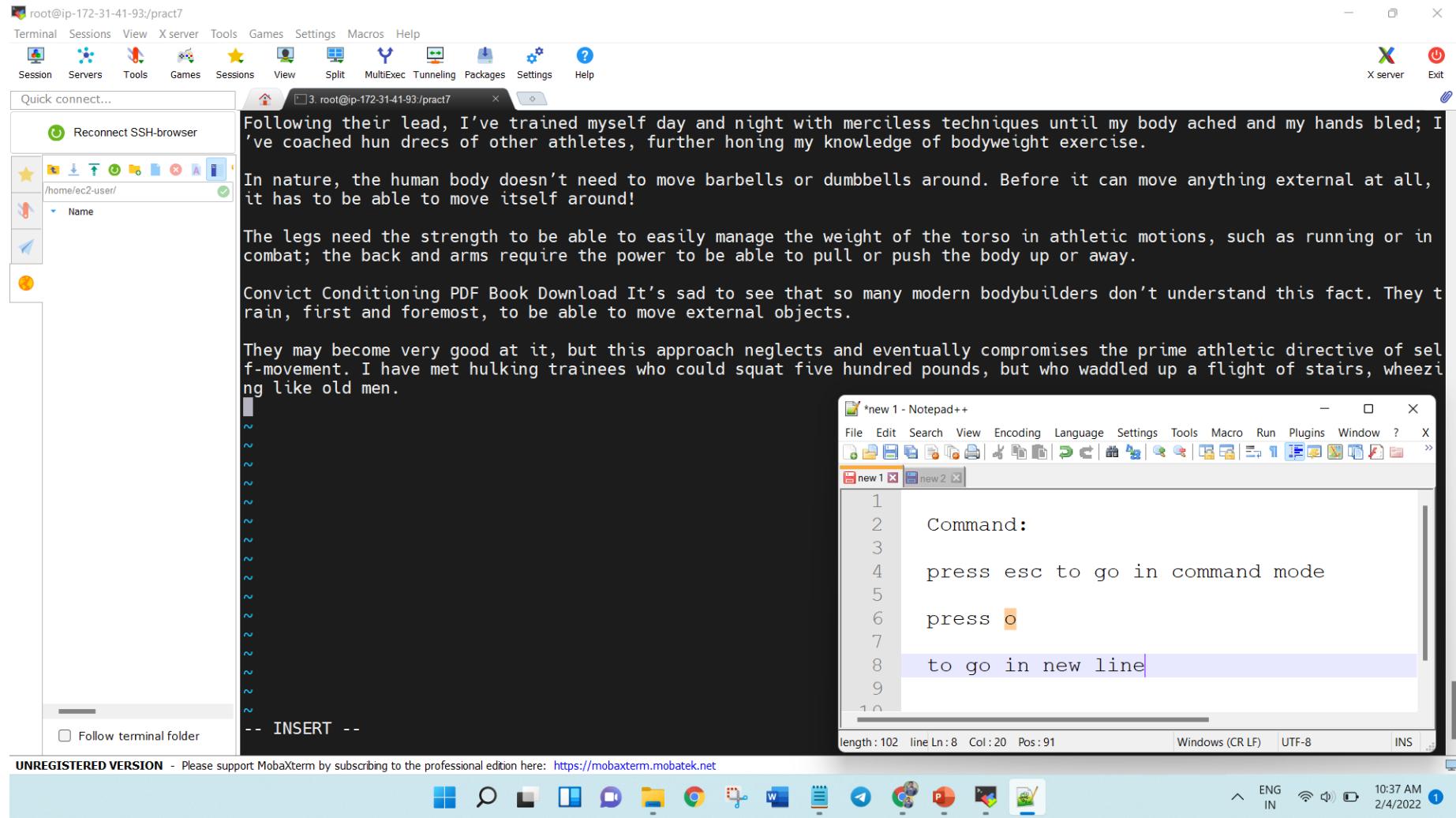
```
1
2 Command:
3
4 press esc to go in command mode
5
6 :q!
7
8 to close edited file without saving
9
10
```

The status bar at the bottom indicates the file length is 116, line count is 6, column count is 3, selection is 3, and the encoding is UTF-8. The system tray shows the date and time as 10:32 AM 2/4/2022.

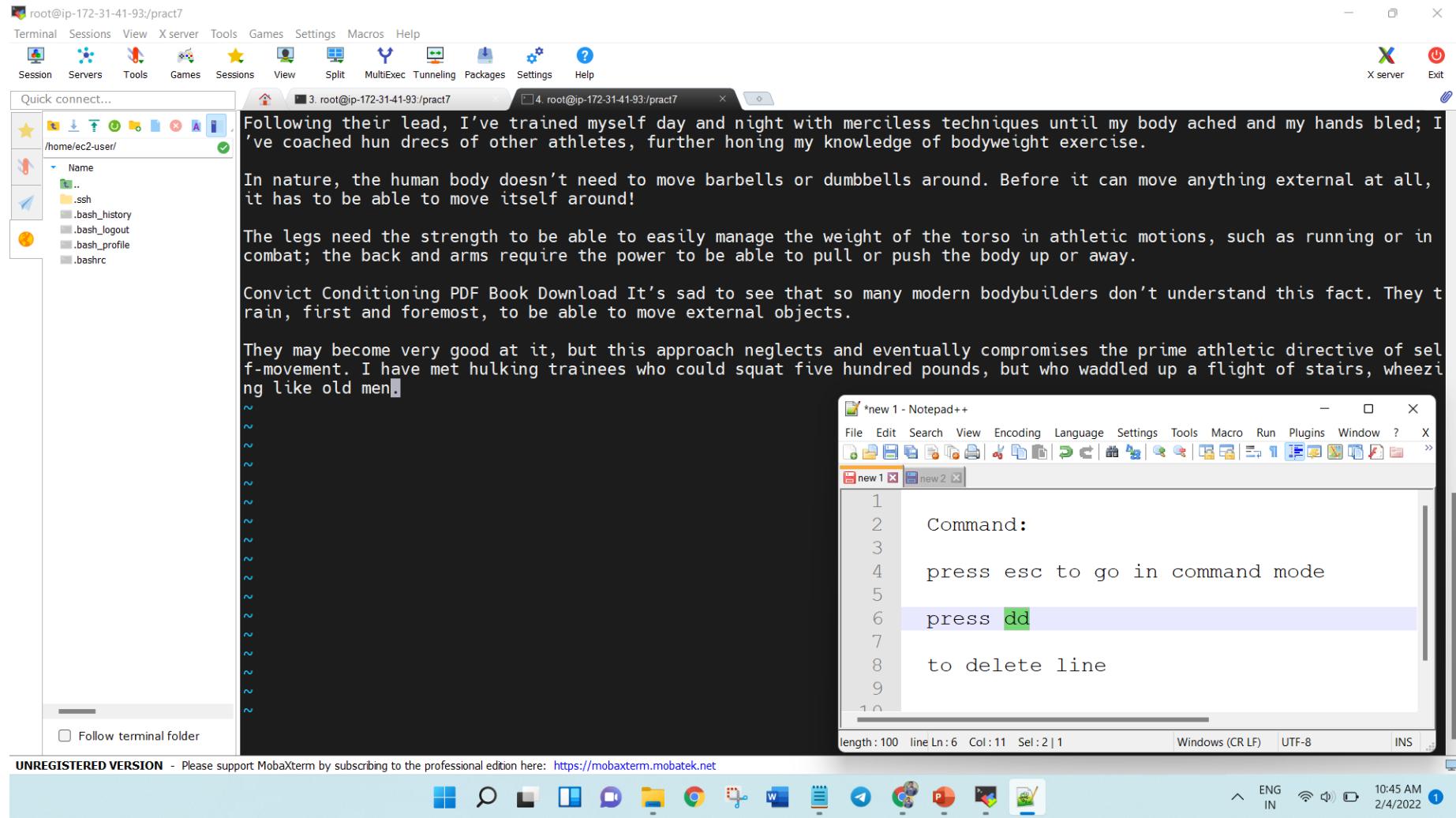
- If you opened any file in **vi editor** and make some changes in that file and you want to close it without saving.
- Then use **:q!** and press enter to close the file without saving.



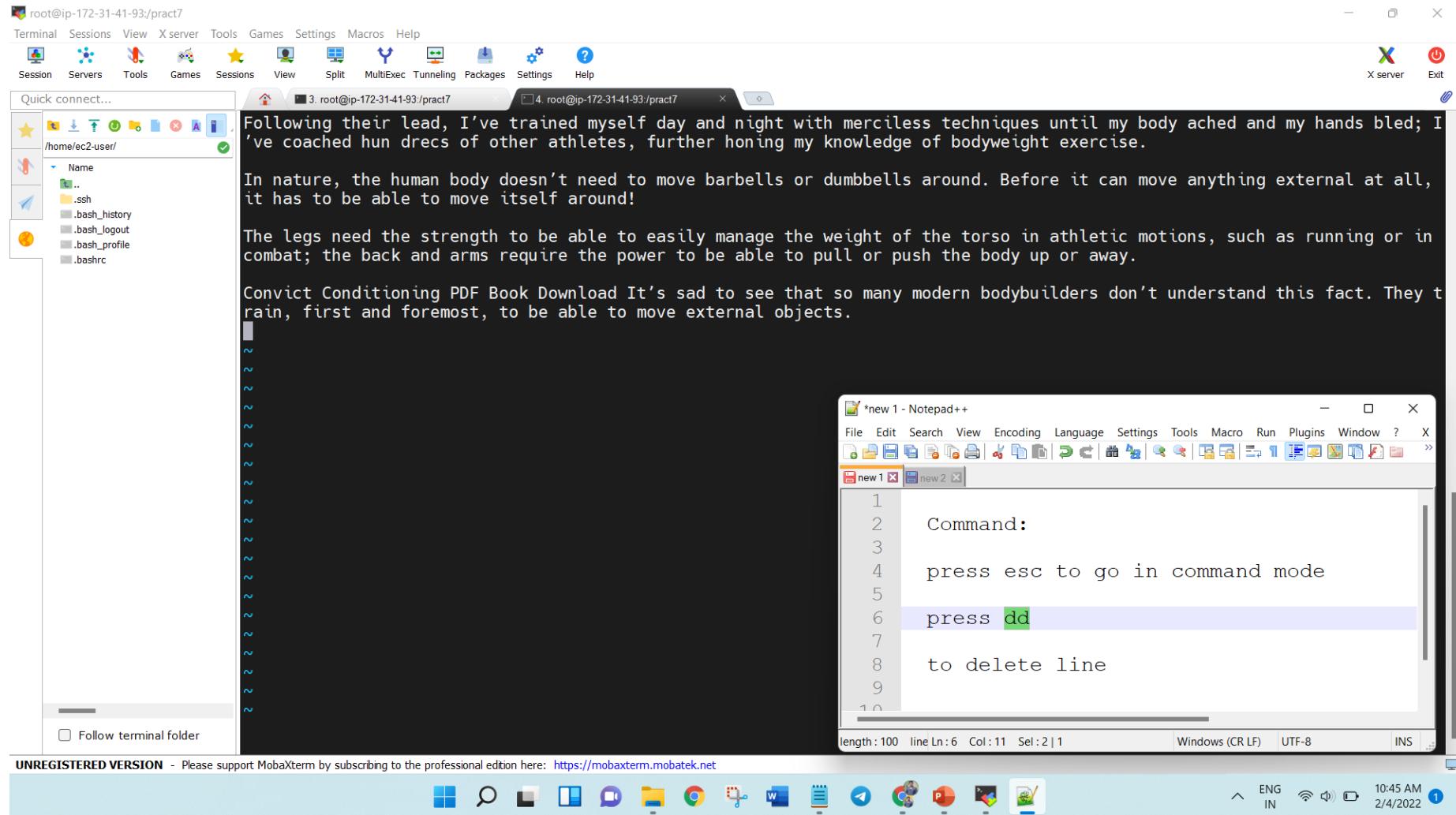
- In command mode press **o** – to go in new line.



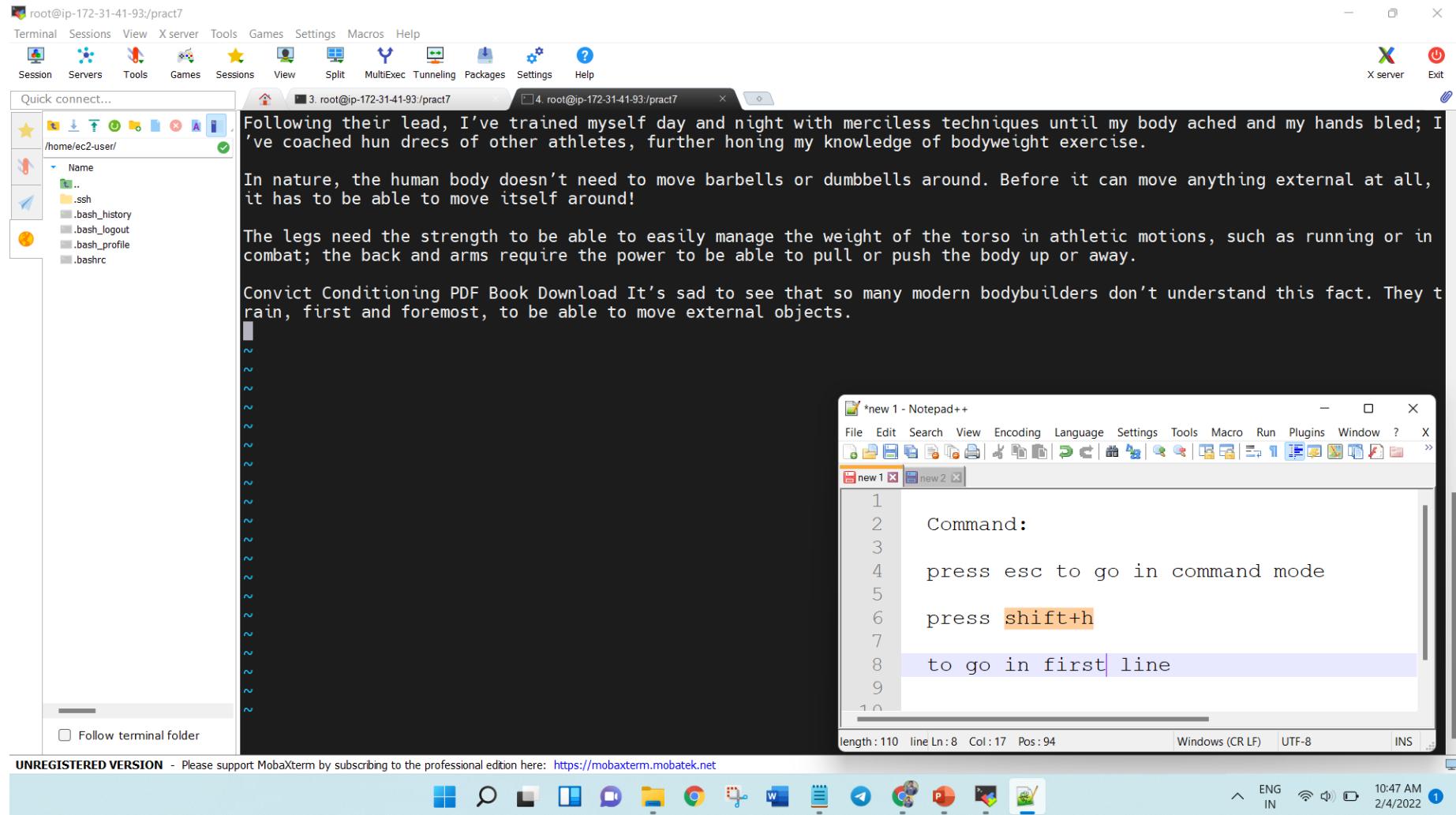
- Here you can see I am in the new line.



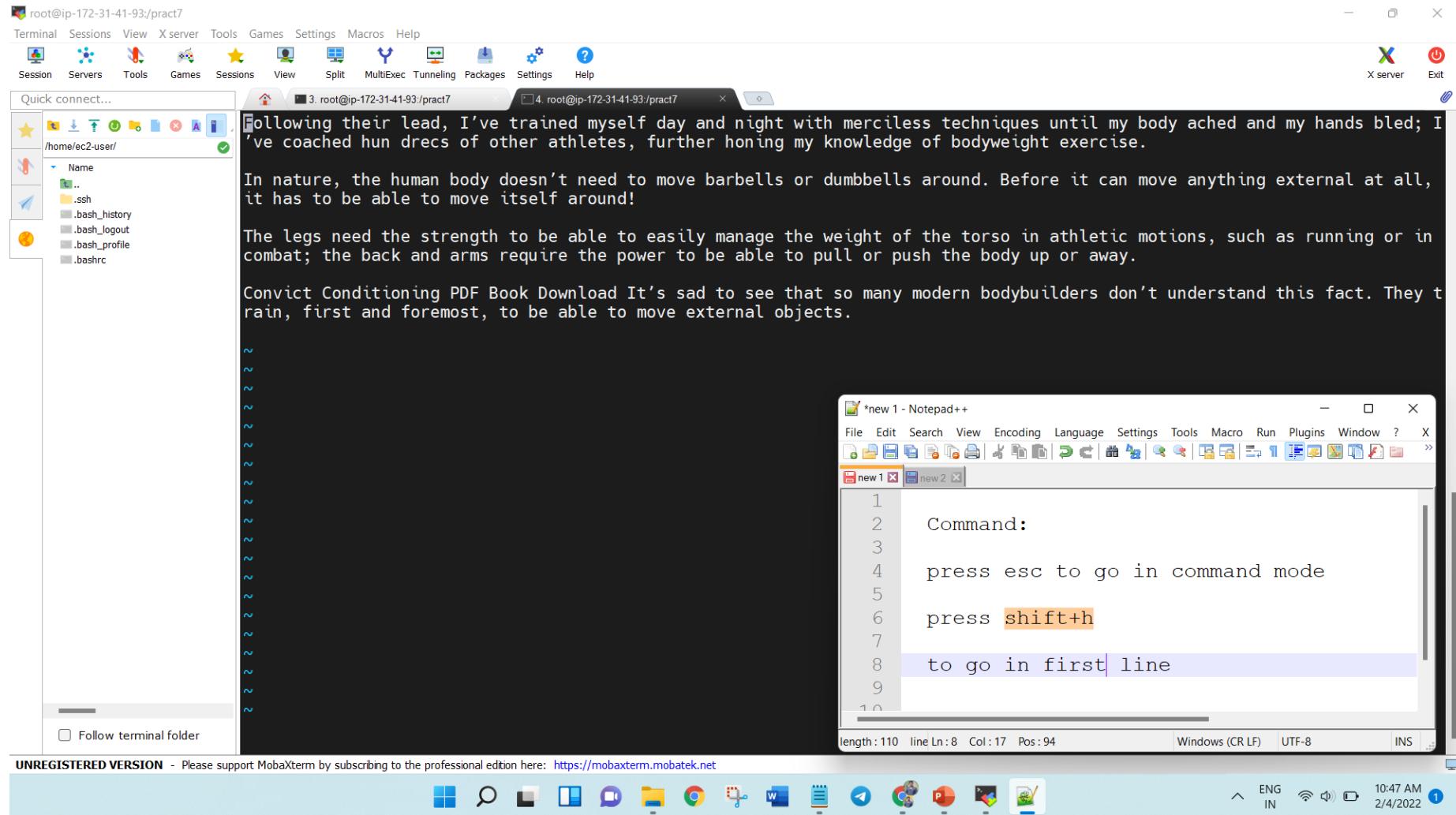
- In command mode press **dd** – to delete line.



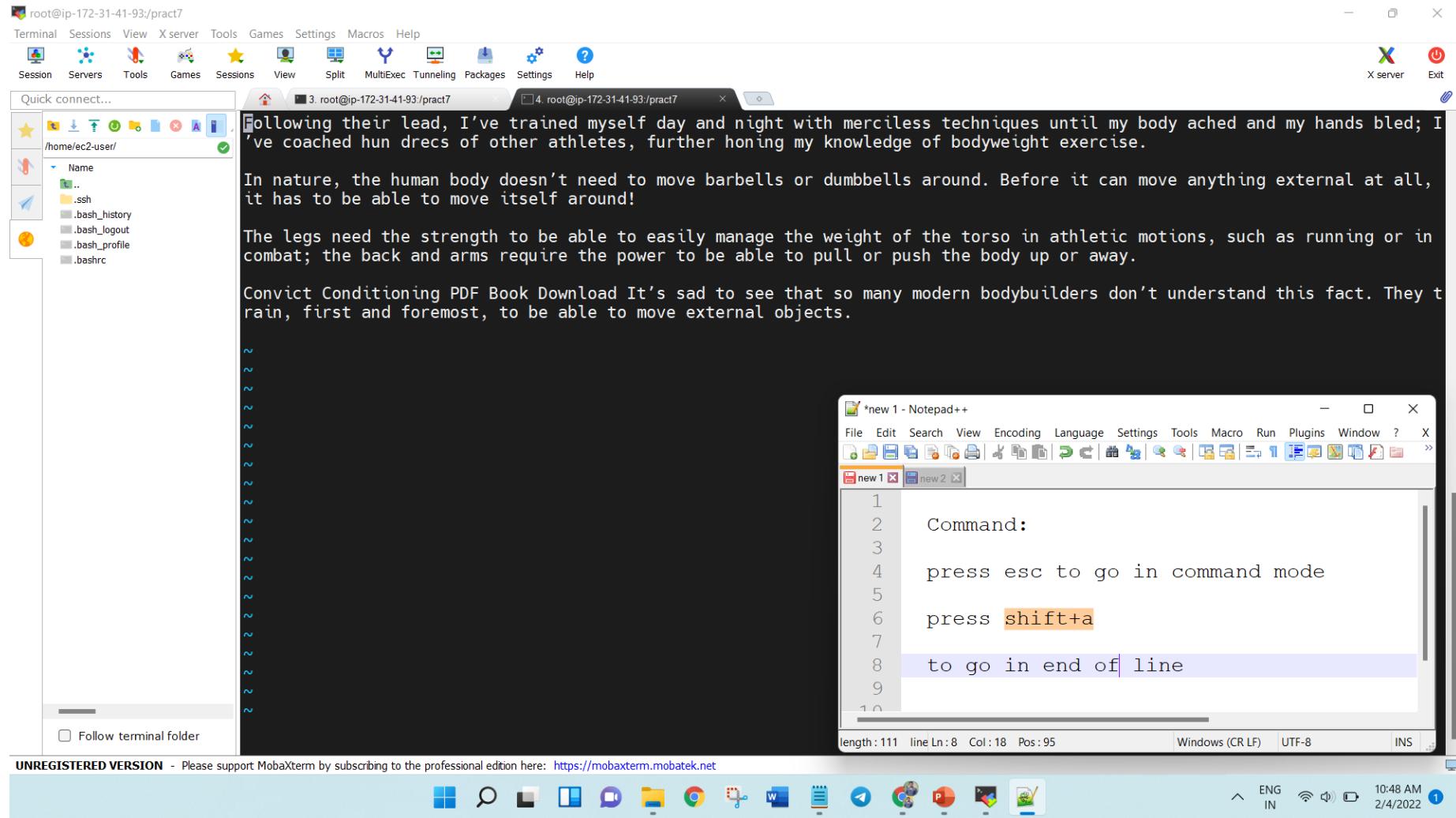
- Here you can see the line is deleted.



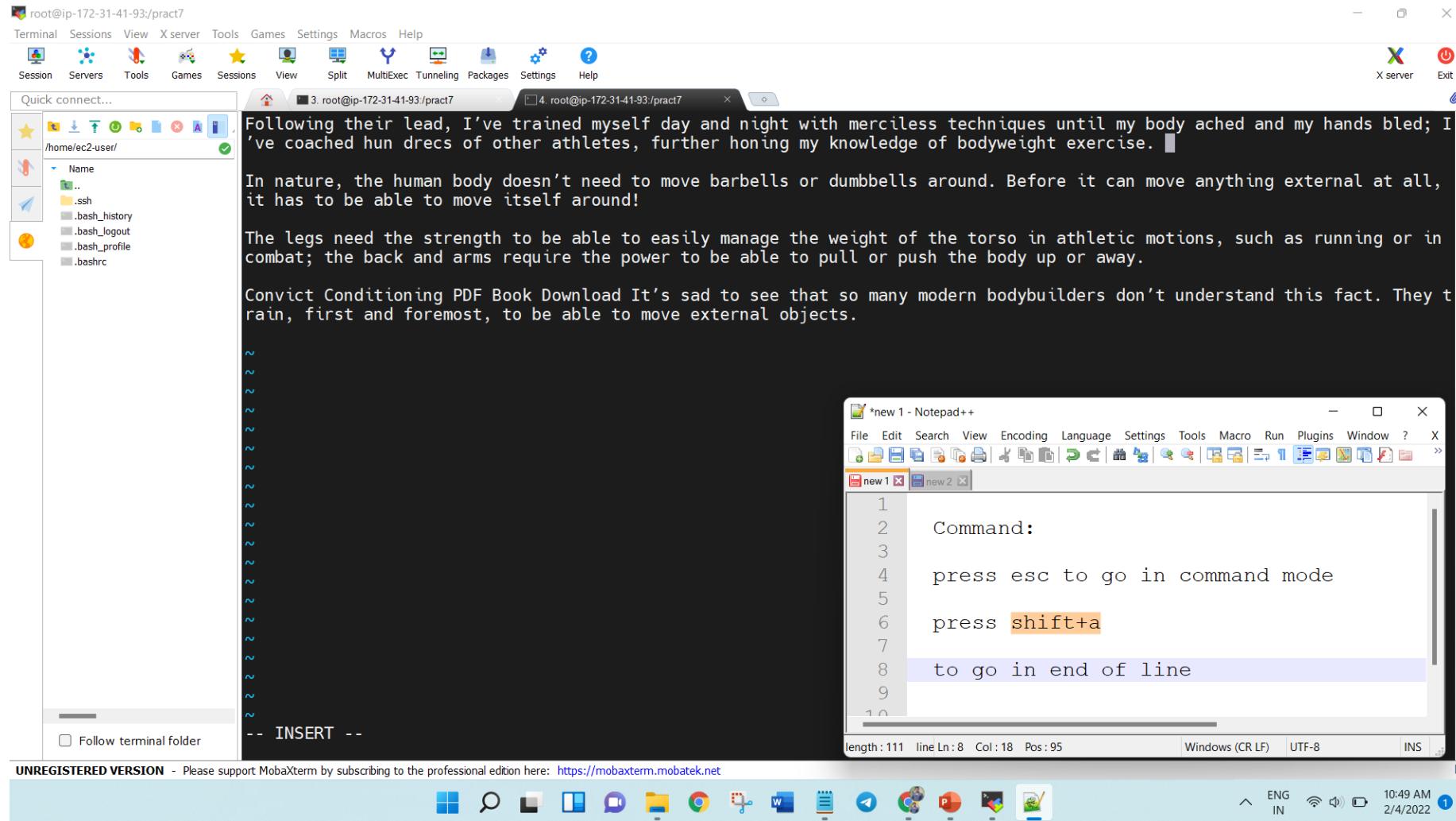
- In command mode press **Shift+h** – to go in first line.



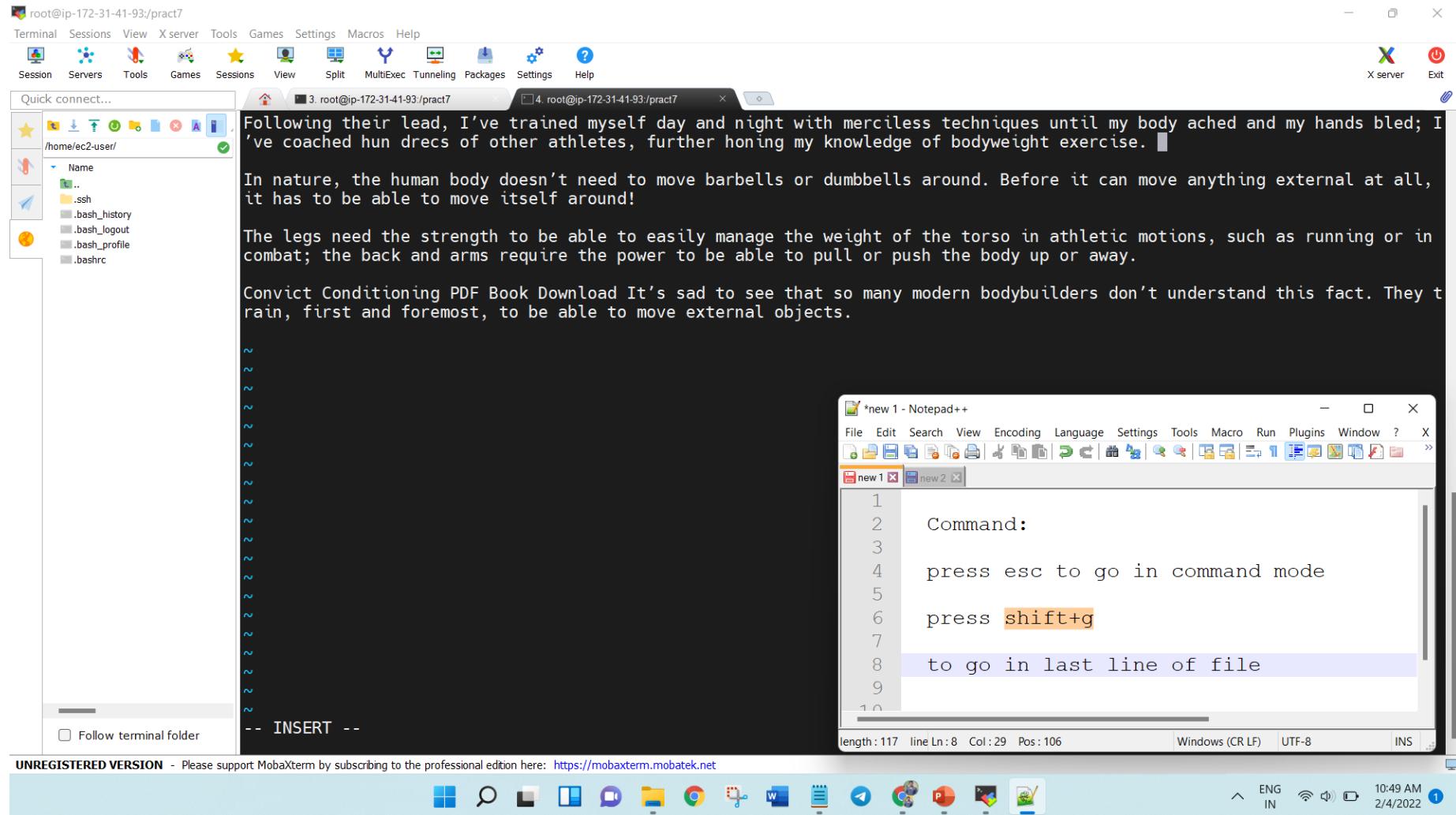
- After pressing **shift+h**, I am in 1<sup>st</sup> line



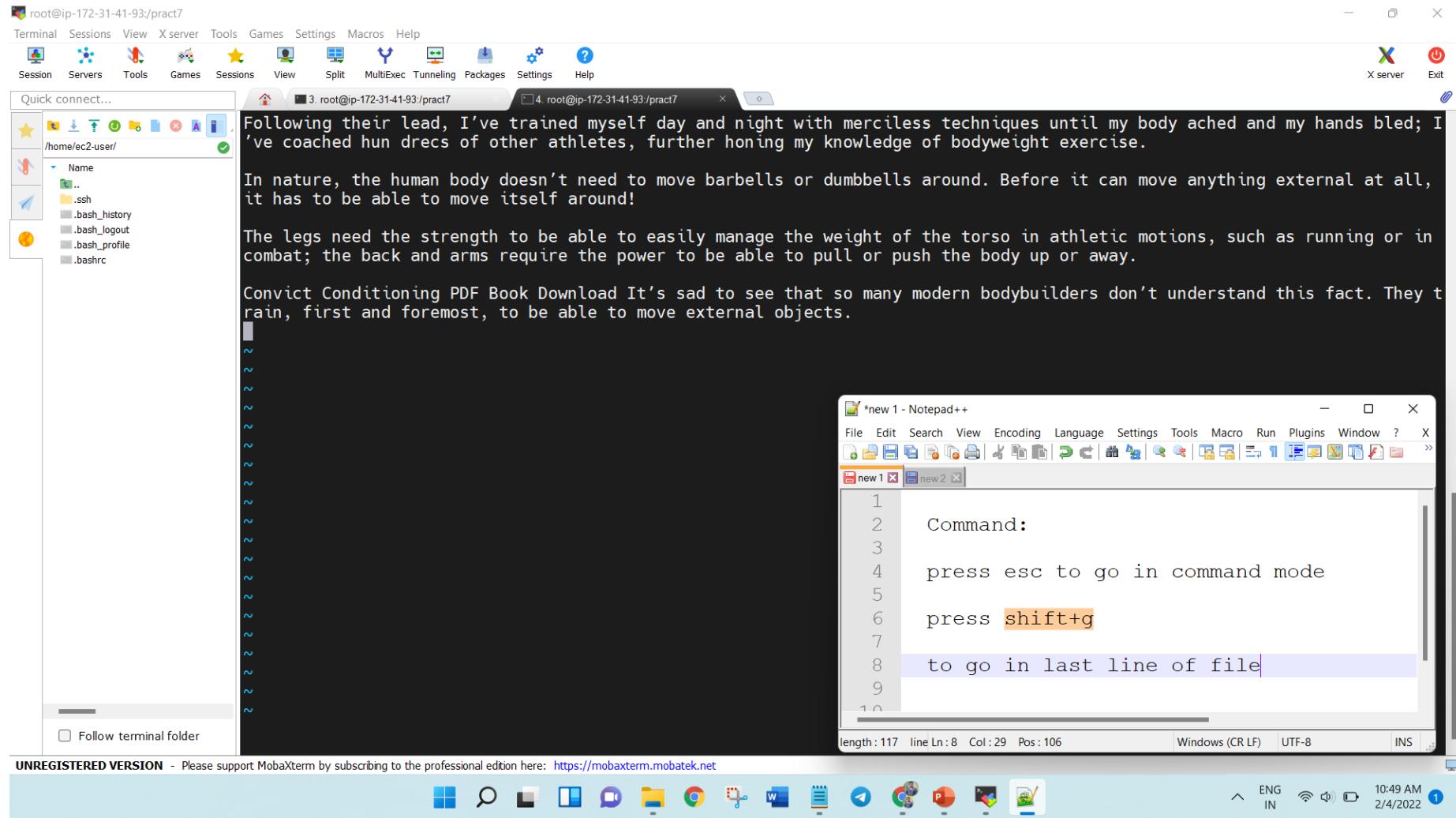
- In command mode press **Shift+a** – to go in end a particular line.



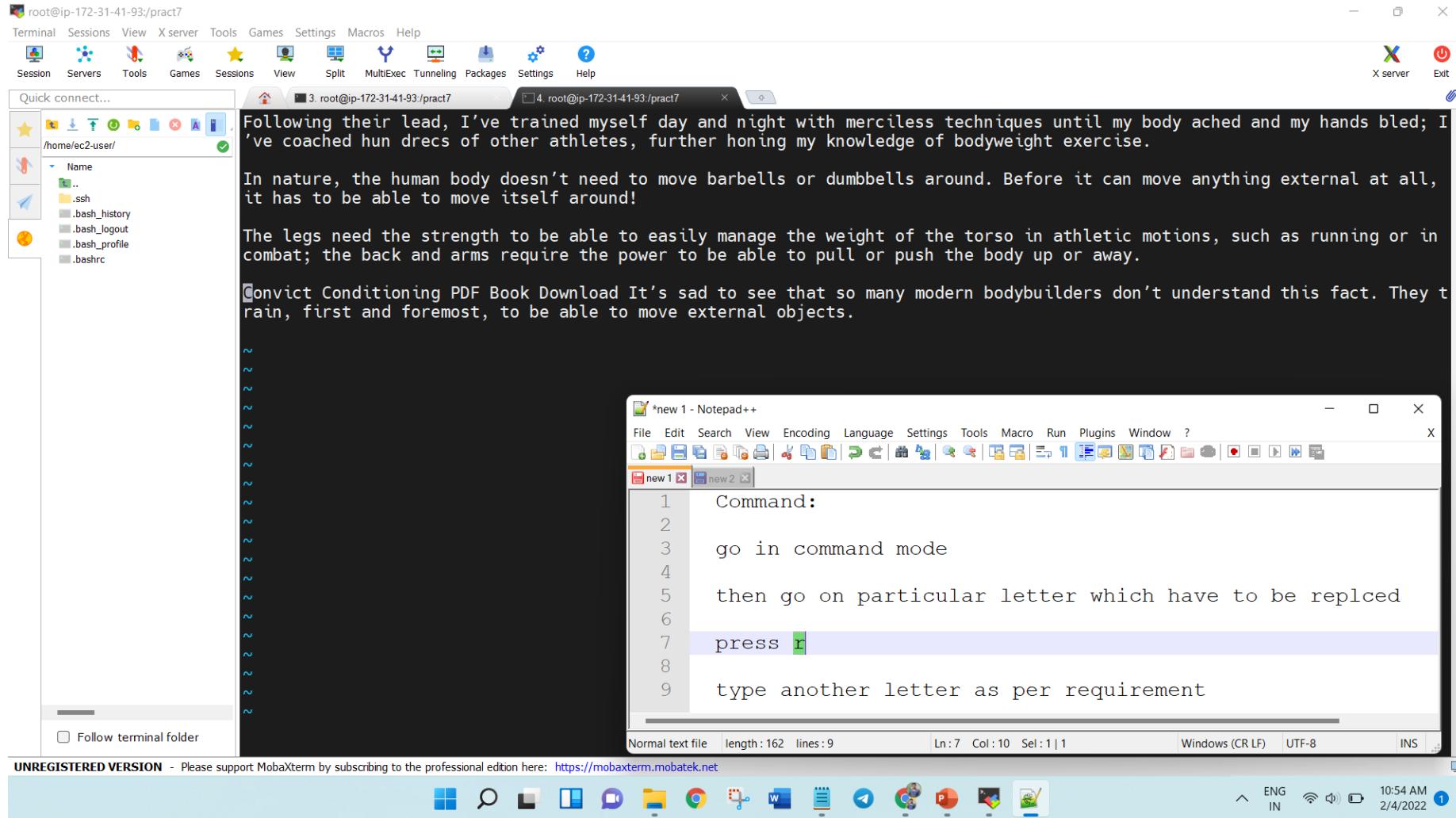
- Here you can see that I came at the end of 1<sup>st</sup> line.



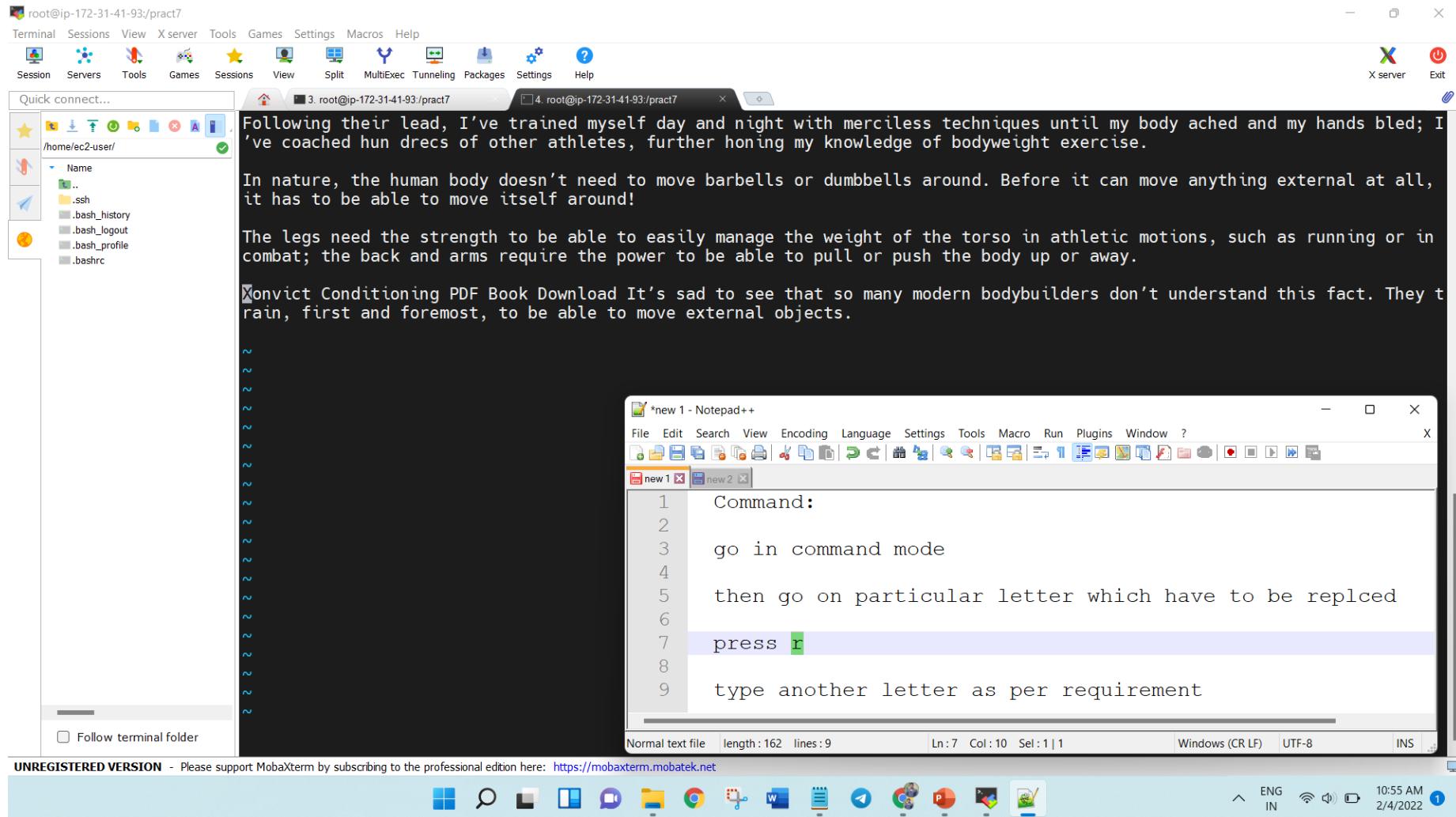
- In command mode press **Shift+g** – to go in last line.



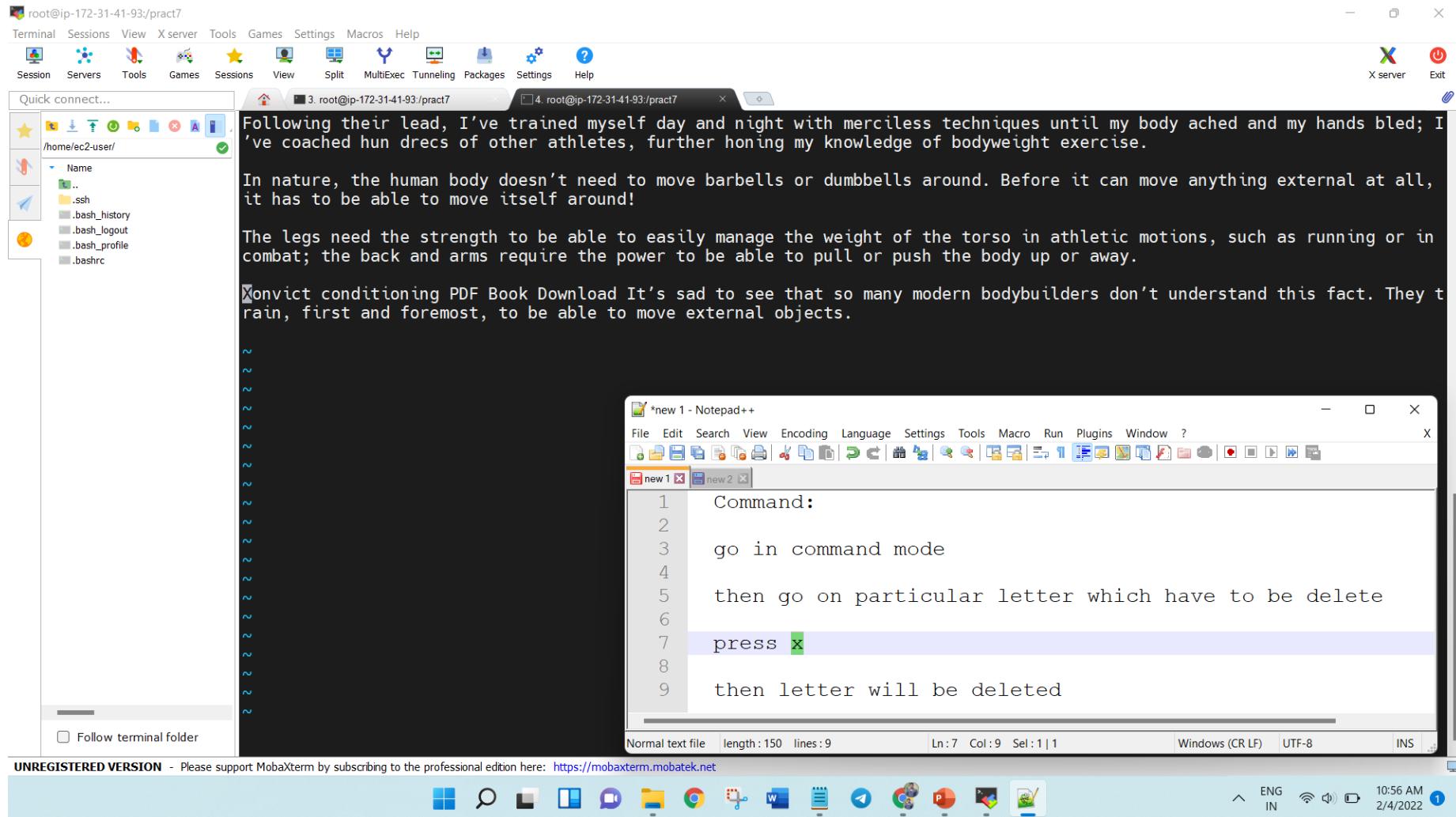
- Here you can see that I am in last line.



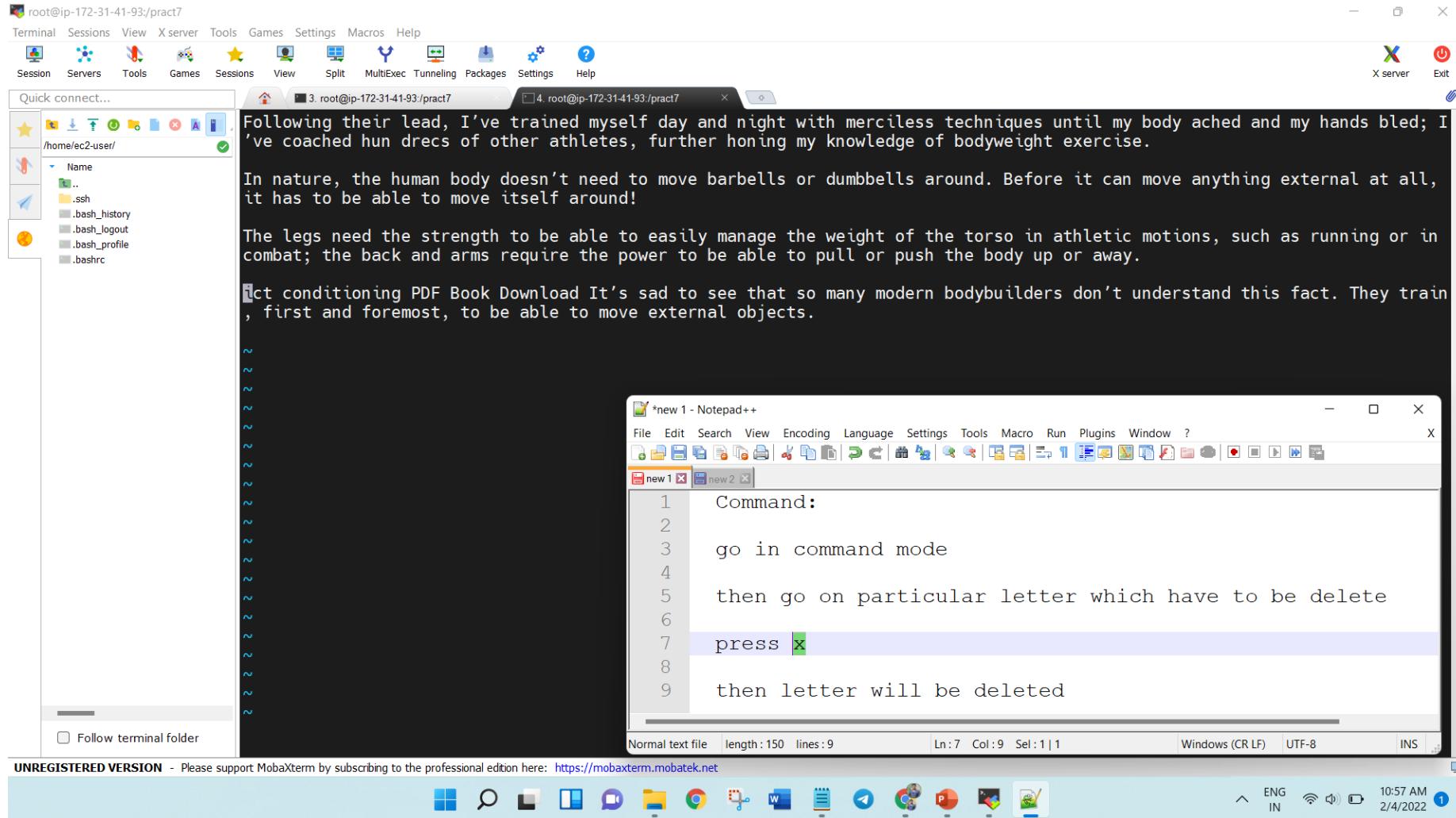
- If you want to replace any letter from file then in command mode.
- Go on particular letter, press **r**
- And type the required letter.



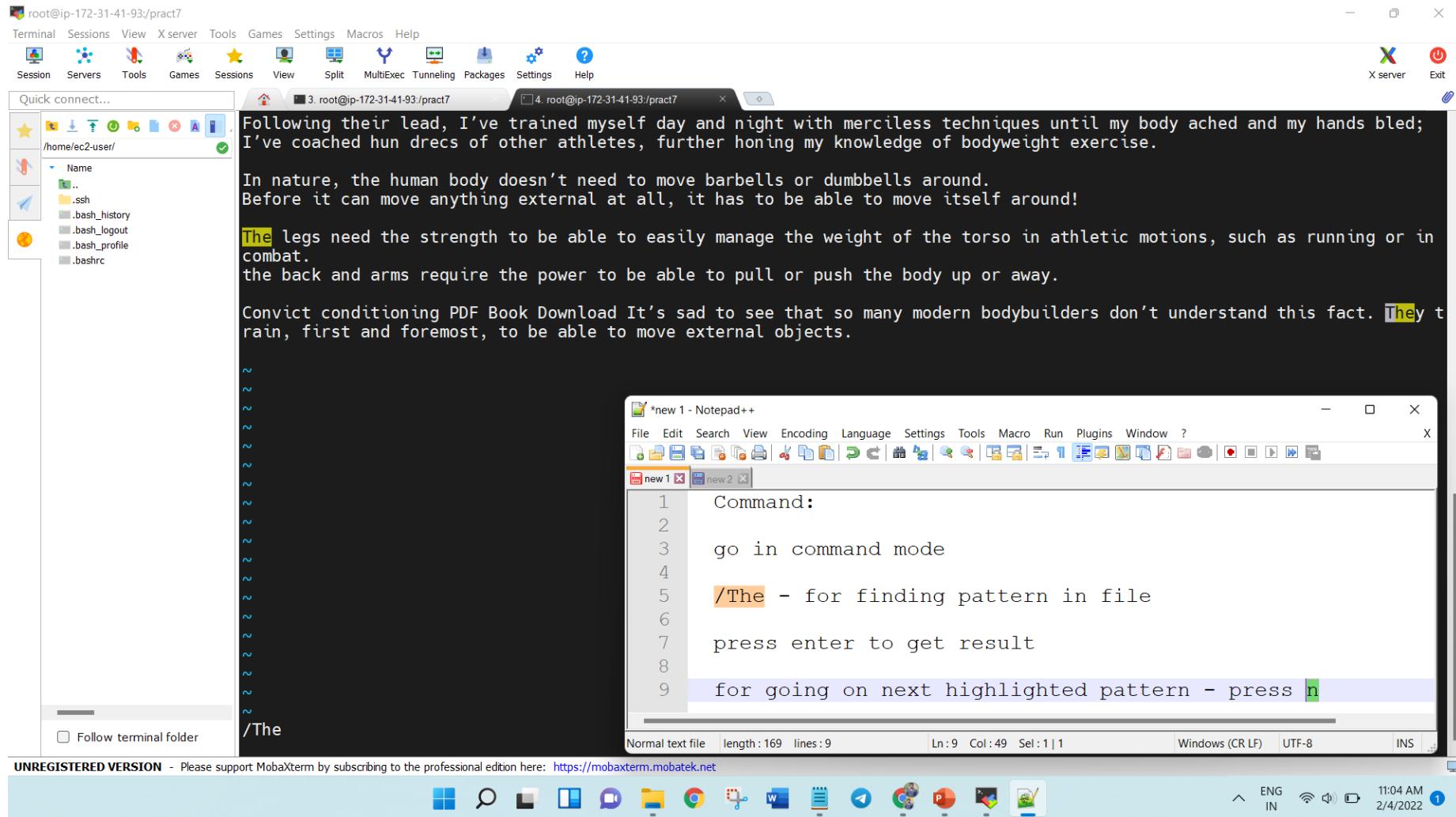
- Here I replaced letter C to X



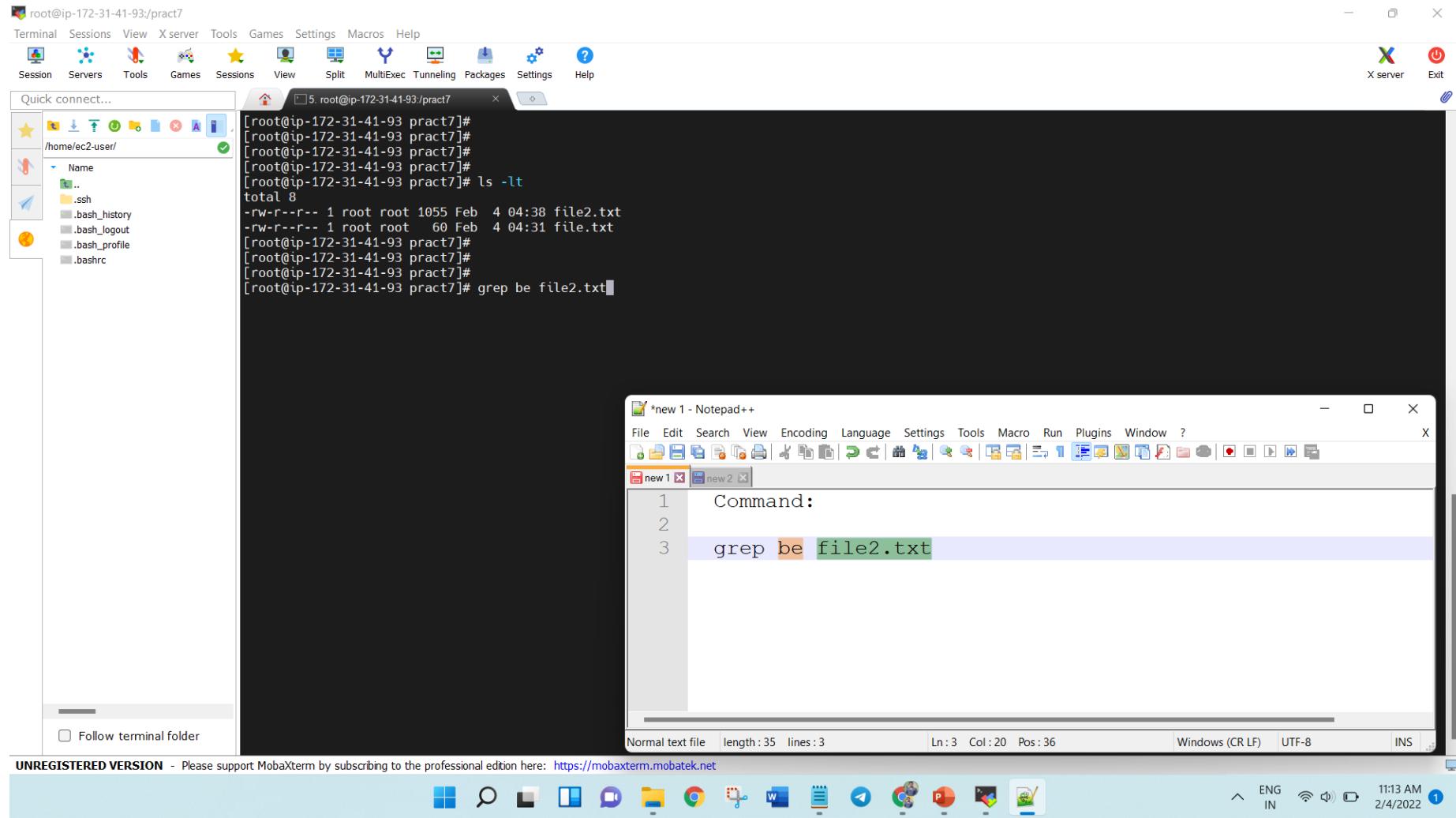
- In command mode **x** is used as backspace button.



- So that you can delete some letter by using x button.



- Use **/the** or **/pattern** (in vi editor)
  - To find same pattern in that file.
  - Press **n** to go on next pattern (if there are more than one patterns)



- Use **grep be file2.txt**

The screenshot shows a MobaXterm interface. On the left is a file explorer window titled 'Quick connect...', showing a directory tree under '/home/ec2-user/'. The main terminal window (tab 5) displays a root shell session with the following commands and output:

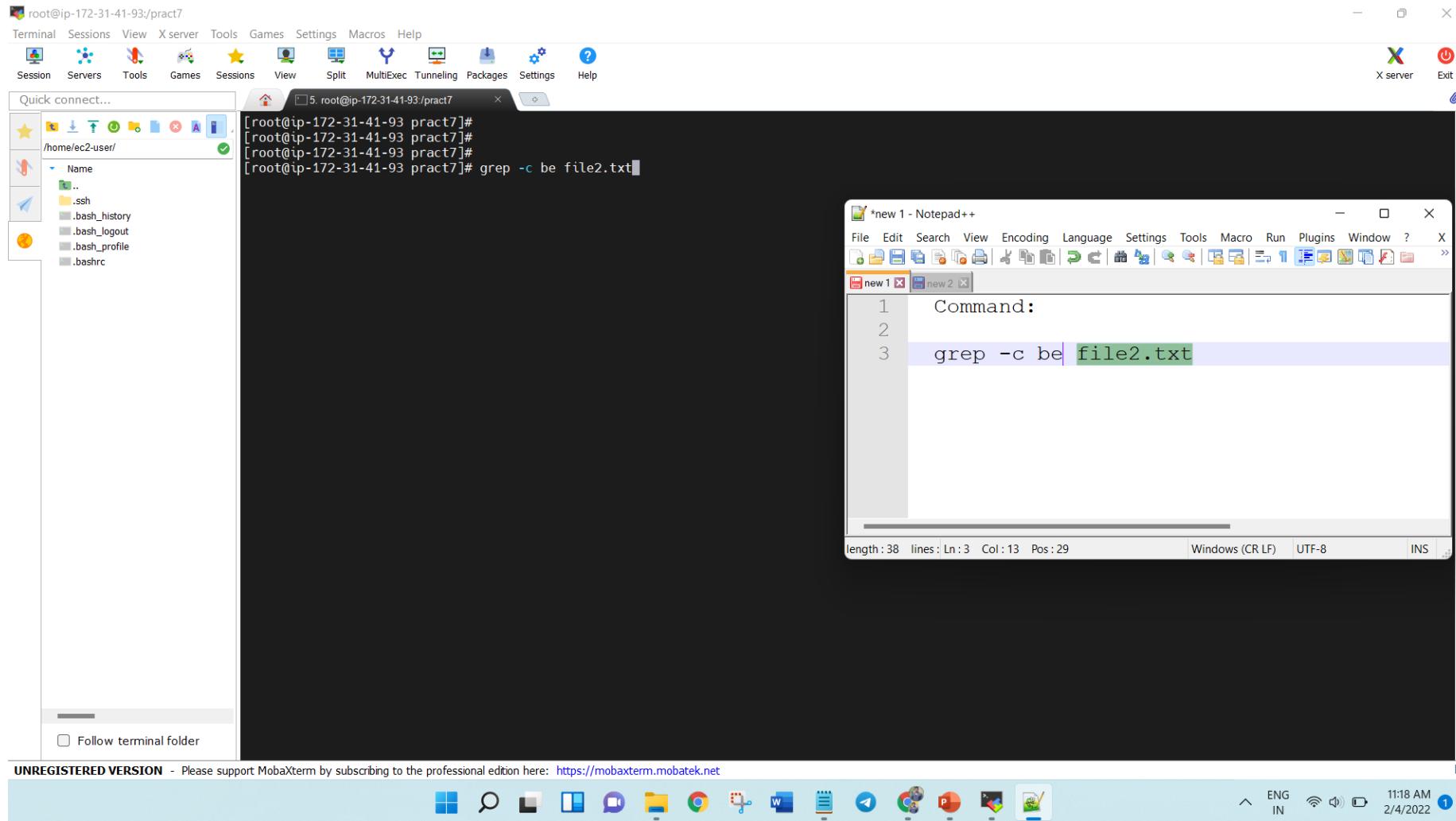
```
[root@ip-172-31-41-93 pract7]#
[root@ip-172-31-41-93 pract7]#
[root@ip-172-31-41-93 pract7]#
[root@ip-172-31-41-93 pract7]#
[root@ip-172-31-41-93 pract7]# ls -lt
total 8
-rw-r--r-- 1 root root 1055 Feb 4 04:38 file2.txt
-rw-r--r-- 1 root root 60 Feb 4 04:31 file.txt
[root@ip-172-31-41-93 pract7]#
[root@ip-172-31-41-93 pract7]#
[root@ip-172-31-41-93 pract7]#
[root@ip-172-31-41-93 pract7]# grep be file2.txt
In nature, the human body doesn't need to move barbells or dumbbells around. Before it can move anything external at all, it has to be able to move itself around!
The legs need the strength to be able to easily manage the weight of the torso in athletic motions, such as running or in combat; the back and arms require the power to be able to pull or push the body up or away.
Convict Conditioning PDF Book Download It's sad to see that so many modern bodybuilders don't understand this fact. They train, first and foremost, to be able to move external objects.
They may become very good at it, but this approach neglects and eventually compromises the prime athletic directive of self-movement. I have met hulking trainees who could squat five hundred pounds, but who waddled up a flight of stairs, wheezing like old men.
[root@ip-172-31-41-93 pract7]#
```

Below the terminal, a Notepad++ window titled 'new 1' shows the command:

```
1 Command:
2
3 grep be file2.txt
```

The system tray at the bottom right shows the date and time as 11:13 AM 2/4/2022.

- It is used to find the pattern from file directly from terminal



- Use **grep -c be file2.txt**
  - It is used to get the pattern count from file directly from terminal

The screenshot shows a MobaXterm interface. On the left is a file explorer window titled 'Quick connect...', showing a directory tree under '/home/ec2-user/'. The main terminal window (tab 5) displays a root shell session with the command 'grep -c be file2.txt' and its output '4'. To the right of the terminal is a Notepad++ window titled 'new 1 - Notepad++' containing the same command and output. The Notepad++ status bar shows 'length : 38 lines : Ln : 3 Col : 13 Pos : 29' and encoding 'Windows (CR LF) | UTF-8'. The bottom taskbar includes icons for various Windows applications like File Explorer, Task View, and Edge. A message at the bottom of the terminal window reads 'UNREGISTERED VERSION - Please support MobaXterm by subscribing to the professional edition here: <https://mobaxterm.mobatek.net>'.

- Here we got in how much times our pattern is saved in files.

The screenshot shows a MobaXterm interface. On the left is a file browser window titled 'Quick connect...'. The current directory is '/home/ec2-user/'. Inside, there's a folder named 'Name' containing files like '.ssh', '.bash\_history', '.bash\_logout', '.bash\_profile', and '.bashrc'. The main terminal window (tab 5) shows a root shell session. The user runs the command 'grep -c be file2.txt', which returns the number '4'. Then they run 'grep -i be file2.txt' and copy the output into a Notepad++ window. The Notepad++ window has two tabs: 'new 1' and 'new 2'. The 'new 1' tab contains the command 'grep -i be file2.txt'. The status bar at the bottom of the terminal window indicates 'UNREGISTERED VERSION - Please support MobaXterm by subscribing to the professional edition here: <https://mobaxterm.mobatek.net>'.

```
[root@ip-172-31-41-93 pract7]# [root@ip-172-31-41-93 pract7]# [root@ip-172-31-41-93 pract7]# [root@ip-172-31-41-93 pract7]# grep -c be file2.txt
4
[root@ip-172-31-41-93 pract7]# [root@ip-172-31-41-93 pract7]# [root@ip-172-31-41-93 pract7]# grep -i be file2.txt
In nature, the human body doesn't need to move barbells or dumbbells around. Before it can move anything external at all, it has to be able to move itself around!
The legs need the strength to be able to easily manage the weight of the torso in athletic motions, such as running or in combat; the back and arms require the power to be able to pull or push the body up or away.
Convict Conditioning PDF Book Download It's sad to see that so many modern bodybuilders don't understand this fact. They train, first and foremost, to be able to move external objects.
They may become very good at it, but this approach neglects and eventually compromises the prime athletic directive of self-movement. I have met hulking trainees who could squat five hundred pounds, but who waddled up a flight of stairs, wheezing like old men.
[root@ip-172-31-41-93 pract7]#
```

\*new 1 - Notepad++

File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ? X

new 1 new 2

1  
2  
3    Command:  
grep -i be file2.txt

length: 38 lines: Ln: 3 Col: 10 Pos: 26 Windows (CR LF) UTF-8 INS

UNREGISTERED VERSION - Please support MobaXterm by subscribing to the professional edition here: <https://mobaxterm.mobatek.net>

ENG IN WiFi 11:19 AM 2/4/2022

- Use **grep -i be file2.txt**
- It is used to find the pattern from file directly from terminal
- But it is **case-insensitive**

The screenshot shows a MobaXterm window with a terminal session titled 'root@ip-172-31-41-93:/pract7'. The terminal displays the following command and its output:

```
[root@ip-172-31-41-93 pract7]# grep -i Be file2.txt
1 Command:
2
3 grep -i Be file2.txt
```

The terminal also shows several lines of text from a file, which include the pattern 'Be' found by the grep command. The text discusses the strength required for movement and bodybuilding.

- Use **grep -i Be file2.txt**
- It is used to find the pattern from file directly from terminal
- But it is **case-insensitive**

The screenshot shows a MobaXterm window with the following components:

- Terminal:** A black terminal window titled "root@ip-172-31-41-93:/pract7". It displays the following command history and output:

```
[root@ip-172-31-41-93 pract7]#
[root@ip-172-31-41-93 pract7]# ls -lt
total 12
-rw-r--r-- 1 root root 36 Feb 4 06:01 file3.txt
-rw-r--r-- 1 root root 0 Feb 4 05:56 beel.txt
-rw-r--r-- 1 root root 0 Feb 4 05:56 best.txt
drwxr-xr-x 2 root root 6 Feb 4 05:55 be
drwxr-xr-x 2 root root 6 Feb 4 05:55 bear
drwxr-xr-x 2 root root 6 Feb 4 05:55 beon
-rw-r--r-- 1 root root 1055 Feb 4 04:38 file2.txt
-rw-r--r-- 1 root root 60 Feb 4 04:31 file.txt
[root@ip-172-31-41-93 pract7]#
[root@ip-172-31-41-93 pract7]#
[root@ip-172-31-41-93 pract7]#
[root@ip-172-31-41-93 pract7]# grep -s be *.txt
```
- File Browser:** A sidebar on the left showing the directory structure under "/home/ec2-user/". The contents of the current directory are listed:

  - ..
  - .ssh
  - .bash\_history
  - .bash\_logout
  - .bash\_profile
  - .bashrc

- Notepad++:** An open instance titled "new 1 - Notepad++". It contains the following text:

```
1 Command:
2
3 grep -s be *.txt
```

At the bottom of the terminal window, there is a message: "UNREGISTERED VERSION - Please support MobaXterm by subscribing to the professional edition here: <https://mobaxterm.mobatek.net>".

- Use **grep -s be \*.txt**

The screenshot shows a MobaXterm interface with a terminal window and a file viewer.

**Terminal Window:**

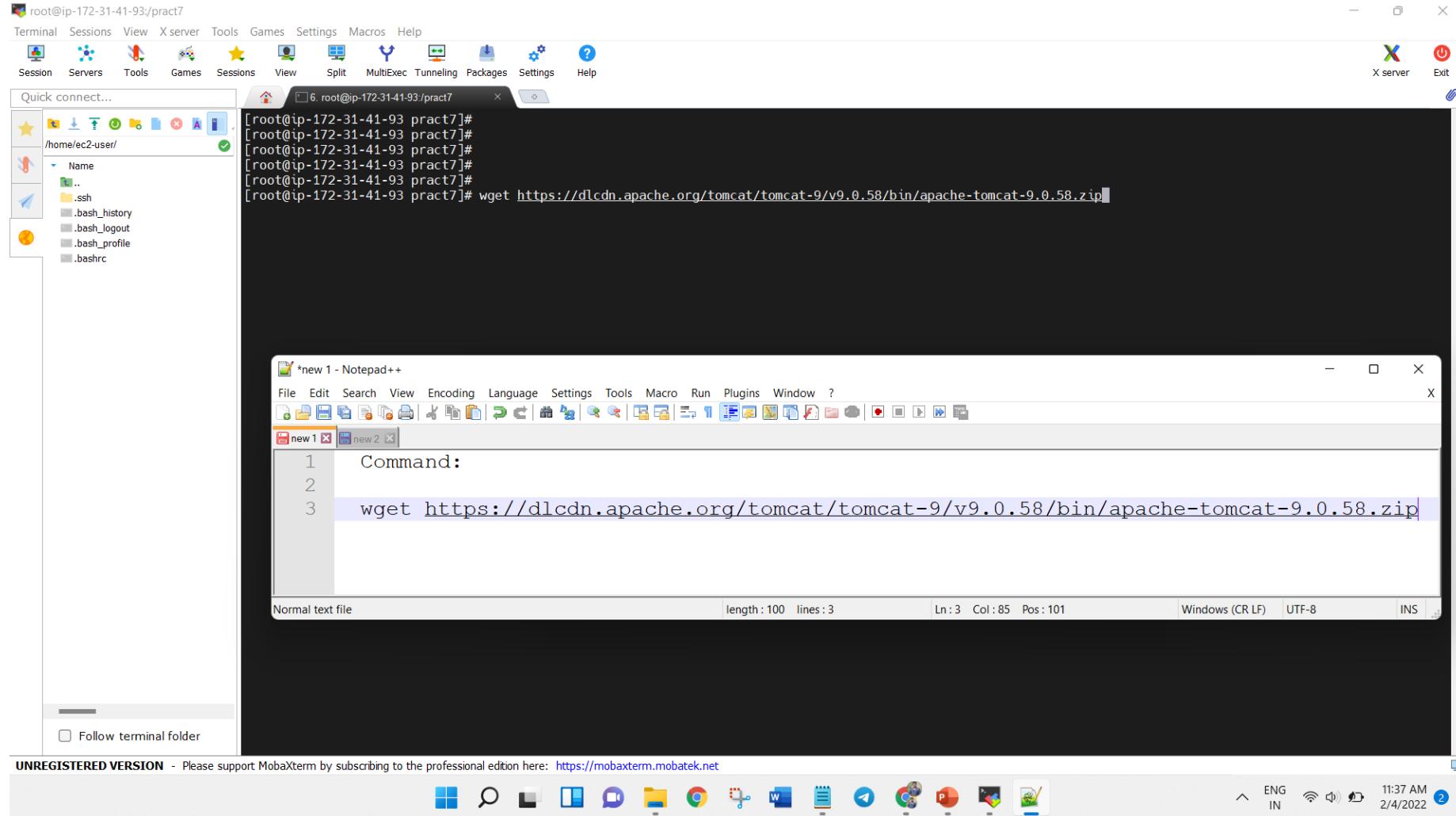
```
[root@ip-172-31-41-93 pract7]#
[root@ip-172-31-41-93 pract7]# ls -lt
total 12
-rw-r--r-- 1 root root 36 Feb 4 06:01 file3.txt
-rw-r--r-- 1 root root 0 Feb 4 05:56 beel.txt
-rw-r--r-- 1 root root 0 Feb 4 05:56 best.txt
drwxr-xr-x 2 root root 6 Feb 4 05:55 be
drwxr-xr-x 2 root root 6 Feb 4 05:55 bear
drwxr-xr-x 2 root root 6 Feb 4 05:55 beon
-rw-r--r-- 1 root root 1055 Feb 4 04:38 file2.txt
-rw-r--r-- 1 root root 60 Feb 4 04:31 file.txt
[root@ip-172-31-41-93 pract7]#
[root@ip-172-31-41-93 pract7]#
[root@ip-172-31-41-93 pract7]# grep -s be *.txt
file2.txt:In nature, the human body doesn't need to move barbells or dumbbells around. Before it can move anything external at all, it has to be able to move itself around!
file2.txt:The legs need the strength to be able to easily manage the weight of the torso in athletic motions, such as running or in combat; the back and arms require the power to be able to pull or push the body up or away.
file2.txt:Convict Conditioning PDF Book Download It's sad to see that so many modern bodybuilders don't understand this fact. They train, first and foremost, to be able to move external objects.
file2.txt:They may become very good at it, but this approach neglects and eventually compromises the prime athletic directive of self-movement. I have met hulking trainees who could squat five hundred pounds, but who waddled up a flight of stairs, wheezing like old men.
file3.txt:best
file3.txt:bear
file3.txt:be rocking
file3.txt:be an engineer
[root@ip-172-31-41-93 pract7]#
```

**File Viewer:**

The file viewer shows the contents of the file2.txt file.

```
1 Command:
2
3 grep -s be *.txt
```

- It is used to express suppress error



- Use **wget <url>** to download any file

The screenshot shows a MobaXterm interface. At the top is a menu bar with options like Terminal, Sessions, View, Xserver, Tools, Games, Settings, Macros, and Help. Below the menu is a toolbar with icons for Session, Servers, Tools, Games, Sessions, View, Split, MultiExec, Tunneling, Packages, Settings, and Help. On the right side of the window are buttons for X server and Exit.

The main terminal window (tab 6) shows a root shell session on a Linux system. The user is executing a wget command to download the Apache Tomcat 9.0.58 binary:

```
[root@ip-172-31-41-93 pract7]# wget https://dlcdn.apache.org/tomcat/tomcat-9/v9.0.58/bin/apache-tomcat-9.0.58.zip
--2022-02-04 06:07:33-- https://dlcdn.apache.org/tomcat/tomcat-9/v9.0.58/bin/apache-tomcat-9.0.58.zip
Resolving dlcdn.apache.org (dlcdn.apache.org)... 151.101.2.132, 2a04:4e42::644
Connecting to dlcdn.apache.org (dlcdn.apache.org)|151.101.2.132|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 12121623 (12M) [application/zip]
Saving to: 'apache-tomcat-9.0.58.zip'

100%[=====] 12,121,623  ---K/s   in 0.1s

2022-02-04 06:07:33 (92.4 MB/s) - 'apache-tomcat-9.0.58.zip' saved [12121623/12121623]

[root@ip-172-31-41-93 pract7]#
```

Below the terminal is a Notepad++ window titled "new 1 - Notepad++". It contains a single line of text:

```
1 Command:
2
3 wget https://dlcdn.apache.org/tomcat/tomcat-9/v9.0.58/bin/apache-tomcat-9.0.58.zip
```

The status bar at the bottom of the Notepad++ window shows the file is a "Normal text file" with 100 length, 3 lines, and position 101. It also indicates Windows (CR LF), UTF-8 encoding, and INS mode.

The bottom of the screen shows the MobaXterm taskbar with various icons for different applications like File Explorer, Task Manager, and a browser. A message in the taskbar says "UNREGISTERED VERSION - Please support MobaXterm by subscribing to the professional edition here: <https://mobaxterm.mobatek.net>". The system tray shows the date and time as 11:37 AM 2/4/2022.

- After putting **wget <url>** press enter
- Then our required file will be download.

**Thanks for doing practical with us.**