

Made By

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**011 Practical - Basic Shell Scripting of Linux on EC2
with Amazon Linux Machine - 09 Feb 2022**

ec2-user@ip-172-31-35-32:~

Terminal Sessions View Xserver Tools Games Settings Macros Help

Session Servers Tools Games Sessions View Split MultiExec Tunneling Packages Settings Help

X server Exit

Qu 2. root@ip-172-31-35-32:11feb 3. ec2-user@ip-172-31-35-32 ~

• MobaXterm Personal Edition v21.5 •
(X server, SSH client and network tools)

> Your computer drives are accessible through the `/drives` path
> Your DISPLAY is set to `192.168.0.105:0.0`
> When using SSH, your remote DISPLAY is automatically forwarded
> Your HOME folder is not persistent: it will be erased on restart
> Each command status is specified by a special symbol (✓ or ✗)

• Important:
This is MobaXterm Personal Edition. The Professional edition allows you to customize MobaXterm for your company: you can add your own logo, your parameters, your welcome message and generate either an MSI installation package or a portable executable.
We can also modify MobaXterm or develop the plugins you need.
For more information: <https://mobaxterm.mobatek.net/download.html>

11/02/2022 16:53:34 /home/mobaxterm cd desktop/keys

11/02/2022 16:53:40 /home/mobaxterm/desktop/keys ssh -i "10-feb-linux-machine.pem" ec2-user@ec2-13-232-199-188.ap-south-1.compute.amazonaws.com X11 forwarding request failed on channel 0
Last login: Fri Feb 11 11:23:41 2022 from 45.115.59.168

Amazon Linux 2 AMI

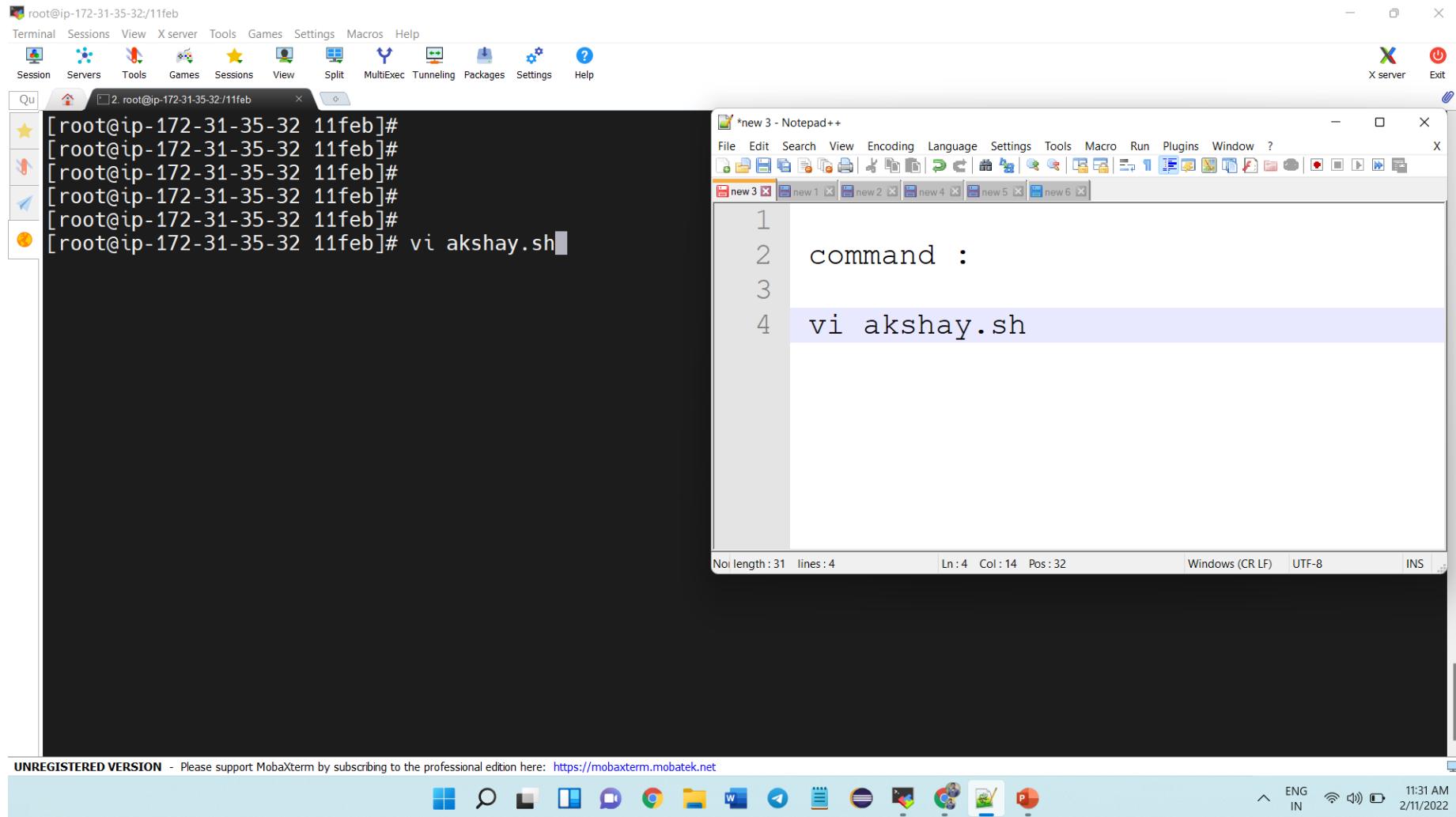
<https://aws.amazon.com/amazon-linux-2/>
3 package(s) needed for security, out of 6 available
Run "sudo yum update" to apply all updates.

[ec2-user@ip-172-31-35-32 ~]\$

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6:28 PM 2/11/2022

- Login to your Linux Machine



- Script 1

```
#!/bin/bash  
# to check variables
```

```
echo "My First Name is : $1"
```

```
echo "MY Last Name is : $2"
```

- Script Used

The screenshot shows a terminal window and a Notepad++ window side-by-side.

Terminal Window:

```
#!/bin/bash
# to check variables

echo "My First Name is : $1"
echo "MY Last Name is : $2"
```

Notepad++ Window:

```
1 1#!/bin/bash
2 # to check variables
3
4
5 echo "My First Name is : $1"
6
7 echo "MY Last Name is : $2"
8
```

The terminal window shows the script being typed. The Notepad++ window shows the same script with line numbers. The line containing "echo "MY Last Name is : \$2"" is highlighted in purple.

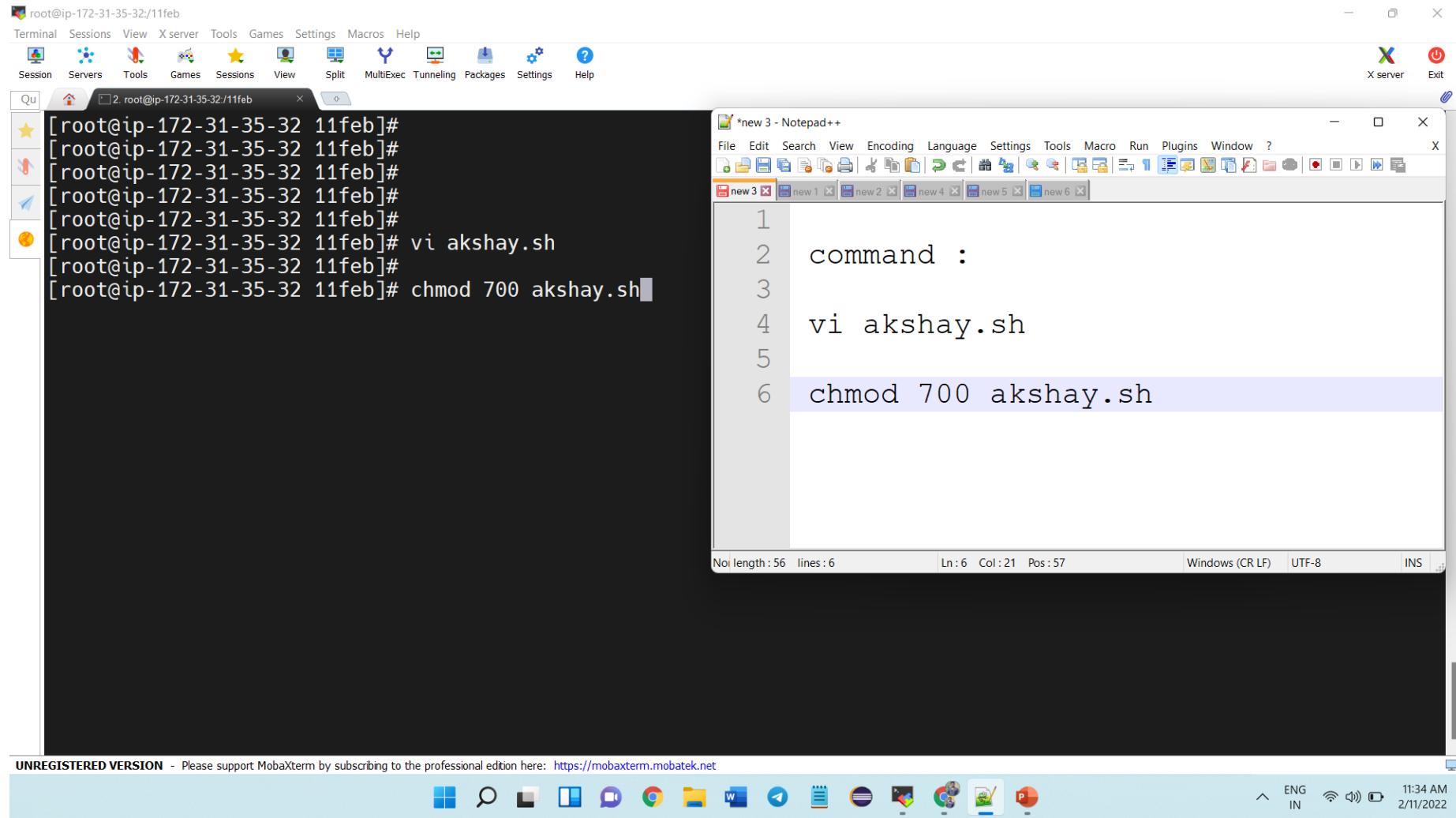
At the bottom of the terminal window, it says "akshay.sh" 6L, 92B.

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Windows taskbar icons include File Explorer, Task View, Start, Search, Edge, Google Chrome, Microsoft Word, Microsoft Excel, Microsoft PowerPoint, Microsoft OneNote, Microsoft Paint, and Microsoft Snipping Tool.

System tray icons show battery level (11:32 AM 2/11/2022), network connectivity, and volume.

- Save file



- Give Permissions

The screenshot shows a MobaXterm interface. On the left is a terminal window titled '2. root@ip-172-31-35-32:11feb'. It displays a series of commands entered by the root user on February 11, 2022, at 11:32 AM. The commands are:

```
[root@ip-172-31-35-32 11feb]#
[root@ip-172-31-35-32 11feb]#
[root@ip-172-31-35-32 11feb]#
[root@ip-172-31-35-32 11feb]#
[root@ip-172-31-35-32 11feb]#
[root@ip-172-31-35-32 11feb]#
[root@ip-172-31-35-32 11feb]# vi akshay.sh
[root@ip-172-31-35-32 11feb]#
[root@ip-172-31-35-32 11feb]# chmod 700 akshay.sh
[root@ip-172-31-35-32 11feb]#
[root@ip-172-31-35-32 11feb]# ./akshay.sh akshay bhairat
```

To the right of the terminal is a Notepad++ window titled 'new 3 - Notepad++'. It contains the same eight lines of text, which are numbered 1 through 8. The line '8' is highlighted in purple, indicating it is the current selection.

At the bottom of the screen, there is a taskbar with various icons for Windows applications like File Explorer, Edge, and Mail. The system tray shows the date and time as '11:41 AM 2/11/2022'.

- Use command **./akshay.sh akshay bhairat**

The screenshot shows a MobaXterm window with two panes. The left pane is a terminal session titled 'root@ip-172-31-35-32:11feb'. It displays the following command-line session:

```
[root@ip-172-31-35-32 11feb]#
[root@ip-172-31-35-32 11feb]#
[root@ip-172-31-35-32 11feb]#
[root@ip-172-31-35-32 11feb]#
[root@ip-172-31-35-32 11feb]#
[root@ip-172-31-35-32 11feb]# vi akshay.sh
[root@ip-172-31-35-32 11feb]#
[root@ip-172-31-35-32 11feb]# chmod 700 akshay.sh
[root@ip-172-31-35-32 11feb]#
[root@ip-172-31-35-32 11feb]# ./akshay.sh akshay bhairat
My First Name is : akshay 1
MY Last Name is : bhairat 2
[root@ip-172-31-35-32 11feb]#
```

Two red boxes highlight the arguments passed to the script: 'akshay' and 'bhairat'. Red arrows point from these boxes to the corresponding arguments in the terminal output.

The right pane is a Notepad++ editor titled 'new 3 - Notepad++'. It contains the following text:

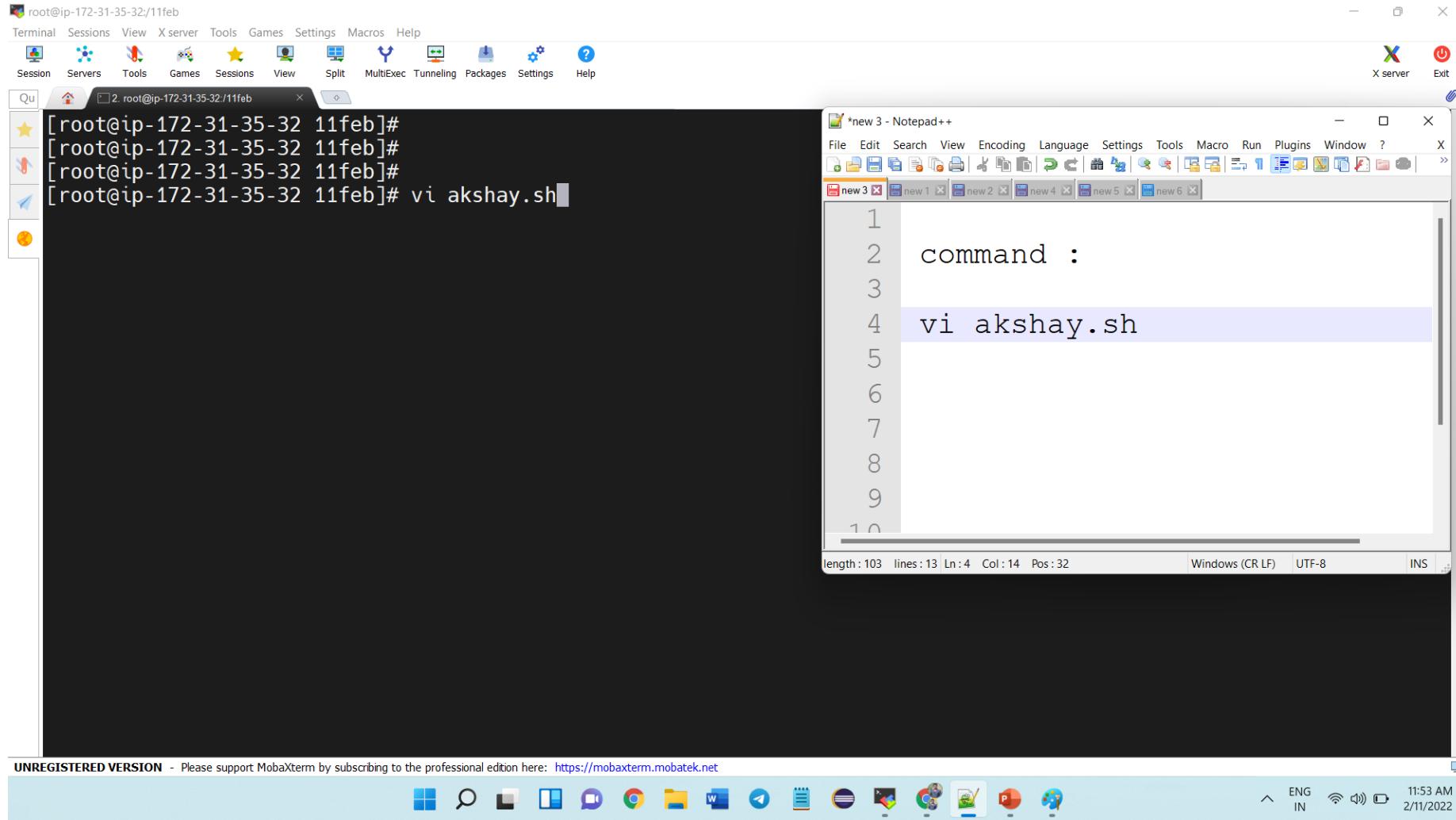
```
1
2 command :
3
4 vi akshay.sh
5
6 chmod 700 akshay.sh
7
8 ./akshay.sh akshay bhairat
```

The status bar at the bottom of the Notepad++ window shows: length: 88 lines: 8 Ln: 8 Col: 28 Pos: 89 Windows (CR LF) UTF-8 INS.

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

The taskbar at the very bottom of the screen shows various application icons.

- Result



- Script 2

```
#!/bin/bash  
# to check variables
```

```
echo "My First Name is : $1"
```

```
echo "MY Last Name is : $2"
```

```
echo "value : $@"
```

```
echo "value : $*"
```

```
echo "value : $#"
```

- Script Used

The screenshot shows a MobaXterm interface with two windows open. On the left is a terminal window titled 'root@ip-172-31-35-32:11feb' containing a bash script. On the right is a Notepad++ window titled '*new 6 - Notepad++' also containing the same bash script. Both windows display the following code:

```
#!/bin/bash
# to check variables

echo "My First Name is : $1"
echo "MY Last Name is : $2"

echo "value : $@"
echo "value : $*"
echo "value : ${#}"
```

The terminal window has a dark background and uses color coding for syntax highlighting. The Notepad++ window has a light background and includes a status bar at the bottom showing file statistics and encoding information.

- Save file

The screenshot shows a MobaXterm interface. On the left, a terminal window titled '2. root@ip-172-31-35-32:11feb' displays the following command history:

```
[root@ip-172-31-35-32 11feb]#
[root@ip-172-31-35-32 11feb]#
[root@ip-172-31-35-32 11feb]#
[root@ip-172-31-35-32 11feb]# vi akshay.sh
[root@ip-172-31-35-32 11feb]#
[root@ip-172-31-35-32 11feb]# ./akshay.sh akshay bhairat
```

On the right, a Notepad++ window titled '*new 3 - Notepad++' shows the contents of the file 'akshay.sh':

```
1 command :
2
3
4 vi akshay.sh
5
6 ./akshay.sh akshay bhairat
```

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>

length : 63 lines : 6 Ln : 6 Col : 28 Pos : 64 Windows (CR LF) UTF-8 INS

At the very bottom, a taskbar shows various application icons.

- Use command `./akshay.sh akshay bhairat`

The screenshot shows a MobaXterm interface with two windows. The left window is a terminal session titled '2. root@ip-172-31-35-32:11feb'. It displays the following command-line interaction:

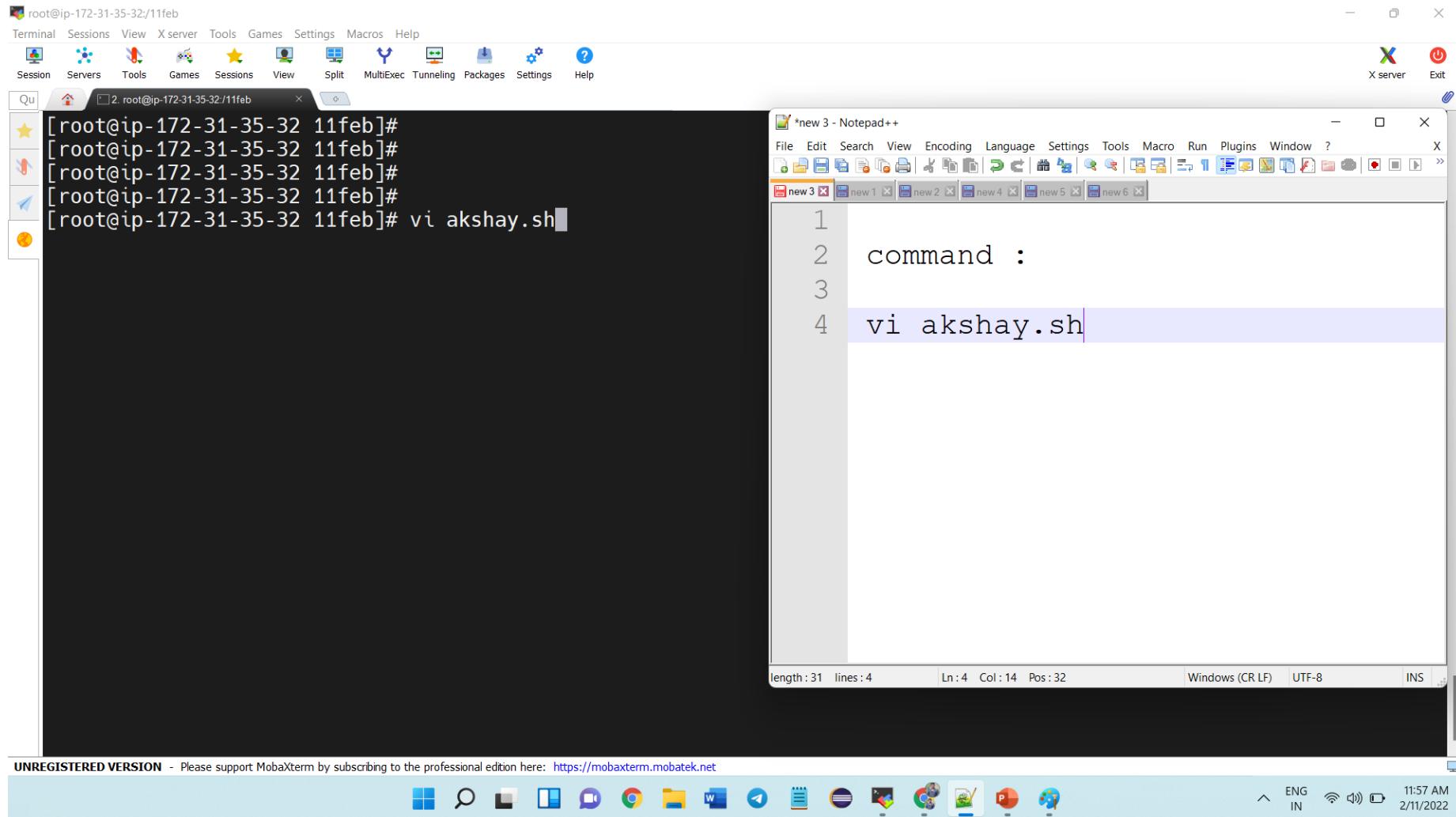
```
[root@ip-172-31-35-32 11feb]#
[root@ip-172-31-35-32 11feb]#
[root@ip-172-31-35-32 11feb]#
[root@ip-172-31-35-32 11feb]# vi akshay.sh
[root@ip-172-31-35-32 11feb]#
[root@ip-172-31-35-32 11feb]# ./akshay.sh akshay bhairat
My First Name is : akshay
MY Last Name is : bhairat
value : akshay bhairat
value : akshay bhairat
value : 2
[root@ip-172-31-35-32 11feb]#
```

The right window is a Notepad++ editor titled '*new 3 - Notepad++'. It contains the following text:

```
1 command :
2
3
4 vi akshay.sh
5
6 ./akshay.sh akshay bhairat
```

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>".

- ## Result



- Script 3

```
#!/bin/bash  
# to check exit status
```

```
date
```

```
echo $?
```

```
echo "If the value is zero then command is sucessfull"
```

- Script Used

The screenshot shows a terminal window titled "root@ip-172-31-35-32:11feb" with the following content:

```
#!/bin/bash
# to check variables

date

echo $?

echo "If the value is zero then command is sucessfull"
```

Below the terminal is a Notepad++ window titled "new 7 - Notepad++" containing the same script:

```
1 #!/bin/bash
2 # to check exit status
3
4 date
5
6 echo $?
7
8 echo "If the value is zero then command is sucessfull"
```

The terminal status bar indicates:

- "akshay.sh" 8L, 105B
- UNREGISTERED VERSION - Please support MobaXterm by subscribing to the professional edition here: <https://mobaxterm.mobatek.net>
- Normal text file length: 114 lines: 9 Ln: 5 Col: 1 Pos: 46 Windows (CR LF) UTF-8 INS
- 8,54 All

The system tray at the bottom right shows:

- ENG IN
- 3:25 PM 2/11/2022

- Save file

The screenshot shows a terminal session in MobaXterm and a Notepad++ window side-by-side.

MobaXterm Terminal Session:

```
[root@ip-172-31-35-32 11feb]#
[root@ip-172-31-35-32 11feb]#
[root@ip-172-31-35-32 11feb]#
[root@ip-172-31-35-32 11feb]# vi akshay.sh
[root@ip-172-31-35-32 11feb]#
[root@ip-172-31-35-32 11feb]#
[root@ip-172-31-35-32 11feb]#
[root@ip-172-31-35-32 11feb]# ./akshay.sh
Fri Feb 11 09:56:52 UTC 2022
0
If the value is zero then command is sucessfull
[root@ip-172-31-35-32 11feb]#
```

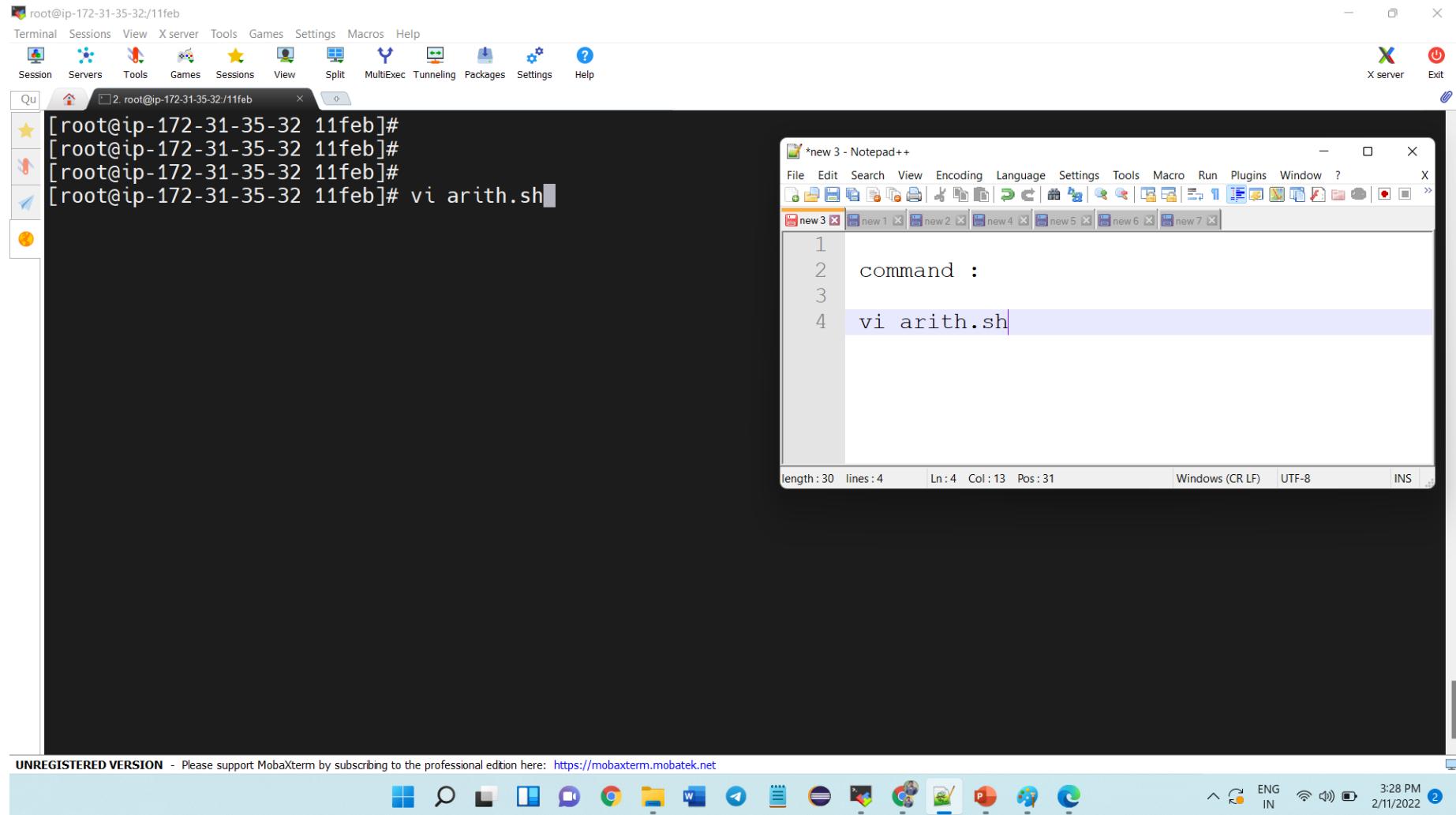
Notepad++ Content:

```
*new 3 - Notepad++
File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
new3 new1 new2 new4 new5 new6 new7

1 command :
2
3
4 vi akshay.sh
5
6 ./akshay.sh
```

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

- **Result**



- Script 4

```
#!/bin/bash  
#to check arithmetic operation
```

```
a=10
```

```
b=30
```

```
val=`expr $a + $b`  
echo "Addition = $val"
```

```
val=`expr $a - $b`  
echo "Subtraction = $val"
```

- Script Used

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

Terminal Window:

```
#!/bin/bash
#to check arithmetic operation

a=10
b=30

val=`expr $a + $b`
echo "Addition = $val"

val=`expr $a - $b`
echo "Substraction = $val"
```

Notepad++ Window:

```
1 #!/bin/bash
2 #to check arithmetic operation
3
4 a=10
5 b=30
6
7 val=`expr $a + $b`
8 echo "Addition = $val"
9
10 val=`expr $a - $b`
11 echo "Substraction = $val"
12
```

System Status Bar:

11,26 All

Bottom Footer:

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- Save file

The screenshot shows a terminal session in MobaXterm with the following command history:

```
[root@ip-172-31-35-32 11feb]#
[root@ip-172-31-35-32 11feb]#
[root@ip-172-31-35-32 11feb]#
[root@ip-172-31-35-32 11feb]#
[root@ip-172-31-35-32 11feb]#
[root@ip-172-31-35-32 11feb]# chmod 700 arith.sh
[root@ip-172-31-35-32 11feb]#
[root@ip-172-31-35-32 11feb]#
[root@ip-172-31-35-32 11feb]# ./arith.ch
```

Below the terminal, a Notepad++ window titled "new 3 - Notepad++" displays the following script content:

```
1 command :
2
3 vi arith.sh
4
5 chmod 700 arith.sh
6
7
8 ./arith.sh
```

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>
- length : 70 lines : 8 Ln : 8 Col : 12 Pos : 71
- Windows (CR LF) UTF-8 INS

The taskbar at the bottom of the screen shows various application icons.

- Added Permissions
- And run script

The screenshot shows a MobaXterm interface with two windows. The left window is a terminal session titled 'root@ip-172-31-35-32:11feb'. It displays the following command-line interaction:

```
[root@ip-172-31-35-32 11feb]# 
[root@ip-172-31-35-32 11feb]# 
[root@ip-172-31-35-32 11feb]# 
[root@ip-172-31-35-32 11feb]# 
[root@ip-172-31-35-32 11feb]# chmod 700 arith.sh
[root@ip-172-31-35-32 11feb]# ./arith.sh
Addition = 40
Substraction = -20
[root@ip-172-31-35-32 11feb]#
```

The right window is a Notepad++ editor titled 'new 3 - Notepad++'. It contains the following script:

```
1 command : 
2 
3 vi arith.sh
4 
5 chmod 700 arith.sh
6 
7 
8 ./arith.sh
```

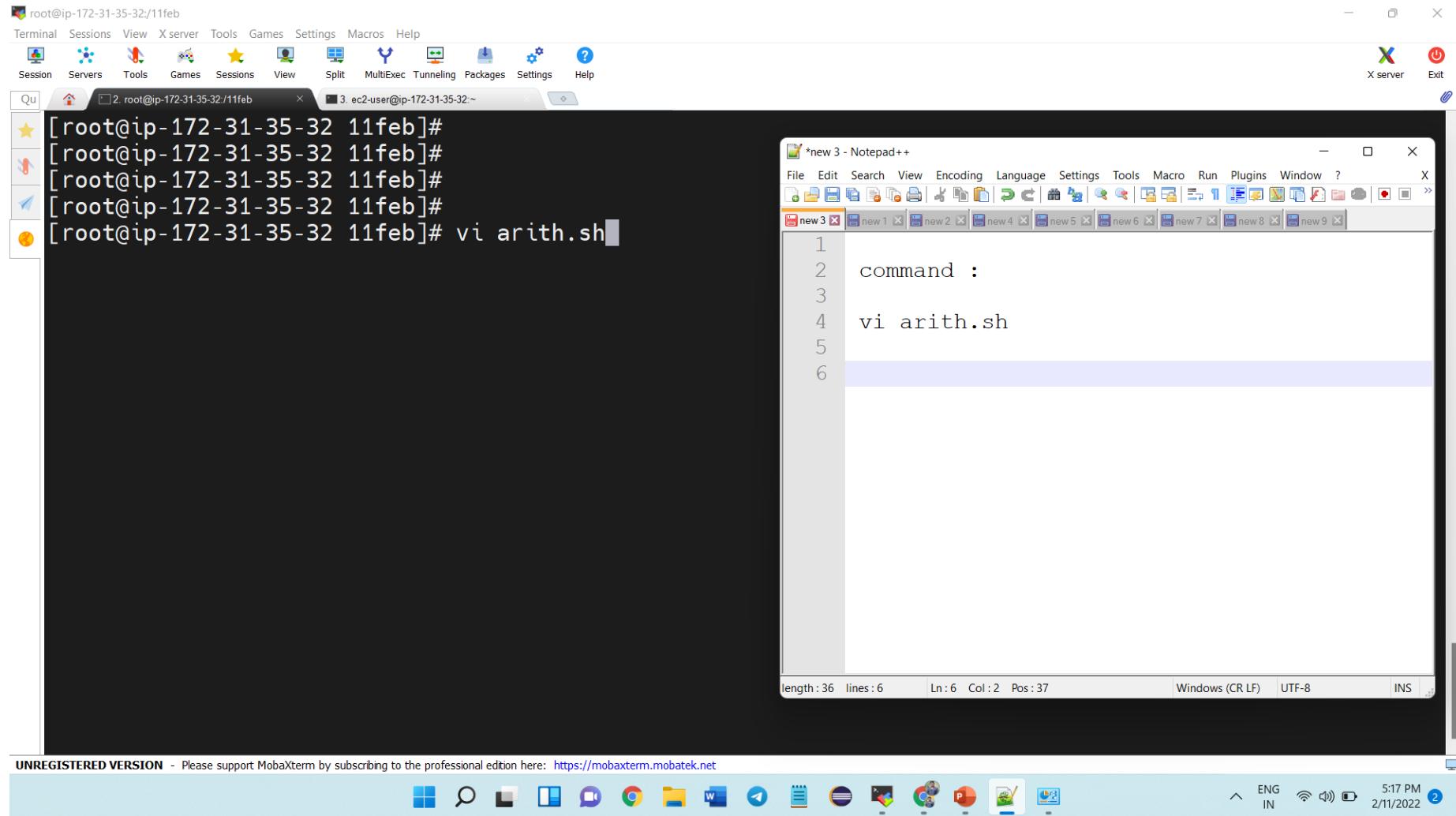
The status bar at the bottom of the MobaXterm window shows:

length : 70 lines : 8 Ln : 8 Col : 12 Pos : 71 Windows (CR LF) UTF-8 INS

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

At the very bottom, there is a taskbar with various icons.

- Result



- Script 5

```
#!/bin/bash
```

```
#To check arithmetic operators
```

```
a=10
```

```
b=20
```

```
val=`expr $a + $b`
```

```
echo "a + b : $val"
```

```
val=`expr $a - $b`
```

```
echo "a - b : $val"
```

```
val=`expr $a \* $b`
```

```
echo "a x b : $val"
```

```
val=`expr $b / $a`
```

```
echo "b/a : $val"
```

```
val=`expr $b % $a`
```

```
echo "b % a : $val"
```

The image shows a terminal session and a Notepad++ window side-by-side. The terminal window (MobaXterm) has tabs for 'root@ip-172-31-35-32:11feb' and 'ec2-user@ip-172-31-35-32 ~'. The current tab contains a script for checking arithmetic operators:

```
#!/bin/bash
#To check arithmetic operators

a=10
b=20

val=`expr $a + $b`
echo "a + b : $val"

val=`expr $a - $b`
echo "a - b : $val"

val=`expr $a \* $b`
echo "a x b : $val"

val=`expr $b / $a`
echo "b/a : $val"

val=`expr $b % $a`
echo "b % a : $val"
~
```

Type :qa and press <Enter> to exit Vim

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The Notepad++ window (new 9) shows the same script, with line numbers 1 through 20 visible on the left.

- Save file

The screenshot shows a MobaXterm interface with two windows. The left window is a terminal session for root user on IP 172-31-35-32 at 11feb. It displays several command-line entries:

```
[root@ip-172-31-35-32 11feb]#
[root@ip-172-31-35-32 11feb]#
[root@ip-172-31-35-32 11feb]#
[root@ip-172-31-35-32 11feb]#
[root@ip-172-31-35-32 11feb]# vi arith.sh
[root@ip-172-31-35-32 11feb]#
[root@ip-172-31-35-32 11feb]#
[root@ip-172-31-35-32 11feb]# ./arith.sh
```

The right window is a Notepad++ editor titled "new 3 - Notepad++". It contains the following text:

```
1
2 command :
3
4 vi arith.sh
5
6
7 ./arith.sh
8
```

The status bar at the bottom of the terminal window shows:

length : 52 lines : 8 Ln : 7 Col : 12 Pos : 48 Windows (CR LF) UTF-8 INS

The taskbar at the bottom of the desktop shows various application icons.

- Run script

The screenshot shows a terminal session and a Notepad++ window. The terminal session (MobaXterm) is running as root on a Linux system (ip-172-31-35-32). The user has run the command `vi arith.sh` to edit a shell script named `arith.sh`. The script contains the following code:

```
1 command :  
2 vi arith.sh  
3  
4 ./arith.sh  
5  
6  
7 ./.arith.sh  
8
```

The terminal also displays the output of the script execution:

```
[root@ip-172-31-35-32 11feb]#  
[root@ip-172-31-35-32 11feb]#  
[root@ip-172-31-35-32 11feb]#  
[root@ip-172-31-35-32 11feb]#  
[root@ip-172-31-35-32 11feb]# vi arith.sh  
[root@ip-172-31-35-32 11feb]#  
[root@ip-172-31-35-32 11feb]#  
[root@ip-172-31-35-32 11feb]#  
[root@ip-172-31-35-32 11feb]# ./arith.sh  
a + b : 30  
a - b : -10  
a x b : 200  
b/a : 2  
b % a : 0  
[root@ip-172-31-35-32 11feb]#
```

The Notepad++ window shows the contents of the `arith.sh` file:

```
1 command :  
2 vi arith.sh  
3  
4 ./arith.sh  
5  
6  
7 ./.arith.sh  
8
```

- result

The screenshot shows a terminal window in MobaXterm with a black background. The terminal title is "root@ip-172-31-35-32:11feb". The user has typed the following command:

```
[root@ip-172-31-35-32 11feb]# vi arith.sh
```

To the right of the terminal is a Notepad++ window titled "new 3 - Notepad++". The file contains the following text:

```
1 command :  
2  
3  
4 vi arith.sh  
5  
6  
7  
8
```

The Notepad++ interface includes a toolbar with icons for file operations like Open, Save, Print, and Find, as well as tabs for multiple documents labeled "new 1" through "new 10". The status bar at the bottom of the Notepad++ window shows "length : 40 lines : 8 Ln : 7 Col : 2 Pos : 38 Windows (CR LF) UTF-8 INS".

- Script 6

```
#!/bin/bash
#To check arithmetic operators
```

```
a=10
```

```
b=10
```

```
if [ $a == $b ]
```

```
then
```

```
echo "a is equal to b"
```

```
fi
```

- Script used

The screenshot shows a terminal session with two windows. The left window is a terminal window titled 'root@ip-172-31-35-32:11feb' running MobaXterm. It displays a Bash script in Vim mode. The script checks if variables \$a and \$b are equal. The right window is a Notepad++ window titled '*new 10 - Notepad++' showing the same script. The Notepad++ status bar indicates the file has 118 characters, 14 lines, and is in Windows (CR LF) encoding.

```
#!/bin/bash
#To check arithmetic operators

a=10
b=10

if [ $a == $b ]
then
echo "a is equal to b"

fi
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
Type :qa and press <Enter> to exit Vim
```

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length : 118 lines : 14 Ln : 14 Col : 1 Pos : 119 Windows (CR LF) UTF-8 INS

ENG IN 5:28 PM 2/11/2022

- Save file

The screenshot shows a terminal session in MobaXterm and a Notepad++ editor window.

MobaXterm Terminal Session:

- Terminal tab: root@ip-172-31-35-32:11feb
- Content:

```
[root@ip-172-31-35-32 11feb]#  
[root@ip-172-31-35-32 11feb]#  
[root@ip-172-31-35-32 11feb]#  
[root@ip-172-31-35-32 11feb]# vi arith.sh  
[root@ip-172-31-35-32 11feb]#  
[root@ip-172-31-35-32 11feb]# ./arith.sh  
a is equal to b  
[root@ip-172-31-35-32 11feb]#
```

Notepad++ Editor:

- Title: *new 3 - Notepad++
- Content:

```
1  
2 command :  
3  
4 vi arith.sh  
5  
6  
7 ./arith.sh  
8
```

Bottom status bar:

- UNREGISTERED VERSION - Please support MobaXterm by subscribing to the professional edition here: <https://mobaxterm.mobatek.net>
- length : 50 lines : 8 Ln : 7 Col : 12 Pos : 48
- Windows (CR LF) UTF-8 INS
- ENG IN 5:29 PM 2/11/2022

- Result

The screenshot shows a Linux desktop environment with a terminal window and a code editor window.

MobaXterm Terminal:

- Terminal title: root@ip-172-31-35-32:11feb
- Content:

```
[root@ip-172-31-35-32 11feb]#
[root@ip-172-31-35-32 11feb]#
[root@ip-172-31-35-32 11feb]#
[root@ip-172-31-35-32 11feb]# vi arith.sh
[root@ip-172-31-35-32 11feb]#
```
- Status bar message: UNREGISTERED VERSION - Please support MobaXterm by subscribing to the professional edition here: <https://mobaxterm.mobatek.net>

Notepad++ Editor:

- Title: *new 3 - Notepad++
- Content:

```
1
2 command :
3
4 vi arith.sh
5
6
7
8
```
- Status bar:
 - Length: 40 Lines: 8 Ln: 7 Col: 2 Pos: 38
 - Windows (CR LF) | UTF-8
 - INS
- Bottom status bar: ENG IN 5:28 PM 2/11/2022

- Script 7

```
#!/bin/bash
#To check arithmetic operators
```

```
a=10
```

```
b=20
```

```
if [ $a == $b ]
```

```
then
```

```
echo "a is equal to b"
```

```
else
```

```
echo "a is not equal to b"
```

```
fi
```

The screenshot shows a terminal window and a Notepad++ window side-by-side.

Terminal Window:

- Session: root@ip-172-31-35-32:11feb
- Servers: 2. root@ip-172-31-35-32:11feb, 3. ec2-user@ip-172-31-35-32 ~
- Tools: Games, Sessions, View, Split, MultiExec, Tunneling, Packages, Settings, Help

```
#!/bin/bash
#To check arithmetic operators

a=10
b=20

if [ $a == $b ]
then
echo "a is equal to b"
else
echo "a is not equal to b"
fi
```

"arith.sh" 17L, 140B

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Notepad++ Window:

- *new 11 - Notepad++
- File, Edit, Search, View, Encoding, Language, Settings, Tools, Macro, Run, Plugins, Window, ?
- new 2, new 4, new 5, new 6, new 7, new 8, new 9, new 10, new 11

```
1 #!/bin/bash
2 #To check arithmetic operators
3
4 a=10
5 b=20
6
7 if [ $a == $b ]
8 then
9 echo "a is equal to b"
10
11 else
12 echo "a is not equal to b"
13
14 fi
```

length : 155 lines : 17 Ln : 17 Col : 3 Pos : 156 Windows (CR LF) UTF-8 INS ENG IN 5:31 PM 2/11/2022

- Save file

The screenshot shows a MobaXterm interface with two windows. The left window is a terminal session for root at ip-172-31-35-32, dated 11feb. The right window is a Notepad++ editor showing a script named arith.sh.

Terminal Session (root@ip-172-31-35-32 11feb):

```
[root@ip-172-31-35-32 11feb]#
[root@ip-172-31-35-32 11feb]#
[root@ip-172-31-35-32 11feb]#
[root@ip-172-31-35-32 11feb]#
[root@ip-172-31-35-32 11feb]# vi arith.sh
[root@ip-172-31-35-32 11feb]#
[root@ip-172-31-35-32 11feb]#
[root@ip-172-31-35-32 11feb]# ./arith.sh
a is not equal to b
[root@ip-172-31-35-32 11feb]#
```

Notepad++ Editor (new 3 - Notepad++):

```
1 command :
2
3
4 vi arith.sh
5
6
7 ./arith.sh
8
```

At the bottom of the Notepad++ window, status information is displayed:

- length : 50 lines : 8 Ln : 7 Col : 12 Pos : 48
- Windows (CR LF) UTF-8 INS
- ENG IN 5:32 PM 2/11/2022 2

- result

The screenshot shows a Linux terminal session in MobaXterm. The terminal window title is "root@ip-172-31-35-32:11feb". The user has run the command "vi arith.sh" to edit a file. The Notepad++ window shows the contents of the file "new3" which contains:

```
1 command :  
2 vi arith.sh
```

The terminal window also displays the command history and the current directory.

- Script 8

```
#!/bin/bash
# check less/greater number

a=10
b=20

if [ $a == $b ]
then
echo "a is equal to b "

elif [ $a -gt $b ]
then
echo "a is greater to b "

elif [ $a -lt $b ]
then
echo "a is less to b "

else "none of the condition is met"

fi
```

The screenshot shows a MobaXterm interface with two terminal sessions and a Notepad++ window.

MobaXterm Terminal Session:

- Session 2 (root@ip-172-31-35-32:11feb): Contains the following bash script code:

```
#!/bin/bash
# check less/greater number

a=10
b=20

if [ $a == $b ]
then
echo "a is equal to b "

elif [ $a -gt $b ]
then
echo "a is greater to b "

elif [ $a -lt $b ]
then
echo "a is less to b "

else "none of the condition is met"

fi
```
- Session 3 (ec2-user@ip-172-31-35-32 ~):

Notepad++ Window:

- Title: *new 12 - Notepad++
- Content: The same bash script code as the terminal session.
- File menu: File, Edit, Search, Encoding, Language, Settings, Tools, Macro, Run, Plugins, Window, ?
- Toolbar: Standard Notepad++ toolbar.
- Status bar: length : 258 lines : 21 Ln : 21 Col : 3 Pos : 259 Windows (CR LF) UTF-8 INS
- Bottom status: ENG IN 5:35 PM 2/11/2022

- Save file

- result

The screenshot shows a Linux desktop environment with a terminal window and a code editor window.

Terminal Window:

- Terminal title: root@ip-172-31-35-32:11feb
- Content:

```
[root@ip-172-31-35-32 11feb]#
[root@ip-172-31-35-32 11feb]#
[root@ip-172-31-35-32 11feb]#
[root@ip-172-31-35-32 11feb]# vi arith.sh
[root@ip-172-31-35-32 11feb]#
```
- Status bar message: UNREGISTERED VERSION - Please support MobaXterm by subscribing to the professional edition here: <https://mobaxterm.mobatek.net>

Code Editor (Notepad++) Window:

- Title: *new 3 - Notepad++
 - File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
 - new 1 new 2 new 4 new 5 new 6 new 7 new 8 new 9 new 10
- Content:

```
1
2 command :
3
4 vi arith.sh
5
6
7
8
```
- Status bar:
 - length : 40 lines : 8 Ln : 7 Col : 2 Pos : 38
 - Windows (CR LF) UTF-8 INS
 - 5:28 PM 2/11/2022

- Script 9

```
#!/bin/bash  
# for string parameter
```

```
a=abc
```

```
b=abc
```

```
if [ $a == $b ]
```

```
then
```

```
echo "a is equal to b"
```

```
else
```

```
echo "a is not equal to b"
```

```
fi
```

The screenshot shows a terminal session with three windows open. The left window displays a bash script named 'arith.sh' with syntax highlighting. The right window is a Notepad++ instance showing the same script. The status bar at the bottom provides file statistics and system information.

```
#!/bin/bash
# for string parameter

a=abc
b=abc

if [ $a == $b ]
then
echo "a is equal to b"

else
echo "a is not equal to b"

fi

"arith.sh" 14L, 132B
```

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length : 144 lines : 14 Ln : 14 Col : 3 Pos : 145 Windows (CR LF) UTF-8 INS

ENG IN 5:39 PM 2/11/2022

- Save file

The screenshot shows a terminal session in MobaXterm. The terminal window title is 'root@ip-172-31-35-32:11feb'. The session content is as follows:

```
[root@ip-172-31-35-32 11feb]#
[root@ip-172-31-35-32 11feb]#
[root@ip-172-31-35-32 11feb]#
[root@ip-172-31-35-32 11feb]#
[root@ip-172-31-35-32 11feb]# vi arith.sh
[root@ip-172-31-35-32 11feb]#
[root@ip-172-31-35-32 11feb]#
[root@ip-172-31-35-32 11feb]# ./arith.sh
a is equal to b
[root@ip-172-31-35-32 11feb]#
```

To the right of the terminal is a Notepad++ window titled 'new 3 - Notepad++'. It contains the following code:

```
1 command :
2
3
4 vi arith.sh
5
6
7 ./arith.sh
8
```

The status bar at the bottom of the terminal window displays:

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length : 50 lines : 8 Ln : 7 Col : 12 Pos : 48 Windows (CR LF) UTF-8 INS

Icons for various applications are visible in the taskbar, including File Explorer, Edge, Google Chrome, Microsoft Word, Microsoft Excel, Microsoft PowerPoint, Microsoft OneNote, Microsoft Access, Microsoft Publisher, Microsoft Visio, Microsoft Project, Microsoft WordPad, Microsoft Paint, and Microsoft Snipping Tool.

- Result

Thanks for doing practical with us.