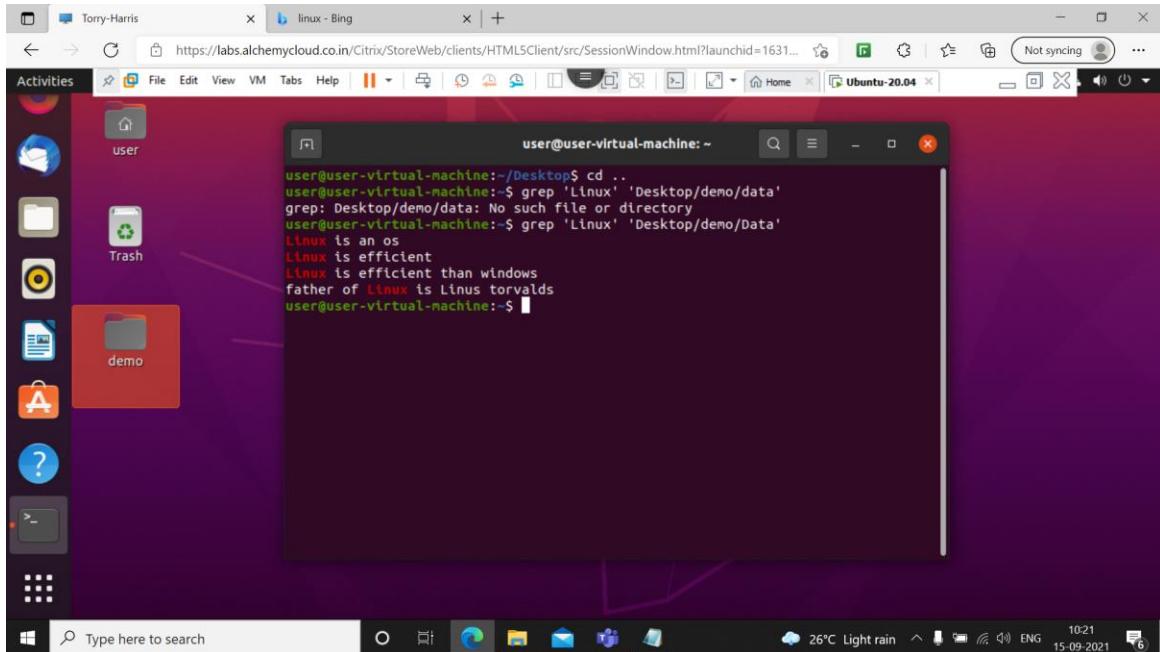


Day 3

1 grep 'Linux' 'Desktop/Demo/Data'



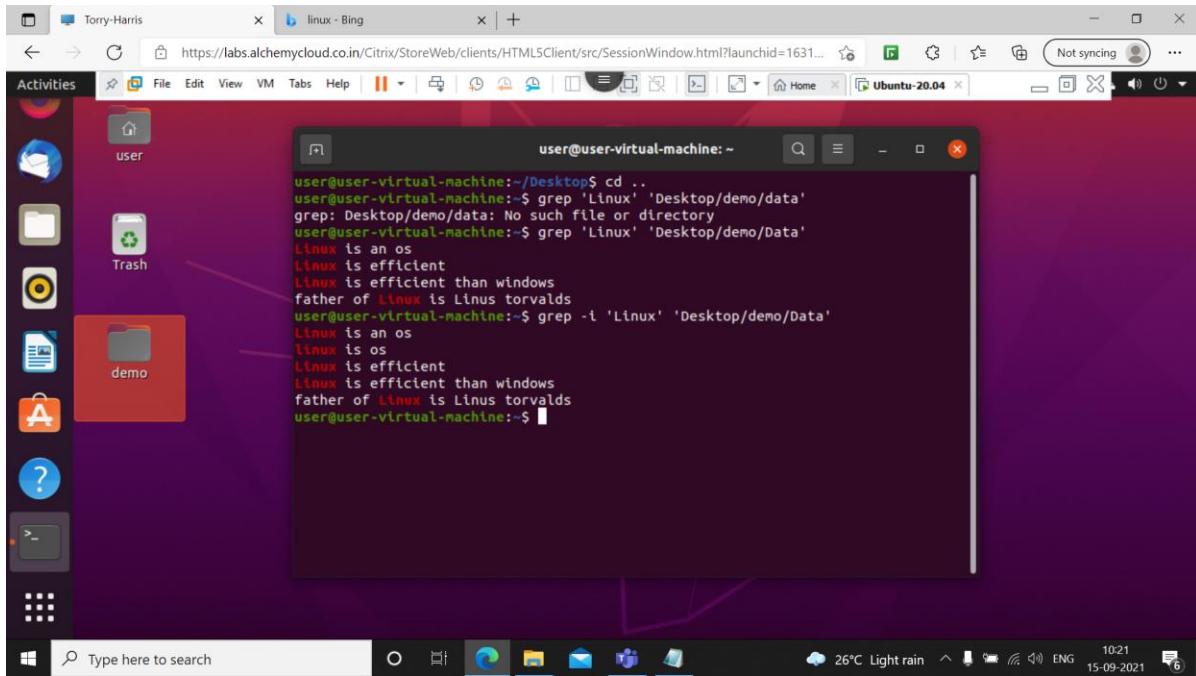
A screenshot of an Ubuntu 20.04 desktop environment. On the left, a vertical dock contains icons for Home, user, Trash, and a demo folder (which is highlighted in red). The main desktop area has a purple gradient background. A terminal window is open in the center, showing the following command and its output:

```
user@user-virtual-machine:~$ cd ..  
user@user-virtual-machine:~$ grep 'Linux' 'Desktop/demo/data'  
grep: Desktop/demo/data: No such file or directory  
user@user-virtual-machine:~$ grep 'Linux' 'Desktop/demo/Data'  
Linux is an os  
Linux is efficient  
Linux is efficient than windows  
father of Linux is Linus torvalds  
user@user-virtual-machine:~$
```

The desktop bar at the bottom shows the date and time as 15-09-2021 10:21, and the weather as 26°C Light rain.

It searches the particular word

2 grep -i 'Linux' 'Desktop/Demo/Data'

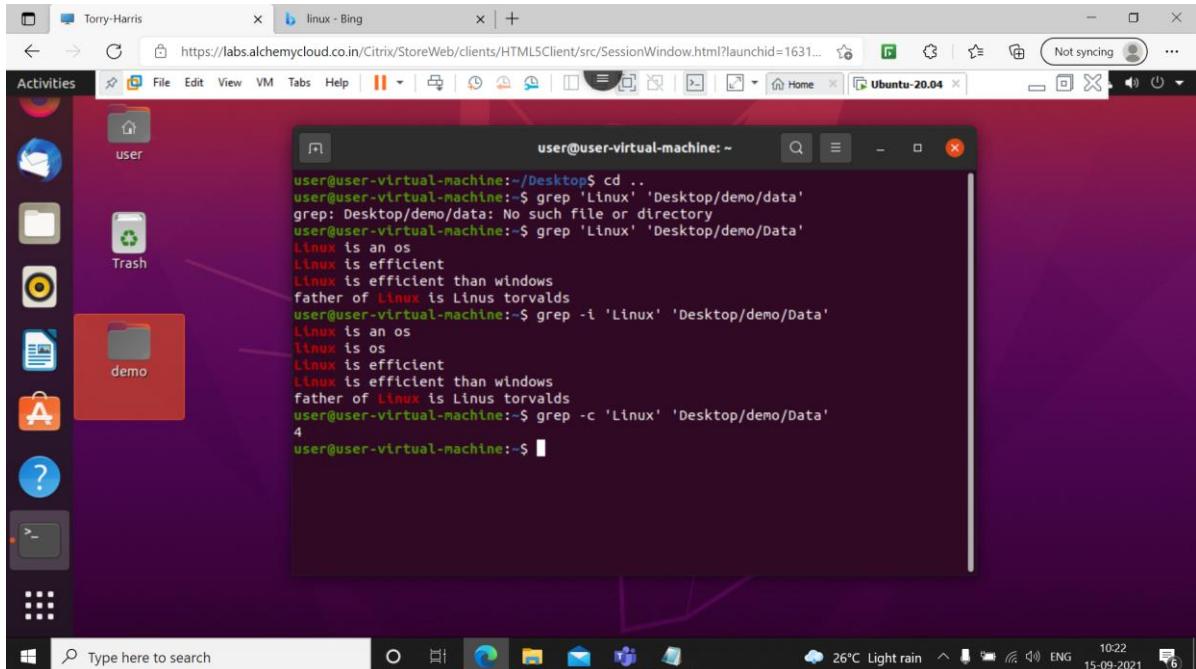


A screenshot of an Ubuntu 20.04 desktop environment. The terminal window shows the following command and its output:

```
user@user-virtual-machine:~$ cd ..  
user@user-virtual-machine:~$ grep 'Linux' 'Desktop/demo/data'  
grep: Desktop/demo/data: No such file or directory  
user@user-virtual-machine:~$ grep 'Linux' 'Desktop/demo/Data'  
Linux is an os  
Linux is efficient  
Linux is efficient than windows  
father of Linux is Linus torvalds  
user@user-virtual-machine:~$ grep -i 'Linux' 'Desktop/demo/Data'  
Linux is an os  
linux is os  
Linux is efficient  
Linux is efficient than windows  
father of Linux is Linus torvalds  
user@user-virtual-machine:~$
```

It searches the particular word with ignoring the cases

3 grep -c 'Linux' "Desktop/Demo/data"

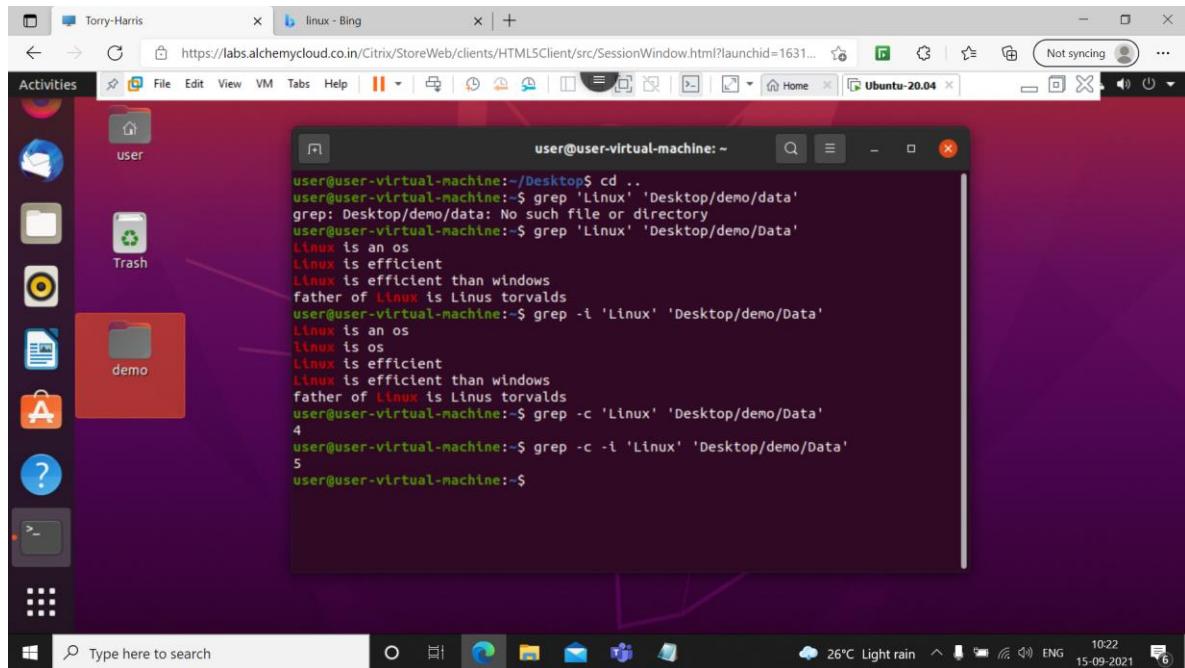


A screenshot of an Ubuntu 20.04 desktop environment. The terminal window shows the following command and its output:

```
user@user-virtual-machine:~$ cd ..  
user@user-virtual-machine:~$ grep 'Linux' 'Desktop/demo/data'  
grep: Desktop/demo/data: No such file or directory  
user@user-virtual-machine:~$ grep 'Linux' 'Desktop/demo/Data'  
Linux is an os  
Linux is efficient  
Linux is efficient than windows  
father of Linux is Linus torvalds  
user@user-virtual-machine:~$ grep -i 'Linux' 'Desktop/demo/Data'  
Linux is an os  
linux is os  
Linux is efficient  
Linux is efficient than windows  
father of Linux is Linus torvalds  
user@user-virtual-machine:~$ grep -c 'Linux' 'Desktop/demo/Data'  
4  
user@user-virtual-machine:~$
```

This command is used to count the word linux at the starting of the line

4 grep -c -I 'Linux' "Desktop/Demo/data"

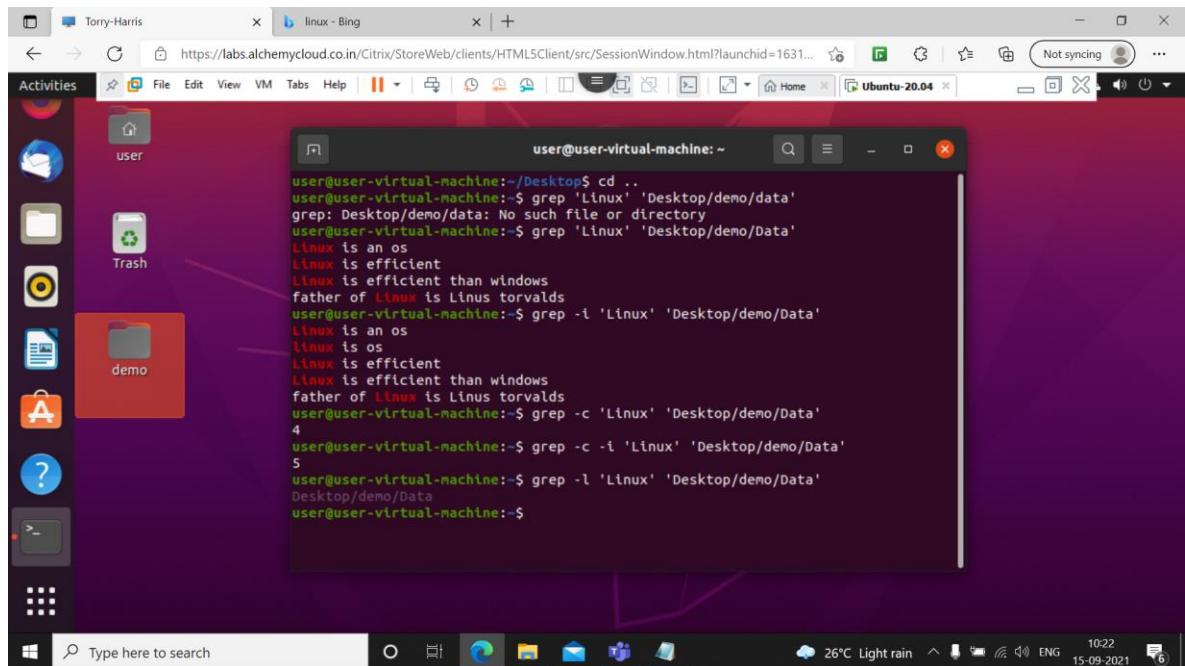


A screenshot of a Linux desktop environment, likely Ubuntu, showing a terminal window. The terminal window is titled "user@user-virtual-machine: ~" and contains the following command and its output:

```
user@user-virtual-machine:~/Desktop$ cd ..  
user@user-virtual-machine:~$ grep 'Linux' 'Desktop/demo/data'  
grep: Desktop/demo/data: No such file or directory  
user@user-virtual-machine:~$ grep 'Linux' 'Desktop/demo/Data'  
Linux is an os  
Linux is efficient  
Linux is efficient than windows  
father of Linux is Linus torvalds  
user@user-virtual-machine:~$ grep -i 'Linux' 'Desktop/demo/Data'  
Linux is an os  
Linux is os  
Linux is efficient  
Linux is efficient than windows  
father of Linux is Linus torvalds  
user@user-virtual-machine:~$ grep -c -i 'Linux' 'Desktop/demo/Data'  
4  
user@user-virtual-machine:~$ grep -c -i 'Linux' 'Desktop/demo/Data'  
5  
user@user-virtual-machine:~$
```

This command is for counting the words with ignore cases

5 grep -l 'Linux' *

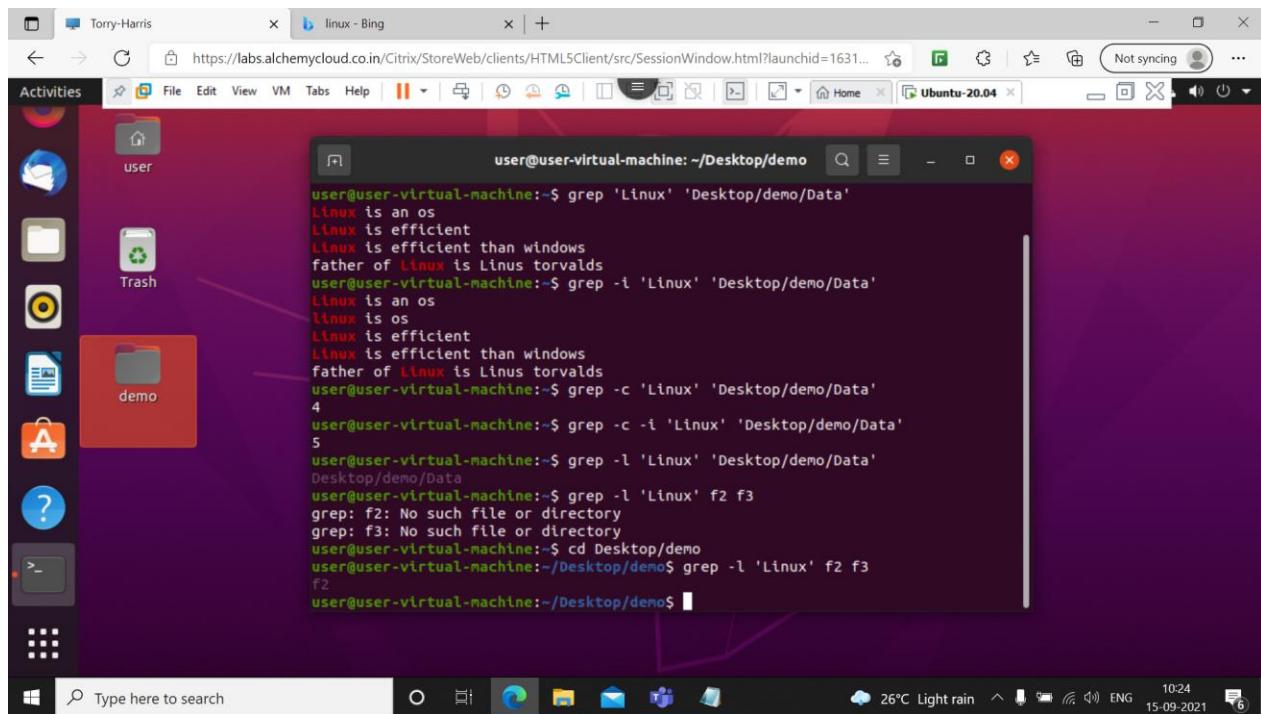


A screenshot of a Linux desktop environment, likely Ubuntu, showing a terminal window. The terminal window is titled "user@user-virtual-machine: ~" and contains the following command and its output:

```
user@user-virtual-machine:~/Desktop$ cd ..  
user@user-virtual-machine:~$ grep 'Linux' 'Desktop/demo/data'  
grep: Desktop/demo/data: No such file or directory  
user@user-virtual-machine:~$ grep 'Linux' 'Desktop/demo/Data'  
Linux is an os  
Linux is efficient  
Linux is efficient than windows  
father of Linux is Linus torvalds  
user@user-virtual-machine:~$ grep -i 'Linux' 'Desktop/demo/Data'  
Linux is an os  
Linux is os  
Linux is efficient  
Linux is efficient than windows  
father of Linux is Linus torvalds  
user@user-virtual-machine:~$ grep -c -i 'Linux' 'Desktop/demo/Data'  
4  
user@user-virtual-machine:~$ grep -c -i 'Linux' 'Desktop/demo/Data'  
5  
user@user-virtual-machine:~$ grep -l 'Linux' 'Desktop/demo/Data'  
Desktop/demo/Data  
user@user-virtual-machine:~$
```

It shows directories which contain the word linux

6 grep -l 'Linux' f2 f3

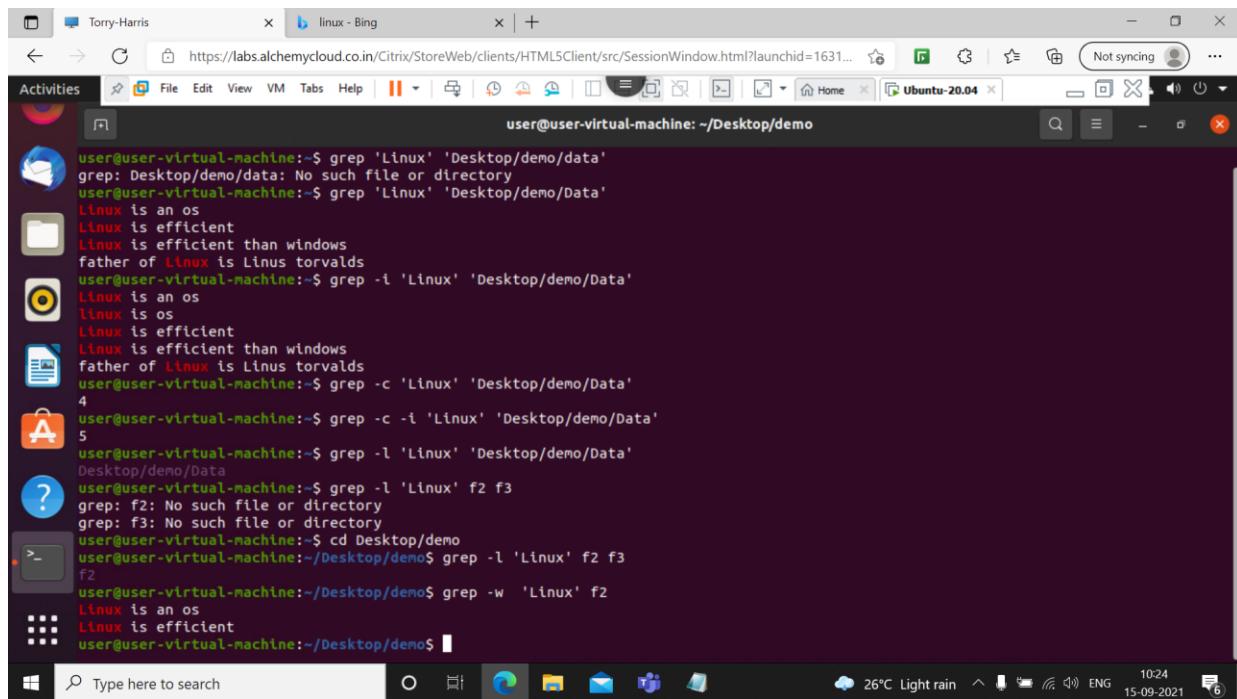


A screenshot of a Linux desktop environment, likely Ubuntu, showing a terminal window. The terminal window is titled "user@user-virtual-machine: ~/Desktop/demo" and contains the following command and output:

```
user@user-virtual-machine:~$ grep 'Linux' 'Desktop/demo/Data'
Linux is an os
Linux is efficient
Linux is efficient than windows
father of Linux is Linus torvalds
user@user-virtual-machine:~$ grep -i 'Linux' 'Desktop/demo/Data'
Linux is an os
linux is os
Linux is efficient
Linux is efficient than windows
father of Linux is Linus torvalds
user@user-virtual-machine:~$ grep -c 'Linux' 'Desktop/demo/Data'
4
user@user-virtual-machine:~$ grep -c -i 'Linux' 'Desktop/demo/Data'
5
user@user-virtual-machine:~$ grep -l 'Linux' 'Desktop/demo/Data'
Desktop/demo/Data
user@user-virtual-machine:~$ grep -l 'Linux' f2 f3
grep: f2: No such file or directory
grep: f3: No such file or directory
user@user-virtual-machine:~$ cd Desktop/demo
user@user-virtual-machine:~/Desktop/demo$ grep -l 'Linux' f2 f3
f2
user@user-virtual-machine:~/Desktop/demo$
```

This command shows the files that contain the word Linux

7 grep -w 'Linux' f2

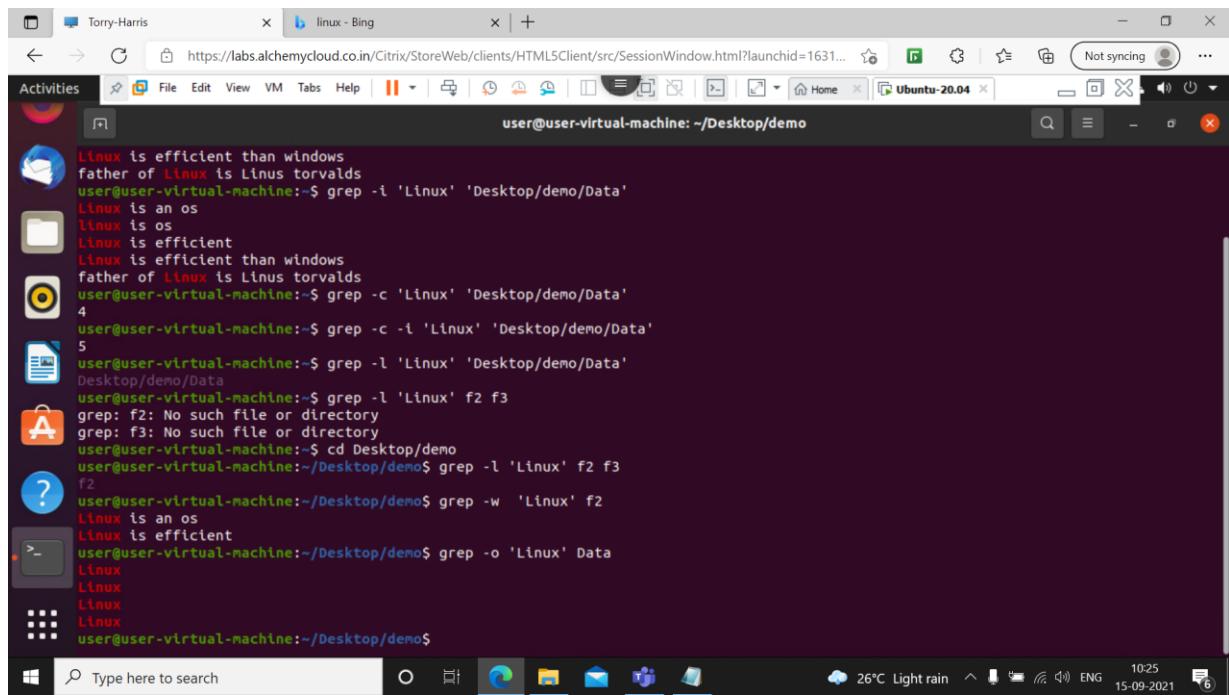


A screenshot of a Linux desktop environment, likely Ubuntu, showing a terminal window. The terminal window is titled "user@user-virtual-machine: ~/Desktop/demo" and contains the following command and output:

```
user@user-virtual-machine:~$ grep 'Linux' 'Desktop/demo/data'
grep: Desktop/demo/data: No such file or directory
user@user-virtual-machine:~$ grep 'Linux' 'Desktop/demo/Data'
Linux is an os
Linux is efficient
Linux is efficient than windows
father of Linux is Linus torvalds
user@user-virtual-machine:~$ grep -i 'Linux' 'Desktop/demo/Data'
Linux is an os
linux is os
Linux is efficient
Linux is efficient than windows
father of Linux is Linus torvalds
user@user-virtual-machine:~$ grep -c 'Linux' 'Desktop/demo/Data'
4
user@user-virtual-machine:~$ grep -c -i 'Linux' 'Desktop/demo/Data'
5
user@user-virtual-machine:~$ grep -l 'Linux' 'Desktop/demo/Data'
Desktop/demo/Data
user@user-virtual-machine:~$ grep -l 'Linux' f2 f3
grep: f2: No such file or directory
grep: f3: No such file or directory
user@user-virtual-machine:~$ cd Desktop/demo
user@user-virtual-machine:~/Desktop/demo$ grep -l 'Linux' f2 f3
f2
user@user-virtual-machine:~/Desktop/demo$ grep -w 'Linux' f2
Linux is an os
Linux is efficient
user@user-virtual-machine:~/Desktop/demo$
```

This command shows the full fetch word

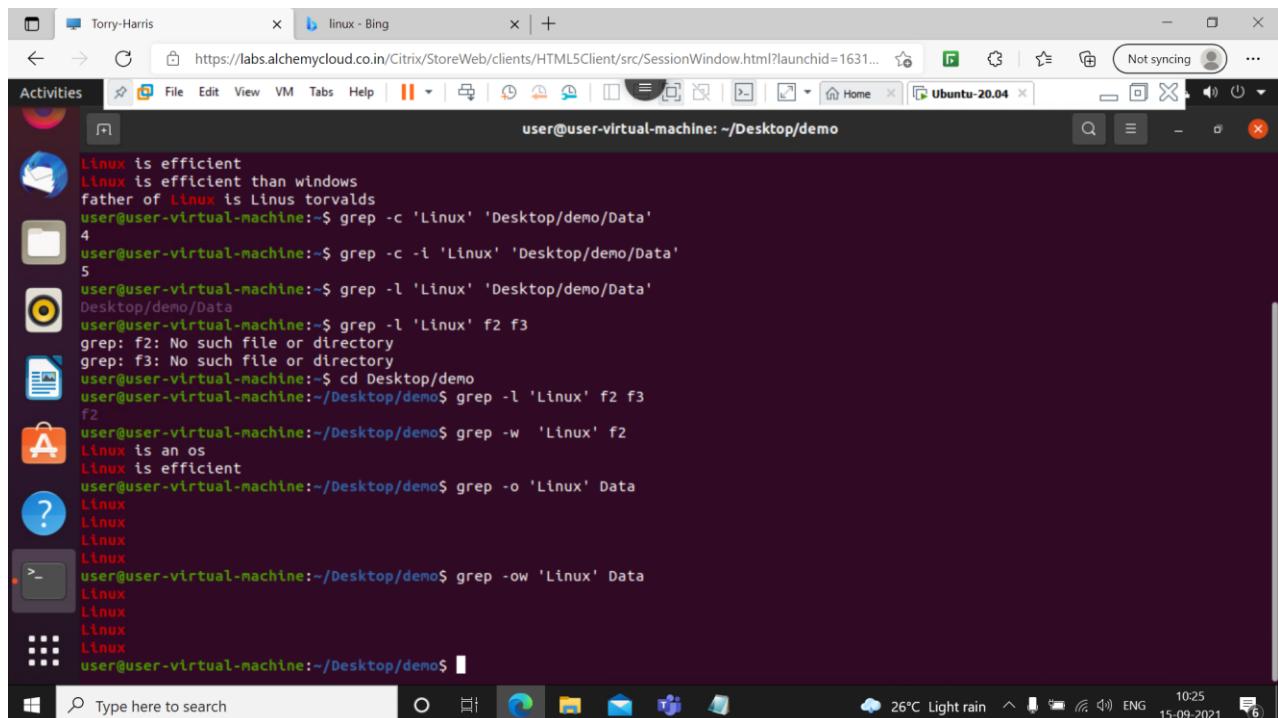
8 grep -o 'Linux' Data



```
user@user-virtual-machine: ~/Desktop/demo
Linux is efficient than windows
father of Linux is Linus torvalds
Linux is an os
Linux is os
Linux is efficient
Linux is efficient than windows
father of Linux is Linus torvalds
4
user@user-virtual-machine:~$ grep -c -i 'Linux' 'Desktop/demo/Data'
5
user@user-virtual-machine:~$ grep -l 'Linux' 'Desktop/demo/Data'
Desktop/demo/Data
user@user-virtual-machine:~$ grep -l 'Linux' f2 f3
grep: f2: No such file or directory
grep: f3: No such file or directory
user@user-virtual-machine:~$ cd Desktop/demo
user@user-virtual-machine:~/Desktop/demo$ grep -l 'Linux' f2 f3
f2
user@user-virtual-machine:~/Desktop/demo$ grep -w 'Linux' f2
Linux
Linux
Linux
Linux
user@user-virtual-machine:~/Desktop/demo$ grep -o 'Linux' Data
Linux
Linux
Linux
Linux
user@user-virtual-machine:~/Desktop/demo$
```

This command shows only matched pattern

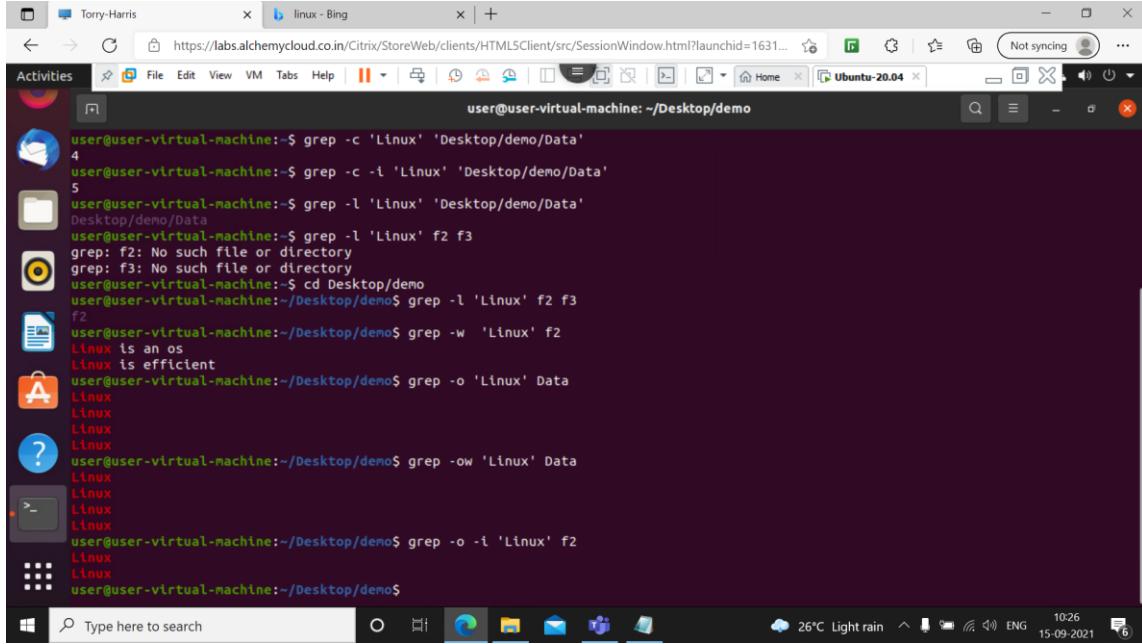
9 grep -ow 'Linux' f2



```
user@user-virtual-machine: ~/Desktop/demo
Linux is efficient
Linux is efficient than windows
father of Linux is Linus torvalds
4
user@user-virtual-machine:~$ grep -c -i 'Linux' 'Desktop/demo/Data'
5
user@user-virtual-machine:~$ grep -l 'Linux' 'Desktop/demo/Data'
Desktop/demo/Data
user@user-virtual-machine:~$ grep -l 'Linux' f2 f3
grep: f2: No such file or directory
grep: f3: No such file or directory
user@user-virtual-machine:~$ cd Desktop/demo
user@user-virtual-machine:~/Desktop/demo$ grep -l 'Linux' f2 f3
f2
user@user-virtual-machine:~/Desktop/demo$ grep -w 'Linux' f2
Linux
Linux
Linux
Linux
user@user-virtual-machine:~/Desktop/demo$ grep -o 'Linux' Data
Linux
Linux
Linux
Linux
user@user-virtual-machine:~/Desktop/demo$ grep -ow 'Linux' f2
Linux
Linux
Linux
Linux
user@user-virtual-machine:~/Desktop/demo$
```

This command shows both matched with full fetch word

10 grep -o -i 'Linux' f2

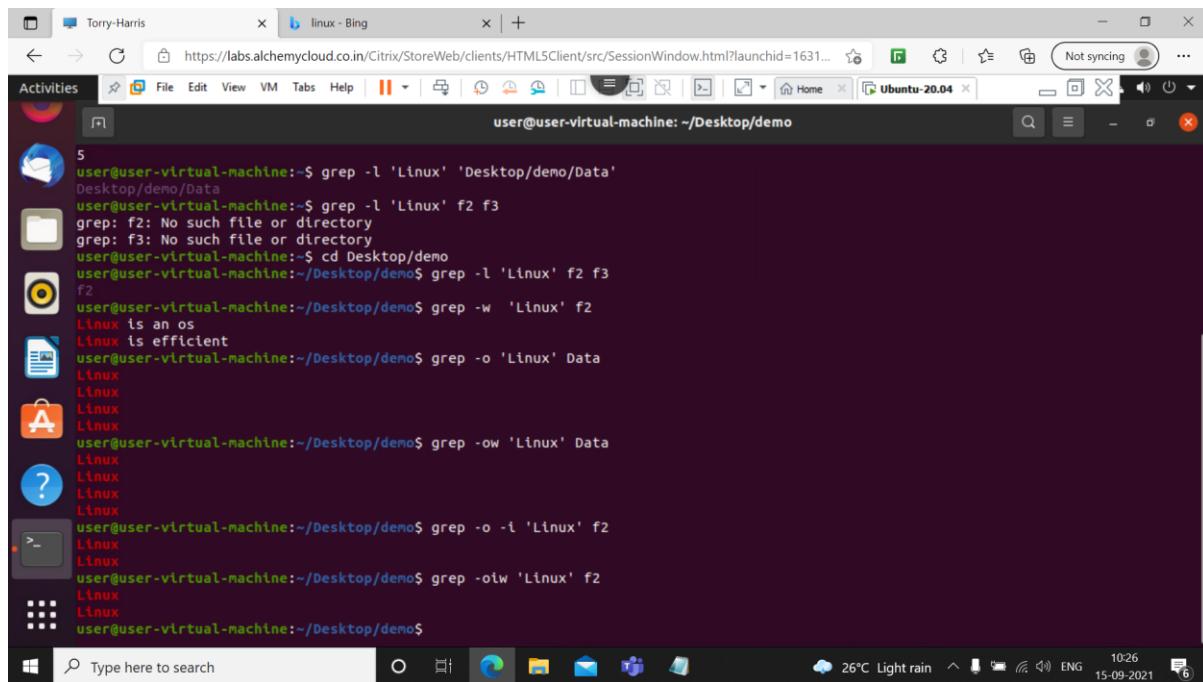


A screenshot of a Linux desktop environment, likely Ubuntu, showing a terminal window. The terminal window title is 'user@user-virtual-machine: ~/Desktop/demo'. The terminal content shows the following grep command execution:

```
user@user-virtual-machine:~$ grep -c 'Linux' 'Desktop/demo/Data'  
4  
user@user-virtual-machine:~$ grep -c -i 'Linux' 'Desktop/demo/Data'  
5  
user@user-virtual-machine:~$ grep -l 'Linux' 'Desktop/demo/Data'  
Desktop/demo/Data  
user@user-virtual-machine:~$ grep -l 'Linux' f2 f3  
grep: f2: No such file or directory  
grep: f3: No such file or directory  
user@user-virtual-machine:~$ cd Desktop/demo  
user@user-virtual-machine:~/Desktop/demo$ grep -l 'Linux' f2 f3  
f2  
user@user-virtual-machine:~/Desktop/demo$ grep -w 'Linux' f2  
Linux is an os  
Linux is efficient  
user@user-virtual-machine:~/Desktop/demo$ grep -o 'Linux' Data  
Linux  
Linux  
Linux  
Linux  
user@user-virtual-machine:~/Desktop/demo$ grep -ow 'Linux' Data  
Linux  
Linux  
Linux  
Linux  
user@user-virtual-machine:~/Desktop/demo$ grep -o -i 'Linux' f2  
Linux  
Linux  
user@user-virtual-machine:~/Desktop/demo$
```

The desktop environment includes a dock with icons for File Explorer, Home, and other applications. The system tray shows the date (15-09-2021), time (10:26), battery level (26°C), and network status.

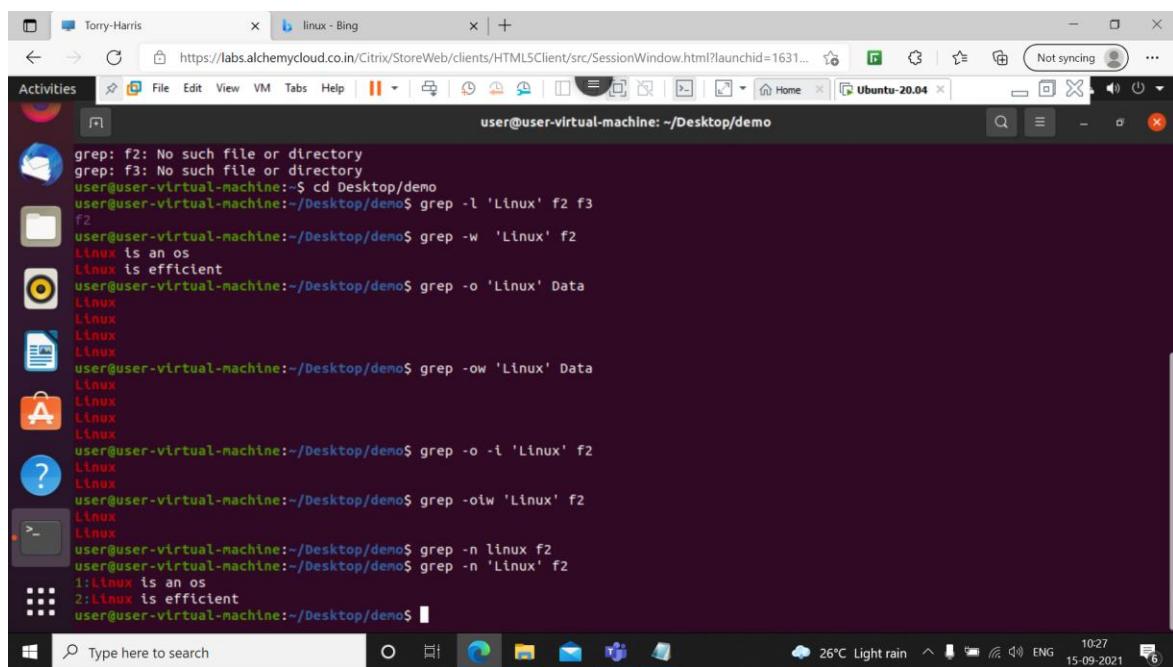
11 grep -oiw 'Linux' f2



A screenshot of a Windows desktop environment. At the top, there is a taskbar with icons for File Explorer, a browser window titled 'Torry-Harris' and 'linux - Bing', and a system tray showing the date and time as 15-09-2021. The main window is a terminal session titled 'Activities' with the title bar 'user@user-virtual-machine: ~/Desktop/demo'. The terminal window displays the following command-line session:

```
user@user-virtual-machine:~$ grep -l 'Linux' 'Desktop/demo/Data'
Desktop/demo/Data
user@user-virtual-machine:~$ grep -l 'Linux' f2 f3
grep: f2: No such file or directory
grep: f3: No such file or directory
user@user-virtual-machine:~$ cd Desktop/demo
user@user-virtual-machine:~/Desktop/demo$ grep -l 'Linux' f2 f3
f2
user@user-virtual-machine:~/Desktop/demo$ grep -w 'Linux' f2
Linux is an os
Linux is efficient
user@user-virtual-machine:~/Desktop/demo$ grep -o 'Linux' Data
Linux
Linux
Linux
A
user@user-virtual-machine:~/Desktop/demo$ grep -ow 'Linux' Data
Linux
Linux
Linux
Linux
user@user-virtual-machine:~/Desktop/demo$ grep -o -i 'Linux' f2
Linux
Linux
user@user-virtual-machine:~/Desktop/demo$ grep -oiw 'Linux' f2
Linux
Linux
Linux
user@user-virtual-machine:~/Desktop/demo$
```

12 grep -n 'Linux' f2



A screenshot of a Windows desktop environment, similar to the previous one. The taskbar and system tray are identical. The main window is a terminal session titled 'Activities' with the title bar 'user@user-virtual-machine: ~/Desktop/demo'. The terminal window displays the following command-line session:

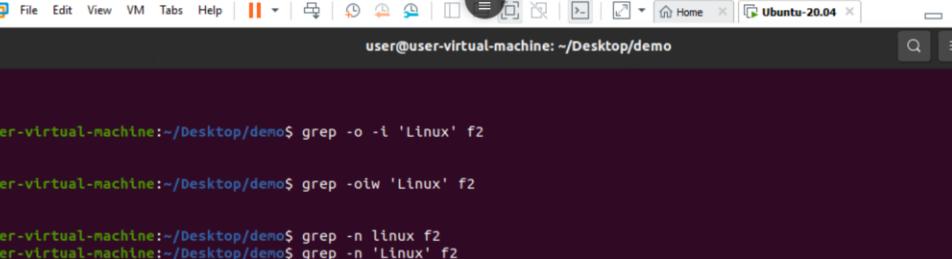
```
grep: f2: No such file or directory
grep: f3: No such file or directory
user@user-virtual-machine:~$ cd Desktop/demo
user@user-virtual-machine:~/Desktop/demo$ grep -l 'Linux' f2 f3
f2
user@user-virtual-machine:~/Desktop/demo$ grep -w 'Linux' f2
Linux is an os
Linux is efficient
user@user-virtual-machine:~/Desktop/demo$ grep -o 'Linux' Data
Linux
Linux
Linux
Linux
user@user-virtual-machine:~/Desktop/demo$ grep -ow 'Linux' Data
Linux
Linux
Linux
Linux
user@user-virtual-machine:~/Desktop/demo$ grep -o -i 'Linux' f2
Linux
Linux
user@user-virtual-machine:~/Desktop/demo$ grep -oiw 'Linux' f2
Linux
Linux
Linux
user@user-virtual-machine:~/Desktop/demo$ grep -n linux f2
1:Linux is an os
2:Linux is efficient
user@user-virtual-machine:~/Desktop/demo$
```

This command shows the no. of line that contain the word

13 grep -ni 'Linux' Data

This command shows the no. of line that contain the word with ignoring the cases

14 grep -niw 'Linux' Data

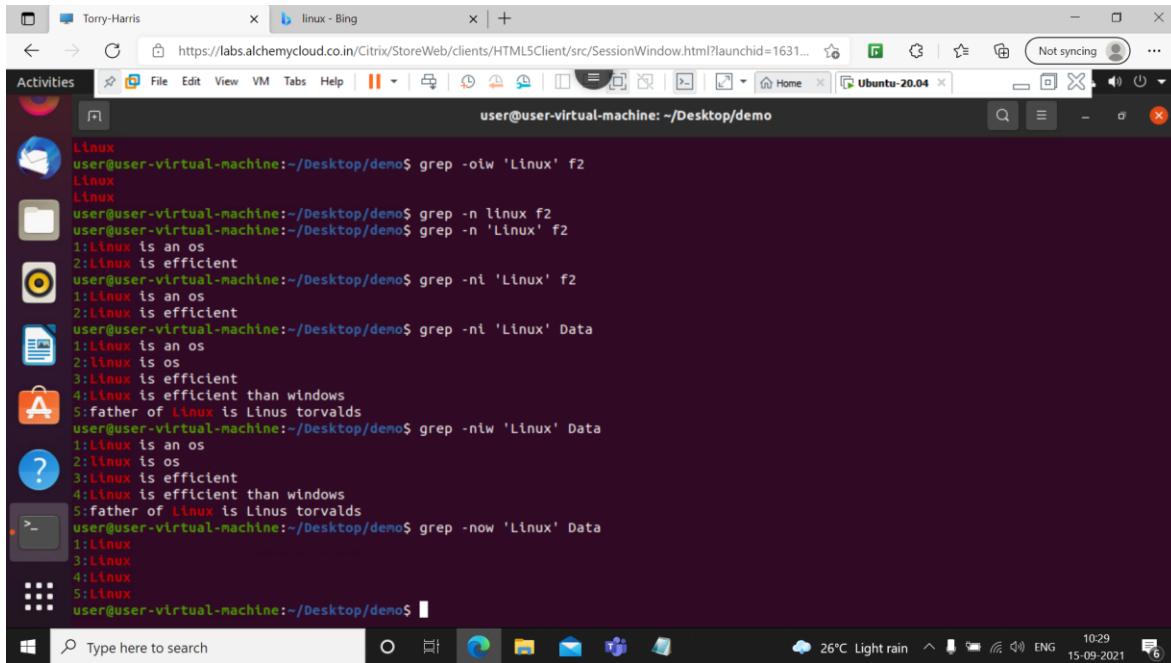


The screenshot shows a Linux desktop environment with a terminal window open. The terminal window title is "user@user-virtual-machine: ~/Desktop/demo". The terminal content displays the output of several grep commands. The commands and their outputs are as follows:

- `grep -o -i 'Linux' f2` (Output: Linux, Linux, Linux)
- `grep -oiw 'Linux' f2` (Output: Linux, Linux)
- `grep -n linux f2` (Output: 1:Linux is an os, 2:Linux is efficient)
- `grep -n 'Linux' f2` (Output: 1:Linux is an os, 2:Linux is efficient)
- `grep -ni 'Linux' Data` (Output: 1:Linux is an os, 2:Linux is os, 3:Linux is efficient, 4:Linux is efficient than windows, 5:father of Linux is Linus torvalds)
- `grep -niw 'Linux' Data` (Output: 1:Linux is an os, 2:Linux is os, 3:Linux is efficient, 4:Linux is efficient than windows, 5:father of Linux is Linus torvalds)

This command shows the no. of line that contain the word with ignoring the case & it shows full fetched word

14 grep -ow 'Linux' Data

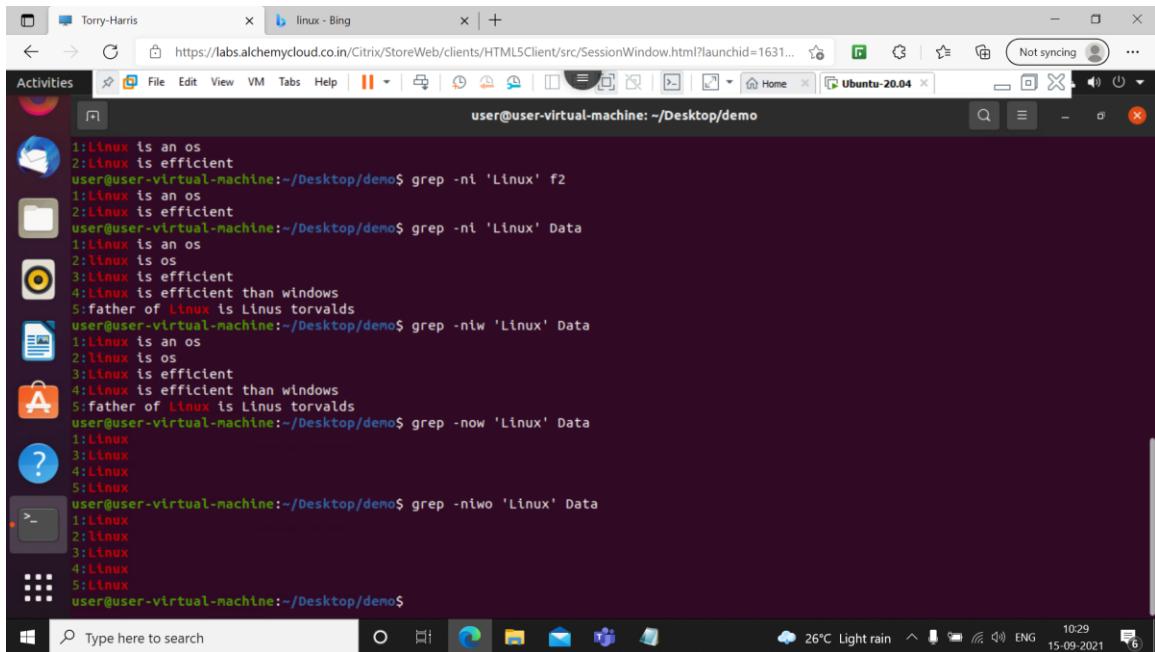


A screenshot of a Linux desktop environment, likely Ubuntu, showing a terminal window. The terminal window title is "Activities" and the command being run is "user@user-virtual-machine: ~/Desktop/demo\$ grep -ow 'Linux' f2". The output of the command is displayed in the terminal window, showing the line numbers and the word "Linux" from the file "f2". The desktop environment includes a dock with various icons and a system tray at the bottom.

```
Linux
user@user-virtual-machine:~/Desktop/demo$ grep -ow 'Linux' f2
Linux
Linux
1:Linux is an os
2:Linux is efficient
user@user-virtual-machine:~/Desktop/demo$ grep -ow 'Linux' f2
1:Linux is an os
2:Linux is efficient
user@user-virtual-machine:~/Desktop/demo$ grep -ow 'Linux' Data
1:Linux is an os
2:Linux is os
3:Linux is efficient
4:Linux is efficient than windows
5:father of Linux is Linus torvalds
user@user-virtual-machine:~/Desktop/demo$ grep -ow 'Linux' Data
1:Linux is an os
2:Linux is os
3:Linux is efficient
4:Linux is efficient than windows
5:father of Linux is Linus torvalds
user@user-virtual-machine:~/Desktop/demo$ grep -ow 'Linux' Data
1:Linux
2:Linux
3:Linux
4:Linux
5:Linux
user@user-virtual-machine:~/Desktop/demo$
```

This command shows the no. of line that contain the word with matched pattern & it shows full fetched word

15 grep -niwo 'Linux' Data

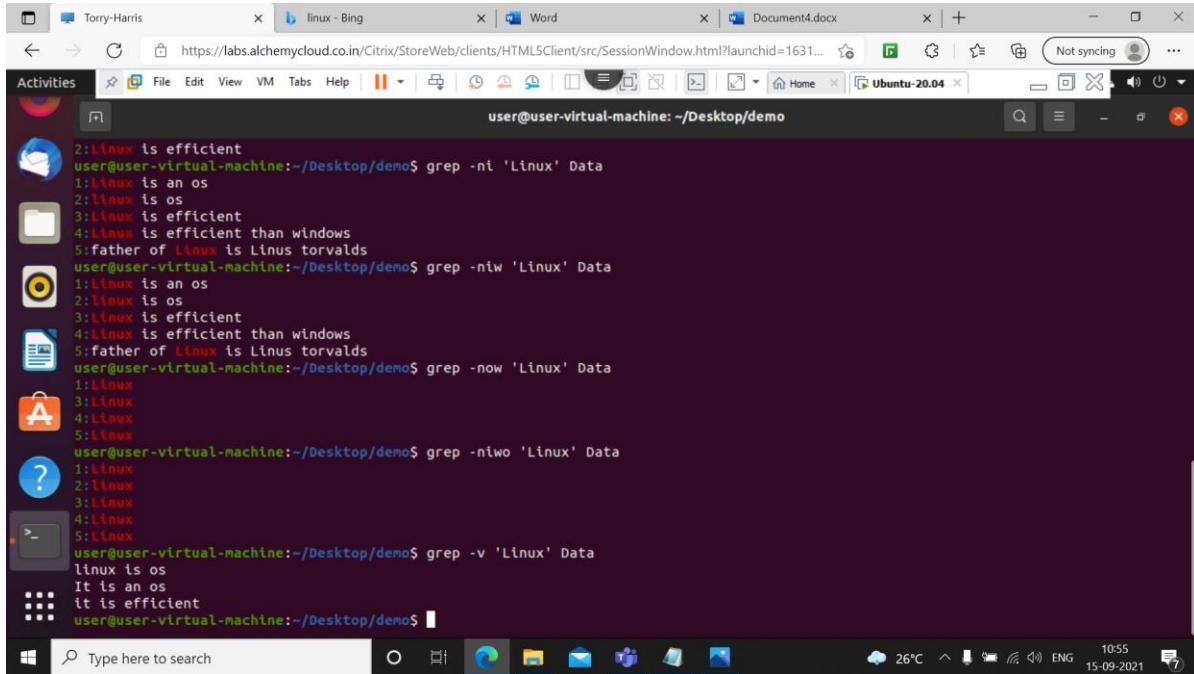


A screenshot of a Linux desktop environment, likely Ubuntu, showing a terminal window. The terminal window title is "Activities" and the command being run is "user@user-virtual-machine: ~/Desktop/demo\$ grep -niwo 'Linux' Data". The output of the command is displayed in the terminal window, showing the line numbers and the word "Linux" from the file "Data". The desktop environment includes a dock with various icons and a system tray at the bottom.

```
1:Linux is an os
2:Linux is efficient
user@user-virtual-machine:~/Desktop/demo$ grep -niwo 'Linux' Data
1:Linux is an os
2:Linux is efficient
user@user-virtual-machine:~/Desktop/demo$ grep -niwo 'Linux' Data
1:Linux is an os
2:Linux is os
3:Linux is efficient
4:Linux is efficient than windows
5:father of Linux is Linus torvalds
user@user-virtual-machine:~/Desktop/demo$ grep -niwo 'Linux' Data
1:Linux is an os
2:Linux is os
3:Linux is efficient
4:Linux is efficient than windows
5:father of Linux is Linus torvalds
user@user-virtual-machine:~/Desktop/demo$ grep -niwo 'Linux' Data
1:Linux
2:Linux
3:Linux
4:Linux
5:Linux
user@user-virtual-machine:~/Desktop/demo$
```

This command shows the no. of line that contain the word with matched pattern & it shows full fetched word with ignoring the cases.

16 grep -v 'Linux' f2

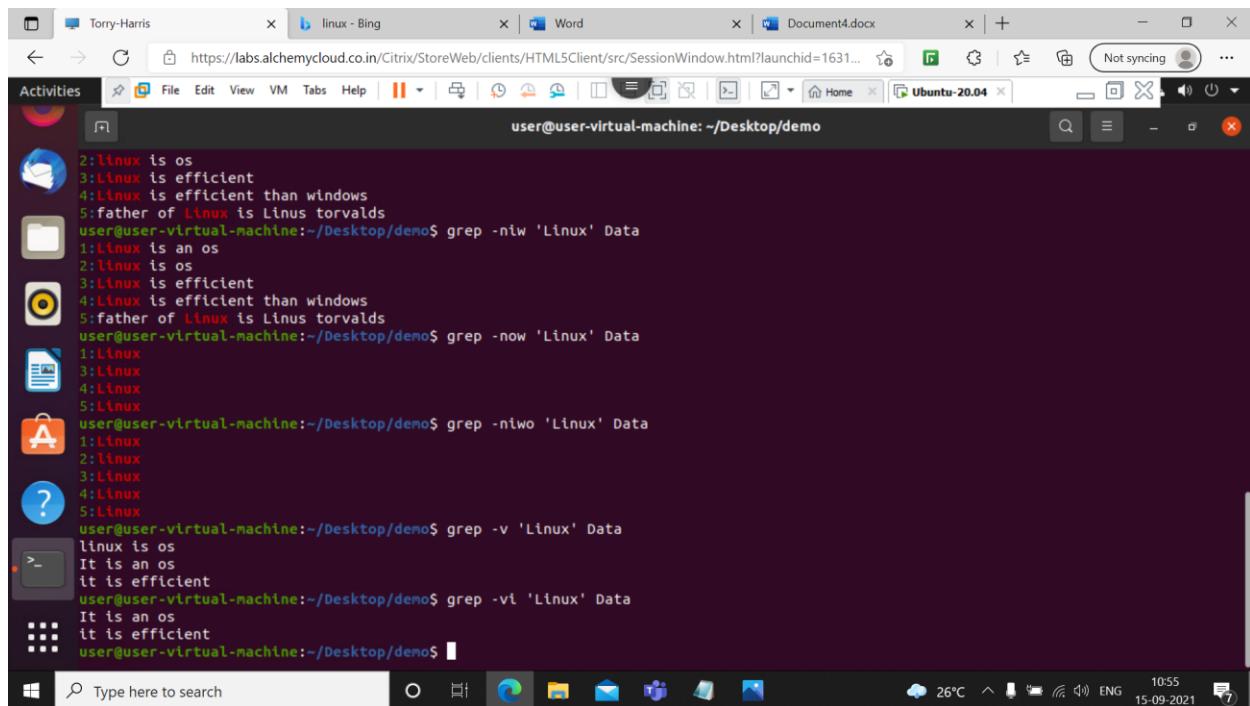


A screenshot of a Linux desktop environment. The terminal window shows the following command and its output:

```
user@user-virtual-machine:~/Desktop/demo$ grep -v 'Linux' Data
1:Linux is efficient
1:Linux is an os
2:Linux is os
3:Linux is efficient
4:Linux is efficient than windows
5:father of Linux is Linus torvalds
user@user-virtual-machine:~/Desktop/demo$ grep -v 'Linux' Data
1:Linux is an os
2:Linux is os
3:Linux is efficient
4:Linux is efficient than windows
5:father of Linux is Linus torvalds
user@user-virtual-machine:~/Desktop/demo$ grep -v 'Linux' Data
1:Linux
3:Linux
4:Linux
5:Linux
user@user-virtual-machine:~/Desktop/demo$ grep -v 'Linux' Data
1:Linux
2:Linux
3:Linux
4:Linux
5:Linux
user@user-virtual-machine:~/Desktop/demo$ grep -v 'Linux' Data
linux is os
It is an os
it is efficient
```

This command shows all the line which doesn't contain the word Linux

17 grep -vi 'Linux' f2

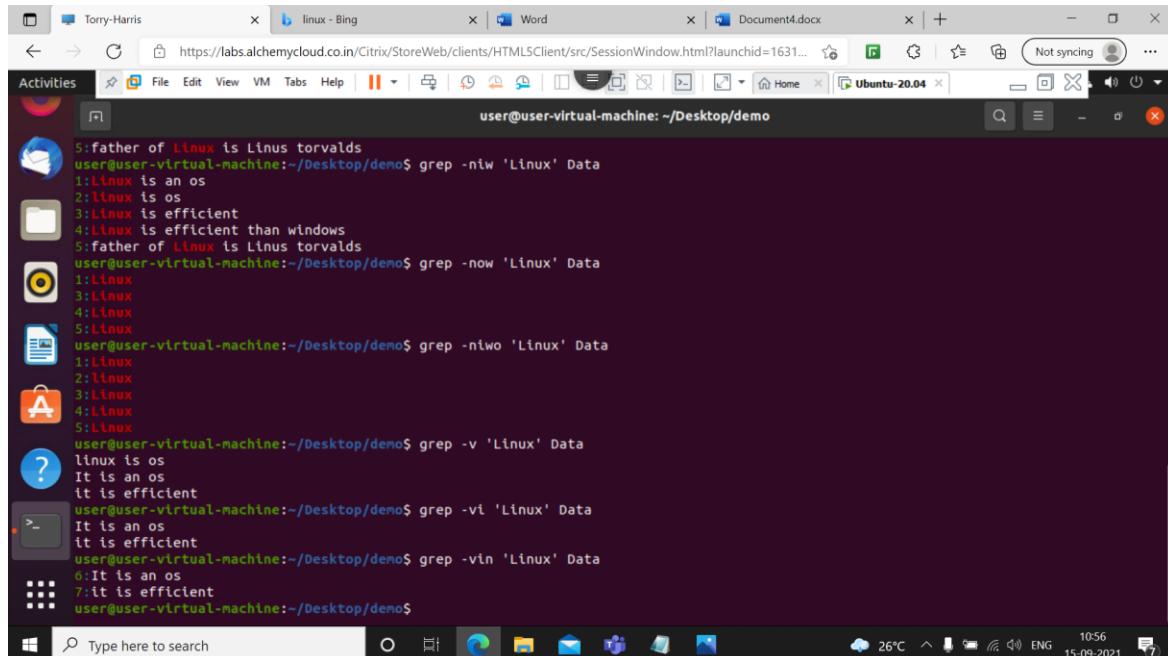


A screenshot of a Windows desktop environment. At the top, there is a taskbar with several open windows: 'Torry-Harris', 'Bing', 'Word', and 'Document4.docx'. Below the taskbar is a system tray showing the date (15-09-2021), time (10:55), and system status (26°C, ENG). The main focus is a terminal window titled 'Activities' with the command 'user@user-virtual-machine: ~/Desktop/demo\$'. The terminal displays the following grep command outputs:

```
2:Linux is os
3:Linux is effcient
4:Linux is efficient than windows
5:father of Linux is Linus torvalds
user@user-virtual-machine:~/Desktop/demo$ grep -niw 'Linux' Data
1:Linux is an os
2:Linux is os
3:Linux is efficient
4:Linux is effficient than windows
5:father of Linux is Linus torvalds
user@user-virtual-machine:~/Desktop/demo$ grep -now 'Linux' Data
1:Linux
3:Linux
5:Linux
user@user-virtual-machine:~/Desktop/demo$ grep -niwo 'Linux' Data
1:Linux
2:Linux
3:Linux
4:Linux
5:Linux
user@user-virtual-machine:~/Desktop/demo$ grep -v 'Linux' Data
linux is os
It is an os
it is efficient
user@user-virtual-machine:~/Desktop/demo$ grep -vi 'Linux' Data
It is an os
it is efficient
user@user-virtual-machine:~/Desktop/demo$
```

This command shows all the line which doesn't contain the word Linux with ignoring cases

18 grep -vin 'Linux' f2

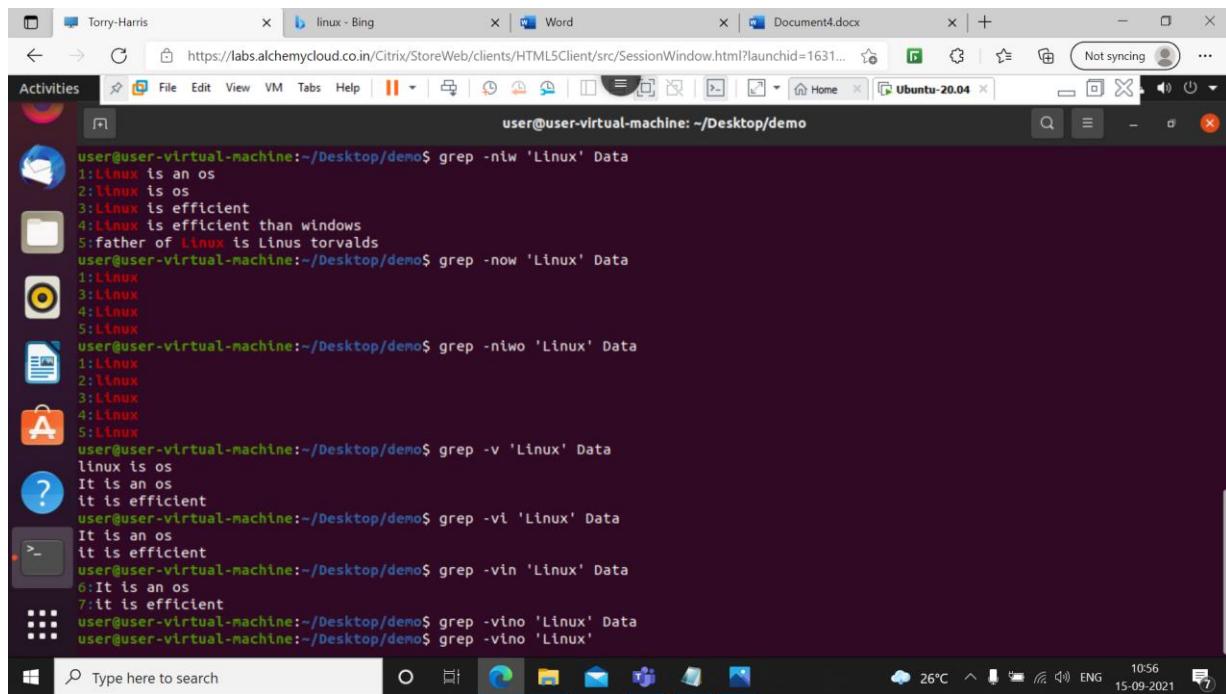


A screenshot of a Windows desktop environment, similar to the previous one. The taskbar and system tray are identical. The terminal window shows the following grep command outputs:

```
5:father of Linux is Linus torvalds
user@user-virtual-machine:~/Desktop/demo$ grep -niw 'Linux' Data
1:Linux is an os
2:Linux is os
3:Linux is efficient
4:Linux is efficient than windows
5:father of Linux is Linus torvalds
user@user-virtual-machine:~/Desktop/demo$ grep -now 'Linux' Data
1:Linux
3:Linux
5:Linux
user@user-virtual-machine:~/Desktop/demo$ grep -niwo 'Linux' Data
1:Linux
2:Linux
3:Linux
4:Linux
5:Linux
user@user-virtual-machine:~/Desktop/demo$ grep -v 'Linux' Data
linux is os
It is an os
it is efficient
user@user-virtual-machine:~/Desktop/demo$ grep -vi 'Linux' Data
It is an os
it is efficient
user@user-virtual-machine:~/Desktop/demo$ grep -vin 'Linux' Data
6:It is an os
7:it is efficient
user@user-virtual-machine:~/Desktop/demo$
```

This command shows all the line which doesn't contain the word Linux with ignoring cases and show the no. of line that contain the word Linux.

19 grep -vino 'Linux' f2



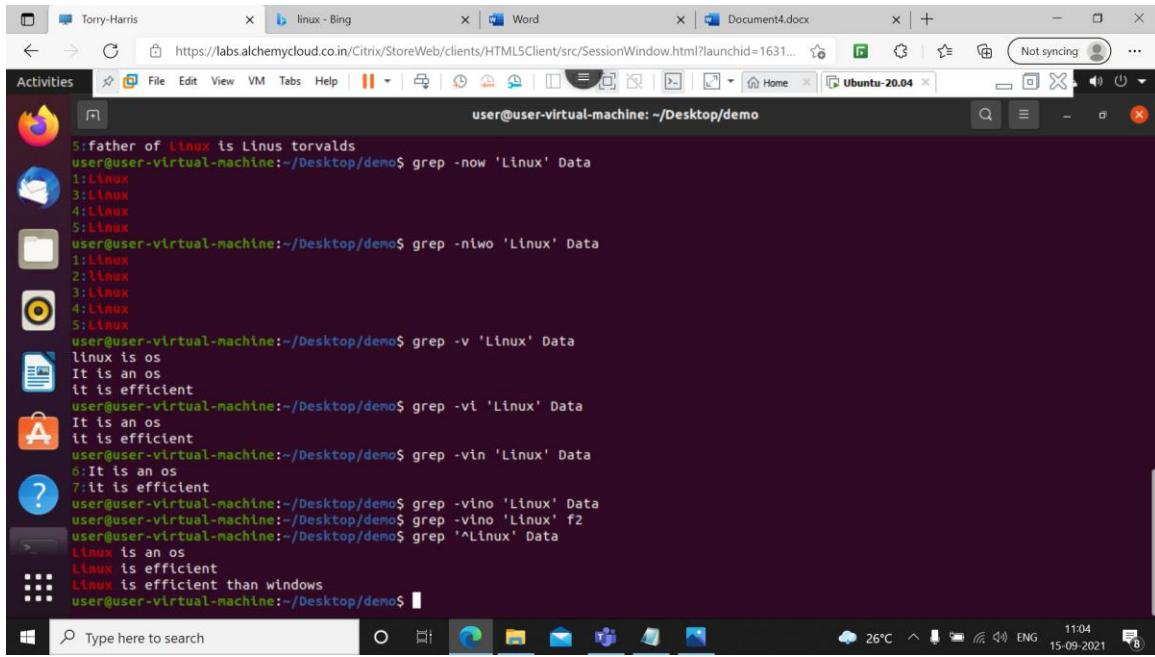
A screenshot of a Windows desktop environment. At the top, there is a taskbar with several icons: Torry-Harris, Bing, Word, Document4.docx, and a browser window titled 'Ubuntu-20.04'. Below the taskbar is a window titled 'Activities' showing a list of desktop icons. The main focus is a terminal window titled 'user@user-virtual-machine: ~/Desktop/demo'. The terminal displays the following grep command outputs:

```
user@user-virtual-machine:~/Desktop/demo$ grep -ntw 'Linux' Data
1:Linux is an os
2:Linux is
3:Linux is efficient
4:Linux is efficient than windows
5:father of Linux is Linus torvalds
user@user-virtual-machine:~/Desktop/demo$ grep -now 'Linux' Data
1:Linux
3:Linux
4:Linux
5:Linux
user@user-virtual-machine:~/Desktop/demo$ grep -niwo 'Linux' Data
1:Linux
2:Linux
3:Linux
4:Linux
5:Linux
user@user-virtual-machine:~/Desktop/demo$ grep -v 'Linux' Data
linux is os
It is an os
it is efficient
user@user-virtual-machine:~/Desktop/demo$ grep -vi 'Linux' Data
It is an os
it is efficient
user@user-virtual-machine:~/Desktop/demo$ grep -vin 'Linux' Data
6:It is an os
7:it is efficient
user@user-virtual-machine:~/Desktop/demo$ grep -vino 'Linux' Data
user@user-virtual-machine:~/Desktop/demo$ grep -vino 'Linux'
```

The terminal window is located on the desktop, and the desktop environment includes a taskbar with a search bar, a system tray with weather and battery information, and a date/time indicator.

This command shows all the line which doesn't contain the word Linux with ignoring cases and show the no. of line that contain the word Linux and with matched pattern.

20 grep '^Linux' Data



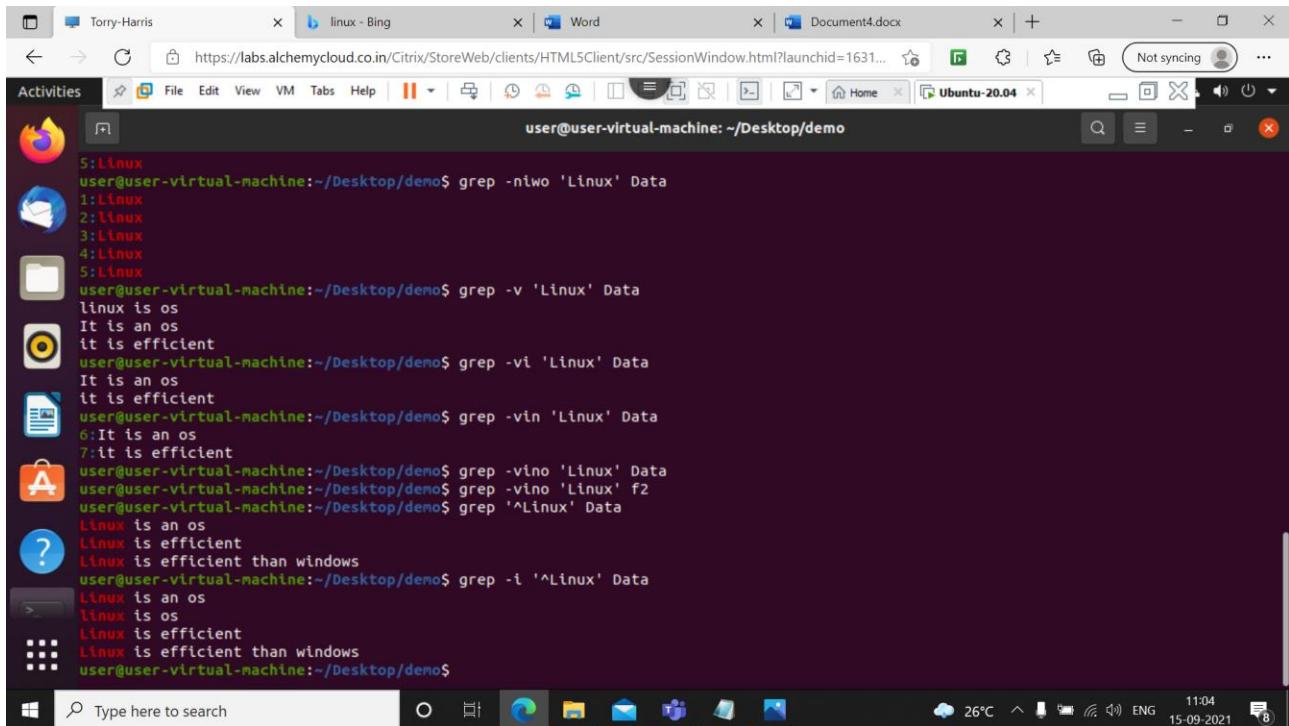
A screenshot of a Linux desktop environment, likely Ubuntu 20.04, showing a terminal window. The terminal window title is "Activities" and the command line shows the user's session: "user@user-virtual-machine: ~/Desktop/demo". The terminal displays the following grep command output:

```
5:father of Linux is Linus torvalds
user@user-virtual-machine:~/Desktop/demo$ grep -now 'Linux' Data
1:Linux
3:Linux
4:Linux
5:Linux
user@user-virtual-machine:~/Desktop/demo$ grep -niwo 'Linux' Data
1:Linux
2:Linux
3:Linux
4:Linux
5:Linux
user@user-virtual-machine:~/Desktop/demo$ grep -v 'Linux' Data
linux is os
It is an os
it is efficient
user@user-virtual-machine:~/Desktop/demo$ grep -vi 'Linux' Data
It is an os
it is efficient
user@user-virtual-machine:~/Desktop/demo$ grep -vin 'Linux' Data
6:It is an os
7:it is efficient
user@user-virtual-machine:~/Desktop/demo$ grep -vino 'Linux' Data
user@user-virtual-machine:~/Desktop/demo$ grep -vno 'Linux' f2
user@user-virtual-machine:~/Desktop/demo$ grep '^Linux' Data
Linux is an os
Linux is efficient
Linux is efficient than windows
user@user-virtual-machine:~/Desktop/demo$
```

The desktop interface includes a taskbar with icons for various applications like a file manager, browser, and messaging, and a system tray showing the date and time (15-09-2021, 11:04).

This command shows the line which starts with linux

21 grep -I '^Linux' Data



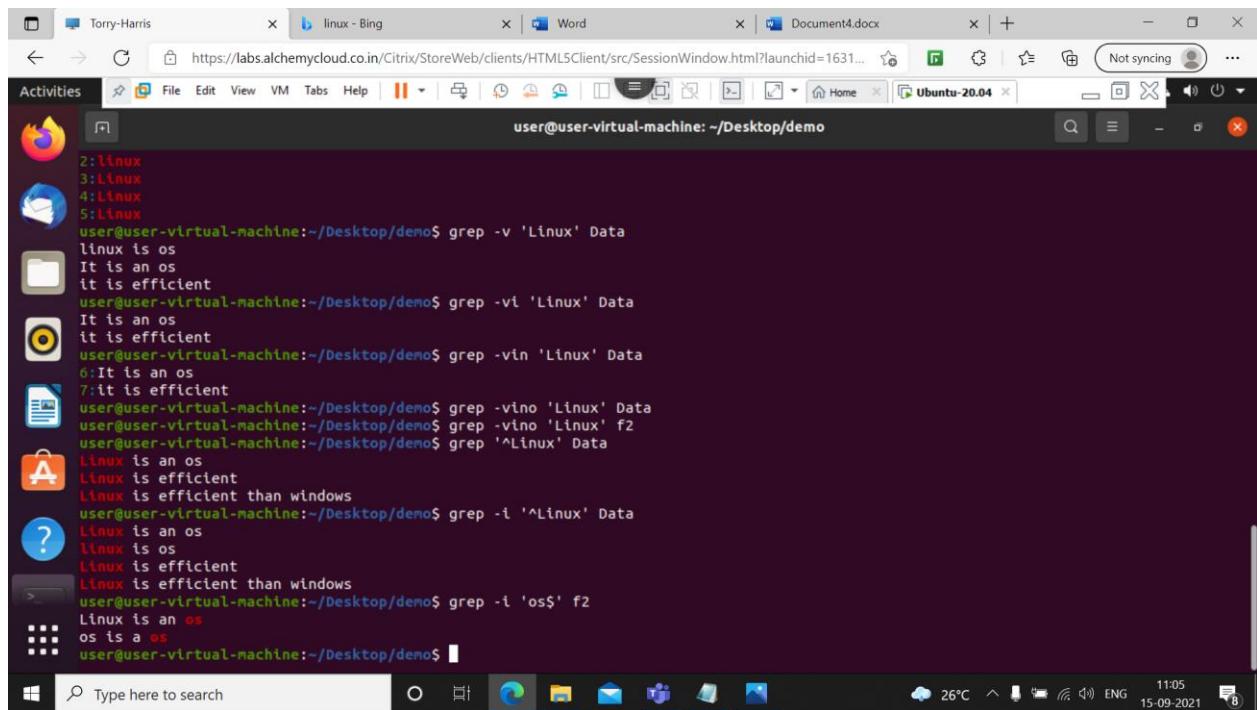
A screenshot of a Linux desktop environment, likely Ubuntu 20.04, showing a terminal window. The terminal window title is "Activities" and the command line shows the user's session: "user@user-virtual-machine: ~/Desktop/demo". The terminal displays the following grep command output:

```
5:Linux
user@user-virtual-machine:~/Desktop/demo$ grep -niwo 'Linux' Data
1:Linux
2:Linux
3:Linux
4:Linux
5:Linux
user@user-virtual-machine:~/Desktop/demo$ grep -v 'Linux' Data
linux is os
It is an os
it is efficient
user@user-virtual-machine:~/Desktop/demo$ grep -vi 'Linux' Data
It is an os
it is efficient
user@user-virtual-machine:~/Desktop/demo$ grep -vin 'Linux' Data
6:It is an os
7:it is efficient
user@user-virtual-machine:~/Desktop/demo$ grep -vino 'Linux' Data
user@user-virtual-machine:~/Desktop/demo$ grep -vno 'Linux' f2
user@user-virtual-machine:~/Desktop/demo$ grep '^Linux' Data
Linux is an os
Linux is efficient
Linux is efficient than windows
user@user-virtual-machine:~/Desktop/demo$ grep -i '^Linux' Data
Linux is an os
Linux is os
Linux is efficient
Linux is efficient than windows
user@user-virtual-machine:~/Desktop/demo$
```

The desktop interface includes a taskbar with icons for various applications like a file manager, browser, and messaging, and a system tray showing the date and time (15-09-2021, 11:04).

This command shows the line which starts with linux with ignoring the cases

22 grep -I 'os\$' f2

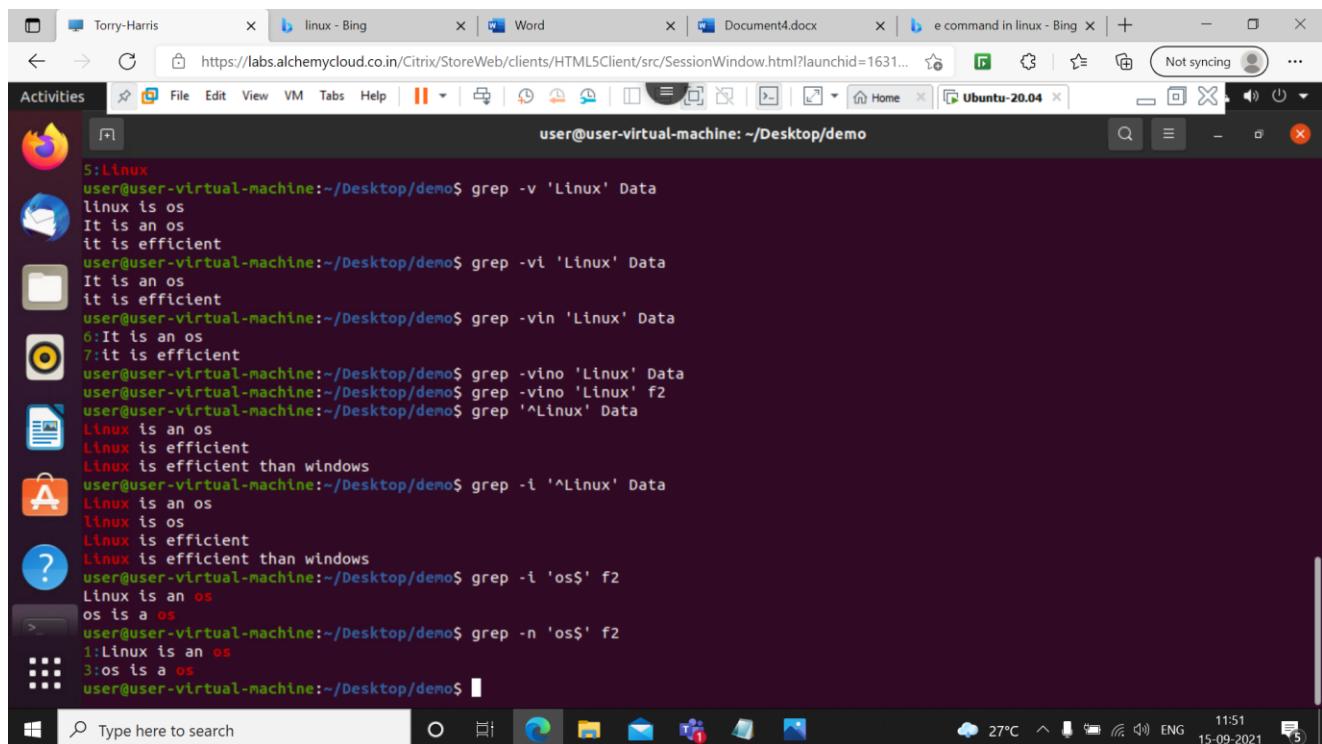


A screenshot of a Windows desktop environment showing a terminal window. The terminal window title is "user@user-virtual-machine: ~/Desktop/demo". The terminal content shows the following grep command execution:

```
user@user-virtual-machine:~/Desktop/demo$ grep -v 'Linux' Data
linux is os
It is an os
it is efficient
user@user-virtual-machine:~/Desktop/demo$ grep -vi 'Linux' Data
It is an os
it is efficient
user@user-virtual-machine:~/Desktop/demo$ grep -vin 'Linux' Data
0:It is an os
7:it is efficient
user@user-virtual-machine:~/Desktop/demo$ grep -vino 'Linux' Data
user@user-virtual-machine:~/Desktop/demo$ grep -vino 'Linux' f2
user@user-virtual-machine:~/Desktop/demo$ grep '^Linux' Data
Linux is an os
Linux is efficient
Linux is efficient than windows
user@user-virtual-machine:~/Desktop/demo$ grep -i '^Linux' Data
Linux is an os
linux is os
Linux is efficient
Linux is efficient than windows
user@user-virtual-machine:~/Desktop/demo$ grep -i 'os$' f2
Linux is an os
os is a os
user@user-virtual-machine:~/Desktop/demo$
```

It shows the line end with os

23 grep -n 'os\$' f2

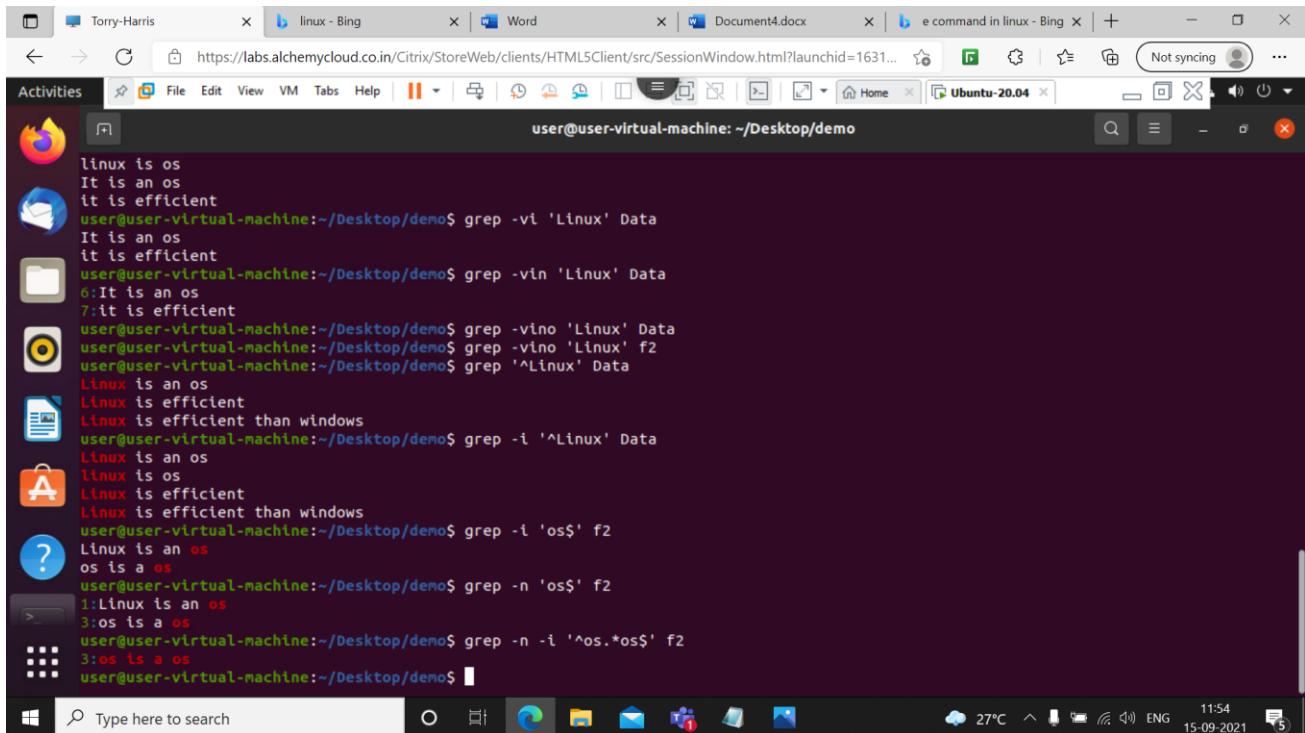


A screenshot of a Windows desktop environment showing a terminal window. The terminal window title is "user@user-virtual-machine: ~/Desktop/demo". The terminal content shows the following grep command execution:

```
user@user-virtual-machine:~/Desktop/demo$ grep -v 'Linux' Data
linux is os
It is an os
it is efficient
user@user-virtual-machine:~/Desktop/demo$ grep -vi 'Linux' Data
It is an os
it is efficient
user@user-virtual-machine:~/Desktop/demo$ grep -vin 'Linux' Data
0:It is an os
7:it is efficient
user@user-virtual-machine:~/Desktop/demo$ grep -vino 'Linux' Data
user@user-virtual-machine:~/Desktop/demo$ grep -vino 'Linux' f2
user@user-virtual-machine:~/Desktop/demo$ grep '^Linux' Data
Linux is an os
Linux is efficient
Linux is efficient than windows
user@user-virtual-machine:~/Desktop/demo$ grep -i '^Linux' Data
Linux is an os
linux is os
Linux is efficient
Linux is efficient than windows
user@user-virtual-machine:~/Desktop/demo$ grep -i 'os$' f2
Linux is an os
os is a os
user@user-virtual-machine:~/Desktop/demo$ grep -n 'os$' f2
1:Linux is an os
3:os is a os
user@user-virtual-machine:~/Desktop/demo$
```

It shows the line end with os with line number

24 grep -n -i '^os.*os\$' f2



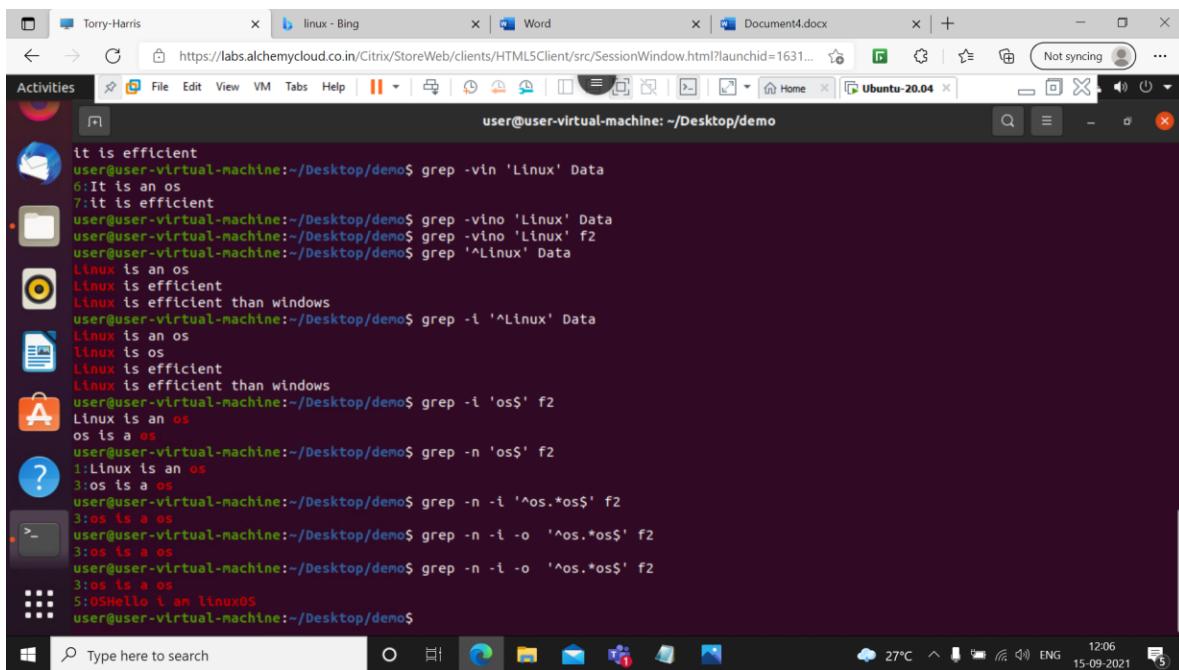
A screenshot of a Windows desktop environment. At the top, there is a taskbar with several open windows: 'Torry-Harris', 'linux - Bing', 'Word', 'Document4.docx', and 'e command in linux - Bing'. Below the taskbar is a desktop window titled 'Activities' showing a terminal session. The terminal output is as follows:

```
user@user-virtual-machine:~/Desktop/demo
linux is os
It is an os
it is efficient
user@user-virtual-machine:~/Desktop/demo$ grep -vi 'Linux' Data
It is an os
it is efficient
user@user-virtual-machine:~/Desktop/demo$ grep -vno 'Linux' Data
6:It is an os
7:it is efficient
user@user-virtual-machine:~/Desktop/demo$ grep -vino 'Linux' Data
user@user-virtual-machine:~/Desktop/demo$ grep -vino 'Linux' f2
user@user-virtual-machine:~/Desktop/demo$ grep '^Linux' Data
Linux is an os
Linux is efficient
Linux is efficient than windows
user@user-virtual-machine:~/Desktop/demo$ grep -i '^Linux' Data
Linux is an os
Linux is os
Linux is efficient
Linux is efficient than windows
user@user-virtual-machine:~/Desktop/demo$ grep -i 'os$' f2
Linux is an os
os is a os
user@user-virtual-machine:~/Desktop/demo$ grep -n 'os$' f2
1:Linux is an os
3:os is a os
user@user-virtual-machine:~/Desktop/demo$ grep -n -i '^os.*os$' f2
3:os is a os
user@user-virtual-machine:~/Desktop/demo$
```

The desktop also shows a system tray with icons for weather (27°C), battery (ENG), and date (15-09-2021).

This command will print the line that starts with os and ends with os

25 grep -n -i -o '^os.*os\$' f2



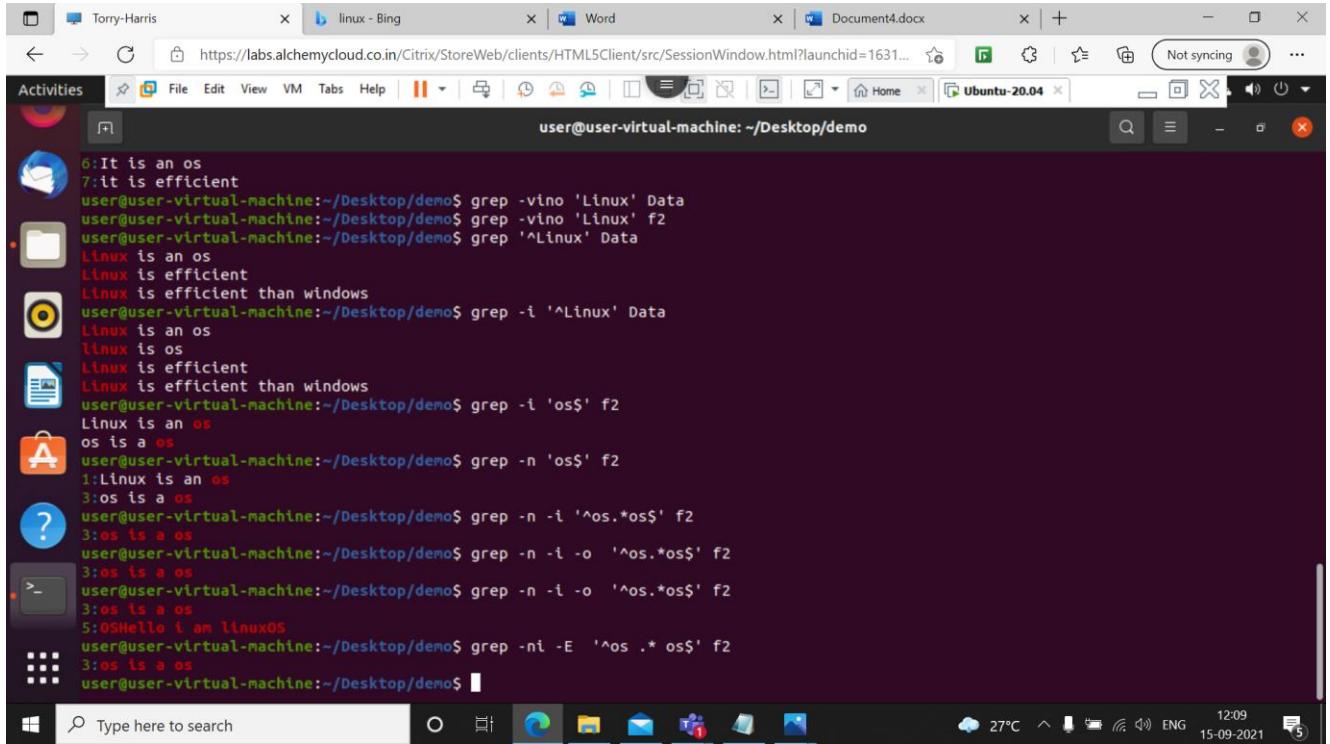
A screenshot of a Windows desktop environment, similar to the previous one. The taskbar and desktop window are identical. The terminal session output is as follows:

```
user@user-virtual-machine:~/Desktop/demo
it is efficient
user@user-virtual-machine:~/Desktop/demo$ grep -vi 'Linux' Data
6:It is an os
7:it is efficient
user@user-virtual-machine:~/Desktop/demo$ grep -vno 'Linux' Data
user@user-virtual-machine:~/Desktop/demo$ grep '^Linux' Data
Linux is an os
Linux is efficient
Linux is efficient than windows
user@user-virtual-machine:~/Desktop/demo$ grep -i '^Linux' Data
Linux is an os
Linux is os
Linux is efficient
Linux is efficient than windows
user@user-virtual-machine:~/Desktop/demo$ grep -i 'os$' f2
Linux is an os
os is a os
user@user-virtual-machine:~/Desktop/demo$ grep -n 'os$' f2
1:Linux is an os
3:os is a os
user@user-virtual-machine:~/Desktop/demo$ grep -n -i '^os.*os$' f2
3:os is a os
user@user-virtual-machine:~/Desktop/demo$ grep -n -i -o '^os.*os$' f2
3:os is a os
user@user-virtual-machine:~/Desktop/demo$ grep -n -i -o '^os.*os$' f2
3:os is a os
5:osHello i am linuxOS
user@user-virtual-machine:~/Desktop/demo$
```

The desktop also shows a system tray with icons for weather (27°C), battery (ENG), and date (15-09-2021).

This command will print the line that starts with os and ends with os with ignoring the cases

26 grep -ni -E '^os.*os\$' f2



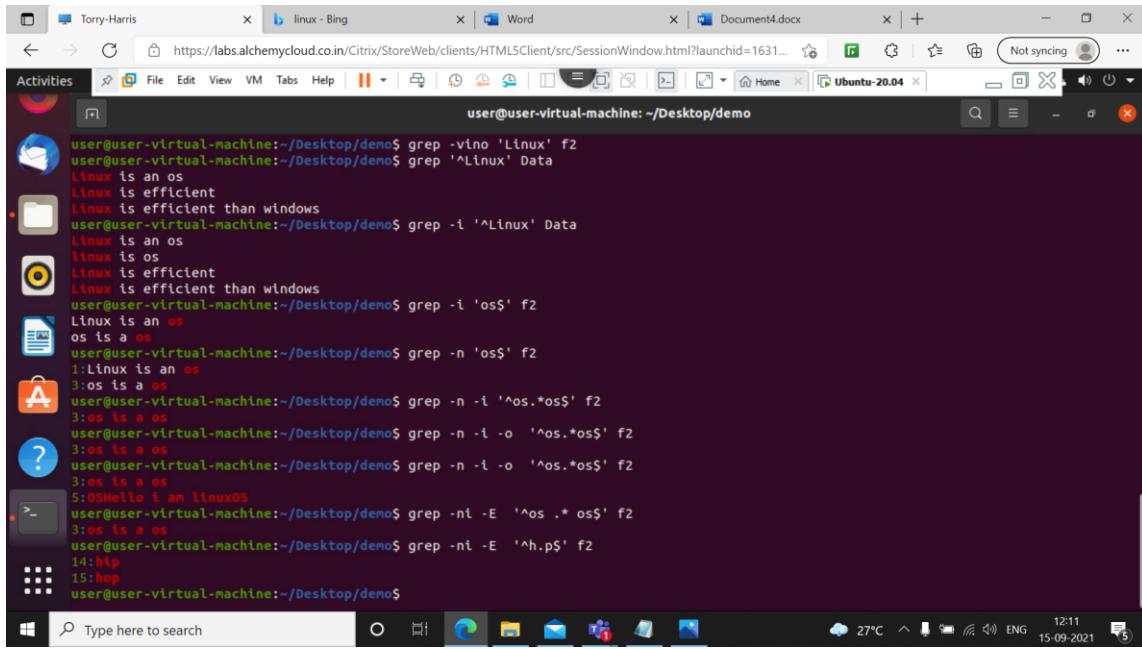
A screenshot of a Linux desktop environment, likely Ubuntu 20.04, showing a terminal window. The terminal window title is "user@user-virtual-machine: ~/Desktop/demo". The terminal content shows the output of a grep command:

```
6:It is an os
7:it is efficient
user@user-virtual-machine:~/Desktop/demo$ grep -vno 'Linux' Data
user@user-virtual-machine:~/Desktop/demo$ grep -vno 'Linux' f2
user@user-virtual-machine:~/Desktop/demo$ grep '^Linux' Data
Linux is an os
Linux is efficient
Linux is efficient than windows
user@user-virtual-machine:~/Desktop/demo$ grep -i '^Linux' Data
Linux is an os
linux is os
Linux is efficient
Linux is efficient than windows
user@user-virtual-machine:~/Desktop/demo$ grep -i 'os$' f2
Linux is an os
os is a os
user@user-virtual-machine:~/Desktop/demo$ grep -n 'os$' f2
1:Linux is an os
3:os is a os
user@user-virtual-machine:~/Desktop/demo$ grep -n -i '^os.*os$' f2
3:os is a os
user@user-virtual-machine:~/Desktop/demo$ grep -n -i -o '^os.*os$' f2
3:os is a os
user@user-virtual-machine:~/Desktop/demo$ grep -n -i -o '^os.*os$' f2
3:os is a os
5:OSHello i am linuxos
user@user-virtual-machine:~/Desktop/demo$ grep -ni -E '^os.*os$' f2
3:os is a os
user@user-virtual-machine:~/Desktop/demo$
```

The desktop environment includes a dock with icons for File Explorer, Edge, Mail, and others. The system tray shows the date (15-09-2021), time (12:09), battery level (5%), and network status.

This command will print the line that starts with os and ends with os with ignoring the cases

27 grep -ni -E '^h.p\$' f2

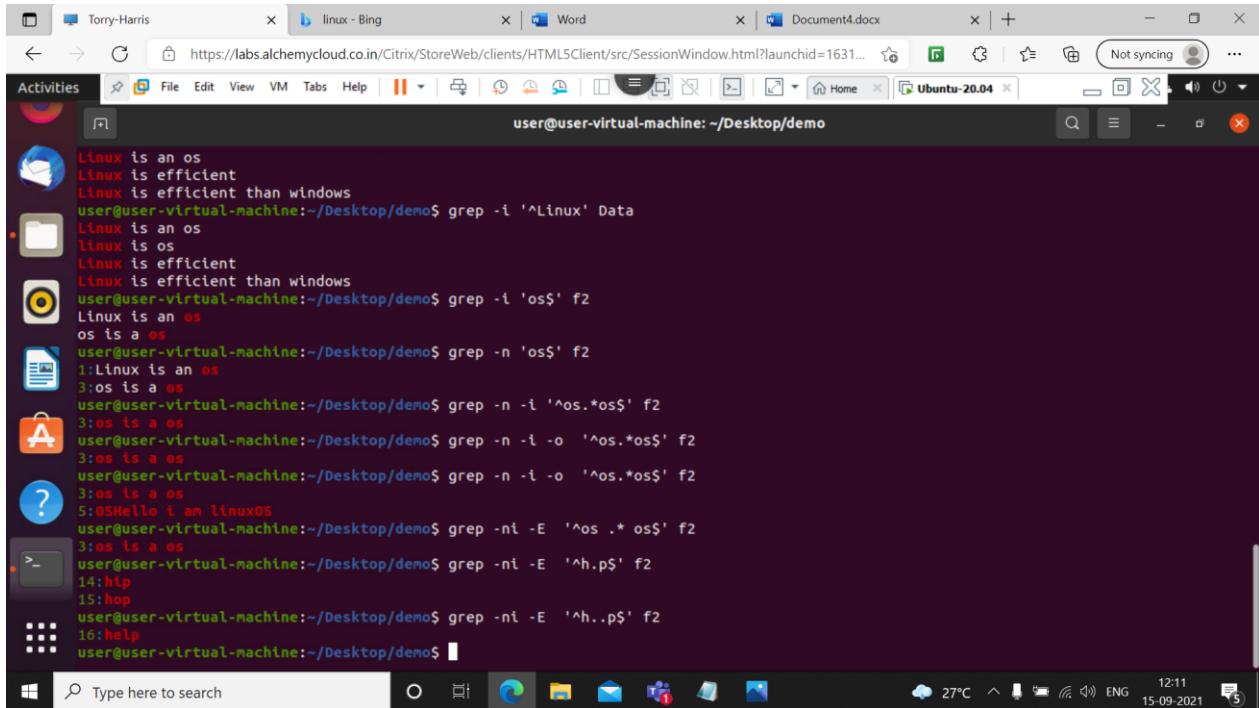


A screenshot of a Linux desktop environment. The terminal window shows the following command and its output:

```
user@user-virtual-machine:~/Desktop/demo$ grep -vno 'Linux' f2
Linux is an os
Linux is efficient
Linux is efficient than windows
user@user-virtual-machine:~/Desktop/demo$ grep -i '^Linux' Data
Linux is an os
Linux is os
Linux is efficient
Linux is efficient than windows
user@user-virtual-machine:~/Desktop/demo$ grep -i 'os$' f2
Linux is an os
os is a os
user@user-virtual-machine:~/Desktop/demo$ grep -n 'os$' f2
1:Linux is an os
3:os is a os
user@user-virtual-machine:~/Desktop/demo$ grep -n -i '^os.*os$' f2
3:os is a os
user@user-virtual-machine:~/Desktop/demo$ grep -n -i -o '^os.*os$' f2
3:os is a os
5:OSHello i am linuxOS
user@user-virtual-machine:~/Desktop/demo$ grep -ni -E '^os .* os$' f2
3:os is a os
user@user-virtual-machine:~/Desktop/demo$ grep -ni -E '^h.p$' f2
14:hip
15:hop
user@user-virtual-machine:~/Desktop/demo$
```

This command will print the line start with h and end with p with in between only one character.

28 grep -ni -E '^h..p\$' f2

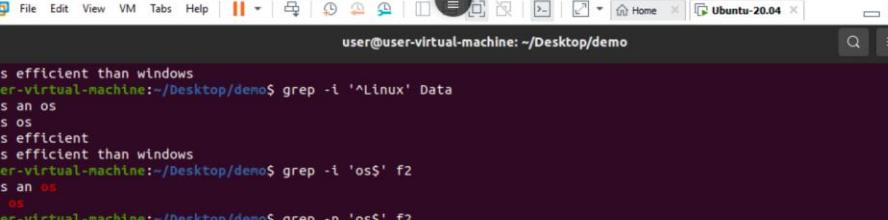


A screenshot of a Linux desktop environment. The terminal window shows the following command and its output:

```
user@user-virtual-machine:~/Desktop/demo$ grep -i '^Linux' Data
Linux is an os
Linux is efficient
Linux is efficient than windows
user@user-virtual-machine:~/Desktop/demo$ grep -i 'os$' f2
Linux is an os
os is a os
user@user-virtual-machine:~/Desktop/demo$ grep -n 'os$' f2
1:Linux is an os
3:os is a os
user@user-virtual-machine:~/Desktop/demo$ grep -n -i '^os.*os$' f2
3:os is a os
user@user-virtual-machine:~/Desktop/demo$ grep -n -i -o '^os.*os$' f2
3:os is a os
5:OSHello i am linuxOS
user@user-virtual-machine:~/Desktop/demo$ grep -ni -E '^os .* os$' f2
3:os is a os
user@user-virtual-machine:~/Desktop/demo$ grep -ni -E '^h.p$' f2
14:hip
15:hop
user@user-virtual-machine:~/Desktop/demo$ grep -ni -E '^h..p$' f2
16:help
user@user-virtual-machine:~/Desktop/demo$
```

This command will print the line start with h and end with p with in between two character.

29 grep -ni -E '^h[i]p\$' f2

```
Activities  user@user-virtual-machine:~/Desktop/demo
user@user-virtual-machine:~/Desktop/demo$ grep -i '^Linux' Data
Linux is efficient than windows
Linux is an os
Linux is os
Linux is efficient
Linux is efficient than windows
user@user-virtual-machine:~/Desktop/demo$ grep -i 'os$' f2
Linux is an os
os is a os
user@user-virtual-machine:~/Desktop/demo$ grep -n 'os$' f2
1:Linux is an os
3:os is a os
user@user-virtual-machine:~/Desktop/demo$ grep -n -i '^os.*os$' f2
3:os is a os
user@user-virtual-machine:~/Desktop/demo$ grep -n -i -o '^os.*os$' f2
3:os is a os
5:osHello i an linuxos
user@user-virtual-machine:~/Desktop/demo$ grep -ni -E '^os.* os$' f2
3:os is a os
user@user-virtual-machine:~/Desktop/demo$ grep -ni -E '^h.p$' f2
14:hp
15:hop
user@user-virtual-machine:~/Desktop/demo$ grep -ni -E '^h..p$' f2
16:help
user@user-virtual-machine:~/Desktop/demo$ grep -ni -E '^h[i]p$' f2
14:ntp
user@user-virtual-machine:~/Desktop/demo$
```

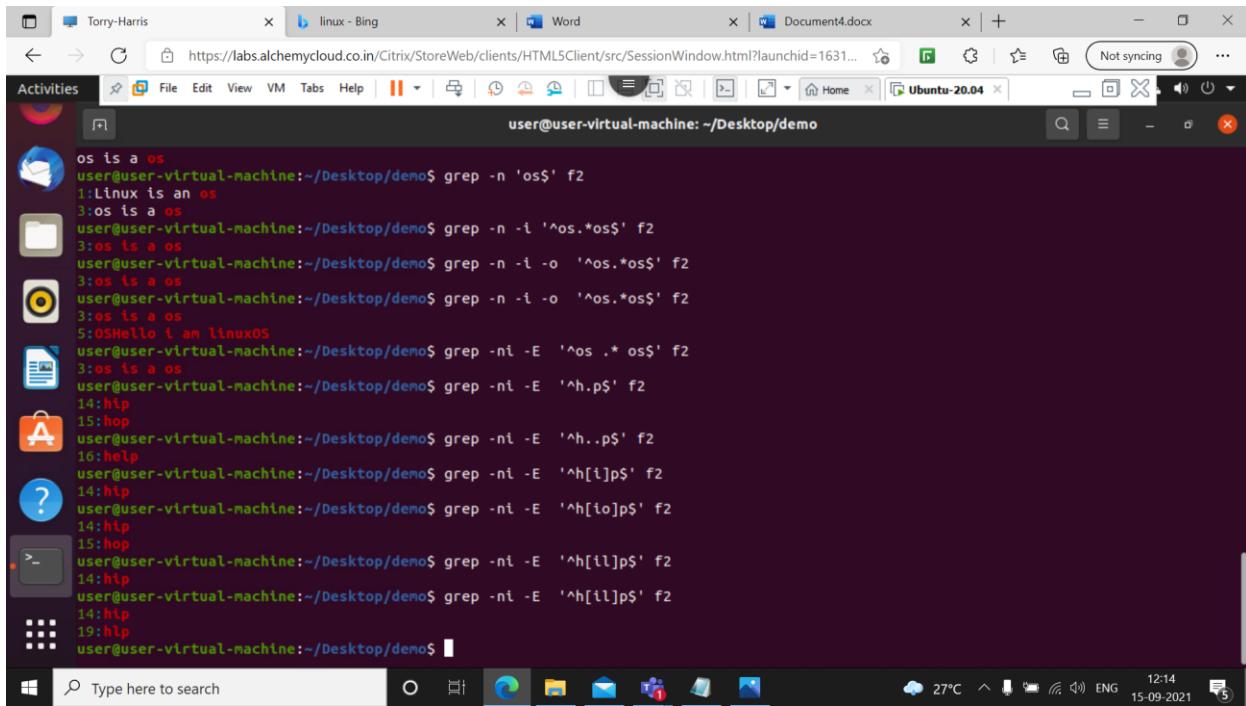
This command will print the line start with h and end with p with in between character must be i.

30 grep -ni -E '^h[io]p\$' f2

```
llinux ls
Linux is efficient
Linux is efficient than windows
user@user-virtual-machine:~/Desktop/demo$ grep -i 'os$' f2
Linux is an os
os is a os
user@user-virtual-machine:~/Desktop/demo$ grep -n 'os$' f2
1:Linux is an os
3:os is a os
user@user-virtual-machine:~/Desktop/demo$ grep -n -i -o '^os.*os$' f2
3:os is a os
user@user-virtual-machine:~/Desktop/demo$ grep -n -i -o '^os.*os$' f2
3:os is a os
5:0$Hello I am linuxOS
user@user-virtual-machine:~/Desktop/demo$ grep -nl -E '^os.* os$' f2
3:os is a os
user@user-virtual-machine:~/Desktop/demo$ grep -nl -E '^h.p$' f2
14:hp
15:hp
user@user-virtual-machine:~/Desktop/demo$ grep -nl -E '^h..p$' f2
16:help
user@user-virtual-machine:~/Desktop/demo$ grep -nl -E '^h[.]p$' f2
14:htp
user@user-virtual-machine:~/Desktop/demo$ grep -nt -E '^h[lo]p$' f2
14:htp
15:hop
user@user-virtual-machine:~/Desktop/demo$
```

This command will print the line start with h and end with p with in between character must be l or o.

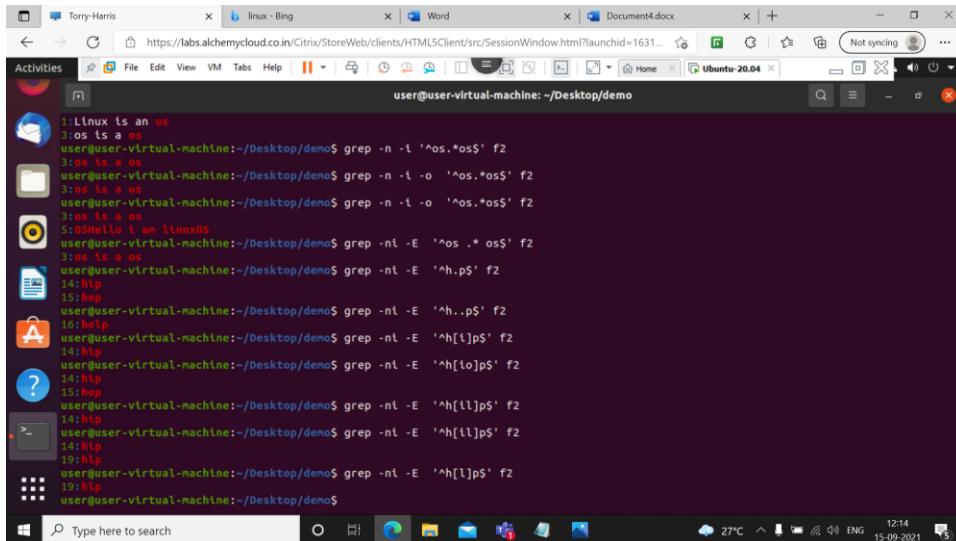
31 grep -ni -E '^h[il]p\$' f2



```
user@user-virtual-machine: ~/Desktop/demo
os is a os
user@user-virtual-machine:~/Desktop/demo$ grep -n 'os$' f2
1:Linux is an os
3:os is a os
user@user-virtual-machine:~/Desktop/demo$ grep -n -i '^os.*os$' f2
3:os is a os
user@user-virtual-machine:~/Desktop/demo$ grep -n -i -o '^os.*os$' f2
3:os is a os
5:OSHello I am linuxOS
user@user-virtual-machine:~/Desktop/demo$ grep -ni -E '^os.* os$' f2
3:os is a os
user@user-virtual-machine:~/Desktop/demo$ grep -ni -E '^h.p$' f2
14:hp
15:hop
user@user-virtual-machine:~/Desktop/demo$ grep -ni -E '^h..p$' f2
16:help
user@user-virtual-machine:~/Desktop/demo$ grep -ni -E '^h[i]p$' f2
14:hp
user@user-virtual-machine:~/Desktop/demo$ grep -ni -E '^h[io]p$' f2
14:hp
15:hop
user@user-virtual-machine:~/Desktop/demo$ grep -ni -E '^h[il]p$' f2
14:hp
user@user-virtual-machine:~/Desktop/demo$ grep -ni -E '^h[ill]p$' f2
14:hp
19:hp
user@user-virtual-machine:~/Desktop/demo$
```

This command will print the line start with h and end with p with in between character must be l or l.

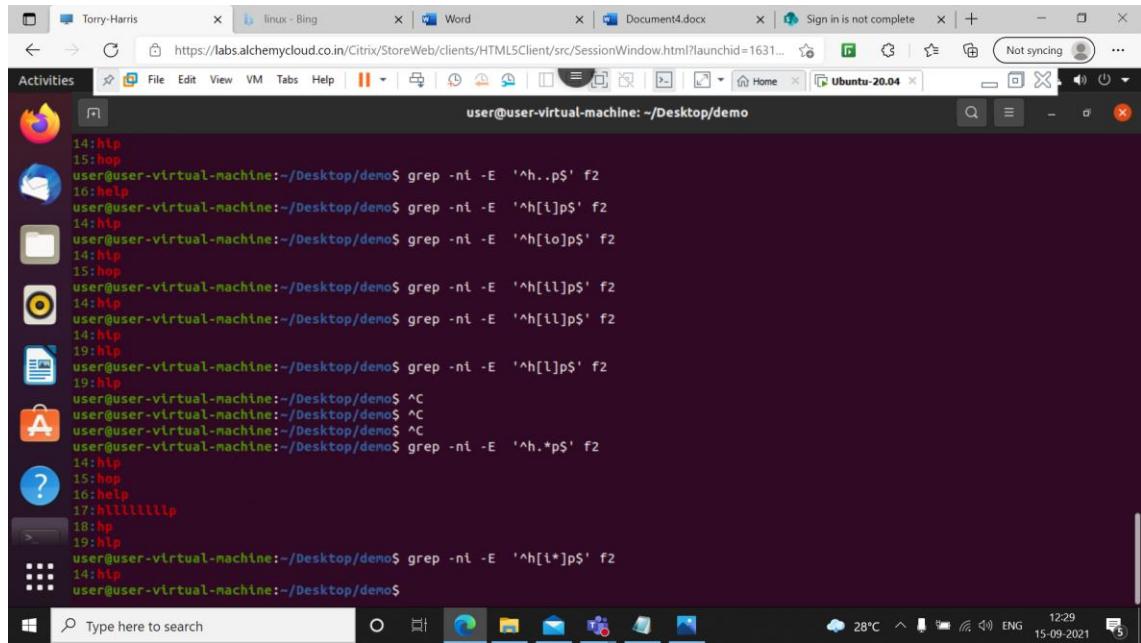
32 grep -ni -E '^h[il]p\$' f2



```
user@user-virtual-machine: ~/Desktop/demo
1:Linux is an os
3:os is a os
user@user-virtual-machine:~/Desktop/demo$ grep -n -i '^os.*os$' f2
3:os is a os
user@user-virtual-machine:~/Desktop/demo$ grep -n -i -o '^os.*os$' f2
3:os is a os
5:OSHello I am linuxOS
user@user-virtual-machine:~/Desktop/demo$ grep -ni -E '^os.* os$' f2
3:os is a os
user@user-virtual-machine:~/Desktop/demo$ grep -ni -E '^h.p$' f2
14:hp
15:hop
user@user-virtual-machine:~/Desktop/demo$ grep -ni -E '^h..p$' f2
16:help
user@user-virtual-machine:~/Desktop/demo$ grep -ni -E '^h[i]p$' f2
14:hp
user@user-virtual-machine:~/Desktop/demo$ grep -ni -E '^h[io]p$' f2
14:hp
15:hop
user@user-virtual-machine:~/Desktop/demo$ grep -ni -E '^h[il]p$' f2
14:hp
user@user-virtual-machine:~/Desktop/demo$ grep -ni -E '^h[ill]p$' f2
14:hp
19:hp
user@user-virtual-machine:~/Desktop/demo$
```

This command will print the line start with h and end with p with in between character must be l.

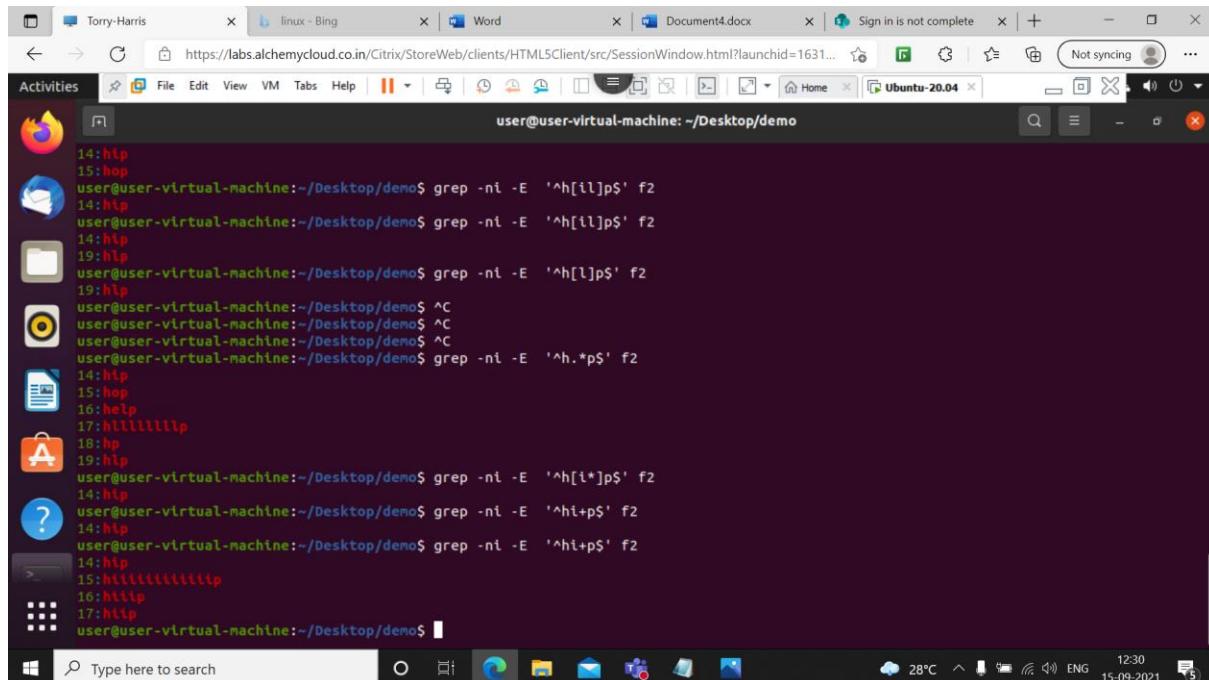
33 grep -ni -E '^h[il]*p\$' f2



```
user@user-virtual-machine: ~/Desktop/demo
14:htp
15:hop
user@user-virtual-machine:~/Desktop/demo$ grep -ni -E '^h..p$' f2
16:help
user@user-virtual-machine:~/Desktop/demo$ grep -ni -E '^h[i]p$' f2
14:htp
user@user-virtual-machine:~/Desktop/demo$ grep -ni -E '^h[lo]p$' f2
14:htp
15:hop
user@user-virtual-machine:~/Desktop/demo$ grep -ni -E '^h[il]p$' f2
14:htp
user@user-virtual-machine:~/Desktop/demo$ grep -ni -E '^h[il]p$' f2
14:htp
19:htp
user@user-virtual-machine:~/Desktop/demo$ grep -ni -E '^h[l]p$' f2
19:htp
user@user-virtual-machine:~/Desktop/demo$ ^C
user@user-virtual-machine:~/Desktop/demo$ ^C
user@user-virtual-machine:~/Desktop/demo$ grep -ni -E '^h.*p$' f2
14:htp
15:hop
16:help
17:hlllllllp
18:htp
19:htp
user@user-virtual-machine:~/Desktop/demo$ grep -ni -E '^h[i*]p$' f2
14:htp
user@user-virtual-machine:~/Desktop/demo$
```

This command will print the line start with h and end with p with in between any character can be there.

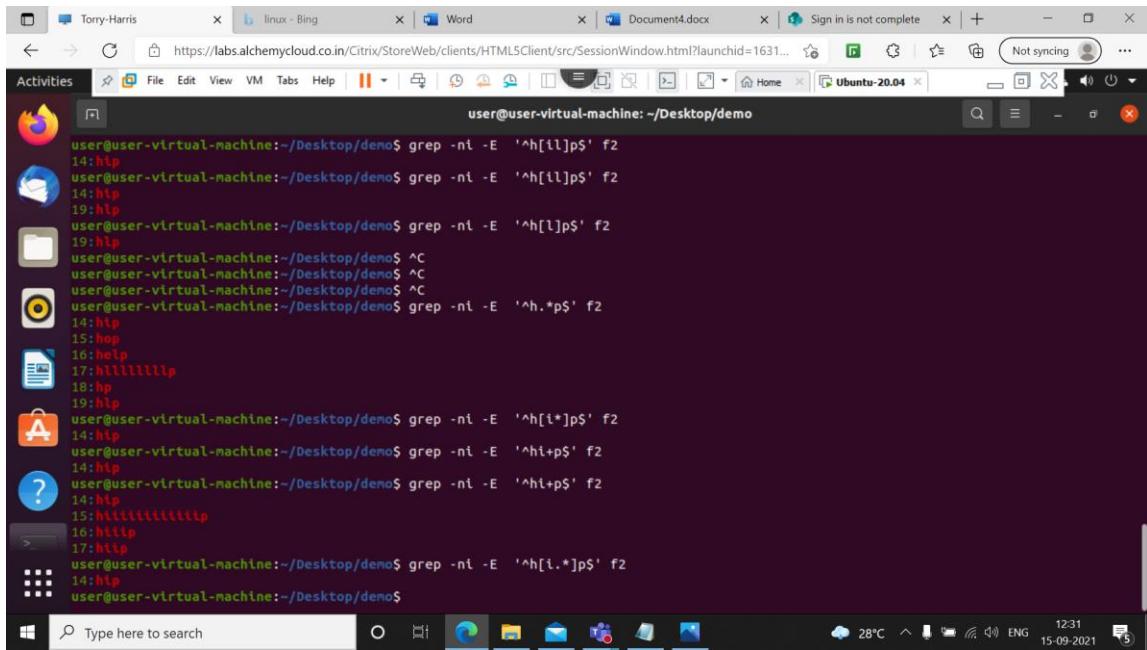
34 grep -ni -E '^hi+p\$' f2



```
user@user-virtual-machine: ~/Desktop/demo
14:htp
15:hop
user@user-virtual-machine:~/Desktop/demo$ grep -ni -E '^h[il]p$' f2
14:htp
user@user-virtual-machine:~/Desktop/demo$ grep -ni -E '^h[il]p$' f2
14:htp
19:htp
user@user-virtual-machine:~/Desktop/demo$ grep -ni -E '^h[l]p$' f2
19:htp
user@user-virtual-machine:~/Desktop/demo$ ^C
user@user-virtual-machine:~/Desktop/demo$ ^C
user@user-virtual-machine:~/Desktop/demo$ grep -ni -E '^h.*p$' f2
14:htp
15:hop
16:help
17:hlllllllp
18:htp
19:htp
user@user-virtual-machine:~/Desktop/demo$ grep -ni -E '^h[i*]p$' f2
14:htp
user@user-virtual-machine:~/Desktop/demo$ grep -ni -E '^hi+p$' f2
14:htp
15:hlllllllllp
16:htlp
17:htlp
user@user-virtual-machine:~/Desktop/demo$
```

This command will print the line start with h and end with p with in between one or more than one character can be there

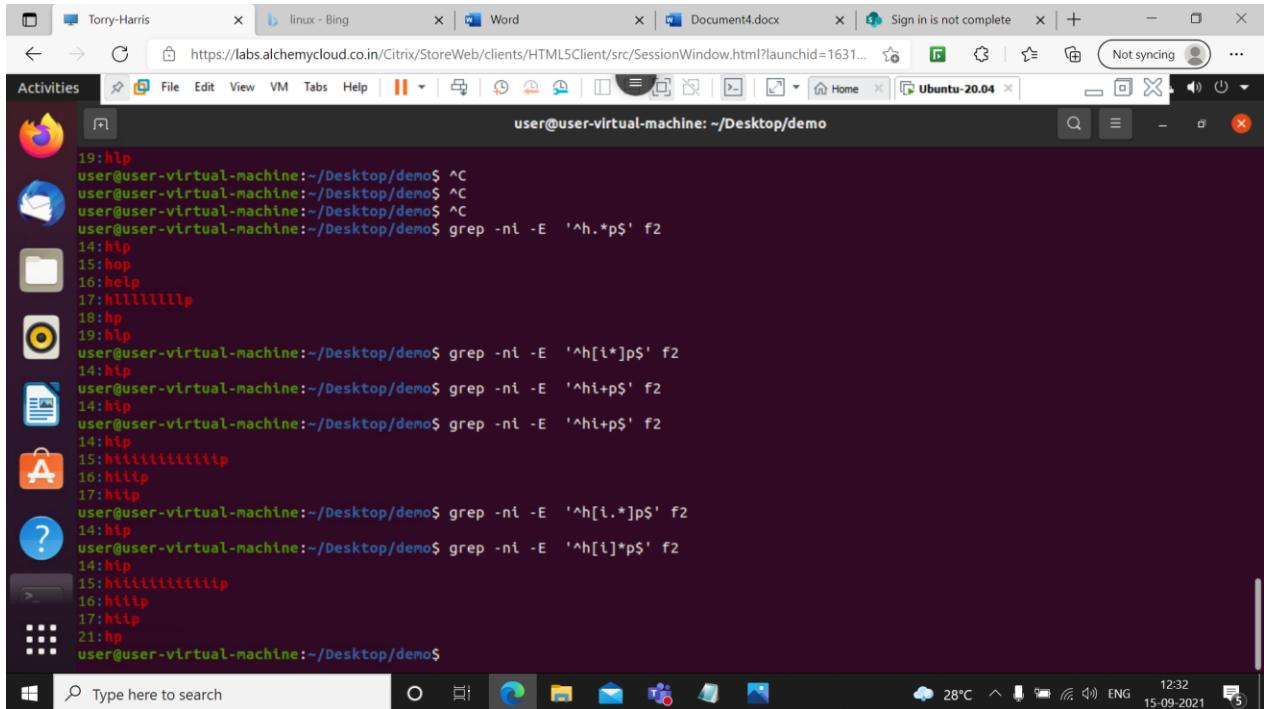
35 grep -ni -E '^h[il]*p\$' f2



```
user@user-virtual-machine:~/Desktop/demo$ grep -ni -E '^h[il]*p$' f2
14:hp
user@user-virtual-machine:~/Desktop/demo$ grep -ni -E '^h[il]*p$' f2
14:hp
19:hp
user@user-virtual-machine:~/Desktop/demo$ grep -ni -E '^h[il]*p$' f2
19:hp
user@user-virtual-machine:~/Desktop/demo$ ^C
user@user-virtual-machine:~/Desktop/demo$ ^C
user@user-virtual-machine:~/Desktop/demo$ ^C
user@user-virtual-machine:~/Desktop/demo$ grep -ni -E '^h.*p$' f2
14:hp
15:hp
16:help
17:htlllllp
18:hp
19:hp
user@user-virtual-machine:~/Desktop/demo$ grep -ni -E '^h[i]*p$' f2
14:hp
user@user-virtual-machine:~/Desktop/demo$ grep -ni -E '^hi+p$' f2
14:hp
user@user-virtual-machine:~/Desktop/demo$ grep -ni -E '^hi+p$' f2
14:hp
15:htlllllp
16:htllp
17:htlp
user@user-virtual-machine:~/Desktop/demo$ grep -ni -E '^h[il]*p$' f2
14:hp
user@user-virtual-machine:~/Desktop/demo$
```

This command will print the line start with h and end with p with in between only i can be there

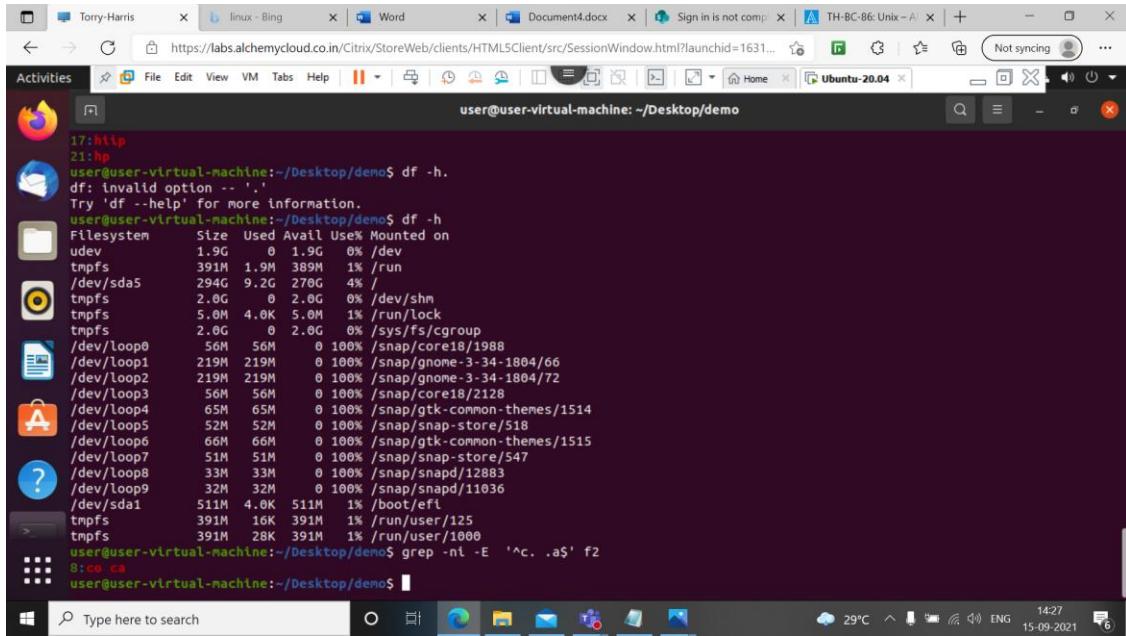
36 grep -ni -E '^h[il]*p\$' f2



```
user@user-virtual-machine:~/Desktop/demo$ grep -ni -E '^h[il]*p$' f2
19:hp
user@user-virtual-machine:~/Desktop/demo$ ^C
user@user-virtual-machine:~/Desktop/demo$ ^C
user@user-virtual-machine:~/Desktop/demo$ ^C
user@user-virtual-machine:~/Desktop/demo$ grep -ni -E '^h.*p$' f2
14:hp
15:hp
16:help
17:htlllllp
18:hp
19:hp
user@user-virtual-machine:~/Desktop/demo$ grep -ni -E '^h[i]*p$' f2
14:hp
user@user-virtual-machine:~/Desktop/demo$ grep -ni -E '^hi+p$' f2
14:hp
user@user-virtual-machine:~/Desktop/demo$ grep -ni -E '^hi+p$' f2
14:hp
15:htlllllp
16:htllp
17:htlp
user@user-virtual-machine:~/Desktop/demo$ grep -ni -E '^h[il]*p$' f2
14:hp
user@user-virtual-machine:~/Desktop/demo$ grep -ni -E '^h[il]*p$' f2
14:hp
15:htlllllp
16:htllp
17:htlp
21:hp
user@user-virtual-machine:~/Desktop/demo$
```

This command will print the line start with h and end with p with in between any character can be there

37 grep -ni -E '^c. .a\$' f2



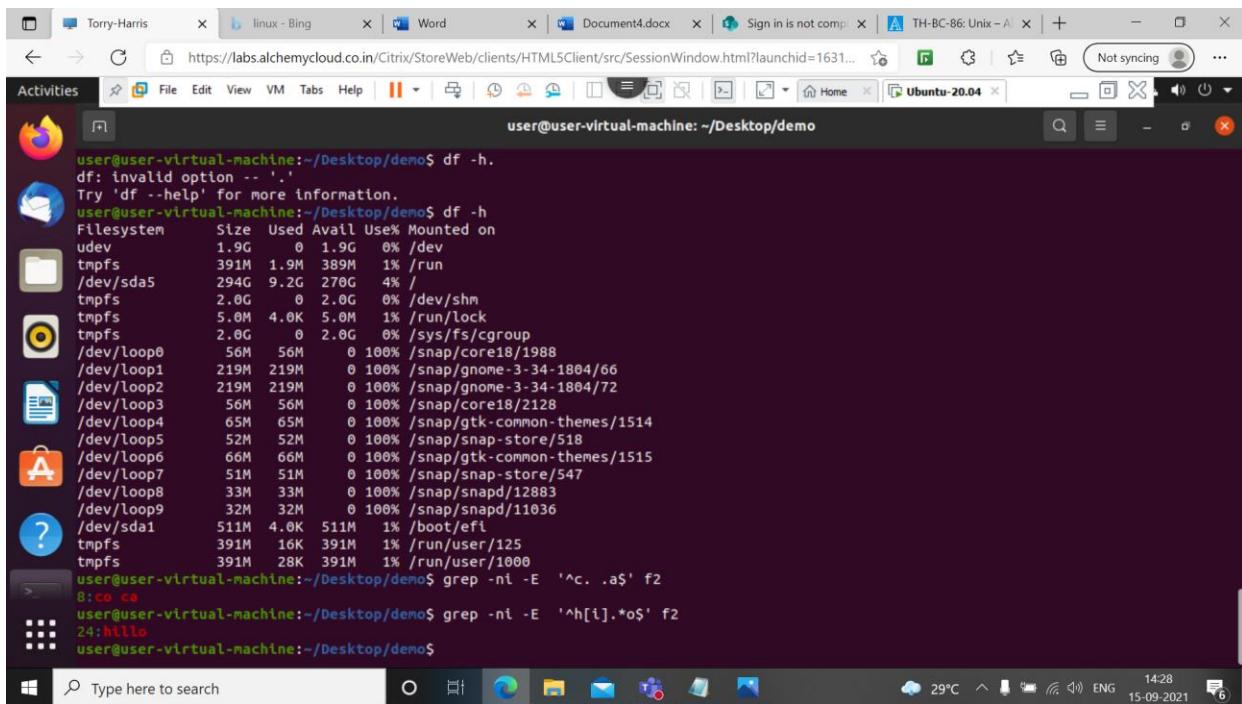
A screenshot of a Linux desktop environment. The terminal window shows the following command and its output:

```
user@user-virtual-machine:~/Desktop/demo$ grep -ni -E '^c. .a$' f2
8:co ca
user@user-virtual-machine:~/Desktop/demo$
```

The terminal window is titled "user@user-virtual-machine: ~/Desktop/demo". The desktop environment includes a dock with icons for various applications like a browser, file manager, and system tools. The system tray shows the date (15-09-2021), time (14:27), battery level (6), and network status.

This command will print the line start with c and end with a with in between any character can be there

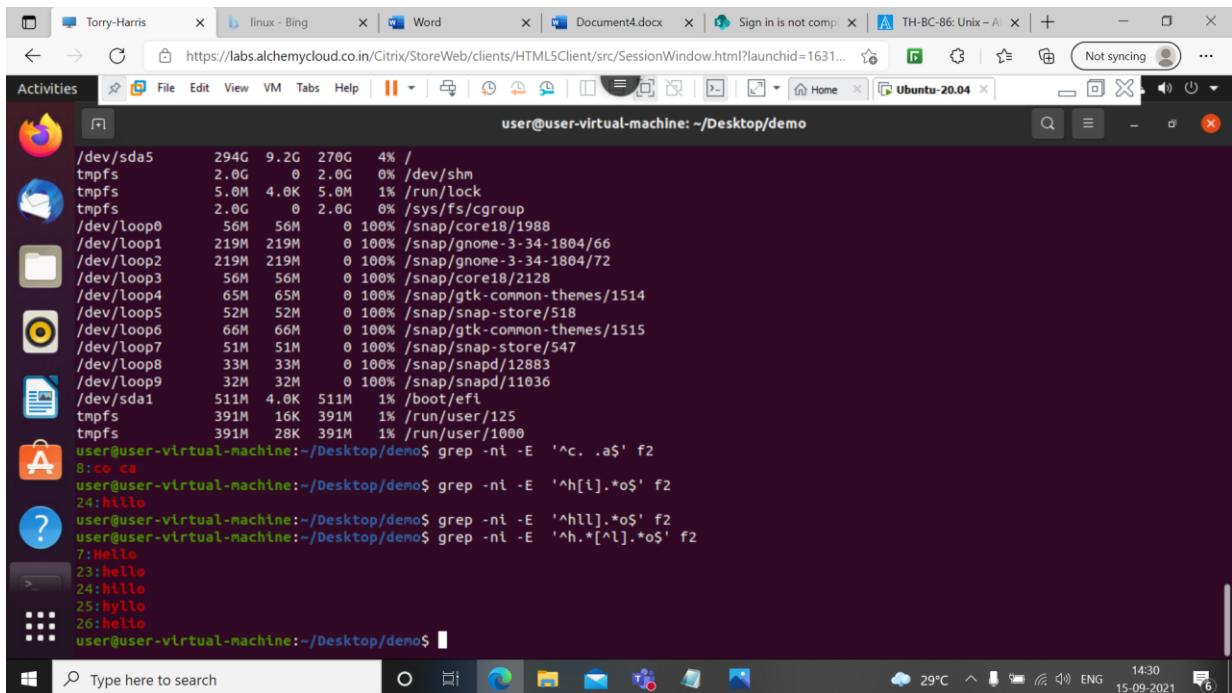
38 grep -ni -E '^h[!].*o\$' f2



```
user@user-virtual-machine:~/Desktop/demo$ df -h
df: invalid option -- 'h'
Try 'df --help' for more information.
user@user-virtual-machine:~/Desktop/demo$ df -h
Filesystem      Size  Used  Avail Use% Mounted on
udev            1.9G   0     1.9G  0% /dev
tmpfs           391M  389M  1M   1% /run
/dev/sda5        294G  270G  4% /
tmpfs           2.0G   0     2.0G  0% /dev/shm
tmpfs           5.0M  4.0K  1% /run/lock
tmpfs           2.0G   0     2.0G  0% /sys/fs/cgroup
/dev/loop0        56M   56M  0  100% /snap/core18/1988
/dev/loop1        219M  219M  0  100% /snap/gnome-3-34-1804/66
/dev/loop2        219M  219M  0  100% /snap/gnome-3-34-1804/72
/dev/loop3        56M   56M  0  100% /snap/core18/2128
/dev/loop4        65M   65M  0  100% /snap/gtk-common-themes/1514
/dev/loop5        52M   52M  0  100% /snap/snap-store/518
/dev/loop6        66M   66M  0  100% /snap/gtk-common-themes/1515
/dev/loop7        51M   51M  0  100% /snap/snap-store/547
/dev/loop8        33M   33M  0  100% /snap/snapd/12883
/dev/loop9        32M   32M  0  100% /snap/snapd/11036
/dev/sda1        511M  4.0K  511M  1% /boot/efi
tmpfs           391M  16K  391M  1% /run/user/125
tmpfs           391M  28K  391M  1% /run/user/1000
user@user-virtual-machine:~/Desktop/demo$ grep -ni -E '^c. .a$' f2
8:ca ca
user@user-virtual-machine:~/Desktop/demo$ grep -ni -E '^h[i].*o$' f2
24:hello
user@user-virtual-machine:~/Desktop/demo$
```

This command will print the line start with hi and end with o with in between any character can be there

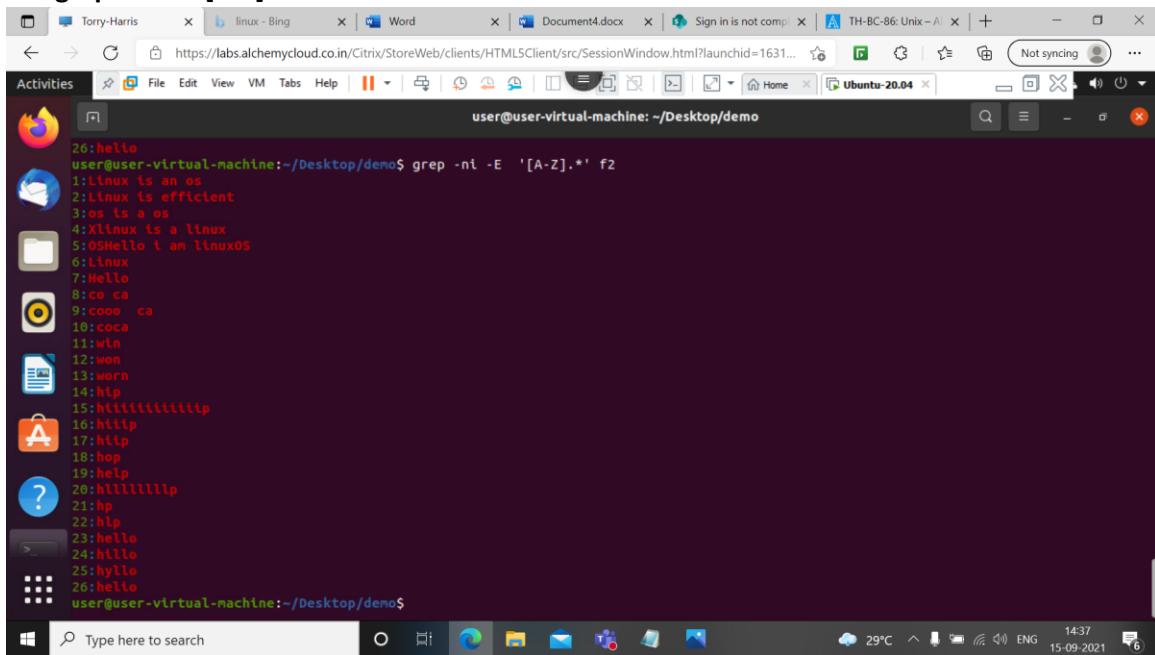
39 grep -ni -E '^h[i].*o\$' f2



```
user@user-virtual-machine:~/Desktop/demo$ df -h
Filesystem      Size  Used  Avail Use% Mounted on
udev            1.9G   0     1.9G  0% /dev
tmpfs           391M  389M  1M   1% /run
/dev/sda5        294G  270G  4% /
tmpfs           2.0G   0     2.0G  0% /dev/shm
tmpfs           5.0M  4.0K  1% /run/lock
tmpfs           2.0G   0     2.0G  0% /sys/fs/cgroup
/dev/loop0        56M   56M  0  100% /snap/core18/1988
/dev/loop1        219M  219M  0  100% /snap/gnome-3-34-1804/66
/dev/loop2        219M  219M  0  100% /snap/gnome-3-34-1804/72
/dev/loop3        56M   56M  0  100% /snap/core18/2128
/dev/loop4        65M   65M  0  100% /snap/gtk-common-themes/1514
/dev/loop5        52M   52M  0  100% /snap/snap-store/518
/dev/loop6        66M   66M  0  100% /snap/gtk-common-themes/1515
/dev/loop7        51M   51M  0  100% /snap/snap-store/547
/dev/loop8        33M   33M  0  100% /snap/snapd/12883
/dev/loop9        32M   32M  0  100% /snap/snapd/11036
/dev/sda1        511M  4.0K  511M  1% /boot/efi
tmpfs           391M  16K  391M  1% /run/user/125
tmpfs           391M  28K  391M  1% /run/user/1000
user@user-virtual-machine:~/Desktop/demo$ grep -ni -E '^c. .a$' f2
8:ca ca
user@user-virtual-machine:~/Desktop/demo$ grep -ni -E '^h[i].*o$' f2
24:hello
user@user-virtual-machine:~/Desktop/demo$ grep -ni -E '^hlll.*o$' f2
user@user-virtual-machine:~/Desktop/demo$ grep -ni -E '^h.*[l].*o$' f2
7:Hello
23:Hello
24:Hello
25:Hello
26:Hello
user@user-virtual-machine:~/Desktop/demo$
```

This command will print the line start with h and end with o with in between l must be there

40 grep -ni -E '[A-Z].*' f2



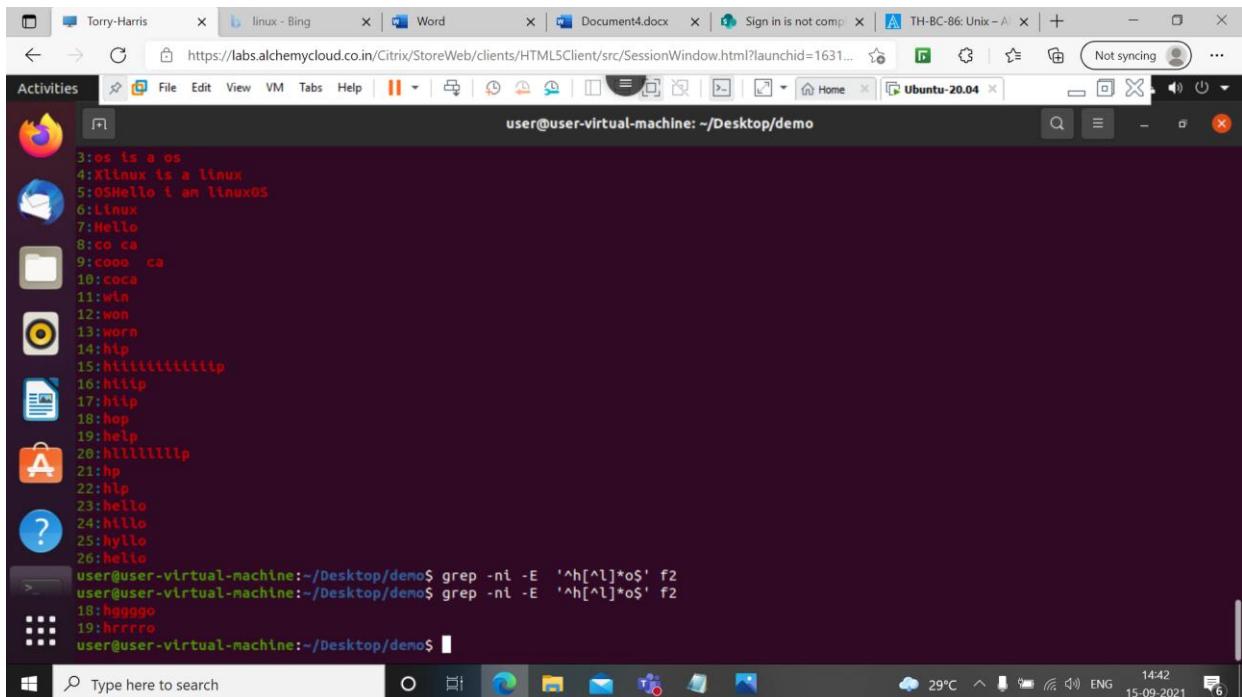
A screenshot of a Windows desktop environment. In the center is a terminal window titled "Activities" with the command "user@user-virtual-machine: ~/Desktop/demo\$". The terminal displays the following output:

```
26:hello
user@user-virtual-machine:~/Desktop/demo$ grep -ni -E '[A-Z].*' f2
1:linux is an os
2:linux is efficient
3:os is a os
4:linux is a linux
5:OSHello i am linuxOS
6:Linux
7:Hello
8:co ca
9:cooo ca
10:coca
11:wn
12:won
13:worn
14:hp
15:hiiiiiiiiiip
16:hiip
17:hipt
18:hop
19:help
20:hlllllllllp
21:hp
22:hlp
23:hello
24:hillo
25:hyllo
26:hello
user@user-virtual-machine:~/Desktop/demo$
```

The desktop taskbar at the bottom shows icons for File Explorer, Edge, Mail, and others. The system tray indicates a battery level of 29%, the date as 15-09-2021, and the time as 14:37.

This command will print all the lines in the range A to Z

41 grep -ni -E '^h[^l]*o\$' f2



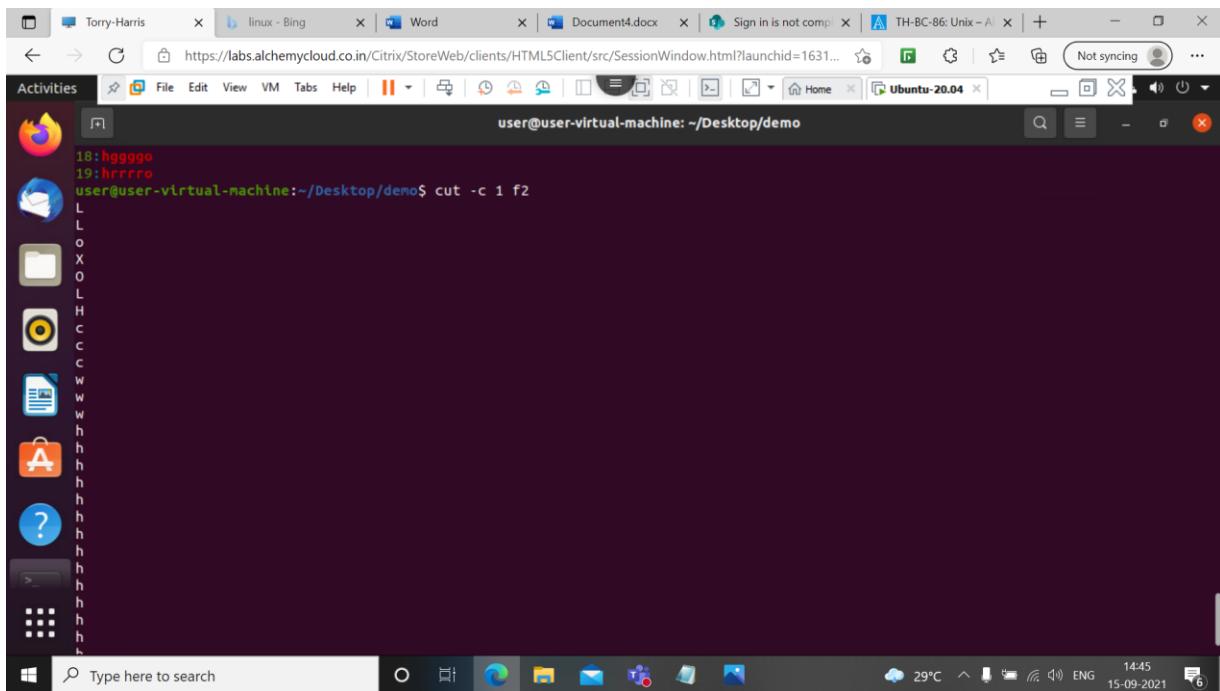
A screenshot of a Windows desktop environment. In the center is a terminal window titled "Activities" with the command "user@user-virtual-machine: ~/Desktop/demo\$". The terminal displays the following output:

```
3:os is a os
4:Xlinux ts a linux
5:OSHello i am linuxOS
6:Linux
7:Hello
8:co ca
9:cooo ca
10:coca
11:wn
12:won
13:worn
14:hp
15:hiiiiiiiiiip
16:hiip
17:hipt
18:hop
19:help
20:hlllllllllp
21:hp
22:hlp
23:hello
24:hillo
25:hyllo
26:hello
user@user-virtual-machine:~/Desktop/demo$ grep -ni -E '^h[^l]*o$' f2
18:hgggo
19:hrrro
user@user-virtual-machine:~/Desktop/demo$
```

The desktop taskbar at the bottom shows icons for File Explorer, Edge, Mail, and others. The system tray indicates a battery level of 29%, the date as 15-09-2021, and the time as 14:42.

It will print the line that starts with h and ends with o , it doesn't contain l in between.

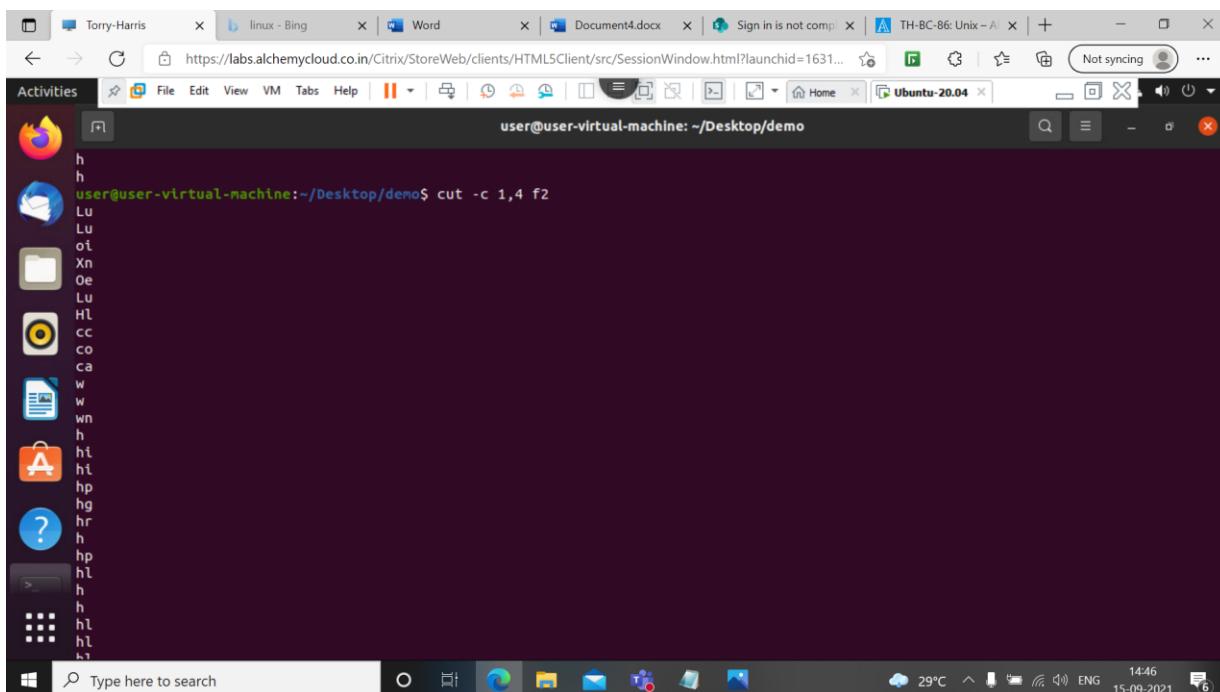
42 cut -c 1 f2



A screenshot of a Windows desktop environment. At the top, there is a taskbar with several open windows: 'Torry-Harris', 'linux - Bing', 'Word', 'Document4.docx', 'Sign in is not comp...', 'TH-BC-86: Unix - A...', and a browser window titled 'Ubuntu-20.04'. Below the taskbar is a desktop environment window titled 'Activities'. The terminal window in the Activities window shows the command 'cut -c 1 f2' being run. The output of the command is visible in the terminal window. The desktop environment includes a dock with icons for various applications like a browser, file manager, and system tools. The system tray at the bottom right shows the date and time as 15-09-2021 14:45, and the weather as 29°C.

This will print the first column

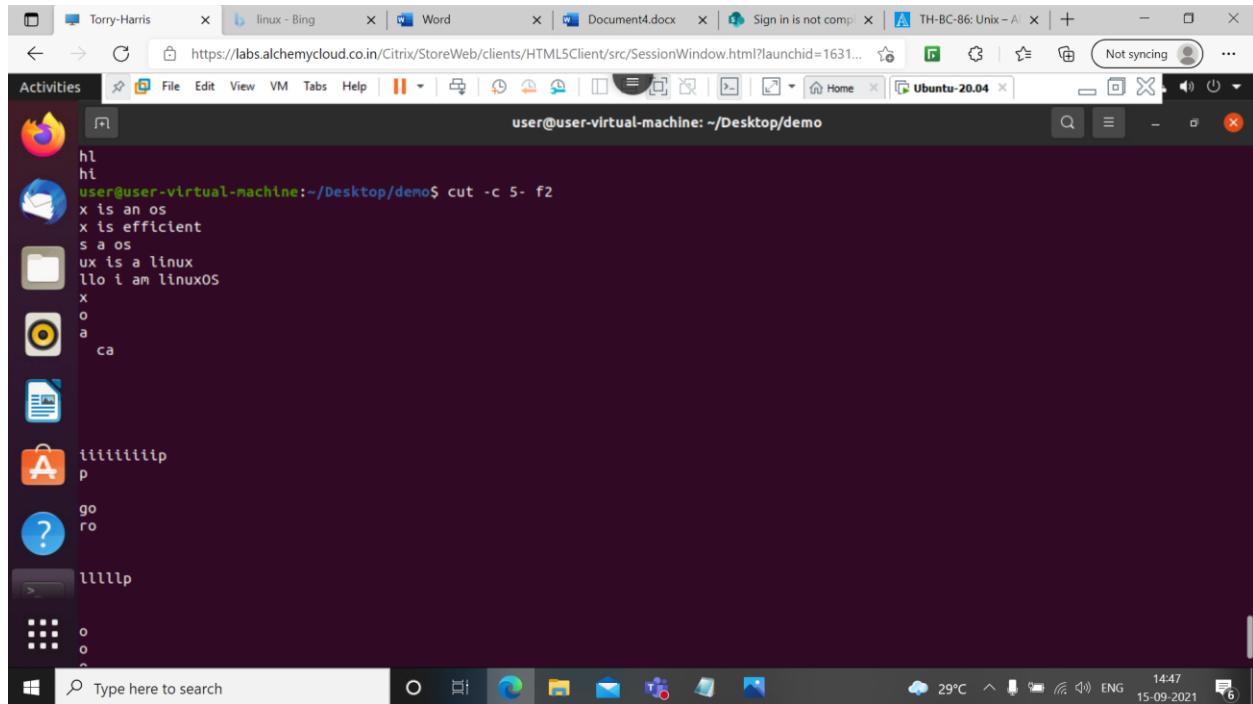
43 cut -c 1,4 f2



A screenshot of a Windows desktop environment, similar to the previous one. The taskbar at the top shows the same set of open windows. The desktop environment window titled 'Activities' contains a terminal window with the command 'cut -c 1,4 f2'. The output of this command is visible in the terminal window. The desktop environment includes a dock with icons for various applications and the system tray at the bottom right shows the date and time as 15-09-2021 14:46, and the weather as 29°C.

This will print the 1 and 4 th column

44 cut -c 5- f2

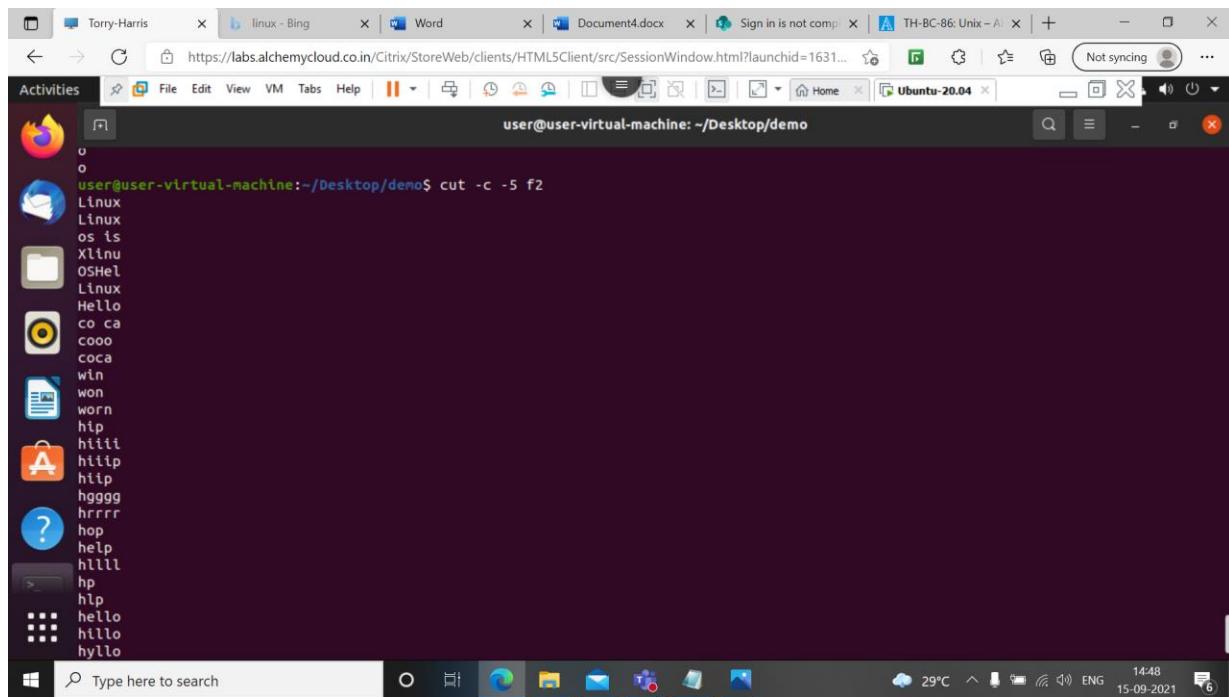


The screenshot shows a Linux desktop environment with a terminal window open. The terminal window title is "user@user-virtual-machine: ~/Desktop/demo". The terminal content shows the command "user@user-virtual-machine:~/Desktop/demo\$ cut -c 5- f2" followed by the output: "x is an os x is efficient s a os ux is a linux llo i am linuxOS x o a ca". The desktop background is dark, and the taskbar at the bottom shows various application icons and system status.

```
user@user-virtual-machine:~/Desktop/demo$ cut -c 5- f2
x is an os
x is efficient
s a os
ux is a linux
llo i am linuxOS
x
o
a
ca
```

This will print the letters after the 5th column

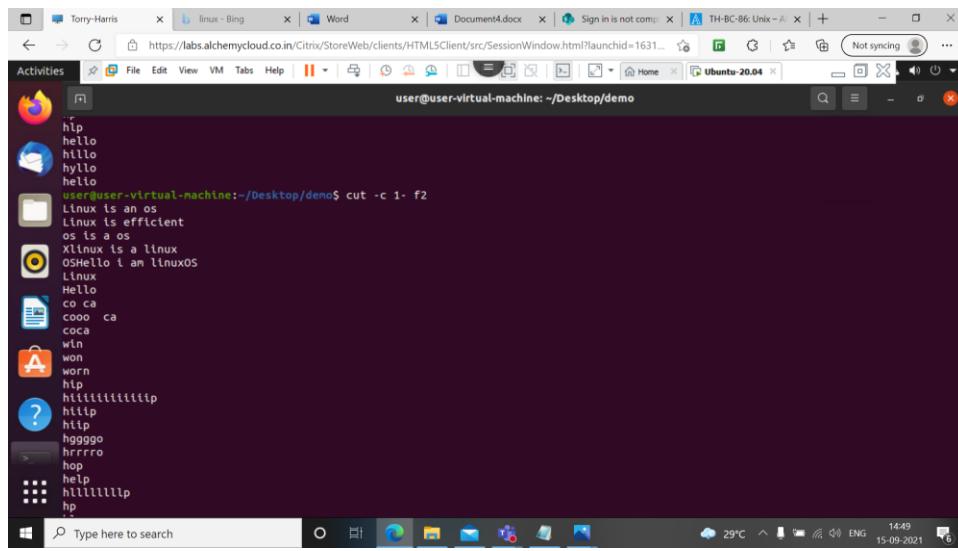
45 cut -c 5- f2



```
user@user-virtual-machine:~/Desktop/demo$ cut -c -5 f2
Linux
Linux
os is
Xlinu
OSHel
Linux
Hello
co ca
coco
coca
win
won
worn
hip
hiii
hiip
hgggg
hrrrr
hop
help
hllll
hp
hlp
hello
hillo
hylla
```

This will print the letters from starting to 5th column

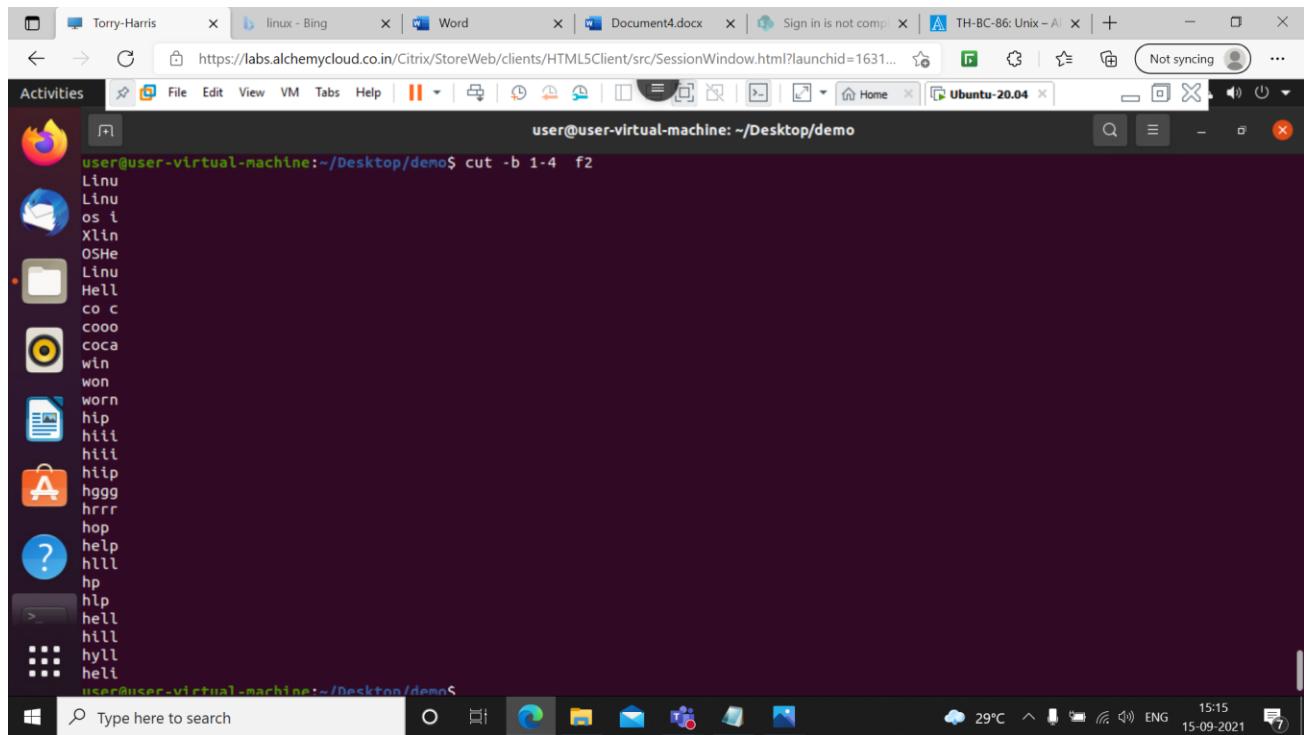
46 cut -c 1- f2



```
user@user-virtual-machine:~/Desktop/demo$ cut -c 1- f2
hip
hello
hillo
hylla
hello
Linux is an os
Linux is efficient
os is a os
Xlinu
OSHello i am linuxOS
Linux
Hello
co ca
coco
coca
win
won
worn
hip
hiiiiiiiiiiip
hiip
hgggg
hrrrr
hop
help
hlllllllp
hp
```

This will print the letters from 1st column to end.

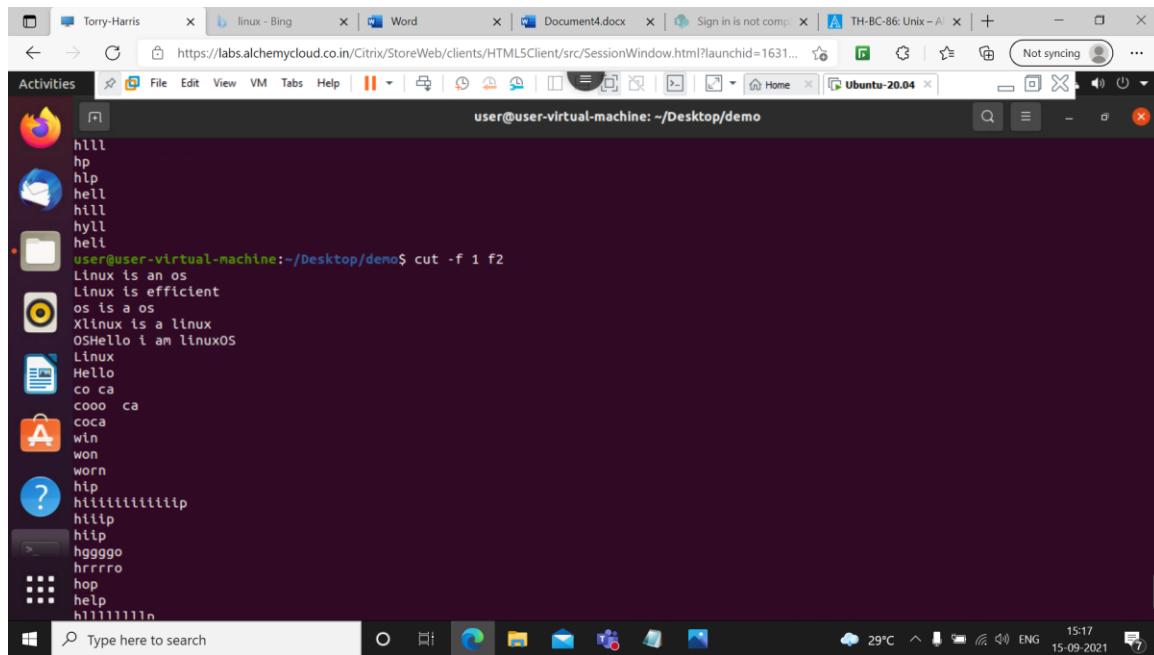
47 cut -b 1-4 f2



```
user@user-virtual-machine:~/Desktop/demo$ cut -b 1-4 f2
Linu
Linu
os i
Xlin
OSHe
LInu
Hell
co c
cooo
coca
win
won
worn
hip
hitt
hitt
hip
hggg
hrrr
hop
help
hill
hp
hip
hell
hill
hyll
heli
```

This will print the letters from 1st to 4th column, b represents byte

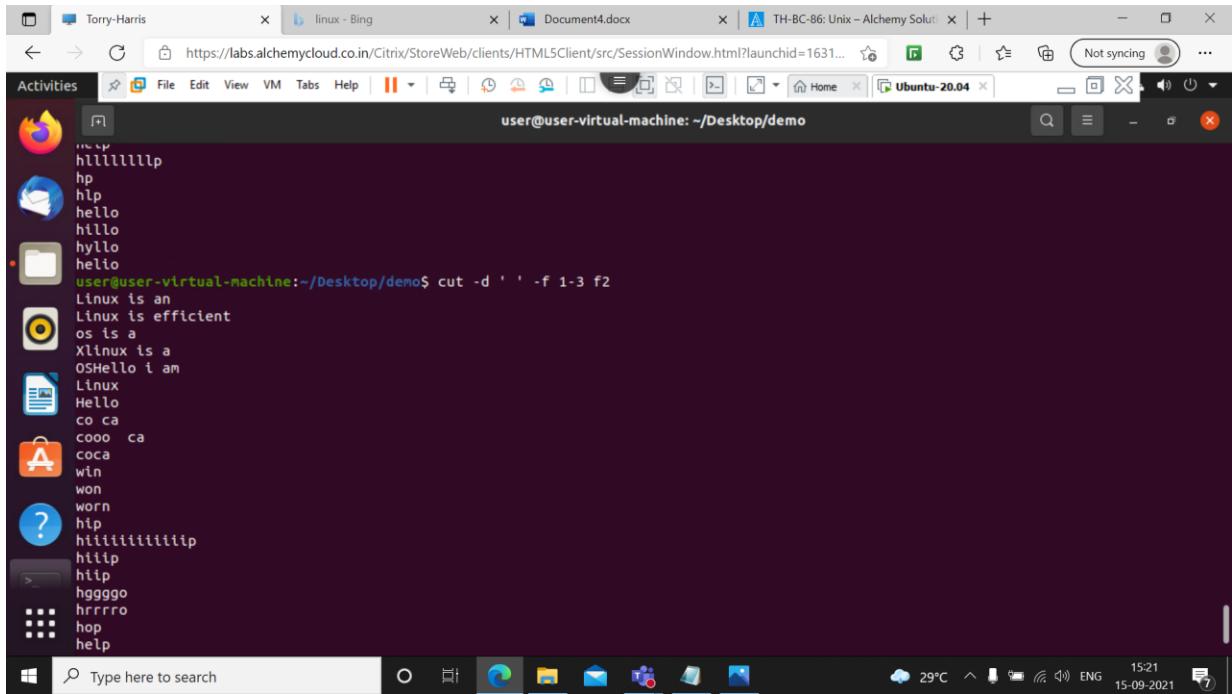
48 cut -f 1 f2



```
user@user-virtual-machine:~/Desktop/demo$ cut -f 1 f2
Linux is an os
Linux is efficient
os is a os
Xlinux is a linux
OSHello i am linuxOS
Linux
Hello
co ca
cooo ca
coca
win
won
worn
hip
hitt
hitt
hip
hgggo
hrrro
hop
help
hylll
```

This will print the all words

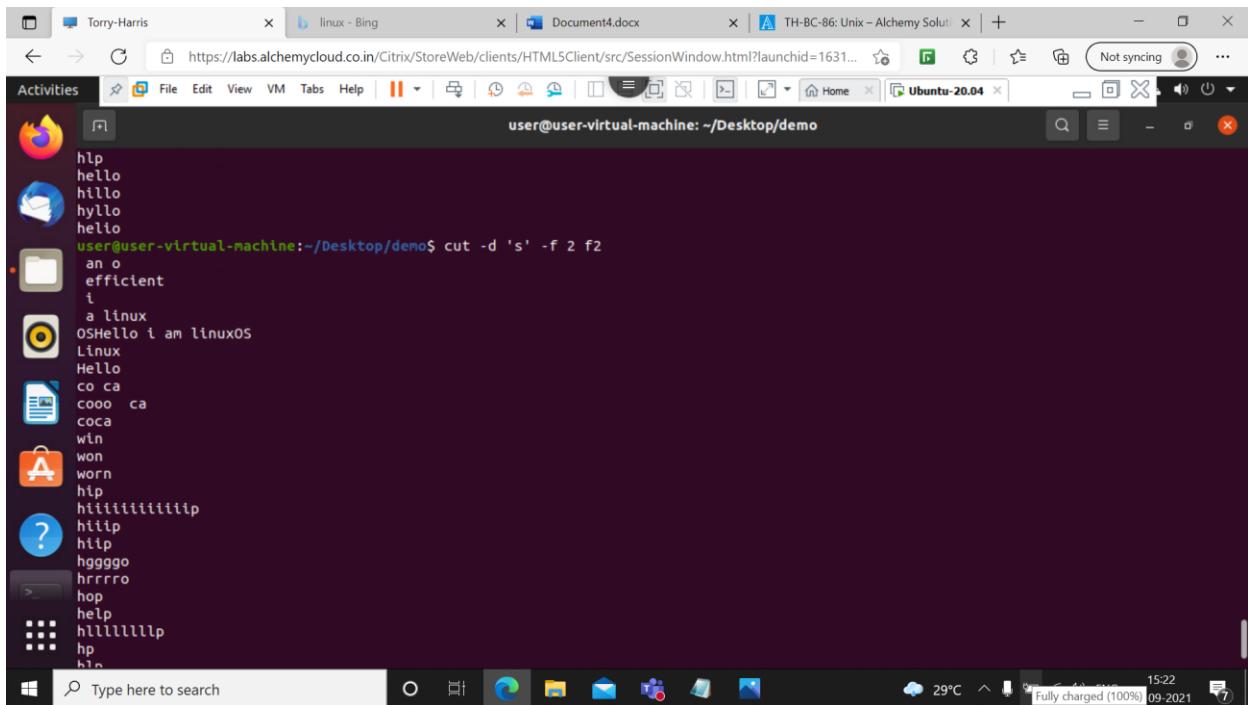
49 cut -d '' -f 1-3 f2



```
user@user-virtual-machine:~/Desktop/demo$ cut -d '' -f 1-3 f2
Linux is an
Linux is efficient
os is a
Xlinux is a
OSHello i am
Linux
Hello
co ca
cooo ca
coca
win
won
worn
hip
hiiliip
hiip
hipp
hgggo
hrrro
hop
help
hlllllllp
hp
h1n
```

This will print the words from 1st to 3rd space. D represents delimiter

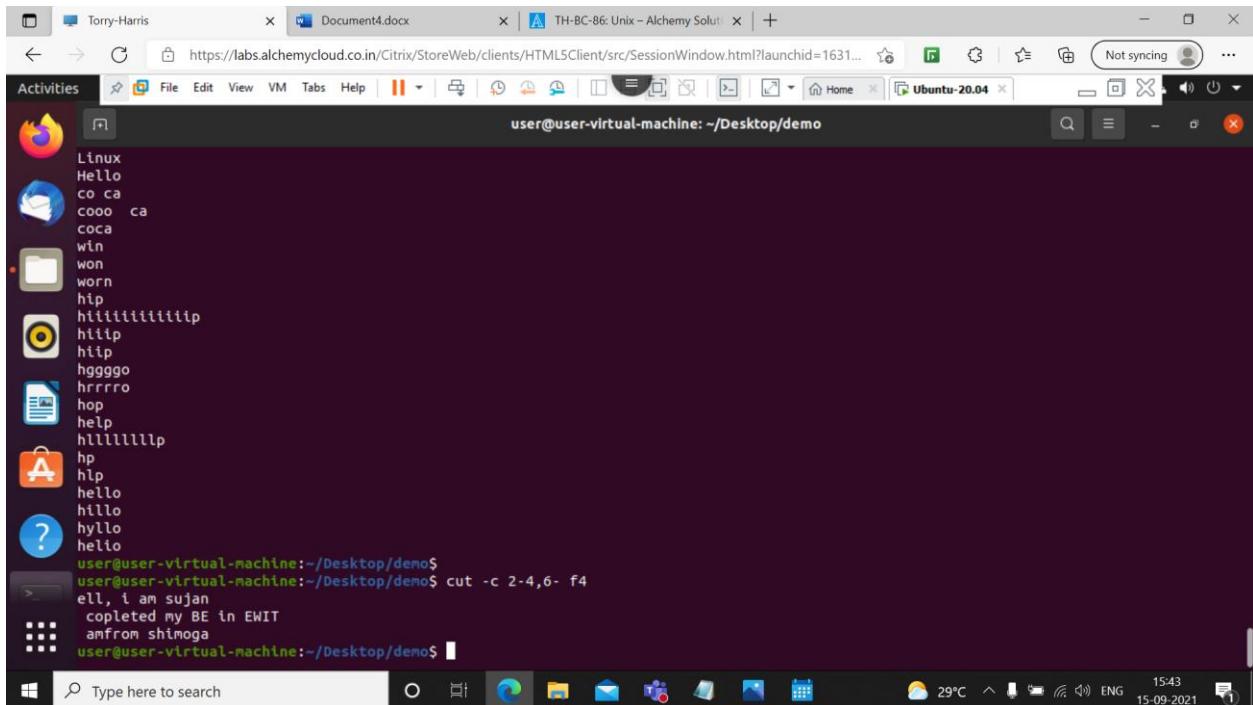
50 cut -d 's' -f 2 f2



```
user@user-virtual-machine:~/Desktop/demo$ cut -d 's' -f 2 f2
an o
efficient
i
a linux
OSHello i am linuxOS
Linux
Hello
co ca
cooo ca
coca
win
won
worn
hip
hiiliip
hiip
hipp
hgggo
hrrro
hop
help
hlllllllp
hp
h1n
```

This will print the words from s

51 cut -c 2-4,6- f4



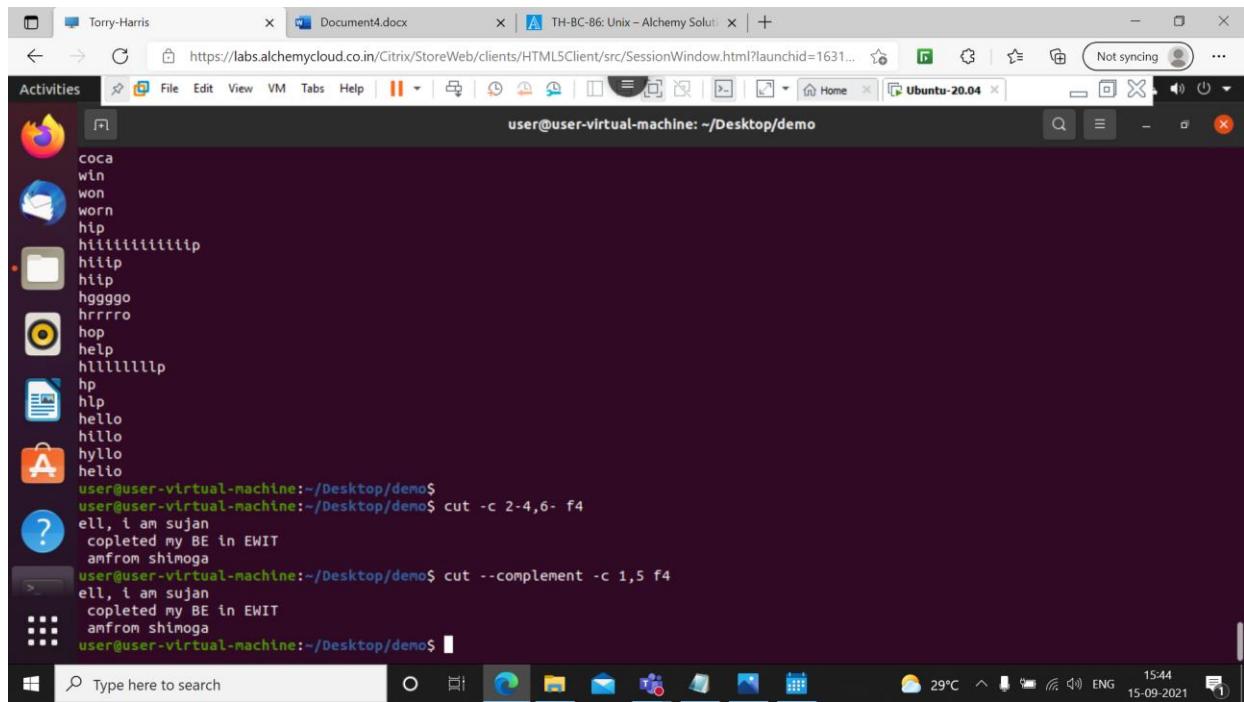
The screenshot shows a Linux desktop environment with a terminal window open. The terminal window title is "user@user-virtual-machine: ~/Desktop/demo". The terminal content shows the following command and its output:

```
user@user-virtual-machine:~/Desktop/demo$ cut -c 2-4,6- f4
ell, i am sujan
cpleted my BE in EWIT
amfrom shinoga
user@user-virtual-machine:~/Desktop/demo$
```

The desktop background is dark, and the taskbar at the bottom shows various application icons. The system tray indicates the date as 15-09-2021, the time as 15:43, and the temperature as 29°C.

This will print 2nd to 4th column and 6th to end

52 cut - -complement -c 1,5 f4



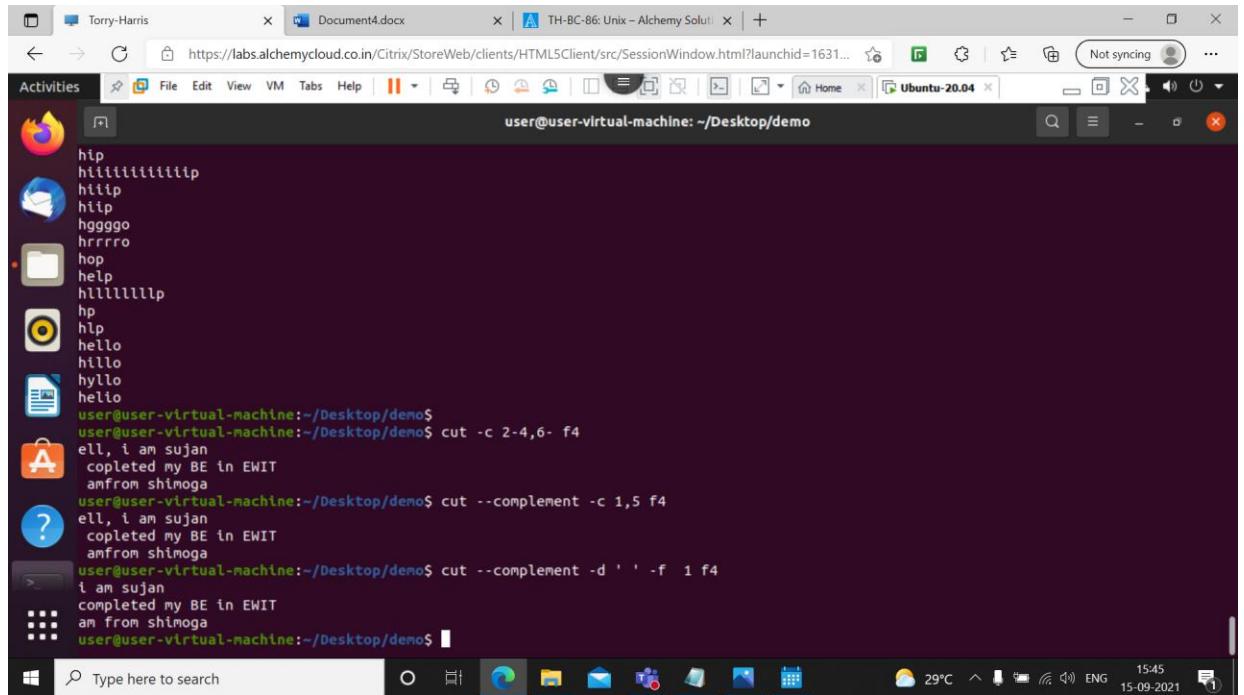
This screenshot shows a Linux desktop environment with a terminal window open. The terminal window title is "user@user-virtual-machine: ~/Desktop/demo". The terminal content shows the following command examples:

```
user@user-virtual-machine:~/Desktop/demo$ cut -c 2-4,6- f4
ell, i am sujan
copleted my BE in EWIT
amfrom shimoga
user@user-virtual-machine:~/Desktop/demo$ cut --complement -c 1,5 f4
ell, i am sujan
copleted my BE in EWIT
amfrom shimoga
user@user-virtual-machine:~/Desktop/demo$
```

The desktop environment includes a dock with icons for various applications like a file manager, browser, and system tools. The system tray shows the date (15-09-2021), time (15:44), and battery status.

This will print all the columns other than 1 & 5.

53 cut --complement -d ' ' -f 1 f4



This screenshot shows a Linux desktop environment with a terminal window open. The terminal window title is "user@user-virtual-machine: ~/Desktop/demo". The terminal content shows the following command examples:

```
user@user-virtual-machine:~/Desktop/demo$ cut -c 2-4,6- f4
ell, i am sujan
copleted my BE in EWIT
amfrom shimoga
user@user-virtual-machine:~/Desktop/demo$ cut --complement -c 1,5 f4
ell, i am sujan
copleted my BE in EWIT
amfrom shimoga
user@user-virtual-machine:~/Desktop/demo$ cut --complement -d ' ' -f 1 f4
i am sujan
copleted my BE in EWIT
am from shimga
user@user-virtual-machine:~/Desktop/demo$
```

The desktop environment includes a dock with icons for various applications like a file manager, browser, and system tools. The system tray shows the date (15-09-2021), time (15:45), and battery status.

This will print all words skipping the first word

54 cut --complement -d “ -f 3- f4

```
hggggo
hrrro
hop
help
hlilllllp
hp
hlp
hello
hillo
hyollo
hello
user@user-virtual-machine:~/Desktop/demo$ cut -c 2-4,6- f4
ell, i am sujan
copleted my BE in EWIT
amfrom shimga
user@user-virtual-machine:~/Desktop/demo$ cut --complement -c 1,5 f4
ell, i am sujan
copleted my BE in EWIT
amfrom shimga
user@user-virtual-machine:~/Desktop/demo$ cut --complement -d ' ' -f 1 f4
i am sujan
copleted my BE in EWIT
am from shimga
user@user-virtual-machine:~/Desktop/demo$ cut --complement -d ' ' -f 3- f4
Hello, i
I completed
I am
user@user-virtual-machine:~/Desktop/demo$
```

This will print the words before the 3rd space

55 cut -complement -d " -f 3- f4 -output-delimiter=*

```
hlllllllp
hp
hlp
hello
hillo
hyllo
hello
user@user-virtual-machine:~/Desktop/demo$ cut -c 2-4,6- f4
ell, i am sujan
completed my BE in EWIT
amfrom shimoga
user@user-virtual-machine:~/Desktop/demo$ cut --complement -c 1,5 f4
ell, i am sujan
completed my BE in EWIT
amfrom shimoga
user@user-virtual-machine:~/Desktop/demo$ cut --complement -d ' ' -f 1 f4
i am sujan
completed my BE in EWIT
am from shimoga
user@user-virtual-machine:~/Desktop/demo$ cut --complement -d ' ' -f 3- f4
Hello, i
I completed
I am
user@user-virtual-machine:~/Desktop/demo$ cut --complement -d ' ' -f 3- f4 --output-delimiter='*'
Hello,*I
I*completed
I*am
user@user-virtual-machine:~/Desktop/demo$
```

This will print the words that comes before 3rd space and replaces the spaces by *

56 cut -complement -d '' -f 1-2 f4 -output-delimiter='+'

```
user@user-virtual-machine: ~/Desktop/demo
hillo
hillo
helio
user@user-virtual-machine:~/Desktop/demo$ cut -c 2-4,6- f4
ell, i am sujan
copleted my BE in EWIT
amfrom shinoga
user@user-virtual-machine:~/Desktop/demo$ cut --complement -c 1,5 f4
ell, i am sujan
copleted my BE in EWIT
amfrom shinoga
user@user-virtual-machine:~/Desktop/demo$ cut --complement -d ' ' -f 1 f4
i am sujan
copleted my BE in EWIT
am from shinoga
user@user-virtual-machine:~/Desktop/demo$ cut --complement -d ' ' -f 3- f4
Hello, i
I completed
I am
user@user-virtual-machine:~/Desktop/demo$ cut --complement -d ' ' -f 3- f4 --output-delimiter='*'
Hello,*i
I*completed
I*am
user@user-virtual-machine:~/Desktop/demo$ cut --complement -d ' ' -f 1-2 f4 --output-delimiter='+' 
am+sujan
my+BE+in+EWIT
from+shinoga
user@user-virtual-machine:~/Desktop/demo$
```

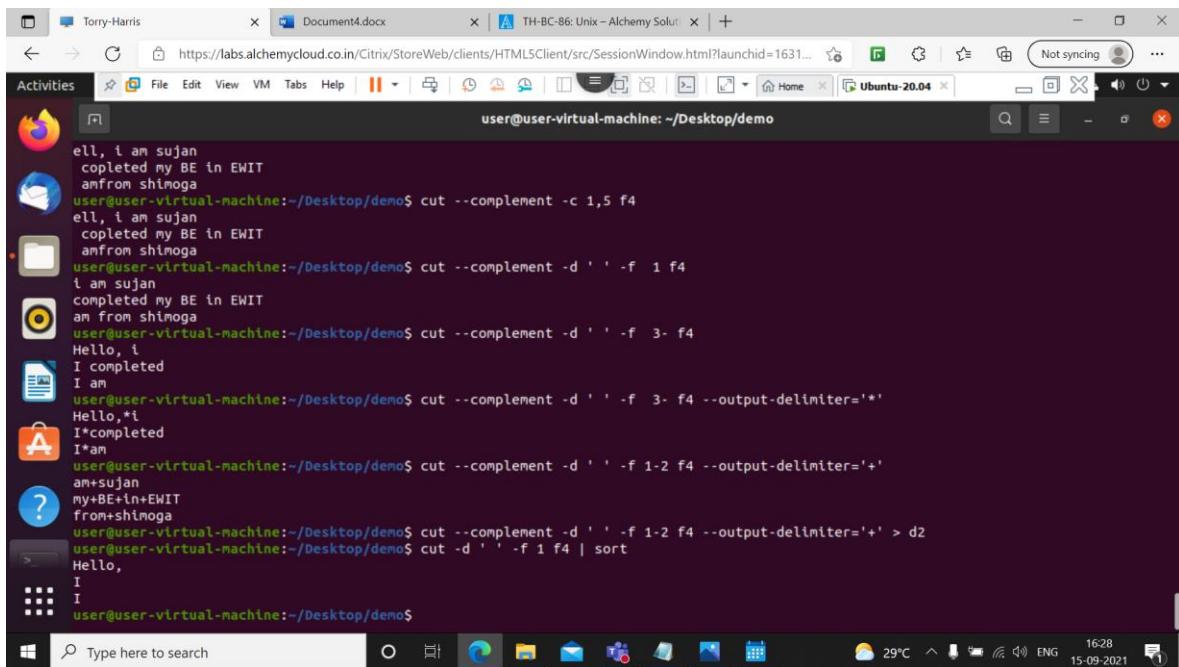
This will print the words that comes after 2nd space and replaces spaces with +

```
56 cut -complement -d '' -f 1-2 f4 -output-delimiter=+ > d2
```

```
user@user-virtual-machine:~/Desktop/demo$ cut -c 2-4,6- f4
ell, i am sujan
copleted my BE in EWIT
amfrom shinoga
user@user-virtual-machine:~/Desktop/demo$ cut --complement -c 1,5 f4
ell, i am sujan
copleted my BE in EWIT
amfrom shinoga
user@user-virtual-machine:~/Desktop/demo$ cut --complement -d ' ' -f 1 f4
i am sujan
copleted my BE in EWIT
am from shinoga
user@user-virtual-machine:~/Desktop/demo$ cut --complement -d ' ' -f 3- f4
Hello, i
I completed
I am
user@user-virtual-machine:~/Desktop/demo$ cut --complement -d ' ' -f 3- f4 --output-delimiter='*'
Hello,*i
I*completed
I*am
user@user-virtual-machine:~/Desktop/demo$ cut --complement -d ' ' -f 1-2 f4 --output-delimiter='+' 
an+sujan
my+BE+ln+EWIT
from+shinoga
user@user-virtual-machine:~/Desktop/demo$ cut --complement -d ' ' -f 1-2 f4 --output-delimiter='+' > d2
user@user-virtual-machine:~/Desktop/demo$
```

The above results will be stored in new file by using the command

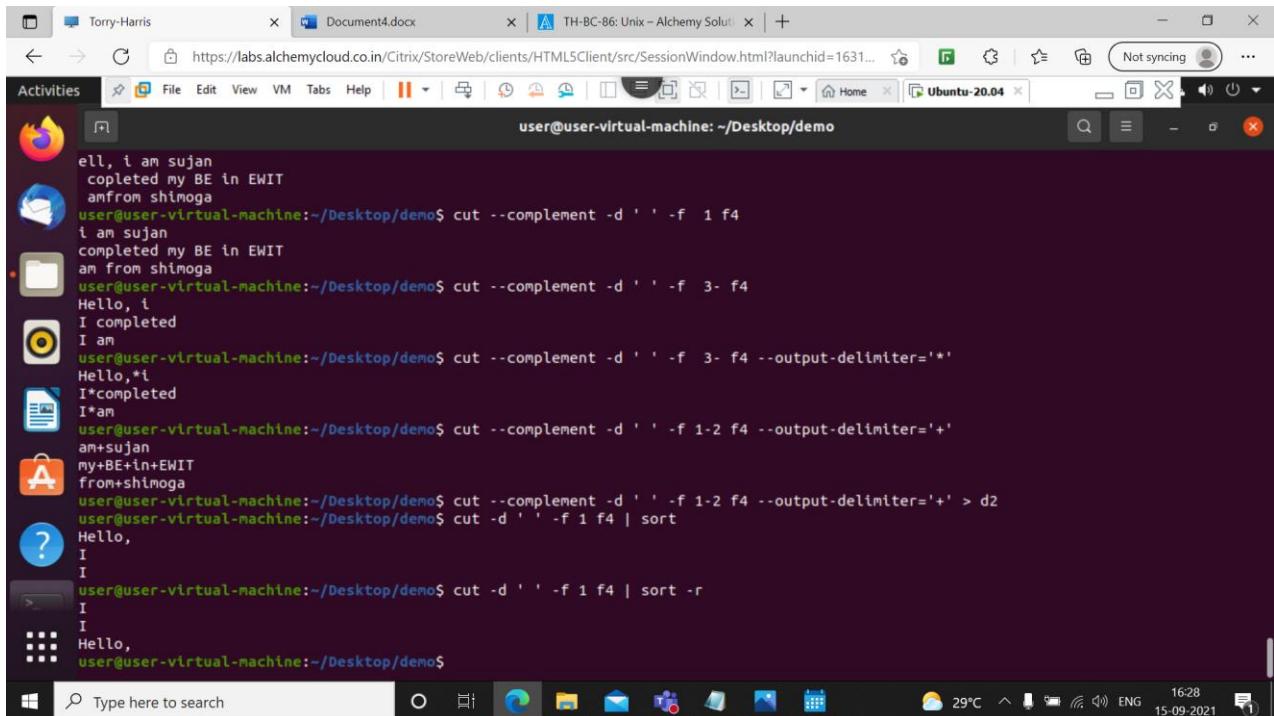
57 cut -d '' -f 1 f4 | sort



```
ell, i am sujan
copleted my BE in EWIT
amfrom shinoga
user@user-virtual-machine:~/Desktop/demo$ cut --complement -c 1,5 f4
ell, i am sujan
copleted my BE in EWIT
amfrom shinoga
user@user-virtual-machine:~/Desktop/demo$ cut --complement -d '' -f 1 f4
i am sujan
completed my BE in EWIT
am from shinoga
user@user-virtual-machine:~/Desktop/demo$ cut --complement -d '' -f 3- f4
Hello, i
I completed
I am
user@user-virtual-machine:~/Desktop/demo$ cut --complement -d '' -f 3- f4 --output-delimiter='*'
Hello,*i
I*completed
I*am
user@user-virtual-machine:~/Desktop/demo$ cut --complement -d '' -f 1-2 f4 --output-delimiter='+' 
am:sujan
my+BE+in+EWIT
from+shinoga
user@user-virtual-machine:~/Desktop/demo$ cut --complement -d '' -f 1-2 f4 --output-delimiter='+' > d2
user@user-virtual-machine:~/Desktop/demo$ cut -d '' -f 1 f4 | sort
Hello,
I
I
user@user-virtual-machine:~/Desktop/demo$
```

It will sort the data alphabetically

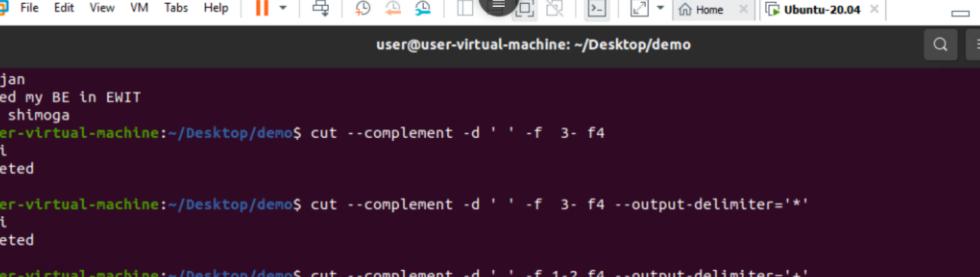
58 cut -d '' -f 1 f4 | sort -r



```
ell, i am sujan
copleted my BE in EWIT
amfrom shinoga
user@user-virtual-machine:~/Desktop/demo$ cut --complement -d '' -f 1 f4
i am sujan
completed my BE in EWIT
am from shinoga
user@user-virtual-machine:~/Desktop/demo$ cut --complement -d '' -f 3- f4
Hello, i
I completed
I am
user@user-virtual-machine:~/Desktop/demo$ cut --complement -d '' -f 3- f4 --output-delimiter='*'
Hello,*i
I*completed
I*am
user@user-virtual-machine:~/Desktop/demo$ cut --complement -d '' -f 1-2 f4 --output-delimiter='+' 
am:sujan
my+BE+in+EWIT
from+shinoga
user@user-virtual-machine:~/Desktop/demo$ cut --complement -d '' -f 1-2 f4 --output-delimiter='+' > d2
user@user-virtual-machine:~/Desktop/demo$ cut -d '' -f 1 f4 | sort -r
Hello,
I
I
user@user-virtual-machine:~/Desktop/demo$ cut -d '' -f 1 f4 | sort -r
I
I
Hello,
user@user-virtual-machine:~/Desktop/demo$
```

It will do the reverse sorting

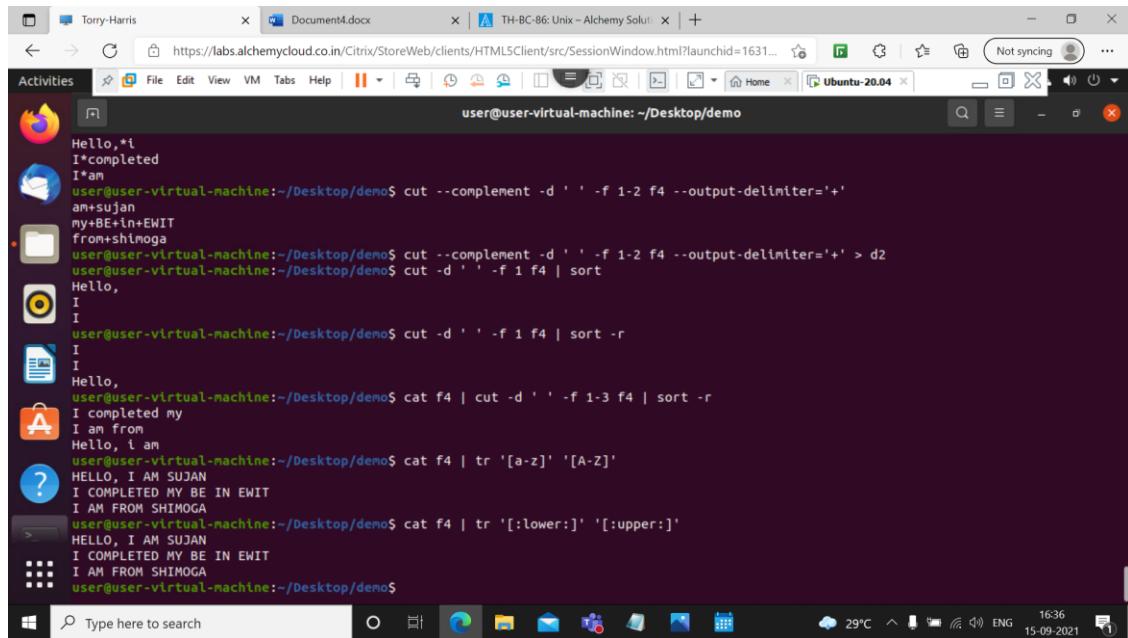
59 cat f4 | cut -d ' ' -f 1-3 f4 | sort



```
i am sujan  
completed my BE in EWIT  
am from shimoga  
user@user-virtual-machine:~/Desktop/demo$ cut --complement -d ' ' -f 3- f4  
Hello, i  
I completed  
I am  
user@user-virtual-machine:~/Desktop/demo$ cut --complement -d ' ' -f 3- f4 --output-delimiter='*'  
Hello,*i  
I*completed  
I*am  
user@user-virtual-machine:~/Desktop/demo$ cut --complement -d ' ' -f 1-2 f4 --output-delimiter='+'  
am+sujan  
my+BE+In+EWIT  
from+shimoga  
user@user-virtual-machine:~/Desktop/demo$ cut --complement -d ' ' -f 1-2 f4 --output-delimiter='+' > d2  
user@user-virtual-machine:~/Desktop/demo$ cut -d ' ' -f 1 f4 | sort  
Hello,  
I  
I  
user@user-virtual-machine:~/Desktop/demo$ cut -d ' ' -f 1 f4 | sort -r  
I  
I  
Hello,  
user@user-virtual-machine:~/Desktop/demo$ cat f4 | cut -d ' ' -f 1-3 f4 | sort -r  
I completed my  
I am from  
Hello, i am  
user@user-virtual-machine:~/Desktop/demo$
```

This command will sort the file f4 till 3rd space

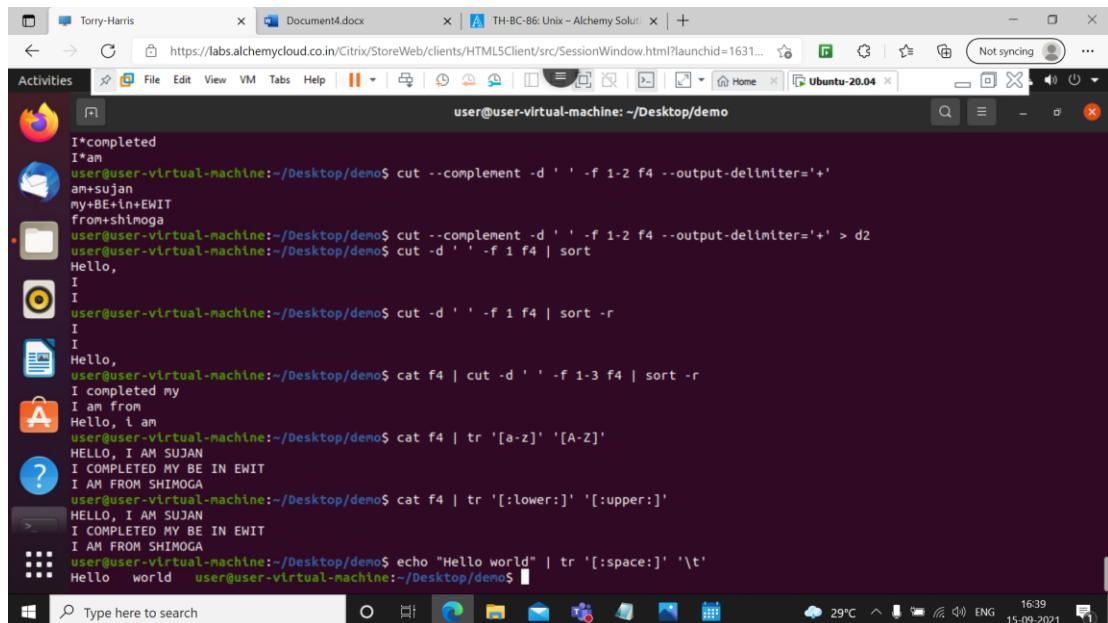
```
60 cat f4 | tr '[a-z]' '[A-Z]'
```



```
Hello,*i
I<completed
I'am
user@user-virtual-machine:~/Desktop/demo$ cut --complement -d ' ' -f 1-2 f4 --output-delimiter='+' > d1
user@user-virtual-machine:~/Desktop/demo$ cut --complement -d ' ' -f 1-2 f4 --output-delimiter='+' > d2
user@user-virtual-machine:~/Desktop/demo$ cut -d ' ' -f 1 f4 | sort
Hello,
I
I
user@user-virtual-machine:~/Desktop/demo$ cut -d ' ' -f 1 f4 | sort -r
I completed my
I am from
Hello, I am
user@user-virtual-machine:~/Desktop/demo$ cat f4 | tr '[a-z]' '[A-Z]'
HELLO, I AM SUJAN
I COMPLETED MY BE IN EWIT
I AM FROM SHIMOGA
user@user-virtual-machine:~/Desktop/demo$ cat f4 | tr '[a-z]' '[A-Z]'
HELLO, I AM SUJAN
I COMPLETED MY BE IN EWIT
I AM FROM SHIMOGA
user@user-virtual-machine:~/Desktop/demo$
```

This command will convert or translate the lower case to upper case letters

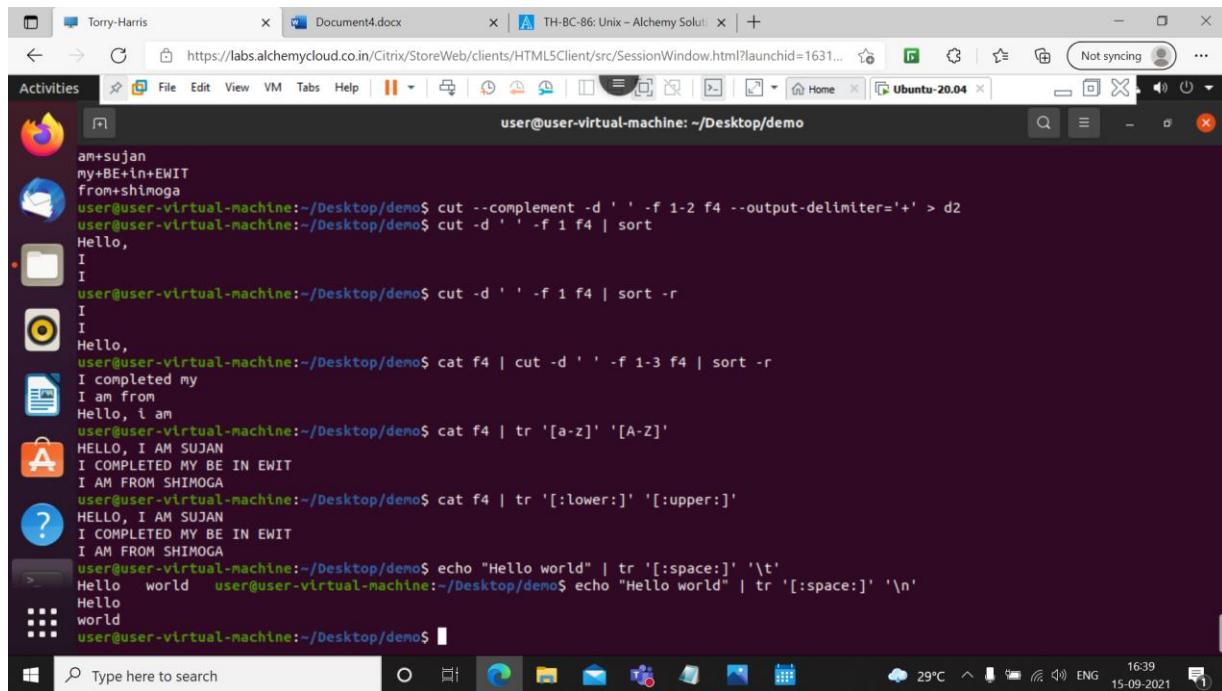
61 cat f4 | tr '[:lower:]' '[:upper:]'



```
I<completed
I'am
user@user-virtual-machine:~/Desktop/demo$ cut --complement -d ' ' -f 1-2 f4 --output-delimiter='+' > d1
user@user-virtual-machine:~/Desktop/demo$ cut --complement -d ' ' -f 1-2 f4 --output-delimiter='+' > d2
user@user-virtual-machine:~/Desktop/demo$ cut -d ' ' -f 1 f4 | sort
Hello,
I
I
user@user-virtual-machine:~/Desktop/demo$ cut -d ' ' -f 1 f4 | sort -r
I completed my
I am from
Hello, I am
user@user-virtual-machine:~/Desktop/demo$ cat f4 | tr '[a-z]' '[A-Z]'
HELLO, I AM SUJAN
I COMPLETED MY BE IN EWIT
I AM FROM SHIMOGA
user@user-virtual-machine:~/Desktop/demo$ cat f4 | tr '[a-z]' '[A-Z]'
HELLO, I AM SUJAN
I COMPLETED MY BE IN EWIT
I AM FROM SHIMOGA
user@user-virtual-machine:~/Desktop/demo$ echo "Hello world" | tr '[[:space:]]' '\t'
Hello world user@user-virtual-machine:~/Desktop/demo$
```

This command will convert or translate the lower case to upper case letters

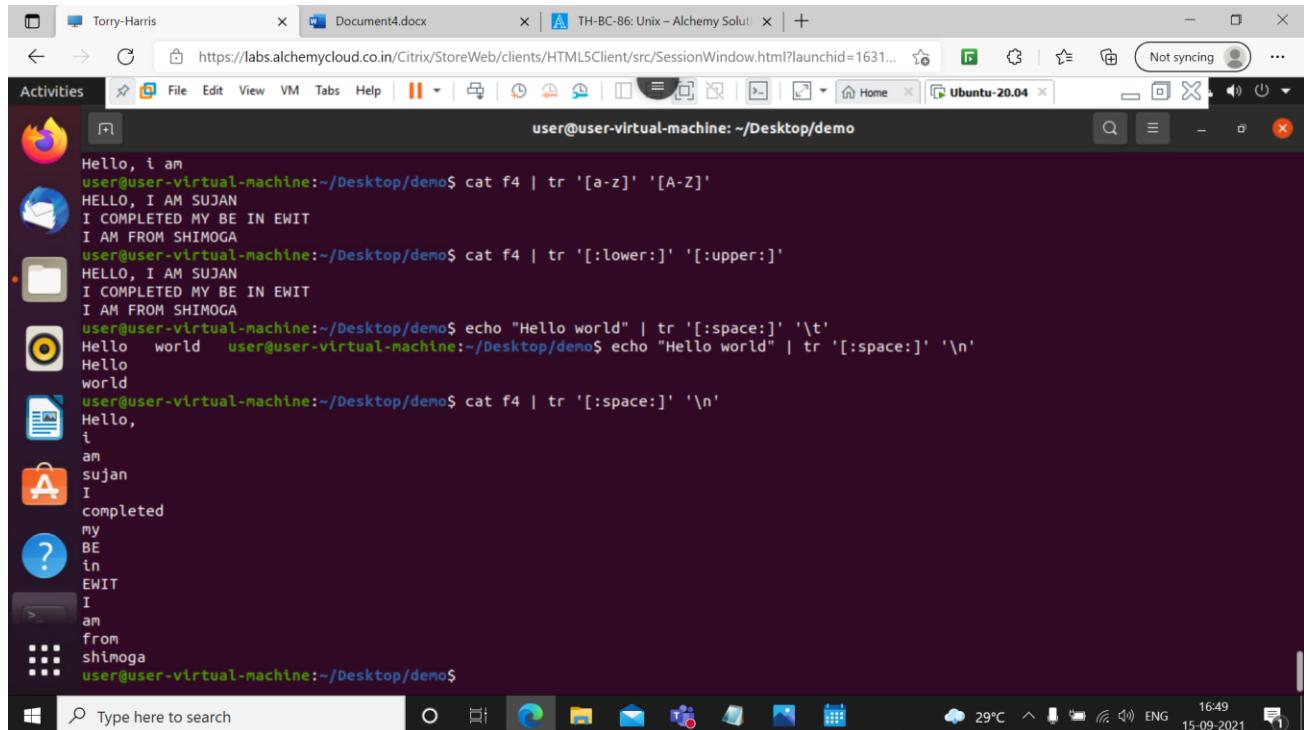
62 echo "Hello world" | tr '[[:space:]]' '\n'



```
am+sujan
my+BE+in+EWIT
from+shimoga
user@user-virtual-machine:~/Desktop/demo$ cut --complement -d ' ' -f 1-2 f4 --output-delimiter='+' > d2
user@user-virtual-machine:~/Desktop/demo$ cut -d ' ' -f 1 f4 | sort
Hello,
I
I
user@user-virtual-machine:~/Desktop/demo$ cut -d ' ' -f 1 f4 | sort -r
I
I
Hello,
user@user-virtual-machine:~/Desktop/demo$ cat f4 | cut -d ' ' -f 1-3 f4 | sort -r
I completed my
I am from
Hello, i am
user@user-virtual-machine:~/Desktop/demo$ cat f4 | tr '[a-z]' '[A-Z]'
HELLO, I AM SUJAN
I COMPLETED MY BE IN EWIT
I AM FROM SHIMOGA
user@user-virtual-machine:~/Desktop/demo$ cat f4 | tr '[:lower:]' '[:upper:]'
HELLO, I AM SUJAN
I COMPLETED MY BE IN EWIT
I AM FROM SHIMOGA
user@user-virtual-machine:~/Desktop/demo$ echo "Hello world" | tr '[:space:]' '\t'
Hello world user@user-virtual-machine:~/Desktop/demo$ echo "Hello world" | tr '[:space:]' '\n'
Hello
world
user@user-virtual-machine:~/Desktop/demo$
```

Echo command will print the hello world and tr will translate the spaces into new line character

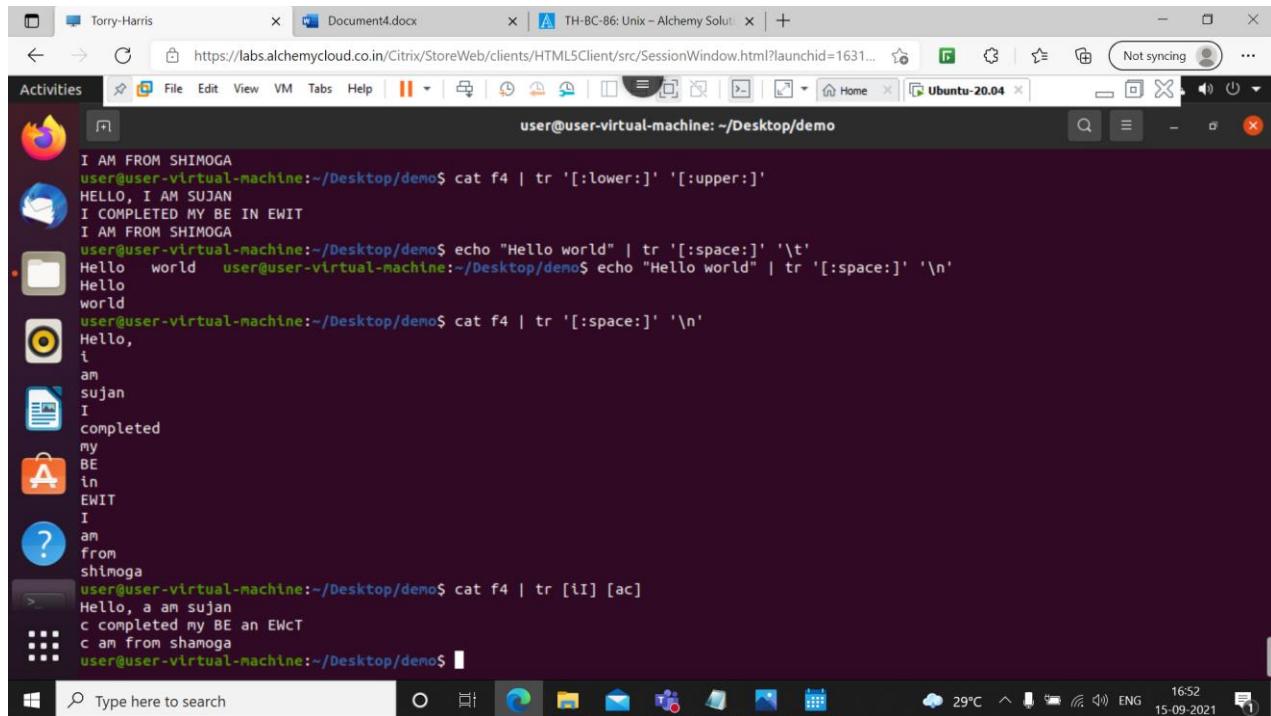
63 cat f4 | tr '[:space:]' '\n'



```
Hello, i am
user@user-virtual-machine:~/Desktop/demo$ cat f4 | tr '[a-z]' '[A-Z]'
HELLO, I AM SUJAN
I COMPLETED MY BE IN EWIT
I AM FROM SHIMOGA
user@user-virtual-machine:~/Desktop/demo$ cat f4 | tr '[:lower:]' '[:upper:]'
HELLO, I AM SUJAN
I COMPLETED MY BE IN EWIT
I AM FROM SHIMOGA
user@user-virtual-machine:~/Desktop/demo$ echo "Hello world" | tr '[:space:]' '\t'
Hello world user@user-virtual-machine:~/Desktop/demo$ echo "Hello world" | tr '[:space:]' '\n'
Hello
world
user@user-virtual-machine:~/Desktop/demo$ cat f4 | tr '[:space:]' '\n'
Hello,
i
am
sujan
I
completed
my
BE
in
EWIT
I
am
from
shimoga
user@user-virtual-machine:~/Desktop/demo$
```

Cat command read the f4 file and tr translate the spaces into new line character

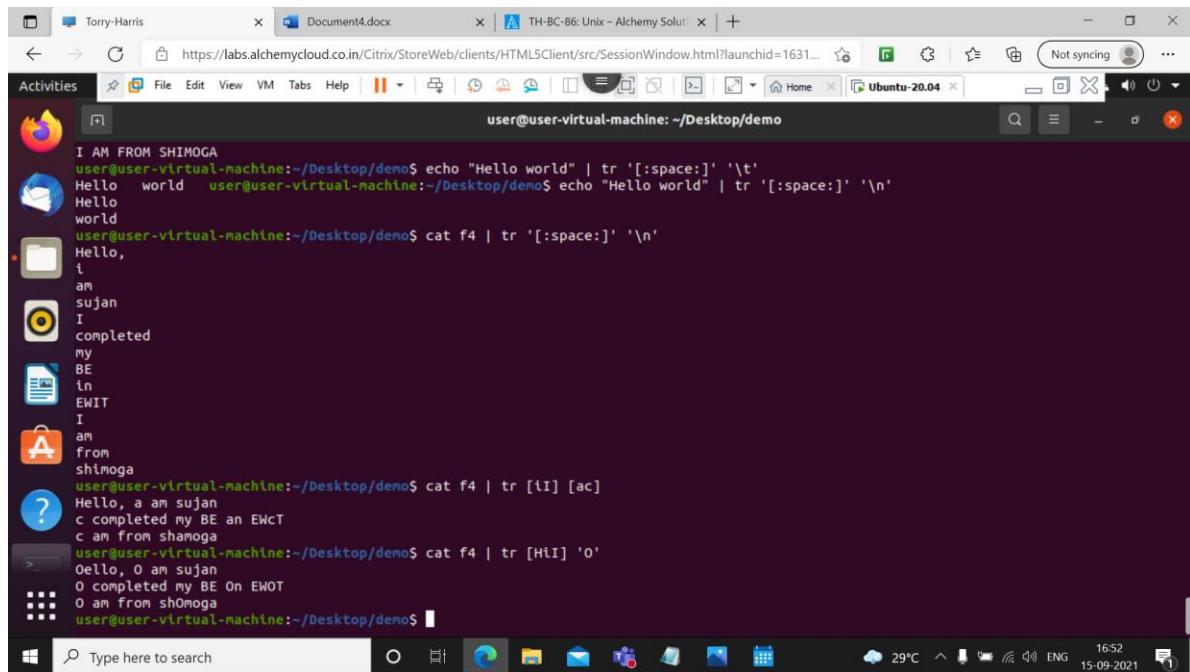
64 cat f4 | tr [il] [ac]



```
I AM FROM SHIMOGA
user@user-virtual-machine:~/Desktop/demo$ cat f4 | tr '[il]' '[ac]'
Hello, I AM SUJAN
I COMPLETED MY BE IN EWIT
I AM FROM SHIMOGA
Hello world user@user-virtual-machine:~/Desktop/demo$ echo "Hello world" | tr '[space]' '\t'
Hello world user@user-virtual-machine:~/Desktop/demo$ echo "Hello world" | tr '[space]' '\n'
Hello
world
user@user-virtual-machine:~/Desktop/demo$ cat f4 | tr '[space]' '\n'
Hello,
i
am
sujan
I
completed
my
BE
in
EWIT
I
am
from
shimoga
user@user-virtual-machine:~/Desktop/demo$ cat f4 | tr [il] [ac]
Hello, a am sujan
c completed my BE an EWcT
c am from shamoga
user@user-virtual-machine:~/Desktop/demo$
```

Cat command read the f4 file and tr replaces il by ac

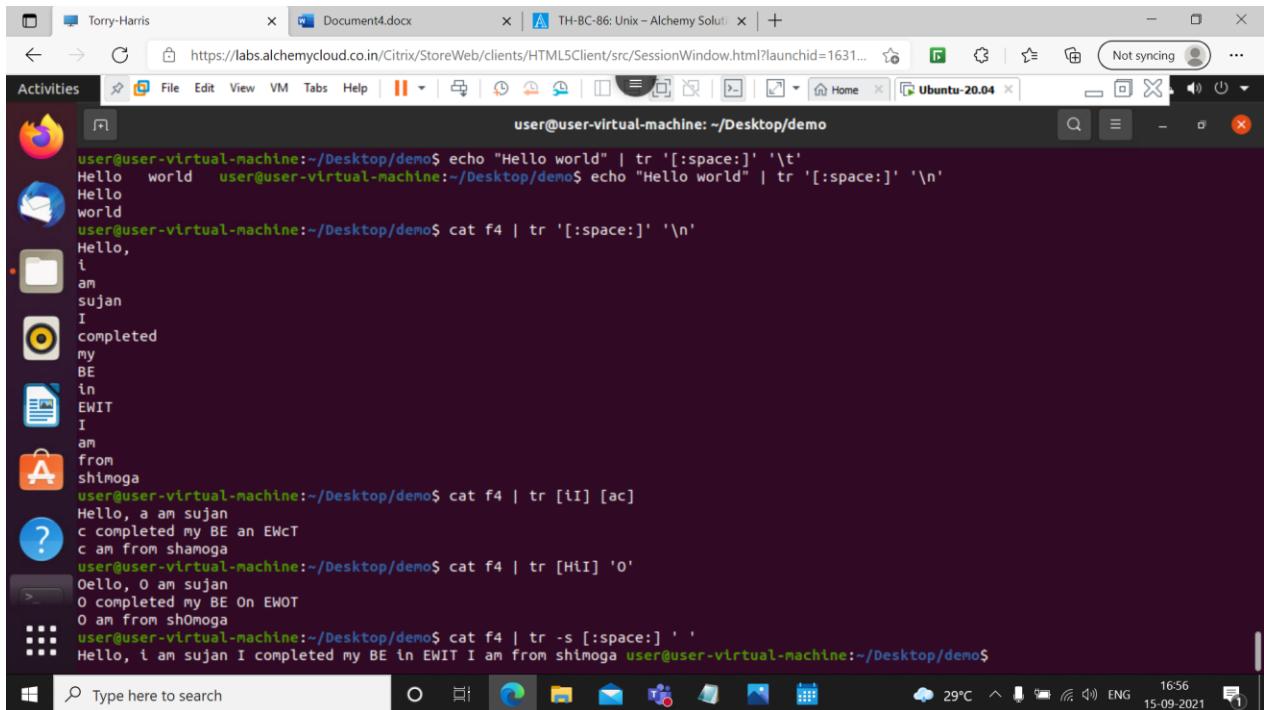
65 cat f4 | tr [Hil] 'O'



```
I AM FROM SHIMOGA
user@user-virtual-machine:~/Desktop/demo$ echo "Hello world" | tr '[space]' '\t'
Hello world user@user-virtual-machine:~/Desktop/demo$ echo "Hello world" | tr '[space]' '\n'
Hello
world
user@user-virtual-machine:~/Desktop/demo$ cat f4 | tr '[space]' '\n'
Hello,
i
am
sujan
I
completed
my
BE
in
EWIT
I
am
from
shimoga
user@user-virtual-machine:~/Desktop/demo$ cat f4 | tr [il] [ac]
Hello, a am sujan
c completed my BE an EWcT
c am from shamoga
user@user-virtual-machine:~/Desktop/demo$ cat f4 | tr [Hil] 'O'
Oello, O am sujan
O completed my BE On EMOT
O am from shomoga
user@user-virtual-machine:~/Desktop/demo$
```

Cat command read the f4 file and tr replaces Hl by O

66 cat f4 | tr -s [:space:] ''



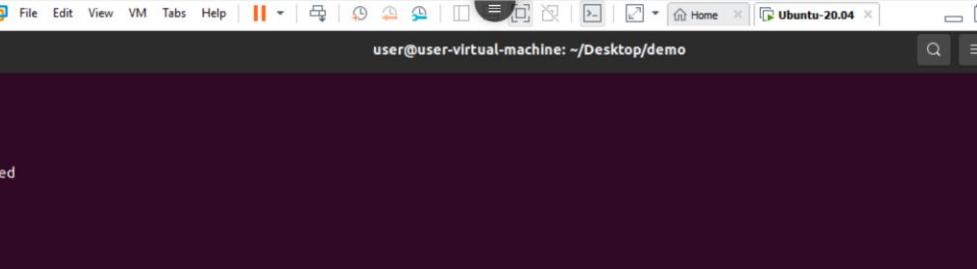
The screenshot shows a Linux desktop environment with a terminal window open. The terminal window title is "user@user-virtual-machine: ~/Desktop/demo". The terminal history shows the following commands and their outputs:

```
user@user-virtual-machine:~/Desktop/demo$ echo "Hello world" | tr [:space:] '\t'
Hello   world  user@user-virtual-machine:~/Desktop/demo$ echo "Hello world" | tr [:space:] '\n'
Hello
world
user@user-virtual-machine:~/Desktop/demo$ cat f4 | tr [:space:] '\n'
Hello,
I
am
sujan
I
completed
my
BE
in
EWIT
I
am
from
shimoga
user@user-virtual-machine:~/Desktop/demo$ cat f4 | tr [iI] [ac]
Hello, a am sujan
c completed my BE an EWcT
c am from shamoga
user@user-virtual-machine:~/Desktop/demo$ cat f4 | tr [HlI] 'O'
Oello, O am sujan
O completed my BE On EWOT
O am from sh0moga
user@user-virtual-machine:~/Desktop/demo$ cat f4 | tr -s [:space:] ''
Hello, i am sujan I completed my BE in EWIT I am from shimoga user@user-virtual-machine:~/Desktop/demo$
```

The terminal window is part of a desktop environment with a taskbar at the bottom. The taskbar shows icons for various applications and a search bar. The desktop background is a dark theme with a grid pattern.

This command will print all the line in same line

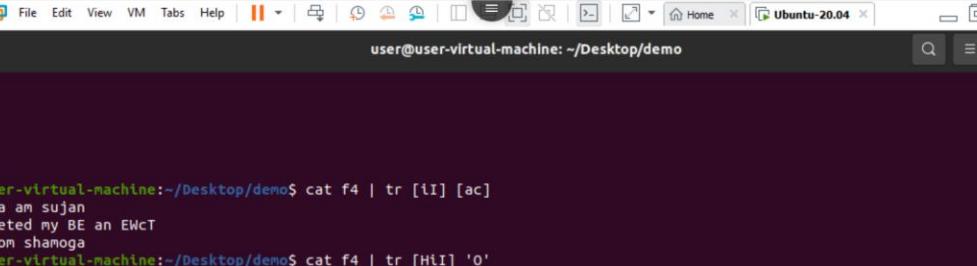
67 cat f4 | tr -d 'l'



```
user@user-virtual-machine: ~/Desktop/demo
Hello,
i
am
sujan
I
completed
my
BE
in
EWIT
I
am
from
shimoga
user@user-virtual-machine:~/Desktop/demo$ cat f4 | tr [iI] [ac]
Hello, a am sujan
c completed my BE an EWcT
c am from shamoga
user@user-virtual-machine:~/Desktop/demo$ cat f4 | tr [HtI] '0'
Hello, 0 am sujan
0 completed my BE On EWOT
0 am from sh0moga
user@user-virtual-machine:~/Desktop/demo$ cat f4 | tr -s [:space:]
Hello, i am sujan I completed my BE in EWI T I am from shimoga
user@user-virtual-machine:~/Desktop/demo$ cat f4 | tr -d 'I'
Hello, i am sujan
completed my BE in EWT
am from shimoga
user@user-virtual-machine:~/Desktop/demo$
```

This command will delete the character I

68 cat f4 | tr -d '[:digit:]'



Activities

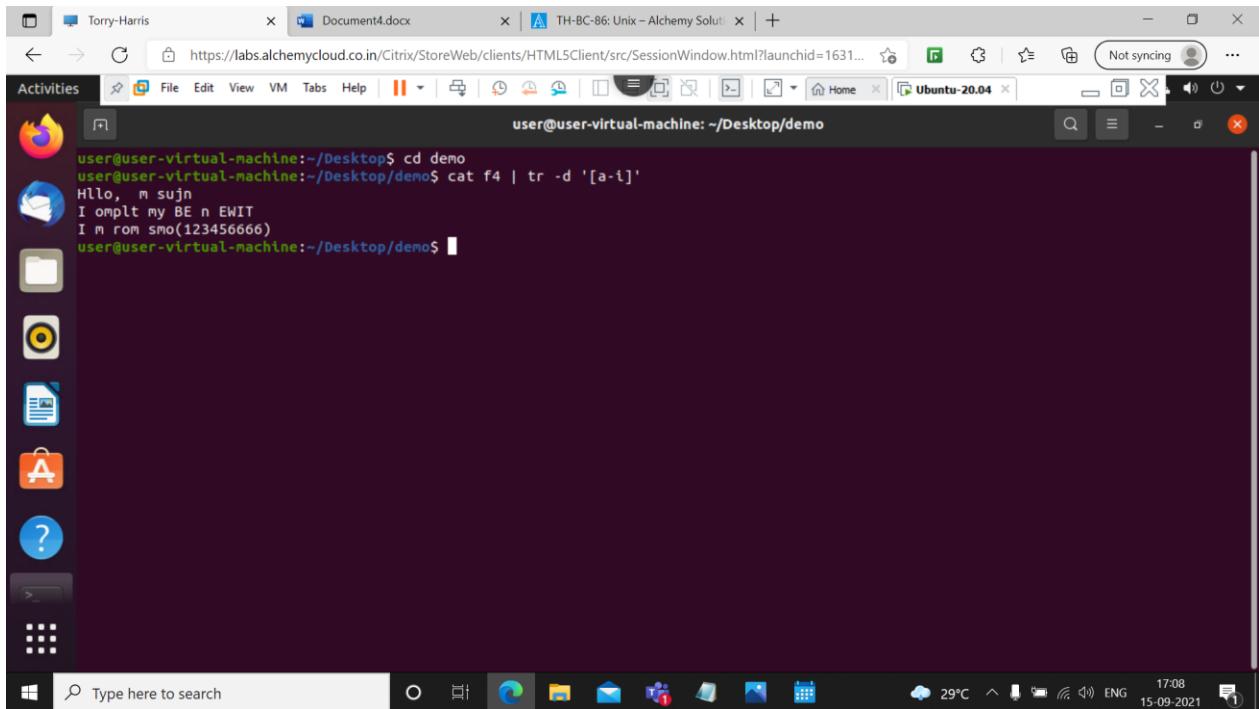
File Edit View VM Tabs Help

user@user-virtual-machine: ~/Desktop/demo

```
in
EWIT
I
am
from
shimoga
user@user-virtual-machine:~/Desktop/demo$ cat f4 | tr [ii] [ac]
Hello, a am sujan
c completed my BE an EWCT
c am from shamoga
user@user-virtual-machine:~/Desktop/demo$ cat f4 | tr [HlI] 'O'
Oello, O am sujan
O completed my BE On EWOT
O am from sh0moga
user@user-virtual-machine:~/Desktop/demo$ cat f4 | tr -s [:space:]
Hello, i am sujan I completed my BE in EWIT I am from shimoga user@user-virtual-machine:~/Desktop/demo$
user@user-virtual-machine:~/Desktop/demo$ cat f4 | tr -d 'I'
Hello, i am sujan
completed my BE in EWT
am from shimoga
user@user-virtual-machine:~/Desktop/demo$ cat f4
Hello, i am sujan
I completed my BE in EWIT
I am from shimoga(123456666)
user@user-virtual-machine:~/Desktop/demo$ cat f4 | tr -d '[:digit:]'
Hello, i am sujan
I completed my BE in EWIT
I am from shimoga()
user@user-virtual-machine:~/Desktop/demo$
```

This will delete the digits in the file f4

69 cat f4 | tr -d '[a-l]'

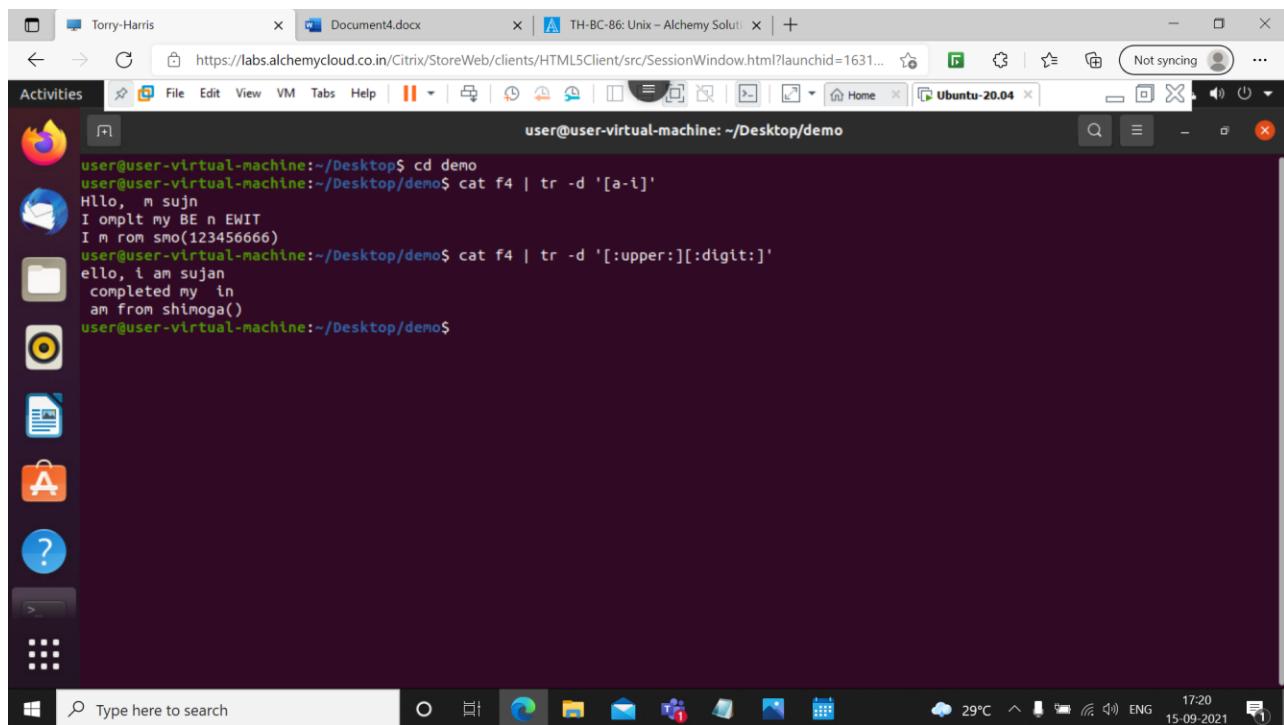


```
user@user-virtual-machine:~/Desktop/demo
user@user-virtual-machine:~/Desktop/demo$ cat f4 | tr -d '[a-l]'

Hllo, m sujn
I mplit my BE n EWIT
I m rom smo(123456666)
user@user-virtual-machine:~/Desktop/demo$
```

This command will delete the characters in the range a to l.

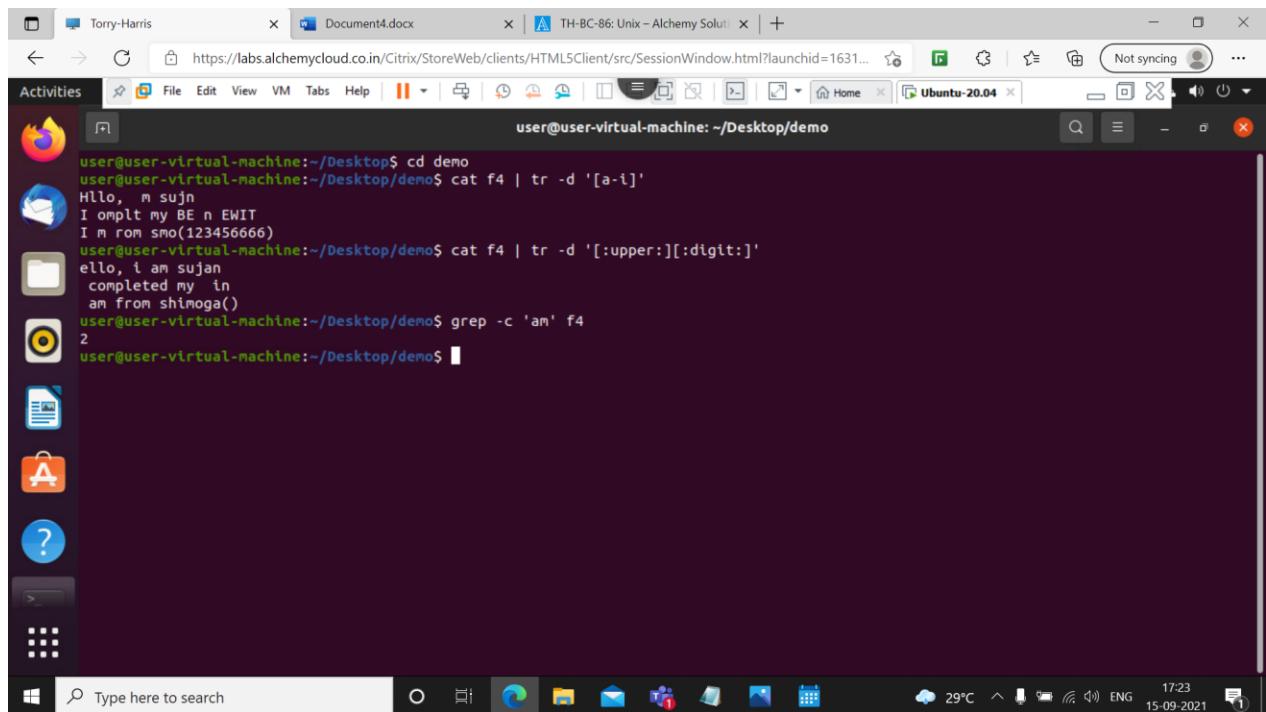
70 cat f4 | tr -d '[:upper:][:digit:]'



```
user@user-virtual-machine:~/Desktop/demo
user@user-virtual-machine:~/Desktop/demo$ cd demo
user@user-virtual-machine:~/Desktop/demo$ cat f4 | tr -d '[a-i]'
Hllo, m sujn
I omplt my BE n EWIT
I m rom smo(123456666)
user@user-virtual-machine:~/Desktop/demo$ cat f4 | tr -d '[:upper:][:digit:]'
ello, i am sujan
completed my in
am from shimoga()
user@user-virtual-machine:~/Desktop/demo$
```

This command will delete the characters in the range a to I and also the digits.

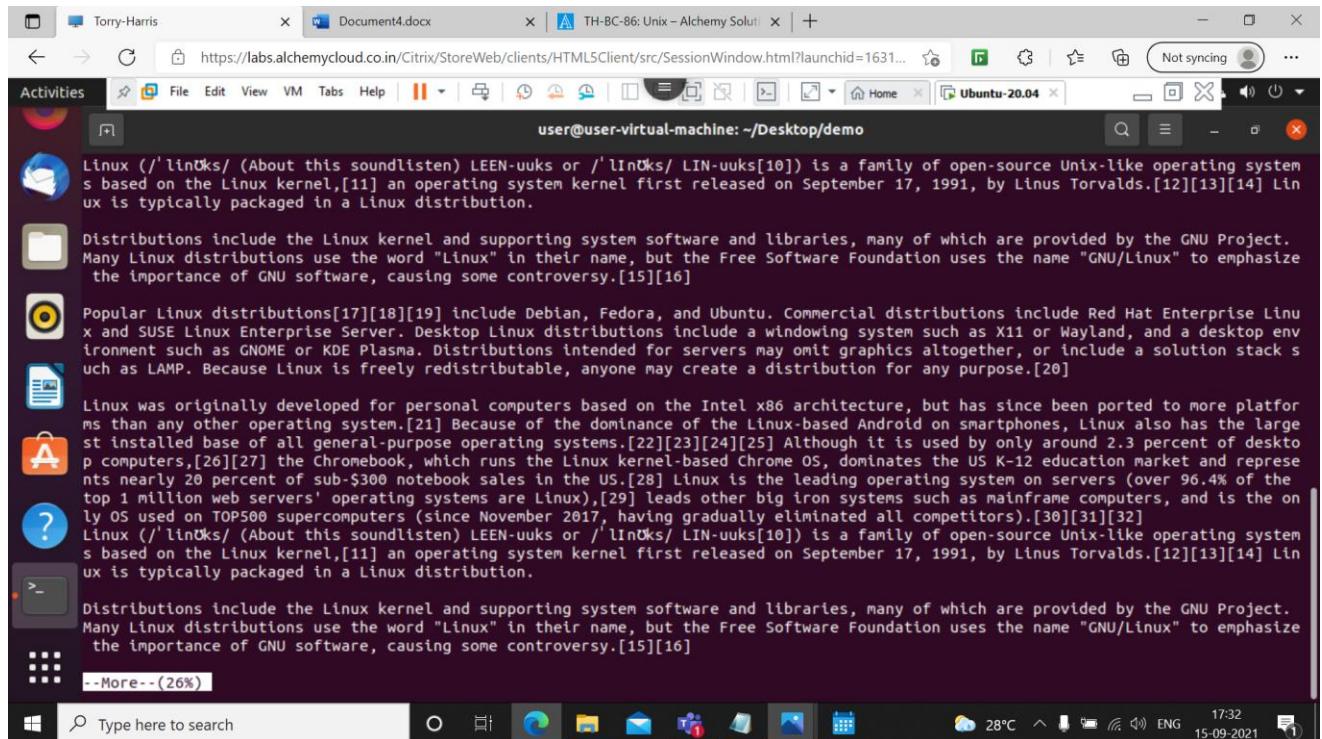
71 grep -c 'am' f4



```
user@user-virtual-machine:~/Desktop/demo
user@user-virtual-machine:~/Desktop/demo$ cd demo
user@user-virtual-machine:~/Desktop/demo$ cat f4 | tr -d '[a-i]'
Hllo, m sujn
I omplt my BE n EWIT
I m rom smo(123456666)
user@user-virtual-machine:~/Desktop/demo$ cat f4 | tr -d '[:upper:][:digit:]'
ello, i am sujan
completed my in
am from shimoga()
user@user-virtual-machine:~/Desktop/demo$ grep -c 'am' f4
2
user@user-virtual-machine:~/Desktop/demo$
```

This command will count the words

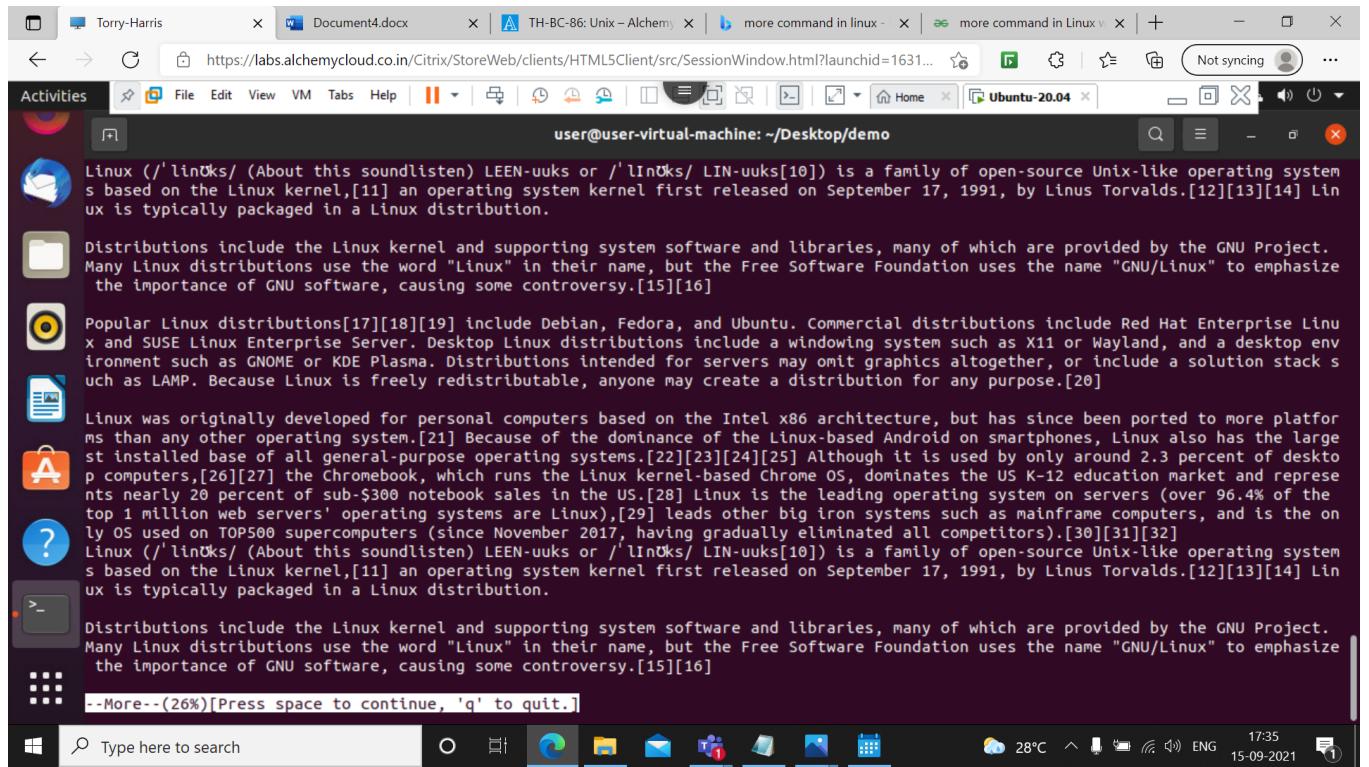
72 more -p Data



more command is used to view the text files in the command prompt, displaying one screen at a time in case the file is large (For example log files). The **more** command also allows the user to scroll up and down through the page. The syntax along with options and command is as follows.

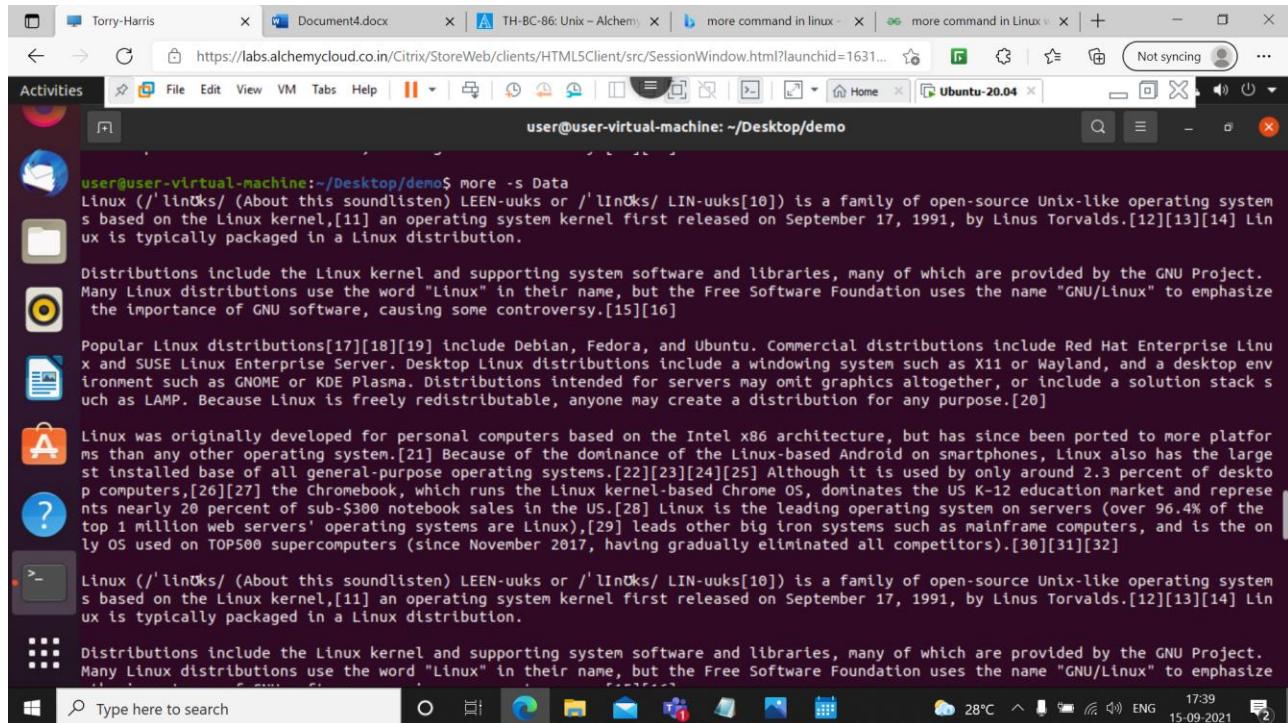
-p : This option clears the screen and then displays the text.

73 more -d Data



-d : Use this command in order to help the user to navigate. It displays “[Press space to continue, ‘q’ to quit.]” and displays “[Press ‘h’ for instructions.]” when wrong key is pressed.

74 more -s Data



```
user@user-virtual-machine:~/Desktop/demo$ more -s Data
Linux ('/lin0ks/ (About this soundlisten) LEEN-uuks or '/Lin0ks/ LIN-uuks[10]) is a family of open-source Unix-like operating systems based on the Linux kernel,[11] an operating system kernel first released on September 17, 1991, by Linus Torvalds.[12][13][14] Linux is typically packaged in a Linux distribution.

Distributions include the Linux kernel and supporting system software and libraries, many of which are provided by the GNU Project. Many Linux distributions use the word "Linux" in their name, but the Free Software Foundation uses the name "GNU/Linux" to emphasize the importance of GNU software, causing some controversy.[15][16]

Popular Linux distributions[17][18][19] include Debian, Fedora, and Ubuntu. Commercial distributions include Red Hat Enterprise Linux and SUSE Linux Enterprise Server. Desktop Linux distributions include a windowing system such as X11 or Wayland, and a desktop environment such as GNOME or KDE Plasma. Distributions intended for servers may omit graphics altogether, or include a solution stack such as LAMP. Because Linux is freely redistributable, anyone may create a distribution for any purpose.[20]

Linux was originally developed for personal computers based on the Intel x86 architecture, but has since been ported to more platforms than any other operating system.[21] Because of the dominance of the Linux-based Android on smartphones, Linux also has the largest installed base of all general-purpose operating systems.[22][23][24][25] Although it is used by only around 2.3 percent of desktop computers,[26][27] the Chromebook, which runs the Linux kernel-based Chrome OS, dominates the US K-12 education market and represents nearly 20 percent of sub-$300 notebook sales in the US.[28] Linux is the leading operating system on servers (over 96.4% of the top 1 million web servers' operating systems are Linux),[29] leads other big iron systems such as mainframe computers, and is the only OS used on TOP500 supercomputers (since November 2017, having gradually eliminated all competitors).[30][31][32]

Linux ('/lin0ks/ (About this soundlisten) LEEN-uuks or '/Lin0ks/ LIN-uuks[10]) is a family of open-source Unix-like operating systems based on the Linux kernel,[11] an operating system kernel first released on September 17, 1991, by Linus Torvalds.[12][13][14] Linux is typically packaged in a Linux distribution.

Distributions include the Linux kernel and supporting system software and libraries, many of which are provided by the GNU Project. Many Linux distributions use the word "Linux" in their name, but the Free Software Foundation uses the name "GNU/Linux" to emphasize
```

-s : This option squeezes multiple blank lines into one single blank line