

MANOJ KUMAR D

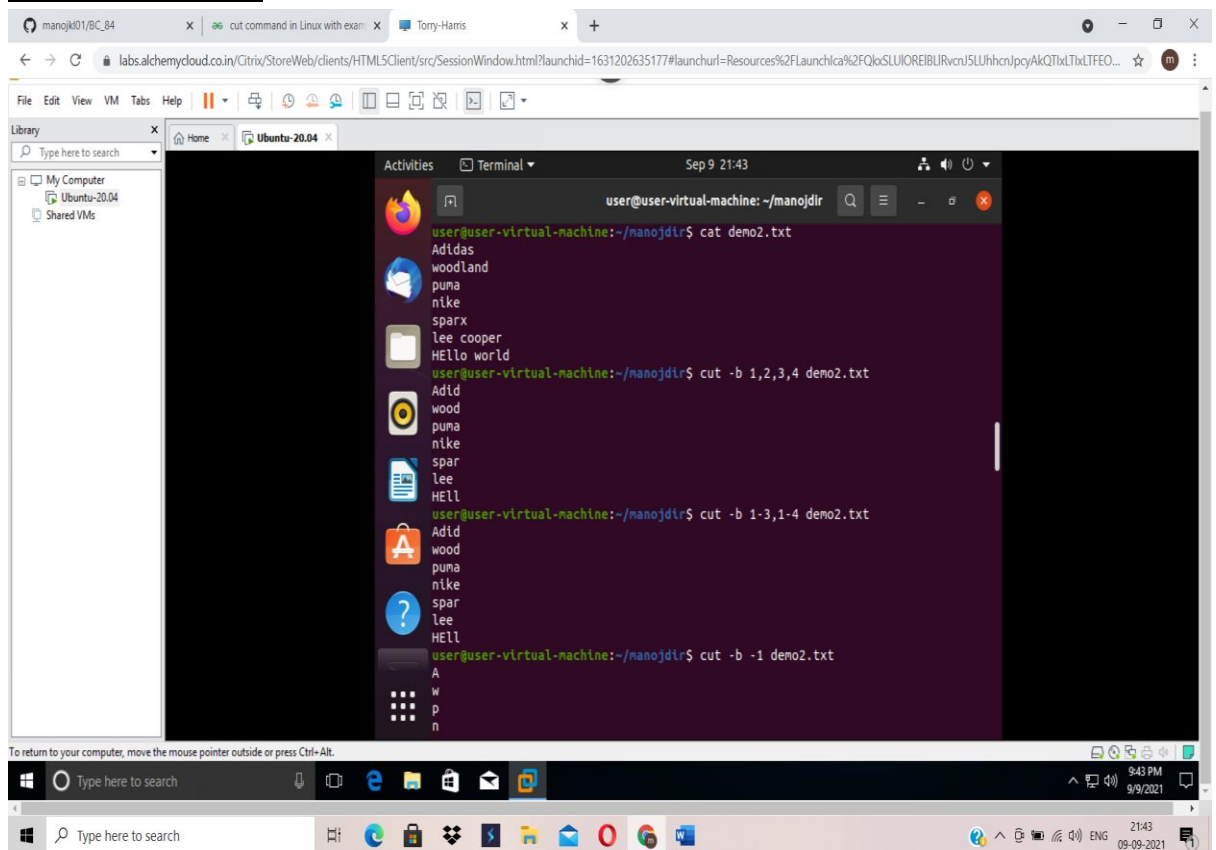
UNIX Commands part-2

1) Grep command:

```
user@user-virtual-machine:~/manojdir$ cat > grep.txt
java is an oopl
java is a platform dependent
java is easy to understand
java uses class for every program
user@user-virtual-machine:~/manojdir$ grep -c "java" grep.txt
4
user@user-virtual-machine:~/manojdir$ grep -i "Java" grep.txt
java is an oopl
java is a platform dependent
java is easy to understand
java uses class for every program
user@user-virtual-machine:~/manojdir$ grep -l "Java" grep.txt
4
user@user-virtual-machine:~/manojdir$ grep -l "java" *
grep: datatypes: Is a directory
grep: dir1: Is a directory
eg3.txt
grep.txt
text1.txt
user@user-virtual-machine:~/manojdir$ grep -w "java" grep.txt
java is an oopl
java is a platform dependent
java is easy to understand
user@user-virtual-machine:~/manojdir$ grep -o "java" grep.txt
java
java
java
java
```

```
user@user-virtual-machine:~/manojdir$ grep -l -c "Java" grep.txt
4
user@user-virtual-machine:~/manojdir$ grep -l "java" *
grep: datatypes: Is a directory
grep: dir1: Is a directory
eg3.txt
grep.txt
text1.txt
user@user-virtual-machine:~/manojdir$ grep -w "java" grep.txt
java is an oopl
java is a platform dependent
java is easy to understand
user@user-virtual-machine:~/manojdir$ grep -o "java" grep.txt
java
java
java
java
user@user-virtual-machine:~/manojdir$ grep -n "java" grep.txt
1:java is an oopl
2:java is a platform dependent
3:java is easy to understand
user@user-virtual-machine:~/manojdir$ grep -v "java" grep.txt
Java uses class for every program
user@user-virtual-machine:~/manojdir$ grep "^java" grep.txt
java is an oopl
java is a platform dependent
java is easy to understand
user@user-virtual-machine:~/manojdir$ grep "oopls" grep.txt
java is an oopl
```

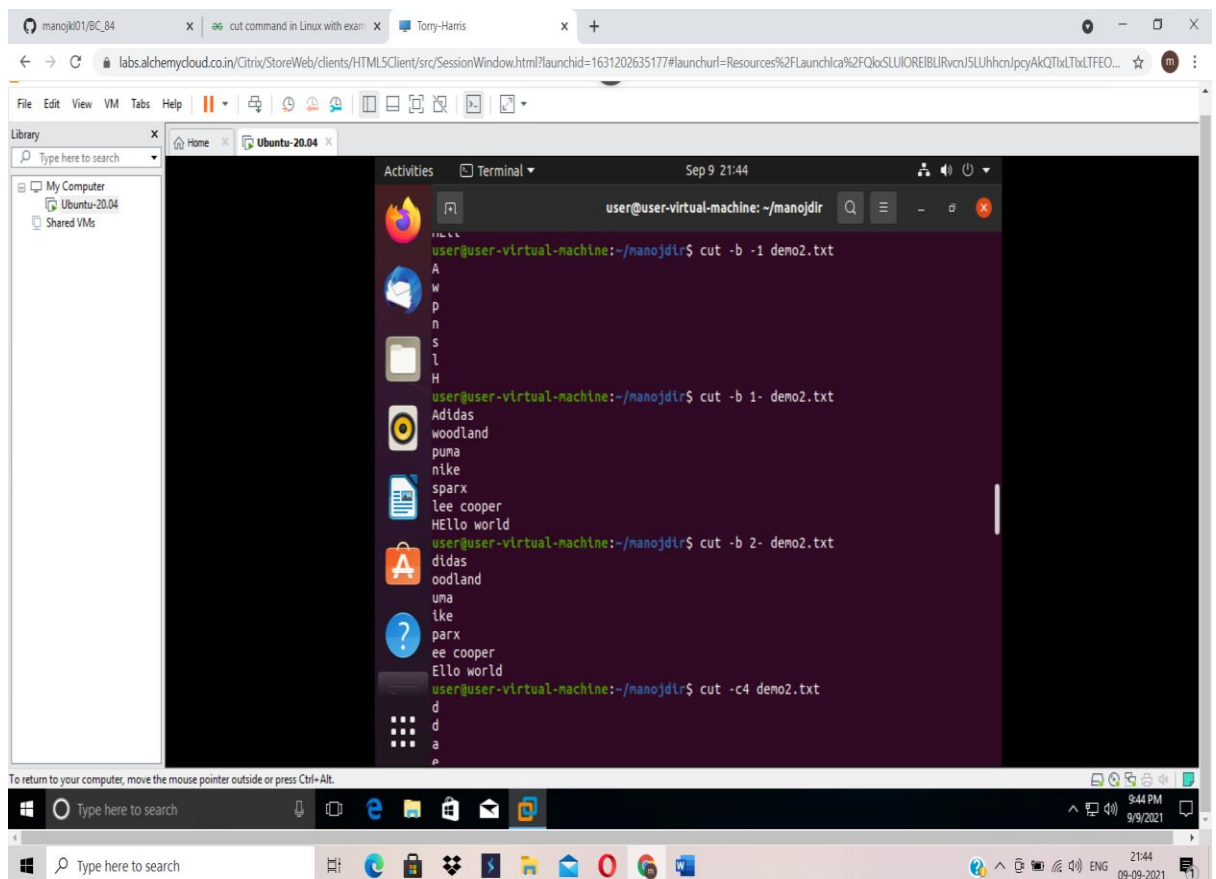
2) Cut command:



The screenshot shows a Citrix session titled 'manojk01/BC_84' with a browser window displaying a URL from 'labs.alchemycloud.co.in'. Below the browser is a virtual machine window titled 'Ubuntu-20.04'. Inside the VM, a terminal window is open, showing the following commands and output:

```
user@user-virtual-machine: ~/manojdir
user@user-virtual-machine:~/manojdir$ cat demo2.txt
Adidas
woodland
puna
nike
sparx
lee cooper
Hello world
user@user-virtual-machine:~/manojdir$ cut -b 1,2,3,4 demo2.txt
Adid
wood
puna
nike
spar
lee
Hell
user@user-virtual-machine:~/manojdir$ cut -b 1-3,1-4 demo2.txt
Adid
wood
puna
nike
spar
lee
Hell
user@user-virtual-machine:~/manojdir$ cut -b -1 demo2.txt
A
w
p
n
s
l
H
```

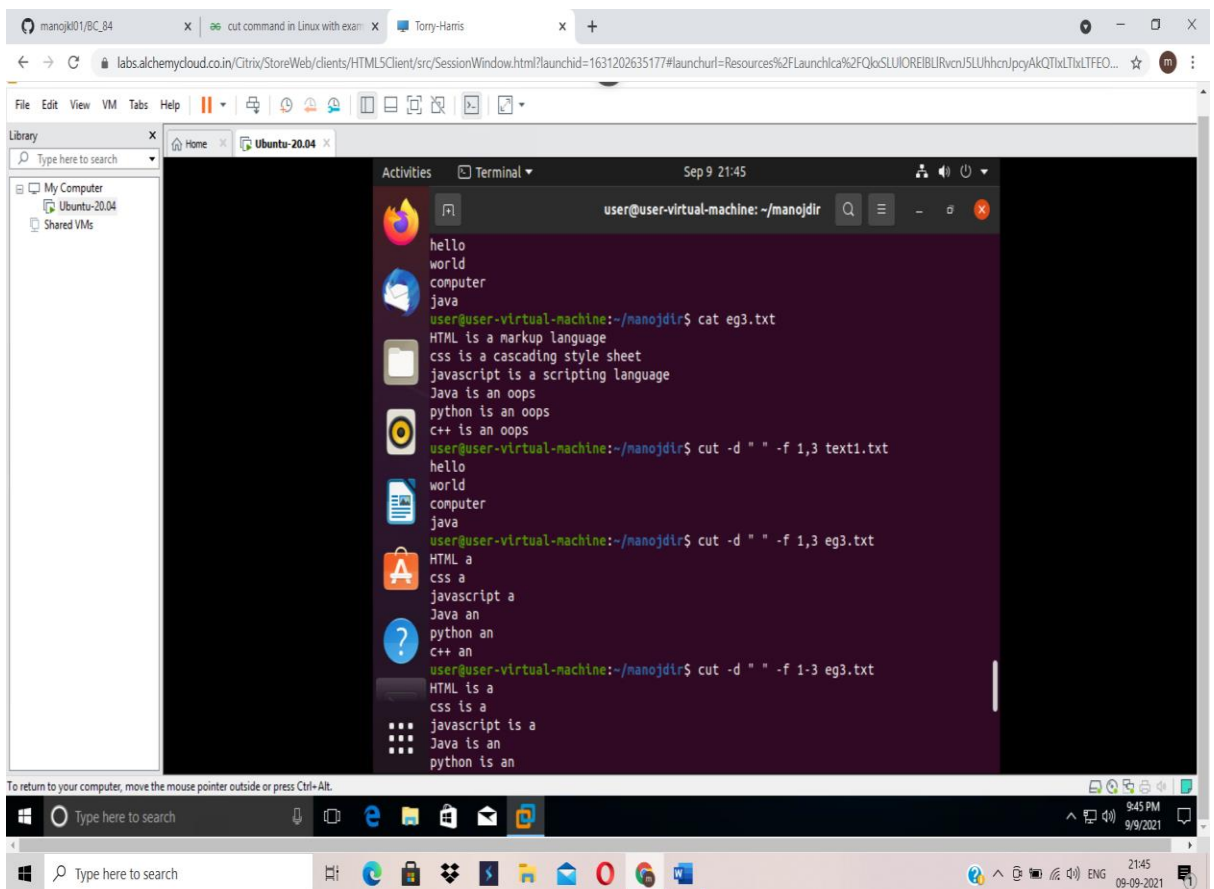
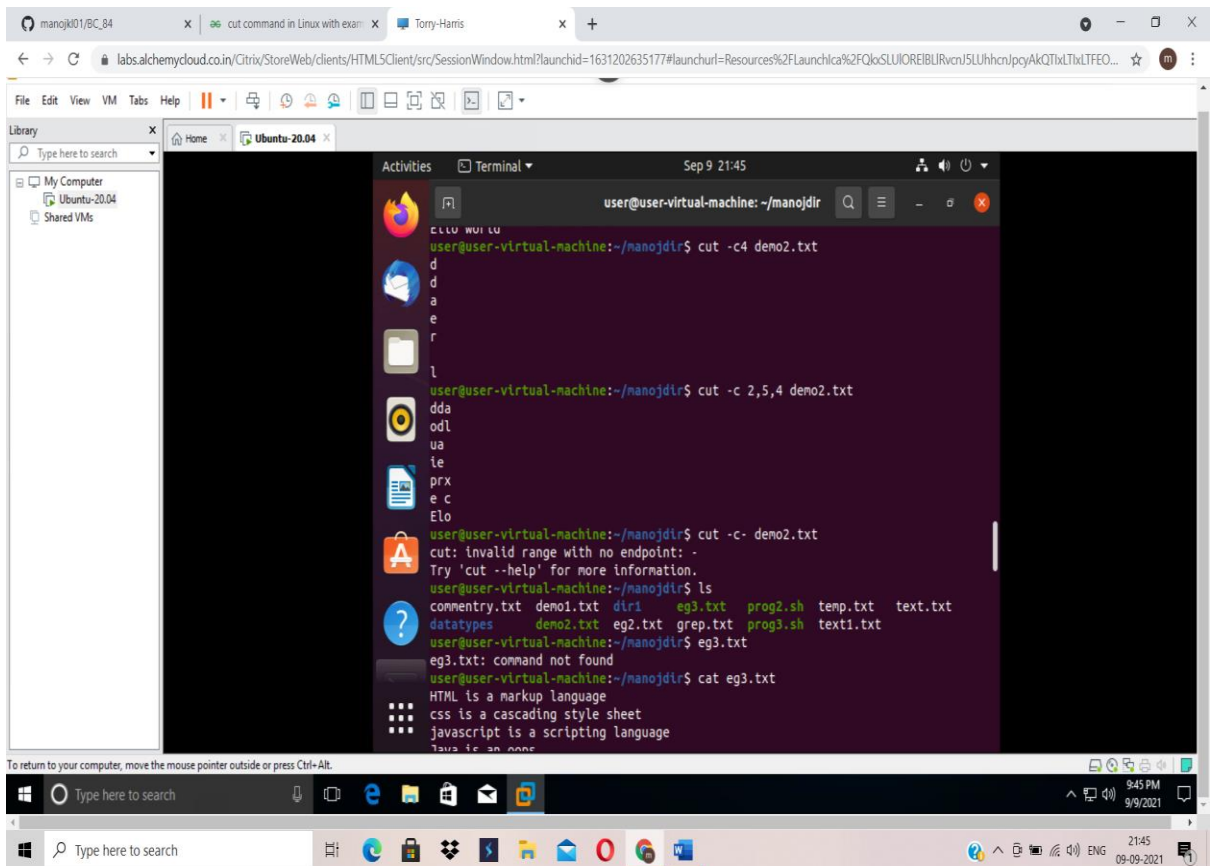
The terminal window is titled 'user@user-virtual-machine: ~/manojdir' and shows the output of the 'cut' command for various byte specifications. The output is displayed in a dark purple terminal window with a light blue cursor. The background of the terminal window shows the Ubuntu desktop environment with various application icons on the left and a taskbar at the bottom.



The screenshot shows a Citrix session titled 'manojk01/BC_84' with a browser window displaying a URL from 'labs.alchemycloud.co.in'. Below the browser is a virtual machine window titled 'Ubuntu-20.04'. Inside the VM, a terminal window is open, showing the following commands and output:

```
user@user-virtual-machine: ~/manojdir
user@user-virtual-machine:~/manojdir$ cut -b -1 demo2.txt
A
w
p
n
s
l
H
user@user-virtual-machine:~/manojdir$ cut -b 1- demo2.txt
Adidas
woodland
puna
nike
sparx
lee cooper
Hello world
user@user-virtual-machine:~/manojdir$ cut -b 2- demo2.txt
didas
oodland
una
ike
parx
ee cooper
ello world
user@user-virtual-machine:~/manojdir$ cut -c4 demo2.txt
d
d
a
e
```

The terminal window is titled 'user@user-virtual-machine: ~/manojdir' and shows the output of the 'cut' command for various character specifications. The output is displayed in a dark purple terminal window with a light blue cursor. The background of the terminal window shows the Ubuntu desktop environment with various application icons on the left and a taskbar at the bottom.



The screenshot shows a virtual machine window titled 'Ubuntu-20.04'. The terminal window is open, displaying the following commands and output:

```
user@user-virtual-machine: ~/manojdir
user@user-virtual-machine:~$ cd ./manojdir/
user@user-virtual-machine:~/manojdir$ cat eg3.txt
HTML is a markup language
CSS is a cascading style sheet
javascript is a scripting pro language
java is an object oriented programming language
python is an interpreted programming language
user@user-virtual-machine:~/manojdir$ cut -d " " -f1,3 eg3.txt --output-delimit
er="%n"
HTML%a
CSS%a
javascript%a
java%a
python%a
user@user-virtual-machine:~/manojdir$ cat eg3.txt | cut -d ' ' -f 1
HTML
CSS
javascript
java
python
user@user-virtual-machine:~/manojdir$ cat demo2.txt
Adidas
woodLand
puna
nike
sparx
user@user-virtual-machine:~/manojdir$
```

3) Sort command:

The screenshot shows the same virtual machine window. The terminal window now displays the following commands and output:

```
user@user-virtual-machine:~/manojdir
user@user-virtual-machine:~/manojdir$ cat demo2.txt
Adidas
woodLand
puna
nike
sparx
lee cooper
HELlo world
user@user-virtual-machine:~/manojdir$ sort demo2.txt
Adidas
HELlo world
lee cooper
nike
puna
sparx
woodland
user@user-virtual-machine:~/manojdir$ sort -r demo2.txt
woodland
sparx
puna
nike
lee cooper
HELlo world
Adidas
user@user-virtual-machine:~/manojdir$ sort -k demo2.txt
sort: invalid number at field start: invalid count at start of 'demo2.txt'
```

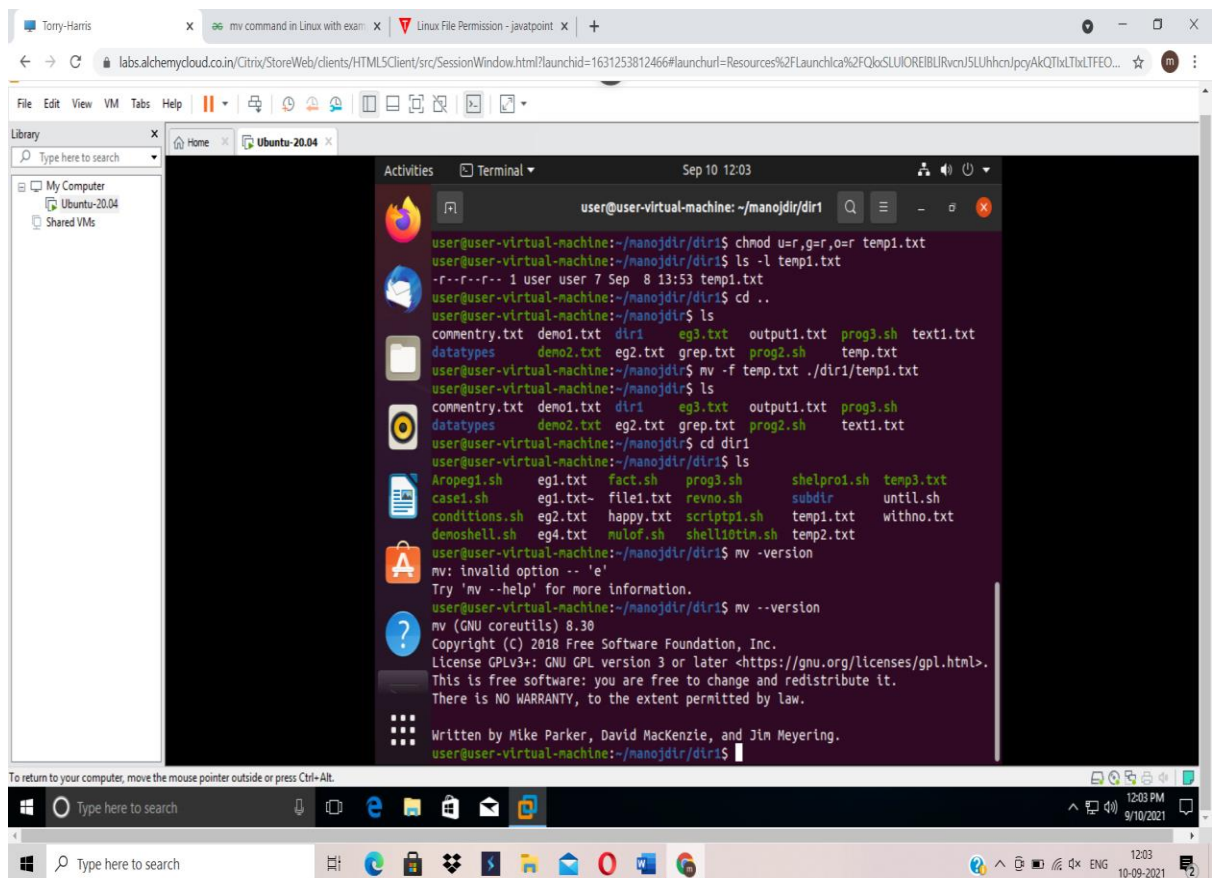
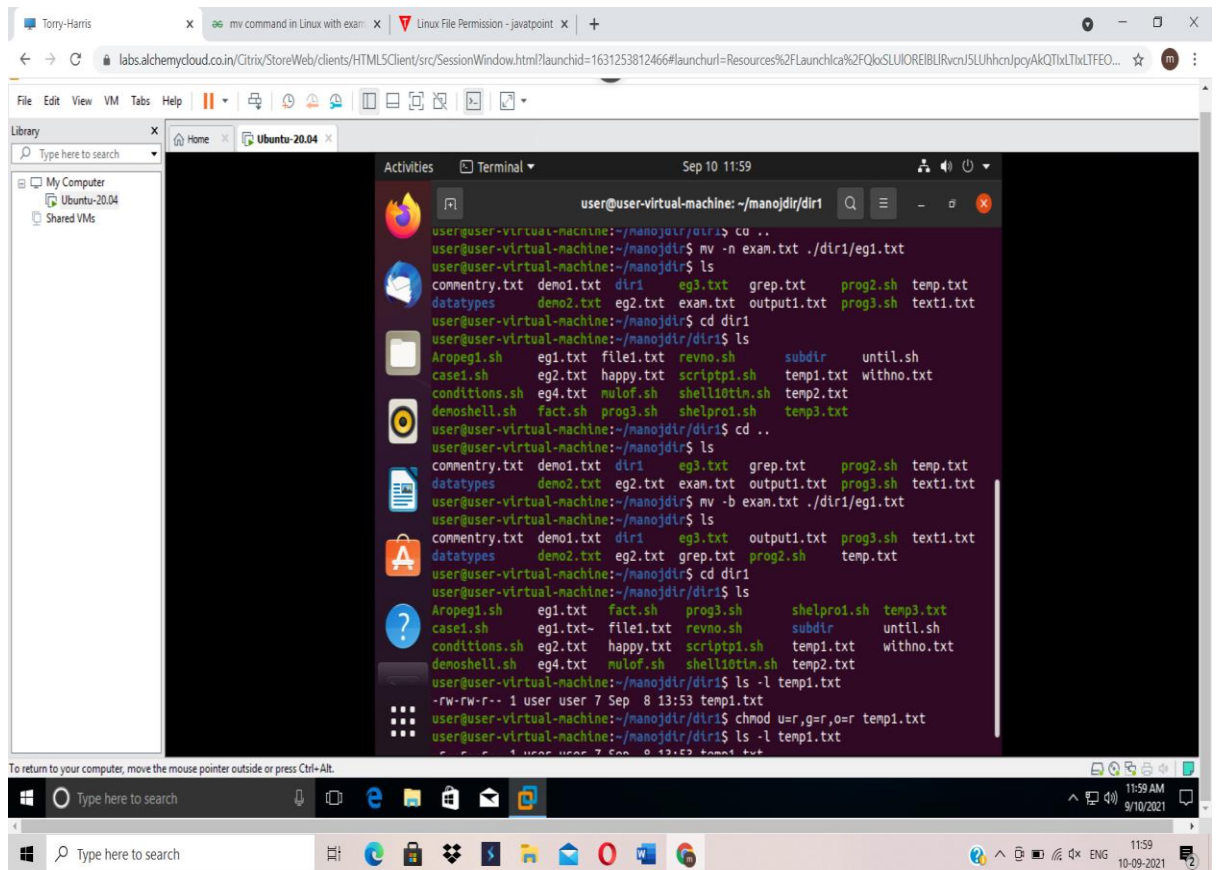

The screenshot shows a terminal window within a VMware Workstation environment. The terminal is running on a user@user-virtual-machine with the directory ~/manojdir. The user has created a file named text1.txt and is using the 'cut' command to extract specific columns of text from it. The output of the 'cut' command is displayed in the terminal, showing the first 23 characters of each line in the file. The terminal also shows the user's prompt and the current directory.

```
user@user-virtual-machine:~/manojdir$ cat text1.txt
hello 23
world 44
computer science
java 16
user@user-virtual-machine:~/manojdir$ sort -n text1.txt
computer science
hello 23
java 16
world 44
user@user-virtual-machine:~/manojdir$ sort -o output1.txt eg3.txt
user@user-virtual-machine:~/manojdir$ ls
commentary.txt  demo1.txt  dir1      eg3.txt  output1.txt  prog3.sh  text1.txt
datatypes      demo2.txt  eg2.txt  grep.txt  prog2.sh    temp.txt  text.txt
CSS is a cascading style sheet
HTML is a markup language
java is an object oriented programming language
javascript is a scripting pro language
python is an interpreted programming language
user@user-virtual-machine:~/manojdir$ sort -c eg3.txt
sort: eg3.txt:2: disorder: CSS is a cascading style sheet
user@user-virtual-machine:~/manojdir$ sort -M eg3.txt
CSS is a cascading style sheet
HTML is a markup language
java is an object oriented programming language
javascript is a scripting pro language
python is an interpreted programming language
user@user-virtual-machine:~/manojdir$
```

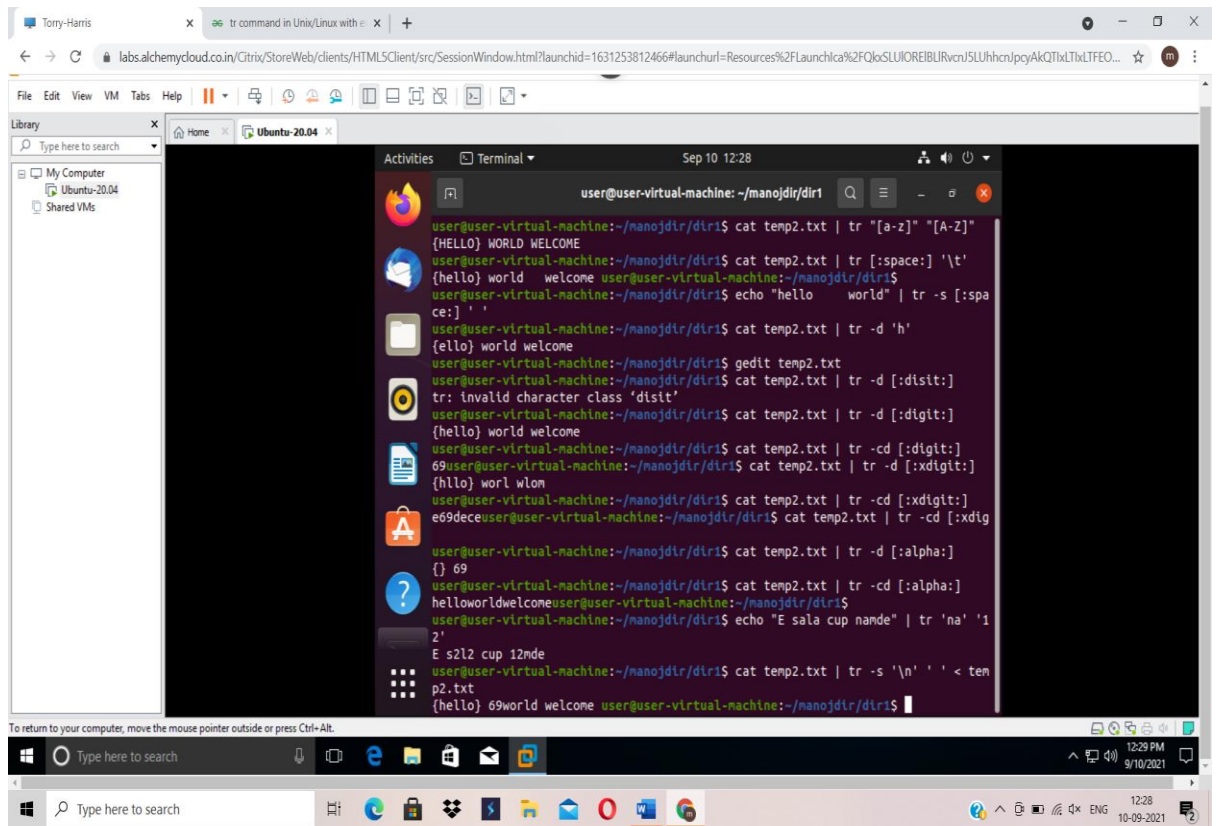
4) Move command:

The screenshot shows a terminal window within a VMware Workstation environment. The terminal is running on a user@user-virtual-machine with the directory ~/manojdir. The user is using the 'mv' command to move files and directories. The output of the 'mv' command is displayed in the terminal, showing the files and directories being moved. The terminal also shows the user's prompt and the current directory.

```
user@user-virtual-machine:~$ ls
Desktop  Documents  eg5.txt  Music  prog4.sh  scriptp1.sh  Templates
dir1     Downloads  manojdir  Pictures  Public  snap  Videos
user@user-virtual-machine:~$ mv -i eg5.txt ./manojdir/exam.txt
mv: replace './manojdir/exam.txt', overriding mode 0111 (--x--x--x)? y
user@user-virtual-machine:~$ ls
Desktop  Documents  manojdir  Pictures  Public  snap  Videos
dir1     Downloads  Music  prog4.sh  scriptp1.sh  Templates
user@user-virtual-machine:~$ cd manojdir
user@user-virtual-machine:~/manojdir$ cat exam.txt
hello world part2
user@user-virtual-machine:~/manojdir$ ls
commentary.txt  demo1.txt  dir1      eg3.txt  grep.txt  prog2.sh  temp.txt
datatypes      demo2.txt  eg2.txt  exan.txt  output1.txt  prog3.sh  text1.txt
hello world
RCB
c#
virat kohli
linux
user@user-virtual-machine:~/manojdir$ cd dir1
user@user-virtual-machine:~/manojdir/dir1$ ls
Aropeg1.sh  eg1.txt  file1.txt  revno.sh  subdir  until.sh
case1.sh    eg2.txt  happy.txt  scriptp1.sh  temp1.txt  withno.txt
conditions.sh  eg4.txt  malof.sh  shell10tin.sh  temp2.txt
denoshell.sh  fact.sh  prog3.sh  shelpro1.sh  temp3.txt
user@user-virtual-machine:~/manojdir/dir1$ cd ..
user@user-virtual-machine:~/manojdir$ mv -n exan.txt ./dir1/eg1.txt
```



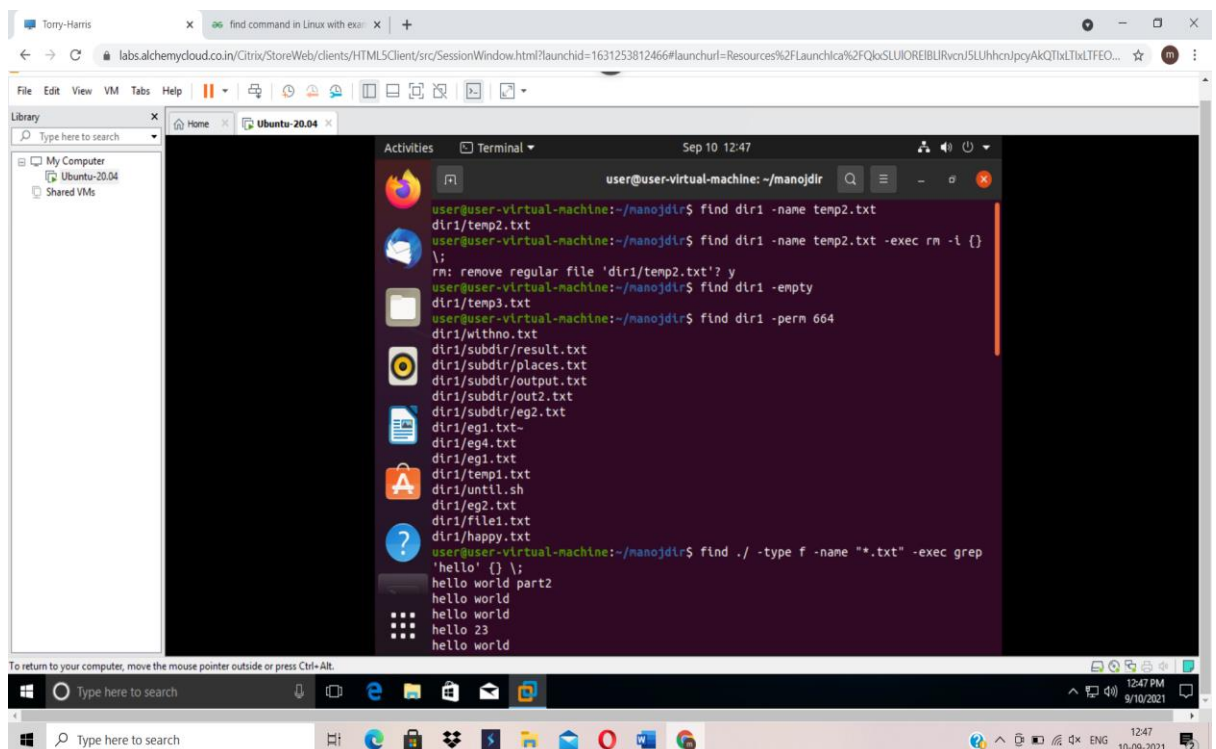
5) tr command:



The screenshot shows a terminal window titled "user@user-virtual-machine: ~/manojdir/dir1". The terminal displays several commands and their outputs using the 'tr' (translate) command:

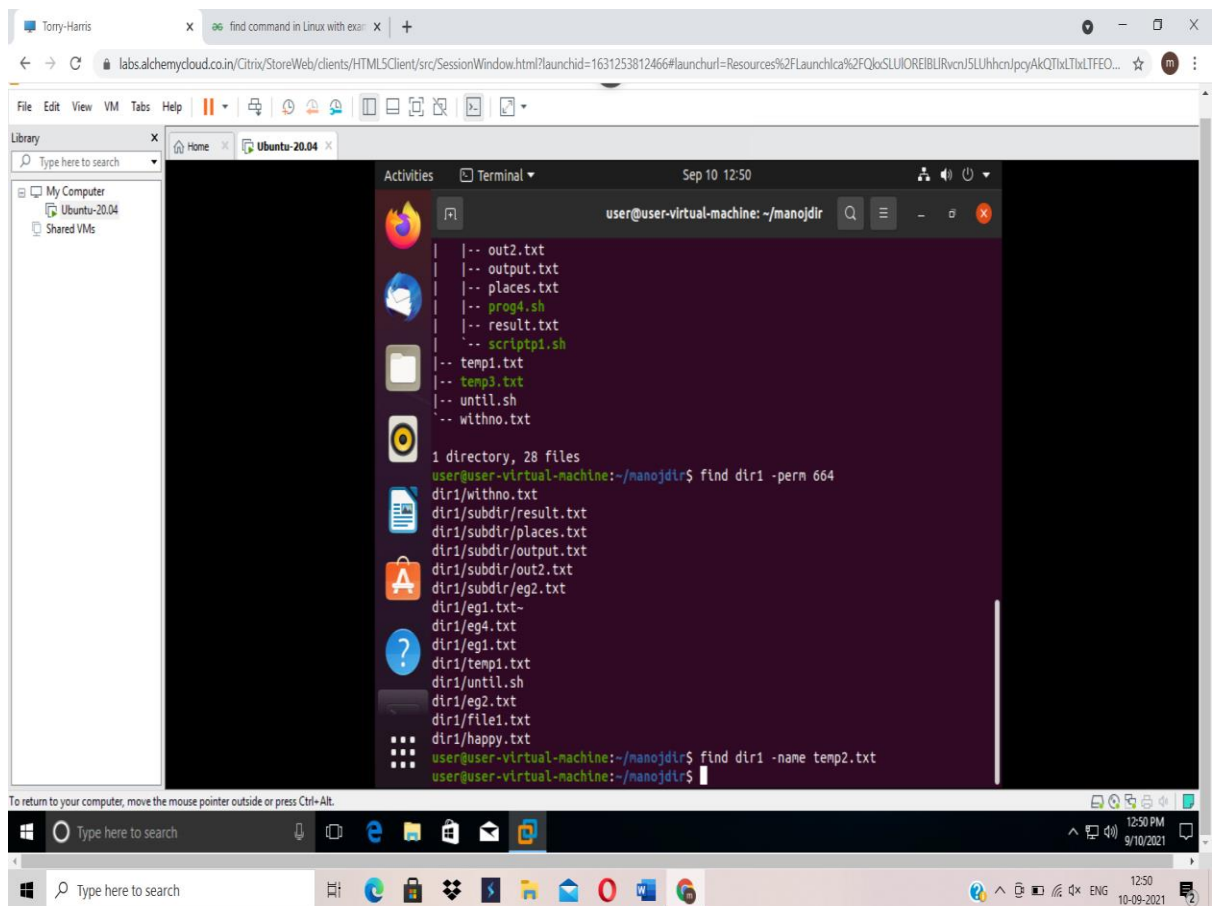
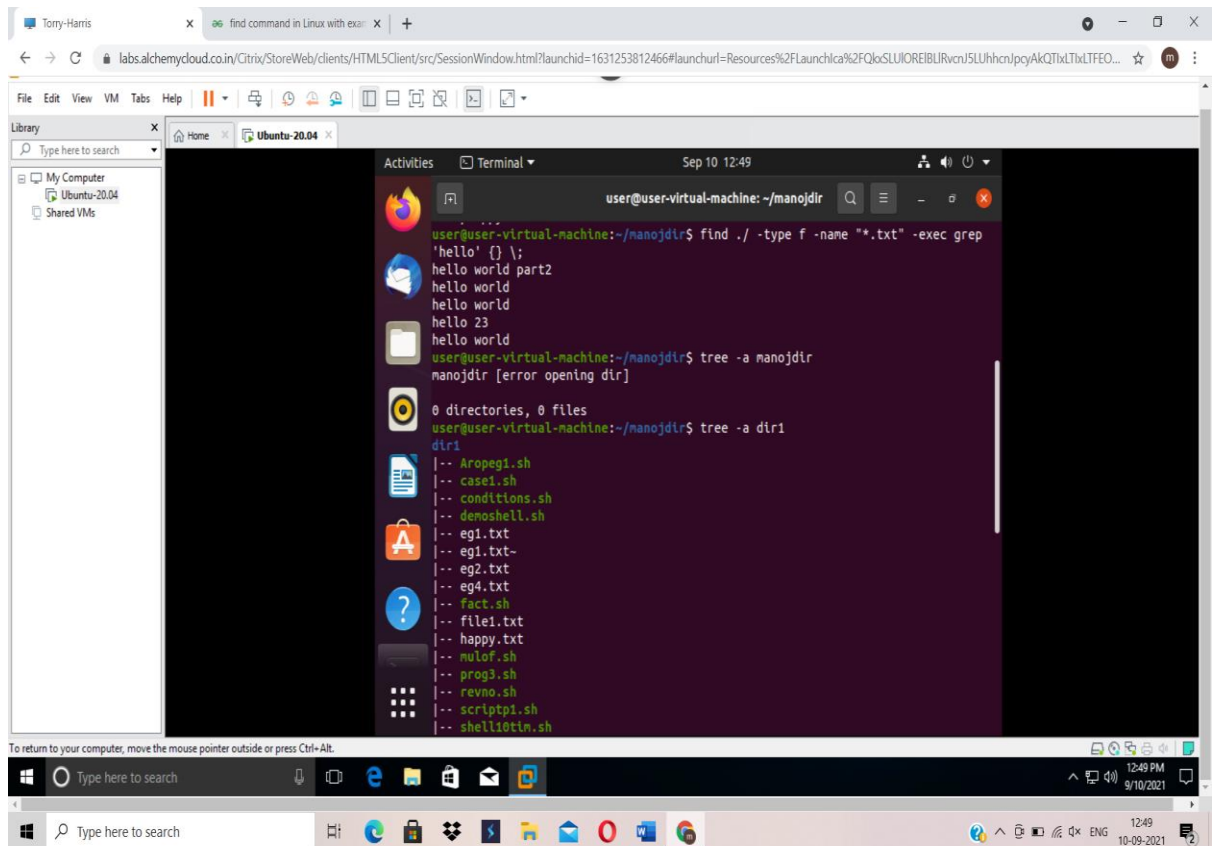
```
user@user-virtual-machine:~/manojdir/dir1$ cat temp2.txt | tr "[a-z]" "[A-Z]"
{HELLO} WORLD WELCOME
user@user-virtual-machine:~/manojdir/dir1$ cat temp2.txt | tr [:space:] '\t'
(hello) world welcome
user@user-virtual-machine:~/manojdir/dir1$ echo "hello world" | tr -s [:space:] ' '
(hello) world welcome
user@user-virtual-machine:~/manojdir/dir1$ cat temp2.txt | tr -d 'h'
{ello} world welcome
user@user-virtual-machine:~/manojdir/dir1$ gedit temp2.txt
user@user-virtual-machine:~/manojdir/dir1$ cat temp2.txt | tr -d [:digit:]
tr: invalid character class 'digit'
user@user-virtual-machine:~/manojdir/dir1$ cat temp2.txt | tr -d [:digit:]
(hello) world welcome
user@user-virtual-machine:~/manojdir/dir1$ cat temp2.txt | tr -cd [:digit:]
69user@user-virtual-machine:~/manojdir/dir1$ cat temp2.txt | tr -d [:xdigit:]
{hilo} worl wlom
user@user-virtual-machine:~/manojdir/dir1$ cat temp2.txt | tr -cd [:xdigit:]
e69deceuser@user-virtual-machine:~/manojdir/dir1$ cat temp2.txt | tr -cd [:xdigit:]
{} 69
user@user-virtual-machine:~/manojdir/dir1$ cat temp2.txt | tr -cd [:alpha:]
{} 69
user@user-virtual-machine:~/manojdir/dir1$ cat temp2.txt | tr -cd [:alpha:]
helloworldwelcom
user@user-virtual-machine:~/manojdir/dir1$
user@user-virtual-machine:~/manojdir/dir1$ echo "E sala cup namde" | tr 'na' '1 2'
E s2l2 cup 12nde
user@user-virtual-machine:~/manojdir/dir1$ cat temp2.txt | tr -s '\n' ' ' < temp2.txt
(hello) 69world welcome
user@user-virtual-machine:~/manojdir/dir1$
```

6) find command:



The screenshot shows a terminal window titled "user@user-virtual-machine: ~/manojdir". The terminal displays several commands and their outputs using the 'find' command:

```
user@user-virtual-machine:~/manojdir$ find dir1 -name temp2.txt
dir1/temp2.txt
user@user-virtual-machine:~/manojdir$ find dir1 -name temp2.txt -exec rm -i {} \;
rm: remove regular file 'dir1/temp2.txt'? y
user@user-virtual-machine:~/manojdir$ find dir1 -empty
dir1/temp3.txt
user@user-virtual-machine:~/manojdir$ find dir1 -perm 664
dir1/withno.txt
dir1/subdir/result.txt
dir1/subdir/places.txt
dir1/subdir/output.txt
dir1/subdir/out2.txt
dir1/subdir/eg2.txt
dir1/eg1.txt-
dir1/eg4.txt
dir1/eg1.txt
dir1/temp1.txt
dir1/untill.sh
dir1/eg2.txt
dir1/file1.txt
dir1/happy.txt
user@user-virtual-machine:~/manojdir$ find ./ -type f -name "*.txt" -exec grep 'hello' {} \;
hello world part2
hello world
hello world
hello 23
hello world
```

7) less command:

The image consists of two screenshots of a virtual machine interface, specifically an Ubuntu 20.04 terminal window. The top screenshot shows the terminal at the prompt `user@user-virtual-machine: ~/manojdir`. The user has run `ls`, listing files: `commentry.txt demo1.txt dir1 eg3.txt output1.txt prog3.sh datatypes demo2.txt eg2.txt grep.txt prog2.sh text1.txt`. Then, the user runs `less -g text1.txt`. The bottom screenshot shows the terminal at the same prompt, but now displaying the contents of `text1.txt` using the `less` command. The output is: `hello 23`, `world 44`, `computer science`, `java 16`, and `text1.txt (END)`. The terminal window is titled "Terminal" and "Sep 10 12:55". The virtual machine interface includes a sidebar with "My Computer", "Ubuntu-20.04", and "Shared VMs". The bottom of the image shows a Windows taskbar with the search bar and various application icons.

```
user@user-virtual-machine: ~/manojdir
user@user-virtual-machine:~/manojdir$ ls
commentry.txt  demo1.txt  dir1      eg3.txt   output1.txt  prog3.sh
datatypes      demo2.txt  eg2.txt   grep.txt   prog2.sh     text1.txt
user@user-virtual-machine:~/manojdir$ less -g text1.txt
user@user-virtual-machine:~/manojdir$
```

```
user@user-virtual-machine: ~/manojdir
hello 23
world 44
computer science
java 16
text1.txt (END)
```

6.View multiple files with less command

To open multiple files with less, simply input the file names one by one:

```
less <filename1> <filename2> <filename3>
```

:n to move next file

:p to move to previous file

7. less -X file name save the file name on screen

when file exits

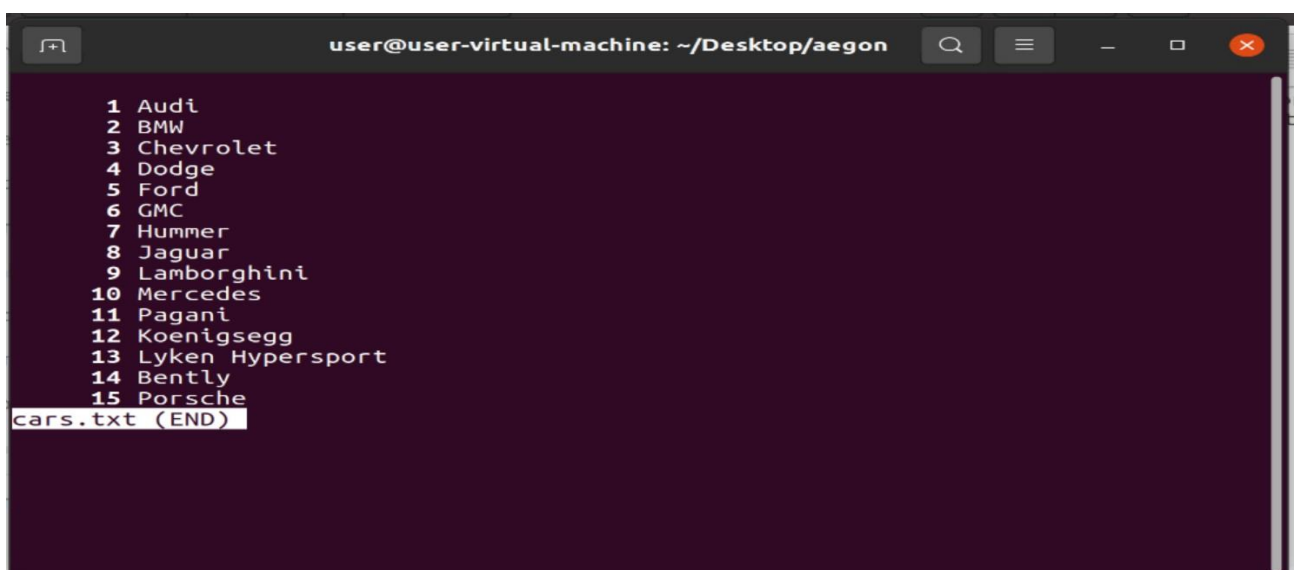
8.less -S file name long line can be seen by side

wrapping.

9.less--version to know the version of less

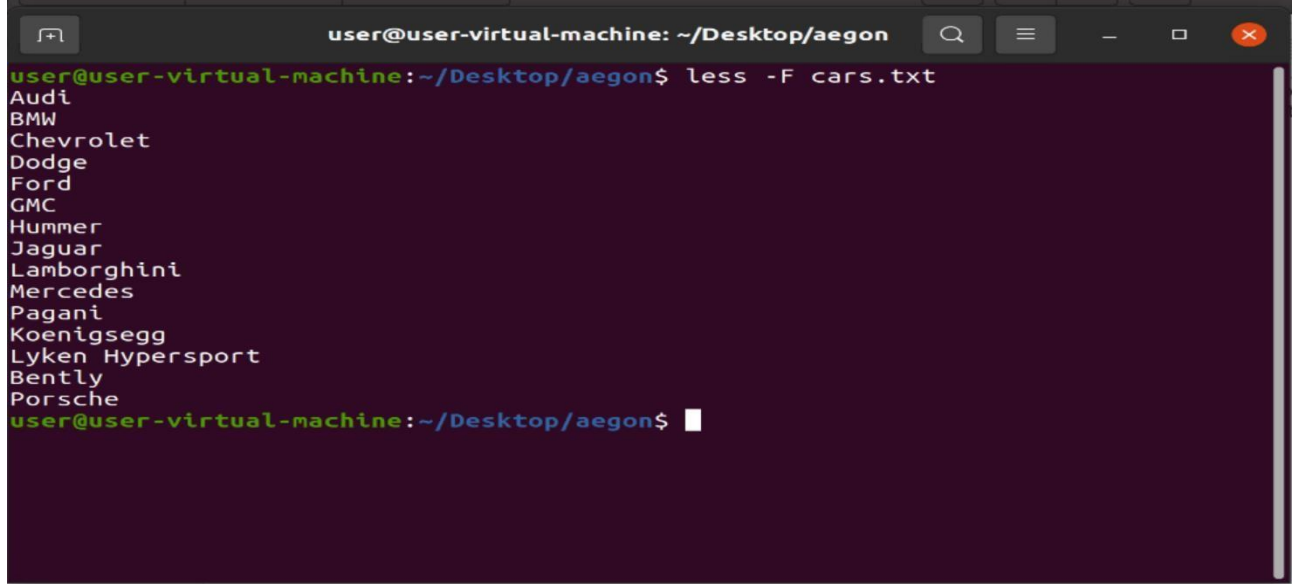
10. less -m file name show more detailed prompt including file position.

-N option



```
user@user-virtual-machine: ~/Desktop/aegon
1 Audi
2 BMW
3 Chevrolet
4 Dodge
5 Ford
6 GMC
7 Hummer
8 Jaguar
9 Lamborghini
10 Mercedes
11 Pagani
12 Koenigsegg
13 Lyken Hypersport
14 Bentley
15 Porsche
cars.txt (END)
```

-F option:



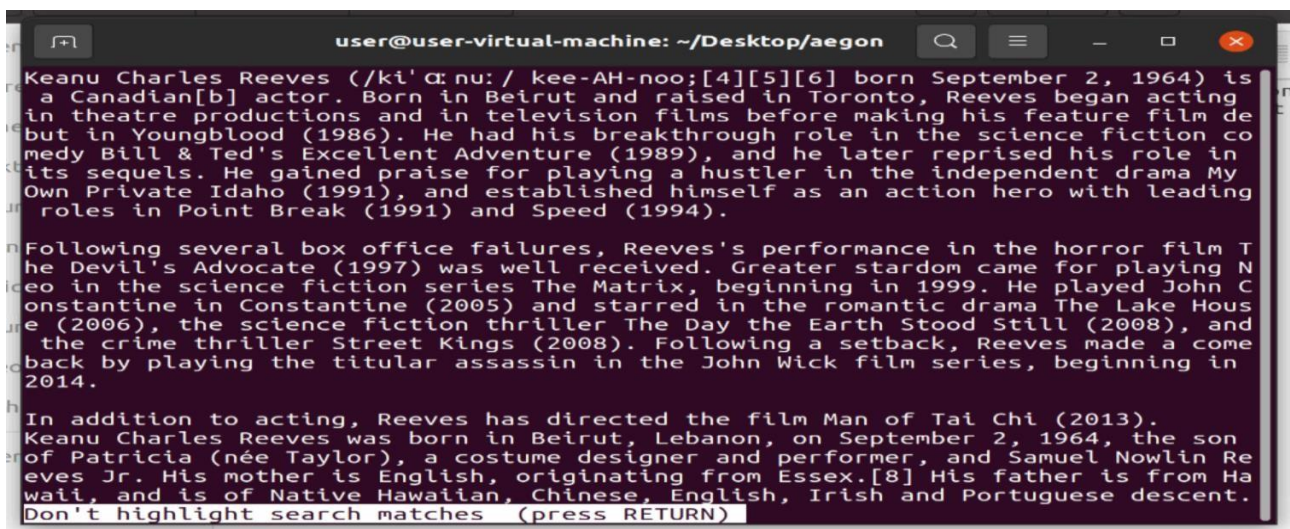
```
user@user-virtual-machine: ~/Desktop/aegon
user@user-virtual-machine:~/Desktop/aegon$ less -F cars.txt
Audi
BMW
Chevrolet
Dodge
Ford
GMC
Hummer
Jaguar
Lamborghini
Mercedes
Pagani
Koenigsegg
Lyken Hypersport
Bentley
Porsche
user@user-virtual-machine:~/Desktop/aegon$
```

-G option:

It hides all highlighting strings found by search command. To highlight the strings do -G again.

Example:

In less editor press '-' and then 'G', It will hides all highlighting strings found by search command as image follows.



```
user@user-virtual-machine: ~/Desktop/aegon
Keanu Charles Reeves (/ki'ɑːnuː/ kee-AH-noo;[4][5][6] born September 2, 1964) is
a Canadian[b] actor. Born in Beirut and raised in Toronto, Reeves began acting
in theatre productions and in television films before making his feature film de
but in Youngblood (1986). He had his breakthrough role in the science fiction co
medy Bill & Ted's Excellent Adventure (1989), and he later reprised his role in
its sequels. He gained praise for playing a hustler in the independent drama My
Own Private Idaho (1991), and established himself as an action hero with leading
roles in Point Break (1991) and Speed (1994).

Following several box office failures, Reeves's performance in the horror film T
he Devil's Advocate (1997) was well received. Greater stardom came for playing N
eo in the science fiction series The Matrix, beginning in 1999. He played John C
onstantine in Constantine (2005) and starred in the romantic drama The Lake Hous
e (2006), the science fiction thriller The Day the Earth Stood Still (2008), and
the crime thriller Street Kings (2008). Following a setback, Reeves made a come
back by playing the titular assassin in the John Wick film series, beginning in
2014.

In addition to acting, Reeves has directed the film Man of Tai Chi (2013).
Keanu Charles Reeves was born in Beirut, Lebanon, on September 2, 1964, the son
of Patricia (née Taylor), a costume designer and performer, and Samuel Nowlin Re
eves Jr. His mother is English, originating from Essex.[8] His father is from Ha
waii, and is of Native Hawaiian, Chinese, English, Irish and Portuguese descent.
Don't highlight search matches (press RETURN)
```

-N and -F

We can use combination of -F option along with -N option to avoid opening of file.

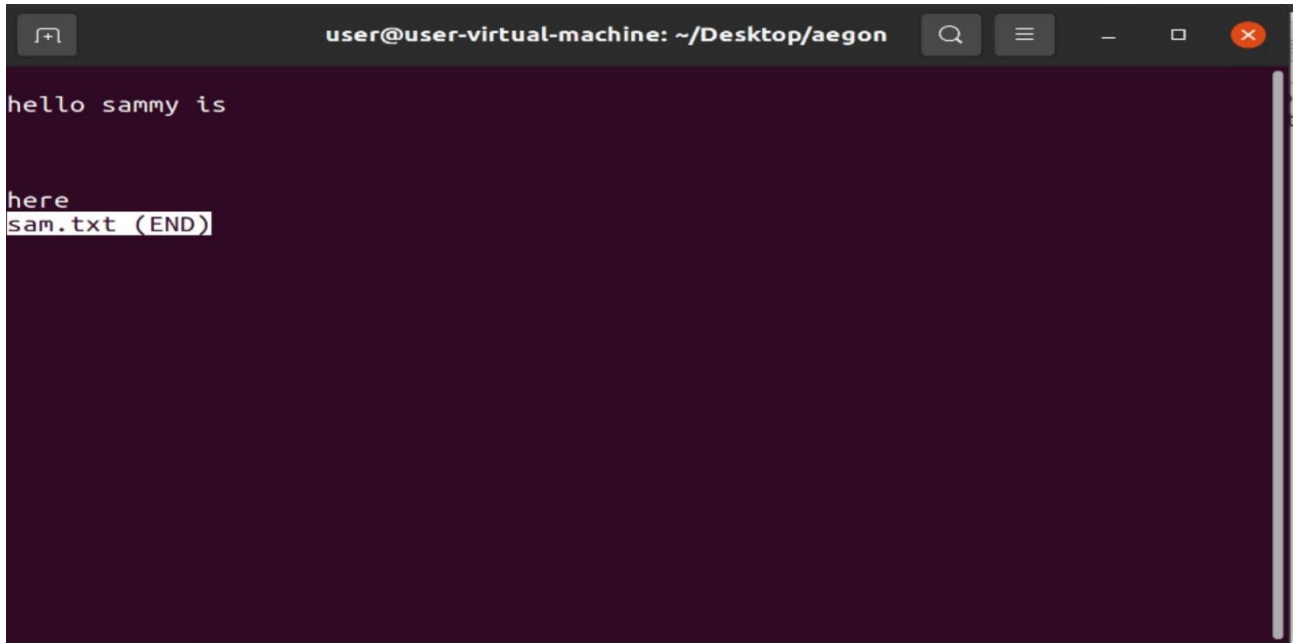
Example:

```
less -N -F cars.txt
```

It gives the output as follows

-s option: causes consecutive blank lines to be squeezed into single blank line.

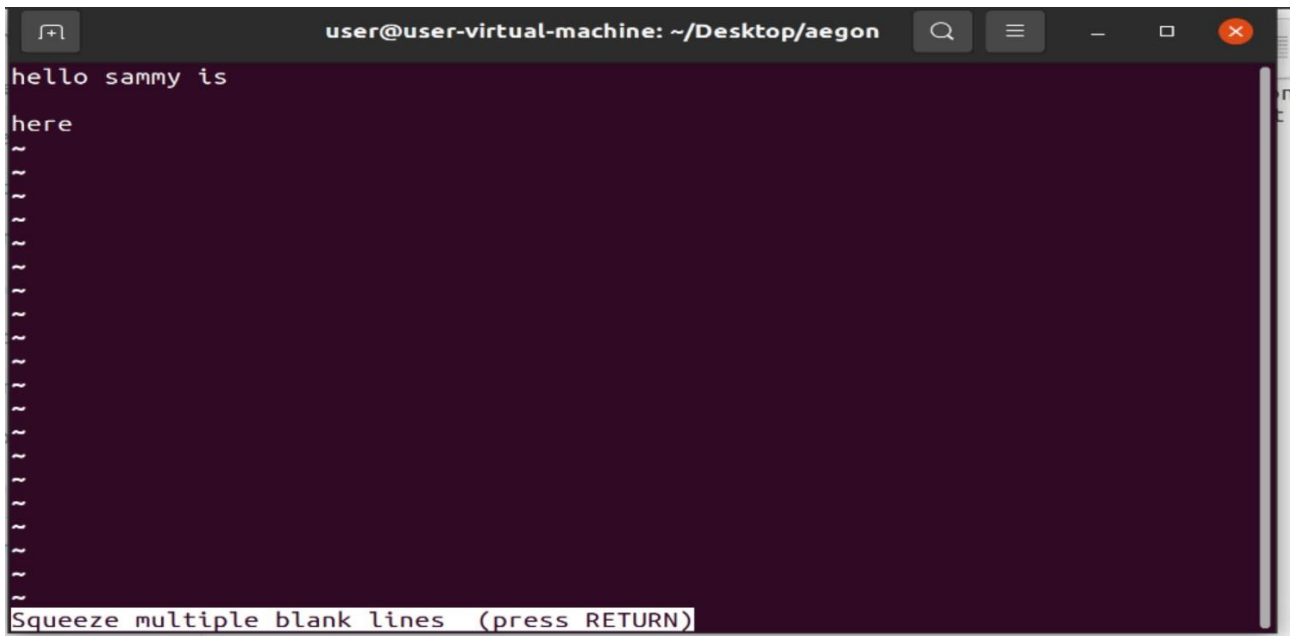
Example:



A terminal window titled "user@user-virtual-machine: ~/Desktop/aegon" with search, menu, and window control icons. The terminal displays the text "hello sammy is" on the first line, followed by a blank line, then "here" on the third line. The cursor is at the end of the third line, and the prompt "sam.txt (END)" is visible.

I created a file with consecutive blank lines as follows.

In the less editor press '-' and 's' then the consecutive blank lines are squeezed as follows.



The same terminal window as before, but now showing the result of pressing '-' and 's' in the less editor. The text "hello sammy is" is on the first line, followed by a single blank line, then "here" on the third line. Below "here" are several tilde (~) characters representing the squeezed blank lines. The cursor is at the end of the line containing the tildes, and the prompt "Squeeze multiple blank lines (press RETURN)" is visible.