

Name - KARNATI CHARAN

Roll No. - 422169

Section - A

UNIX COMMANDS AND SHELL SCRIPTING LAB

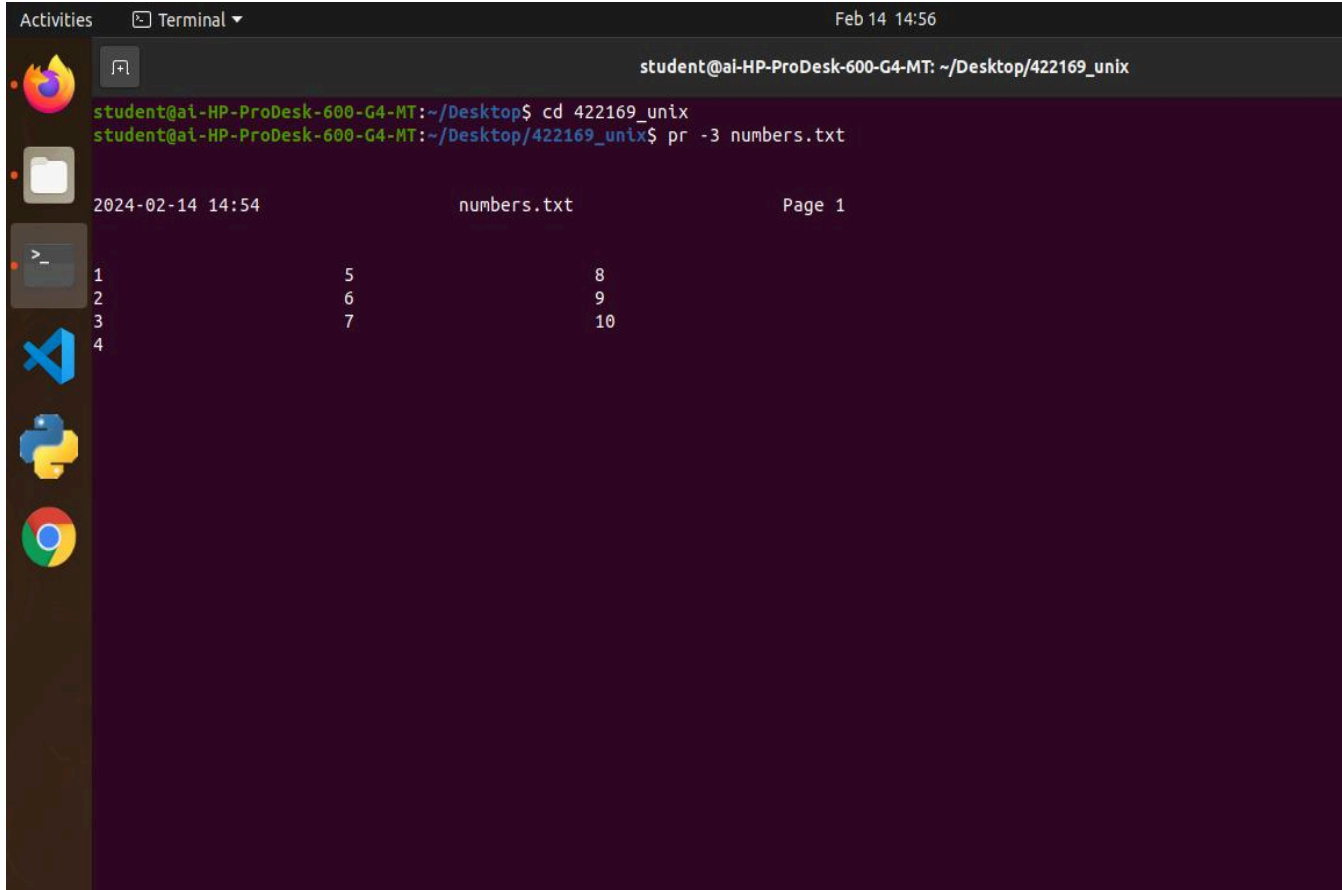
ASSIGNMENT – 1

Q). Write shell script for searching for various patterns using grep, pr, head, tail, cut, paste, sort, uniq, and tr.

1. grep command .

```
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422169_unix$ grep -i "is" file.txt
A Linux command ls is a program or utility that runs on the command line. A command line ls is an interface that accepts lines of text and processes them in
to instructions for your computer. Any graphical user interface (GUI) ls is just an abstraction of command-line programs.
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422169_unix$ grep -c "is" file.txt
1
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422169_unix$ grep -l "is" *
anothercharan
charan
fibonnaci
files.txt
file.txt
merged
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422169_unix$ grep -w "is" file.txt
A Linux command ls is a program or utility that runs on the command line. A command line ls is an interface that accepts lines of text and processes them in
to instructions for your computer. Any graphical user interface (GUI) ls is just an abstraction of command-line programs.
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422169_unix$ grep -o "is" file.txt
is
is
is
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422169_unix$ grep -n "is" file.txt
1:A Linux command ls is a program or utility that runs on the command line. A command line ls is an interface that accepts lines of text and processes them
into instructions for your computer. Any graphical user interface (GUI) ls is just an abstraction of command-line programs.
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422169_unix$ grep -v "is" file.txt
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422169_unix$ grep "^A" file.txt
A Linux command is a program or utility that runs on the command line. A command line is an interface that accepts lines of text and processes them in
to instructions for your computer. Any graphical user interface (GUI) is just an abstraction of command-line programs.
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422169_unix$ grep "line$" file.txt
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422169_unix$ grep -A1 is file.txt
A Linux command ls is a program or utility that runs on the command line. A command line ls is an interface that accepts lines of text and processes them in
to instructions for your computer. Any graphical user interface (GUI) ls is just an abstraction of command-line programs.
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422169_unix$
```

2.pr command



A terminal window titled "Terminal" with a dark background. The top bar shows "Activities", "Terminal", and the date/time "Feb 14 14:56". The terminal prompt is "student@ai-HP-ProDesk-600-G4-MT: ~/Desktop/422169_unix". The user has entered the command "cd 422169_unix" and then "pr -3 numbers.txt". The output shows the first three lines of the file "numbers.txt" in a table format. The table has three columns of numbers: 1, 2, 3, 4 in the first column; 5, 6, 7 in the second; and 8, 9, 10 in the third. The date "2024-02-14 14:54" is on the left, "numbers.txt" is in the center, and "Page 1" is on the right. A vertical sidebar on the left contains icons for Firefox, Files, Terminal, VS Code, Python, and Chrome.

```
student@ai-HP-ProDesk-600-G4-MT:~/Desktop$ cd 422169_unix
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422169_unix$ pr -3 numbers.txt
```

| | | |
|------------------|-------------|--------|
| 2024-02-14 14:54 | numbers.txt | Page 1 |
| 1 | 5 | 8 |
| 2 | 6 | 9 |
| 3 | 7 | 10 |
| 4 | | |

Activities Terminal Feb 14 15:02 student@ai-HP-ProDesk-600-G4-MT: ~/Desktop/422169_unix

```
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422169_unix$ man pr
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422169_unix$ pr -a numbers.txt
```

2024-02-14 14:54 numbers.txt Page 1

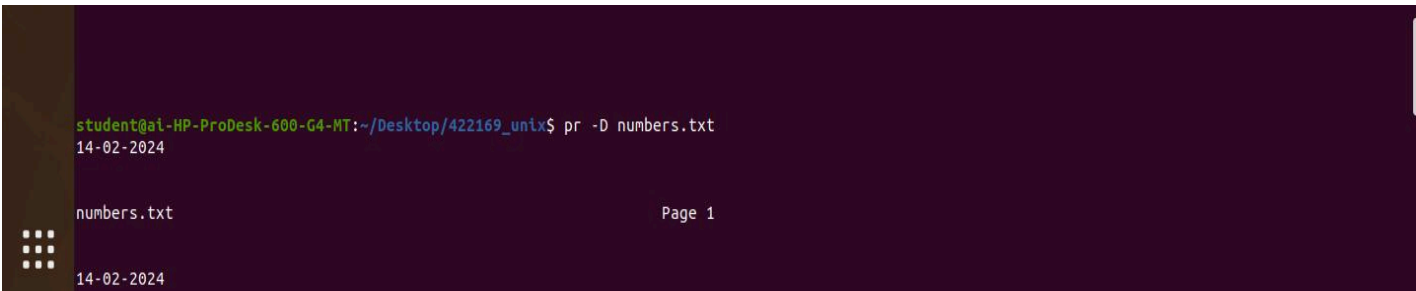
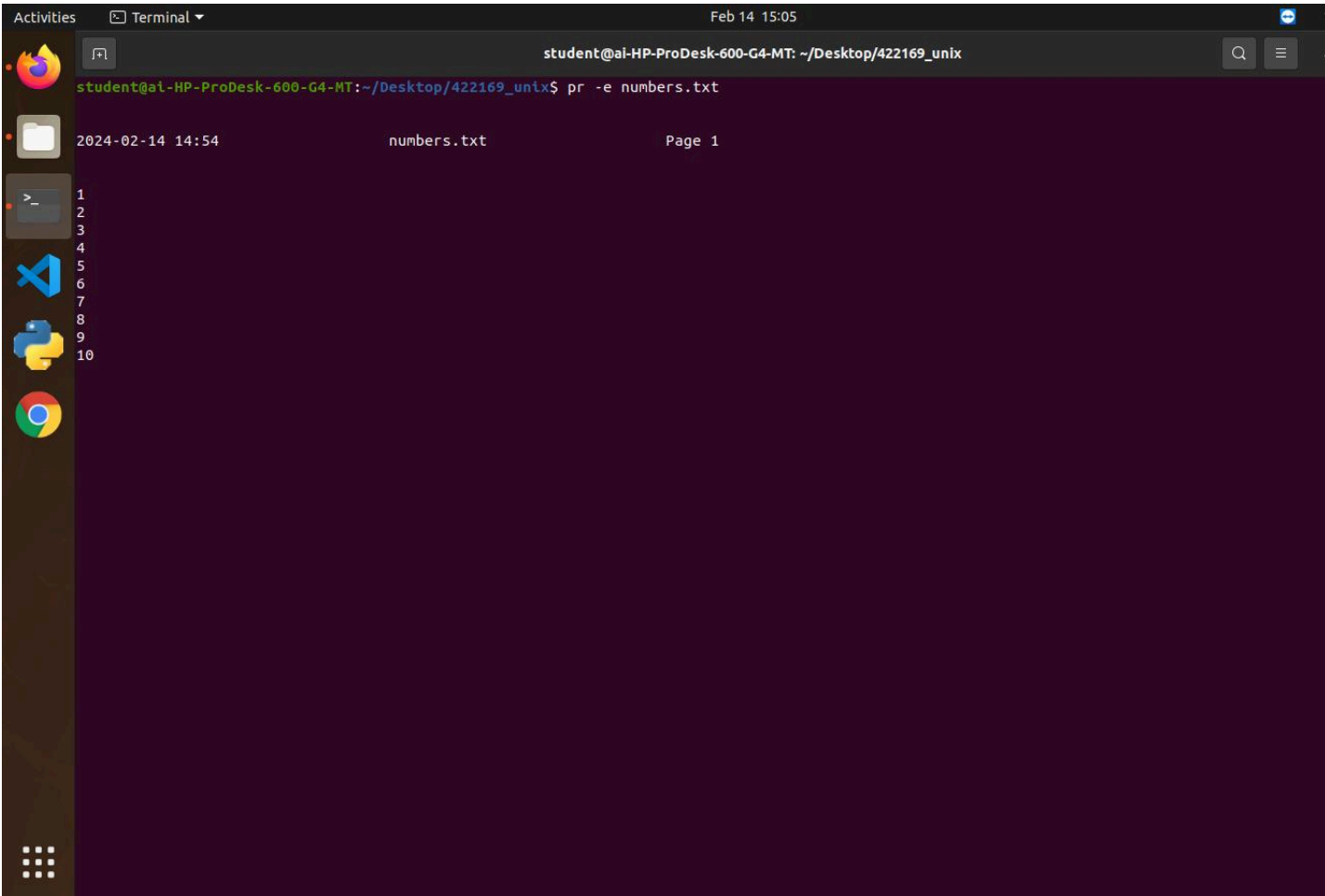
1
2
3
4
5
6
7
8
9
10

Activities Terminal Feb 14 15:03 student@ai-HP-ProDesk-600-G4-MT: ~/Desktop/422169_unix

```
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422169_unix$ pr -c numbers.txt
```

2024-02-14 14:54 numbers.txt Page 1

1
2
3
4
5
6
7
8
9
10





```
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422169_unix$ pr -t numbers.txt
```

```
1
2
3
4
5
6
7
8
9
10
```

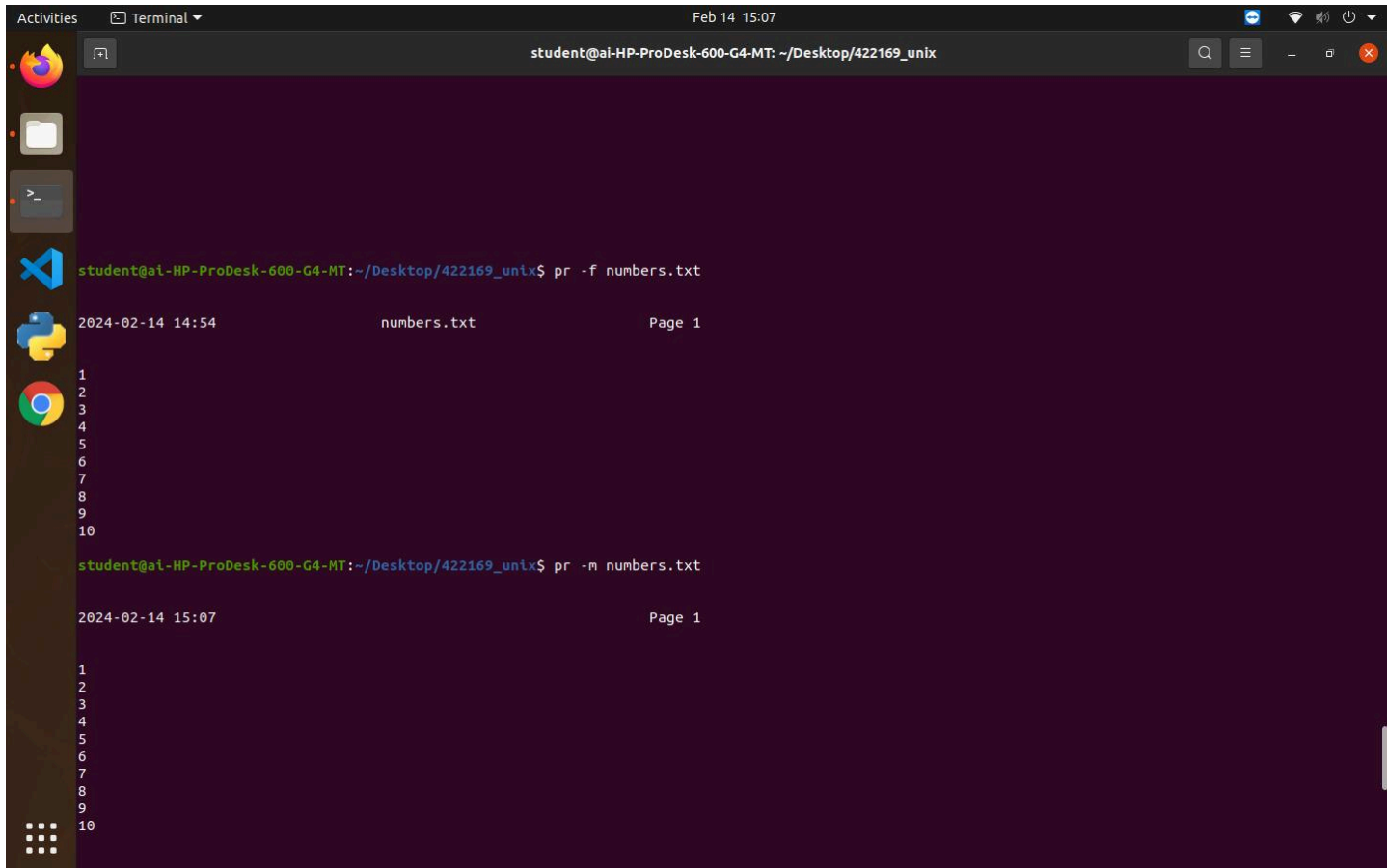
```
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422169_unix$ pr -d numbers.txt
```

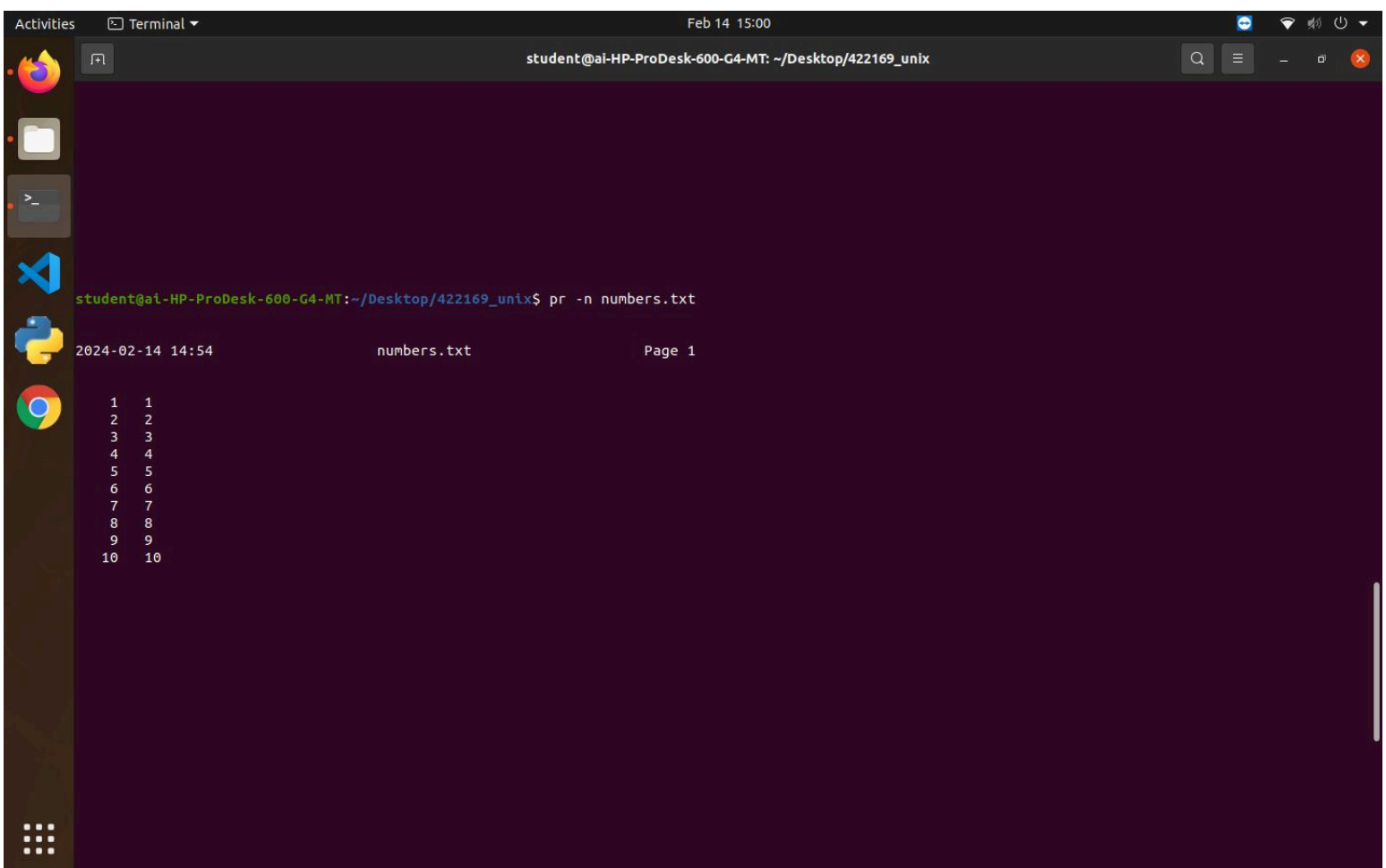
```
2024-02-14 14:54
```

```
numbers.txt
```

```
Page 1
```

```
1
2
3
4
5
6
7
8
9
10
```





```
student@ai-HP-ProDesk-600-G4-MT: ~/Desktop/422169_unix
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422169_unix$ pr -n numbers.txt
2024-02-14 14:54          numbers.txt          Page 1
1      1
2      2
3      3
4      4
5      5
6      6
7      7
8      8
9      9
10     10
```

3) head command


```
Activities Terminal Feb 14 15:37
student@ai-HP-ProDesk-600-G4-MT: ~/Desktop/422169_unix
student@ai-HP-ProDesk-600-G4-MT: ~/Desktop/422169_unix
student@ai-HP-ProDesk-600-G4-MT: ~/Desktop/422169_unix$ head -n 5 states.txt
Andhra Pradesh
Arunachal Pradesh
Assam
Bihar
Chhattisgarh
student@ai-HP-ProDesk-600-G4-MT: ~/Desktop/422169_unix$ head -c 6 states.txt
Andhrastudent@ai-HP-ProDesk-600-G4-MT: ~/Desktop/422169_unix$ head -v states.txt
==> states.txt <==
Andhra Pradesh
Arunachal Pradesh
Assam
Bihar
Chhattisgarh
Goa
Gujarat
Haryana
Himachal Pradesh
Jammu and Kashmir
student@ai-HP-ProDesk-600-G4-MT: ~/Desktop/422169_unix$ head -n 20 states.txt |tail -10
Jharkhand
Karnataka
Kerala
Madhya Pradesh
Maharashtra
Manipur
Meghalaya
Mizoram
Nagaland
Odisha
student@ai-HP-ProDesk-600-G4-MT: ~/Desktop/422169_unix$ head --help
Usage: head [OPTION]... [FILE]...
Print the first 10 lines of each FILE to standard output.
With more than one FILE, precede each with a header giving the file name.

With no FILE, or when FILE is -, read standard input.

Mandatory arguments to long options are mandatory for short options too.
-c, --bytes=[-]NUM      print the first NUM bytes of each file;
                        with the leading '-', print all but the last
                        NUM bytes of each file
-n, --lines=[-]NUM      print the first NUM lines instead of the first 10;
                        with the leading '-', print all but the last
                        NUM lines of each file
```

```
Activities Terminal Feb 14 15:37
student@ai-HP-ProDesk-600-G4-MT: ~/Desktop/422169_unix
student@ai-HP-ProDesk-600-G4-MT: ~/Desktop/422169_unix
or available locally via: info '(coreutils) head invocation'
student@ai-HP-ProDesk-600-G4-MT: ~/Desktop/422169_unix$ head -z states.txt
Andhra Pradesh
Arunachal Pradesh
Assam
Bihar
Chhattisgarh
Goa
Gujarat
Haryana
Himachal Pradesh
Jammu and Kashmir
Jharkhand
Karnataka
Kerala
Madhya Pradesh
Maharashtra
Manipur
Meghalaya
Mizoram
Nagaland
Odisha
Punjab
Rajasthan
Sikkim
Tamil Nadu
Telangana
Tripura
Uttar Pradesh
Uttarakhand
West Bengal
student@ai-HP-ProDesk-600-G4-MT: ~/Desktop/422169_unix$ head -q states.txt
Andhra Pradesh
Arunachal Pradesh
Assam
Bihar
Chhattisgarh
Goa
Gujarat
Haryana
Himachal Pradesh
Jammu and Kashmir
student@ai-HP-ProDesk-600-G4-MT: ~/Desktop/422169_unix$
```

4)Tail command

```
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422169_unix$ tail states.txt
Odisha
Punjab
Rajasthan
Sikkim
Tamil Nadu
Telangana
Tripura
Uttar Pradesh
Uttarakhand
West Bengal
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422169_unix$ tail -n 3 states.txt
Uttar Pradesh
Uttarakhand
West Bengal
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422169_unix$ tail -c 4 states.txt
gal
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422169_unix$ tail states.txt -q
Odisha
Punjab
Rajasthan
Sikkim
Tamil Nadu
Telangana
Tripura
Uttar Pradesh
Uttarakhand
West Bengal
```

```

West Bengal
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422169_unix$ tail -v states.txt
==> states.txt <==
Odisha
Punjab
Rajasthan
Sikkim
Tamil Nadu
Telangana
Tripura
Uttar Pradesh
Uttarakhand
West Bengal
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422169_unix$ tail -c +263 file.txt
grams.

```

5)cut command .

```

student@ai-HP-ProDesk-600-G4-MT: ~/Desktop/422169_unix
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422169_unix$ cut -b 1,2,3 states.txt
And
Aru
Ass
Bih
Chh
Goa
Guj
Har
Him
Jam
Jha
Kar
Ker
Mad
Mah
Man
Meg
Miz
Nag
Odi
Pun
Raj
Sik
Tam
Tel
Tri
Utt
Utt
Wes
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422169_unix$ cut -b 1,3,5,-7 states.txt
Andhra
Arunach
Assam
Bihar
Chhatti
Goa
Gujarat
Haryana
Himacha
Jammu a
Jharkha
Karnata
Kerala

```

```
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422169_unix$ cut --complement -c 5 states.txt
Andha Pradesh
Arunchal Pradesh
Assa
Biha
Chhatisgarh
Goa
Gujaat
Haryna
Himahal Pradesh
Jamm and Kashmir
Jharhand
Karntaka
Keraa
Madha Pradesh
Mahaashtra
Maniur
Meghlaya
Mizoam
Nagaand
Odisa
Punjb
Rajathan
Sikkm
Tami Nadu
Telagana
Tripura
Utta Pradesh
Uttaakhand
WestBengal
```

```
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422169_unix$ cut -d " " -f 1,2 states.txt --output-delimiter="%"
Andhra%Pradesh
Arunachal%Pradesh
Assam
Bihar
Chhattisgarh
Goa
Gujarat
Haryana
Himachal%Pradesh
Jammu%and
Jharkhand
Karnataka
Kerala
Madhya%Pradesh
Maharashtra
Manipur
Meghalaya
Mizoram
Nagaland
Odisha
Punjab
Rajasthan
Sikkim
Tamil%Nadu
Telangana
Tripura
Uttar%Pradesh
Uttarakhand
West%Bengal
```

```
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422169_unix$ cut --complement -c 5 states.txt
Andha Pradesh
Arunchal Pradesh
Assa
Biha
Chhatisgarh
Goa
Gujaat
Haryna
Himahal Pradesh
Jamm and Kashmir
Jharhand
Karntaka
Keraa
Madha Pradesh
Mahaashtra
Maniur
Meghlaya
Mizoam
Nagaand
Odisa
Punjb
Rajathan
Sikkm
Tami Nadu
Telagana
Tripra
Utta Pradesh
Uttaakhand
WestBengal
```

```
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422169_unix$ cut -d " " -f 1 states.txt
Andhra
Arunachal
Assam
Bihar
Chhattisgarh
Goa
Gujarat
Haryana
Himachal
Jammu
Jharkhand
Karnataka
Kerala
Madhya
Maharashtra
Manipur
Meghalaya
Mizoram
Nagaland
Odisha
Punjab
Rajasthan
Sikkim
Tamil
Telangana
Tripura
Uttar
Uttarakhand
West
```

```
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422169_unix$ cut -c 1- states.txt
Andhra Pradesh
Arunachal Pradesh
Assam
Bihar
Chhattisgarh
Goa
Gujarat
Haryana
Himachal Pradesh
Jammu and Kashmir
Jharkhand
Karnataka
Kerala
Madhya Pradesh
Maharashtra
Manipur
Meghalaya
Mizoram
Nagaland
Odisha
Punjab
Rajasthan
Sikkim
Tamil Nadu
Telangana
Tripura
Uttar Pradesh
Uttarakhand
West Bengal
```

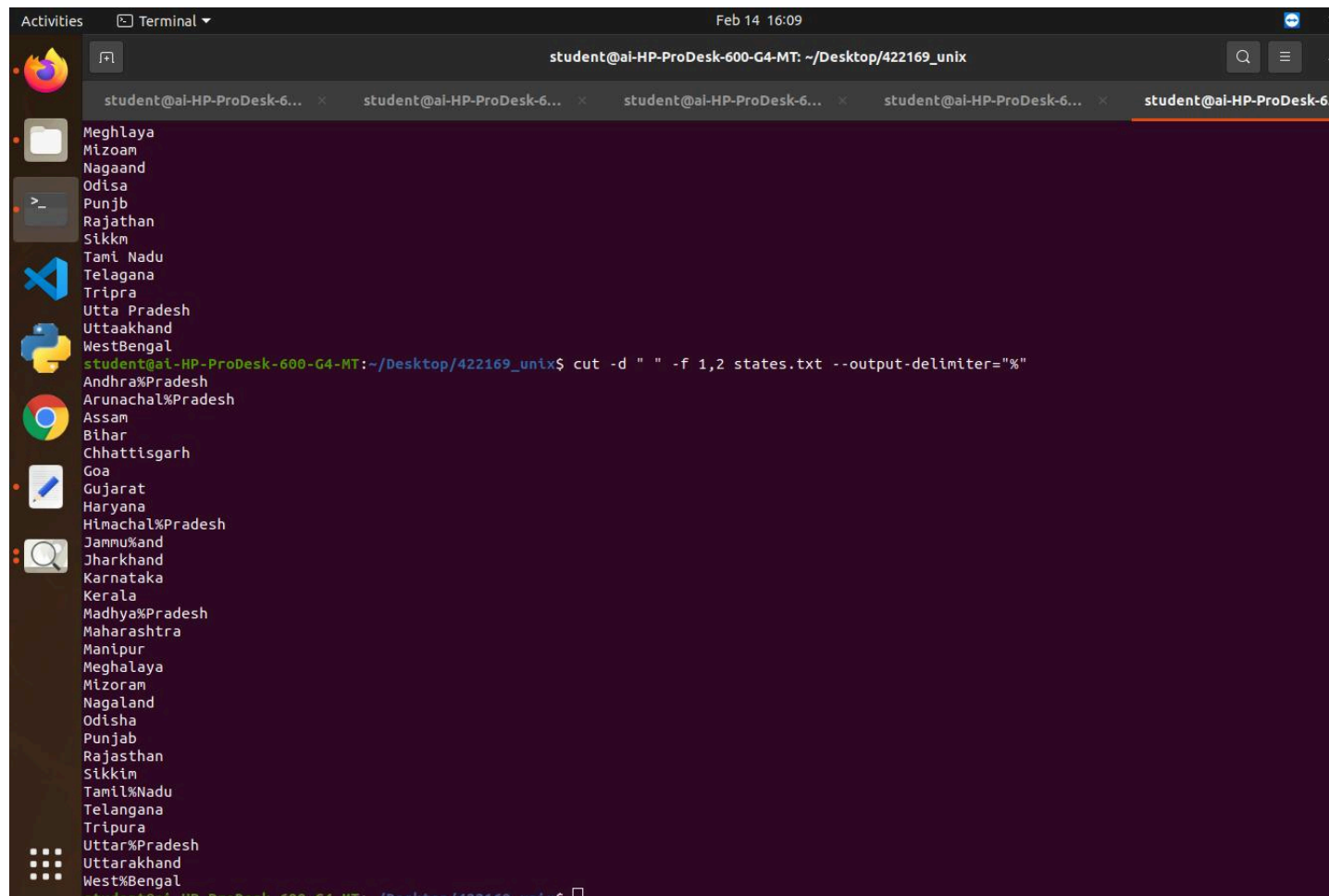


```
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422169_unix$ cut -c 2,5,7 states.txt
```

```
nr  
rah  
sm  
ir  
hti  
o  
urt  
aaa  
ica  
aua  
hka  
aaa  
el  
ay  
ars  
apr  
eaa  
irm  
aln  
dh  
ua  
ash  
ii  
alN  
ena  
rua  
trP  
trk  
e e
```

```
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422169_unix$ cut -b 1,3,5,-7 states.txt
Andhra
Arunach
Assam
Bihar
Chhatti
Goa
Gujarat
Haryana
Himacha
Jammu a
Jharkha
Karnata
Kerala
Madhya
Maharas
Manipur
Meghala
Mizoram
Nagalan
Odisha
Punjab
Rajasth
Sikkim
Tamil N
Telanga
Tripura
Uttar P
Uttarak
West Be
```

```
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422169_unix$ cut -b 1,2,3 states.txt
And
Aru
Ass
Bih
Chh
Goa
Guj
Har
Him
Jam
Jha
Kar
Ker
Mad
Mah
Man
Meg
Miz
Nag
Odi
Pun
Raj
Sik
Tam
Tel
Tri
Utt
Utt
Wes
```

The screenshot shows a Linux terminal window with a dark purple background. On the left side, there is a vertical list of Indian states: Meghalaya, Mizoram, Nagaland, Odisha, Punjab, Rajasthan, Sikkim, Tamil Nadu, Telangana, Tripura, Uttarakhand, Uttar Pradesh, West Bengal, Andhra Pradesh, Arunachal Pradesh, Assam, Bihar, Chhattisgarh, Goa, Gujarat, Haryana, Himachal Pradesh, Jammu and Kashmir, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Manipur, Meghalaya, Mizoram, Nagaland, Odisha, Punjab, Rajasthan, Sikkim, Tamil Nadu, Telangana, Tripura, Uttar Pradesh, Uttarakhand, and West Bengal. The terminal window title is "student@ai-HP-ProDesk-600-G4-MT: ~/Desktop/422169_unix". The command being executed is `cut -d " " -f 1,2 states.txt --output-delimiter=" "`. The output of the command is a list of states separated by spaces, which is visible on the right side of the terminal window.

```
student@ai-HP-ProDesk-600-G4-MT: ~/Desktop/422169_unix
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422169_unix$ cut -d " " -f 1,2 states.txt --output-delimiter=" "
```

6) paste command

```
Activities Terminal Feb 14 16:18
student@ai-HP-ProDesk-600-G4-MT: ~/Desktop/422169_unix
student@ai-HP-ProDesk-600-G4-MT: ~/Desktop/422169_unix
student@ai-HP-ProDesk-600-G4-MT: ~/Desktop/422169_unix$ paste numbers.txt states.txt
1 Andhra Pradesh
2 Arunachal Pradesh
3 Assam
4 Bihar
5 Chhattisgarh
6 Goa
7 Gujarat
8 Haryana
9 Himachal Pradesh
10 Jammu and Kashmir
Jharkhand
Karnataka
Kerala
Madhya Pradesh
Maharashtra
Manipur
Meghalaya
Mizoram
Nagaland
Odisha
Punjab
Rajasthan
Sikkim
Tamil Nadu
Telangana
Tripura
Uttar Pradesh
Uttarakhand
West Bengal
student@ai-HP-ProDesk-600-G4-MT: ~/Desktop/422169_unix$ paste -s numbers.txt states.txt
1 2 3 4 5 6 7 8 9 10
Andhra Pradesh Arunachal Pradesh Assam Bihar Chhattisgarh Goa Gujarat Haryana Himachal Pradesh Jammu and Kashmir
and Karnataka Kerala Madhya Pradesh Maharashtra Manipur Meghalaya Mizoram Nagaland Odisha Punjab Rajasthan
Tamil Nadu Telangana Tripura Uttar Pradesh Uttarakhand West Bengal
student@ai-HP-ProDesk-600-G4-MT: ~/Desktop/422169_unix$ paste -s -d ":" numbers.txt states.txt
1:2:3:4:5:6:7:8:9:10
Andhra Pradesh:Arunachal Pradesh:Assam:Bihar:Chhattisgarh:Goa:Gujarat:Haryana:Himachal Pradesh:Jammu and Kashmir:Jharkhand:Karnataka:Kerala:
desh:Maharashtra:Manipur:Meghalaya:Mizoram:Nagaland:Odisha:Punjab:Rajasthan:Sikkim:Tamil Nadu:Telangana:Tripura:Uttar Pradesh:Uttarakhand:Wes
student@ai-HP-ProDesk-600-G4-MT: ~/Desktop/422169_unix$ paste -d "|" numbers.txt states.txt
1|Andhra Pradesh
2|Arunachal Pradesh
3|Assam
4|Bihar
```

```
Activities Terminal Feb 14 16:18
student@ai-HP-ProDesk-600-G4-MT: ~/Desktop/422169_unix
student@ai-HP-ProDesk-600-G4-MT: ~/Desktop/422169_unix
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422169_unix$ paste numbers.txt states.txt
1 Andhra Pradesh
2 Arunachal Pradesh
3 Assam
4 Bihar
5 Chhattisgarh
6 Goa
7 Gujarat
8 Haryana
9 Himachal Pradesh
10 Jammu and Kashmir
Jharkhand
Karnataka
Kerala
Madhya Pradesh
Maharashtra
Manipur
Meghalaya
Mizoram
Nagaland
Odisha
Punjab
Rajasthan
Sikkim
Tamil Nadu
Telangana
Tripura
Uttar Pradesh
Uttarakhand
West Bengal
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422169_unix$ paste -s numbers.txt states.txt
1 2 3 4 5 6 7 8 9 10
Andhra Pradesh Arunachal Pradesh Assam Bihar Chhattisgarh Goa Gujarat Haryana Himachal Pradesh Jammu and Kashmir
and Karnataka Kerala Madhya Pradesh Maharashtra Manipur Meghalaya Mizoram Nagaland Odisha Punjab Rajasthan
Tamil Nadu Telangana Tripura Uttar Pradesh Uttarakhand West Bengal
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422169_unix$ paste -s -d ":" numbers.txt states.txt
1:2:3:4:5:6:7:8:9:10
Andhra Pradesh:Arunachal Pradesh:Assam:Bihar:Chhattisgarh:Goa:Gujarat:Haryana:Himachal Pradesh:Jammu and Kashmir:Jharkhand:Karnataka:Kerala:
desh:Maharashtra:Manipur:Meghalaya:Mizoram:Nagaland:Odisha:Punjab:Rajasthan:Sikkim:Tamil Nadu:Telangana:Tripura:Uttar Pradesh:Uttarakhand:Wes
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422169_unix$ paste -d "|" numbers.txt states.txt
1|Andhra Pradesh
2|Arunachal Pradesh
3|Assam
4|Bihar
```

7) sort command

Activities Terminal Feb 14 16:25

student@ai-HP-ProDesk-600-G4-MT: ~/Desktop/422169_unix

student@ai-HP-ProDesk-600-G4-MT... x student@ai-HP-ProDesk-600-G4-MT... x student@ai-HP-ProDesk-600-G4-MT... x student@ai-HP-ProDesk-600-G4-MT...

```
Jammu and Kashmir
Himachal Pradesh
Haryana
Gujarat
Goa
Chhattisgarh
Bihar
Assam
Arunachal Pradesh
Andhra Pradesh
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422169_unix$ sort -k3 states.txt
Andhra Pradesh
Arunachal Pradesh
Assam
Bihar
Chhattisgarh
Goa
Gujarat
Haryana
Himachal Pradesh
Jharkhand
Karnataka
Kerala
Madhya Pradesh
Maharashtra
Manipur
Meghalaya
Mizoram
Nagaland
Odisha
Punjab
Rajasthan
Sikkim
Tamil Nadu
Telangana
Tripura
Uttarakhand
Uttar Pradesh
West Bengal
Jammu and Kashmir
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422169_unix$ sort --help
Usage: sort [OPTION]... [FILE]...
       or: sort [OPTION]... --files0-from=F
       Write sorted representation of all FILE(s) to standard output
```

```
Activities Terminal Feb 14 16:24
student@ai-HP-ProDesk-600-G4-MT: ~/Desktop/422169_unix
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422169_unix$ sort states.txt
Andhra Pradesh
Arunachal Pradesh
Assam
Bihar
Chhattisgarh
Goa
Gujarat
Haryana
Himachal Pradesh
Jammu and Kashmir
Jharkhand
Karnataka
Kerala
Madhya Pradesh
Maharashtra
Manipur
Meghalaya
Mizoram
Nagaland
Odisha
Punjab
Rajasthan
Sikkim
Tamil Nadu
Telangana
Tripura
Uttarakhand
Uttar Pradesh
West Bengal
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422169_unix$ sort -r states.txt
West Bengal
Uttar Pradesh
Uttarakhand
Tripura
Telangana
Tamil Nadu
Sikkim
Rajasthan
Punjab
Odisha
Nagaland
Mizoram
Meghalaya
```

```
Activities Terminal Feb 14 16:43
student@ai-HP-ProDesk-600-G4-MT: ~/Desktop/422169_unix
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422169_unix$ sort -c states.txt
sort: states.txt:30: disorder: Uttarakhand
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422169_unix$ sort -R states.txt
Punjab
Rajasthan
Sikkim
Tamil Nadu
Telangana
Tripura
Uttarakhand
Uttar Pradesh
Haryana
Manipur
Odisha
Kerala
Karnataka
Gujarat
Uttarakhand
Goa
Bihar
Chhattisgarh
Arunachal Pradesh
Himachal Pradesh
Nagaland
Goa
Goa
Punjab
Meghalaya
Telangana
Tamil Nadu
Assam
Sikkim
Jammu and Kashmir
Rajasthan
Maharashtra
Madhya Pradesh
Uttar Pradesh
Jharkhand
Mizoram
Tripura
Andhra Pradesh
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422169_unix$
```

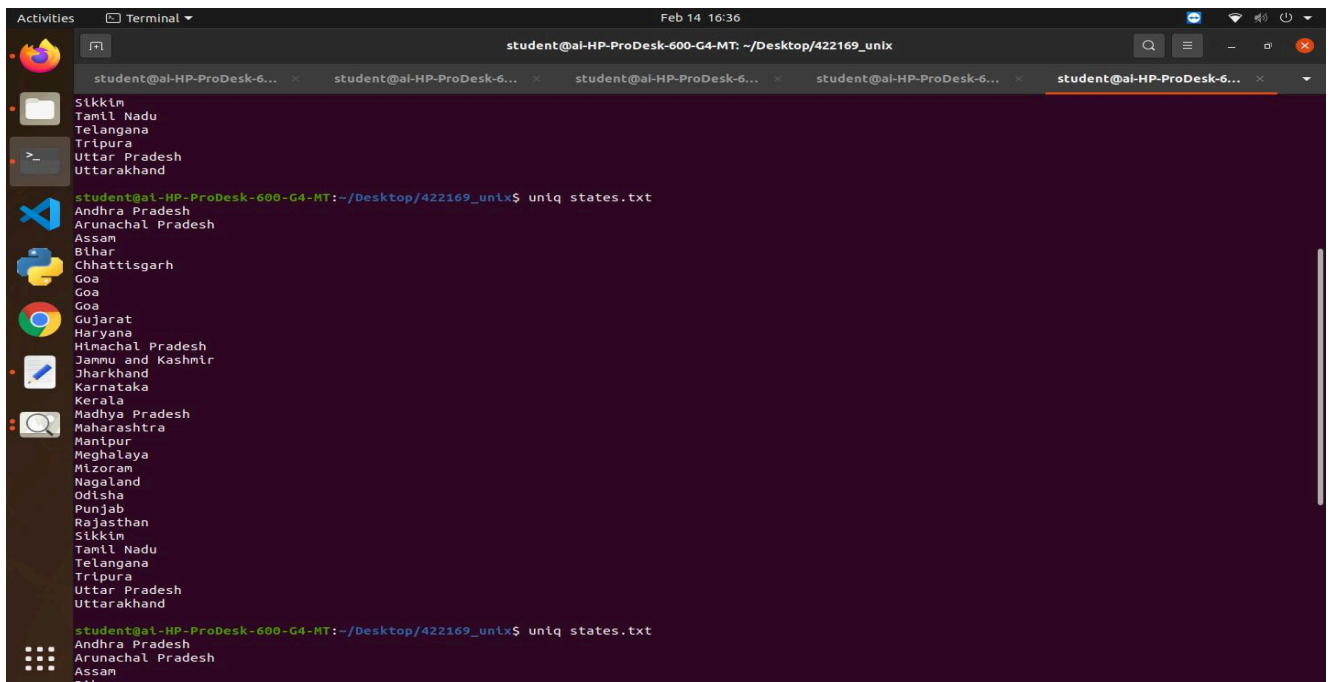
```
Activities Terminal Feb 14 16:43 student@al-HP-ProDesk-600-G4-MT: ~/Desktop/422169_unix
student@al-HP-ProDesk-600-G4-MT:~/Desktop/422169_unix$ sort -u states.txt
Uttarakhand
Uttar Pradesh
Andhra Pradesh
Arunachal Pradesh
Assam
Bihar
Chhattisgarh
Goa
Goa
Gujarat
Haryana
Himachal Pradesh
Jammu and Kashmir
Jharkhand
Karnataka
Kerala
Madhya Pradesh
Maharashtra
Manipur
Meghalaya
Mizoram
Nagaland
Odisha
Punjab
Rajasthan
Sikkim
Tamil Nadu
Telangana
Tripura
Uttarakhand
Uttar Pradesh
student@al-HP-ProDesk-600-G4-MT:~/Desktop/422169_unix$ sort -c states.txt
sort: states.txt:30: disorder: Uttarakhand
student@al-HP-ProDesk-600-G4-MT:~/Desktop/422169_unix$ sort -R states.txt
Haryana
Manipur
Odisha
Kerala
Karnataka
Gujarat
Uttarakhand
```

```
student@al-HP-ProDesk-600-G4-MT:~/Desktop/422169_unix$ sort -V states.txt
Andhra Pradesh
Arunachal Pradesh
Assam
Bihar
Chhattisgarh
Goa
Goa
Goa
Gujarat
Haryana
Himachal Pradesh
Jammu and Kashmir
Jharkhand
Karnataka
Kerala
Madhya Pradesh
Maharashtra
Manipur
Meghalaya
Mizoram
Nagaland
Odisha
Punjab
Rajasthan
Sikkim
Tamil Nadu
Telangana
Tripura
Uttarakhand
Uttar Pradesh
```



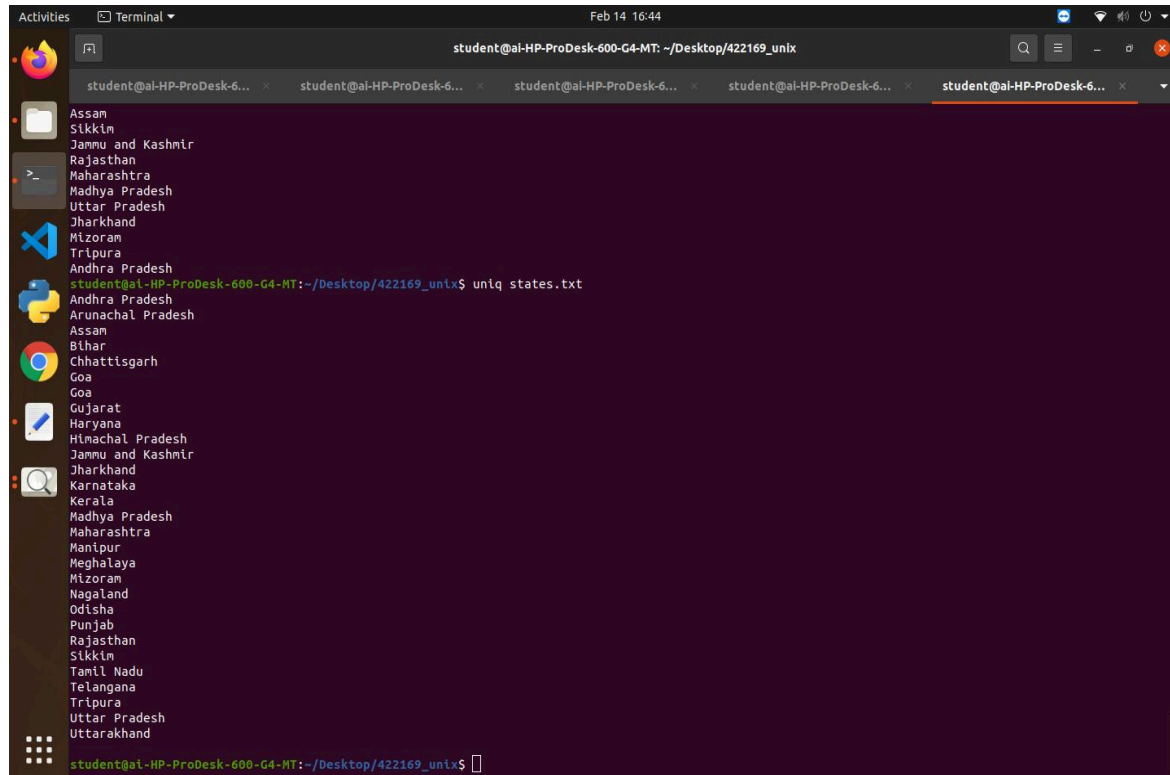
```
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422169_unix$ sort -i states.txt
Andhra Pradesh
Arunachal Pradesh
Assam
Bihar
Chhattisgarh
Goa
Goa
Goa
Gujarat
Haryana
Himachal Pradesh
Jammu and Kashmir
Jharkhand
Karnataka
Kerala
Madhya Pradesh
Maharashtra
Manipur
Meghalaya
Mizoram
Nagaland
Odisha
Punjab
Rajasthan
Sikkim
Tamil Nadu
Telangana
Tripura
Uttarakhand
Uttar Pradesh
```

8)uniq command



```
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422169_unix$ uniq states.txt
Andhra Pradesh
Arunachal Pradesh
Assam
Bihar
Chhattisgarh
Goa
Goa
Goa
Gujarat
Haryana
Himachal Pradesh
Jammu and Kashmir
Jharkhand
Karnataka
Kerala
Madhya Pradesh
Maharashtra
Manipur
Meghalaya
Mizoram
Nagaland
Odisha
Punjab
Rajasthan
Sikkim
Tamil Nadu
Telangana
Tripura
Uttar Pradesh
Uttarakhand
```

```
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422169_unix$ uniq -d states.txt
Goa
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422169_unix$ uniq -D states.txt
Goa
Goa
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422169_unix$
```



The screenshot shows a terminal window with the title bar "student@al-HP-ProDesk-600-G4-MT: ~/Desktop/422169_unlx". The terminal displays the output of the command `uniq states.txt`. The output is a list of Indian states, with some states appearing multiple times. The states listed are: Assam, Sikkim, Jammu and Kashmir, Rajasthan, Maharashtra, Madhya Pradesh, Uttar Pradesh, Jharkhand, Mizoram, Tripura, Andhra Pradesh, Andhra Pradesh, Arunachal Pradesh, Assam, Bihar, Chhattisgarh, Goa, Goa, Gujarat, Haryana, Himachal Pradesh, Jammu and Kashmir, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Manipur, Meghalaya, Mizoram, Nagaland, Odisha, Punjab, Rajasthan, Sikkim, Tamil Nadu, Telangana, Tripura, Uttar Pradesh, and Uttarakhand. The terminal prompt is `student@al-HP-ProDesk-600-G4-MT:~/Desktop/422169_unlx$`.

```
student@al-HP-ProDesk-600-G4-MT:~/Desktop/422169_unlx$ uniq states.txt
Assam
Sikkim
Jammu and Kashmir
Rajasthan
Maharashtra
Madhya Pradesh
Uttar Pradesh
Jharkhand
Mizoram
Tripura
Andhra Pradesh
Andhra Pradesh
Arunachal Pradesh
Assam
Bihar
Chhattisgarh
Goa
Goa
Gujarat
Haryana
Himachal Pradesh
Jammu and Kashmir
Jharkhand
Karnataka
Kerala
Madhya Pradesh
Maharashtra
Manipur
Meghalaya
Mizoram
Nagaland
Odisha
Punjab
Rajasthan
Sikkim
Tamil Nadu
Telangana
Tripura
Uttar Pradesh
Uttarakhand
```

9) tr command

Activities Terminal Feb 14 16:39

student@ai-HP-ProDesk-600-G4-MT: ~/Desktop/422169_unix

student@ai-HP-ProDesk-600-G4-MT: ~/Desktop/422169_unix\$ cat states.txt | tr [a-z] [A-Z]

Uttar Pradesh
Uttarakhand

ANDHRA PRADESH
ARUNACHAL PRADESH
ASSAM
BIHAR
CHHATTISGARH
GOA .
GOA .
GUJARAT
HARYANA
HIMACHAL PRADESH
JAMMU AND KASHMIR
JHARKHAND
KARNATAKA
KERALA
MADHYA PRADESH
MAHARASHTRA
MANIPUR
MEGHALAYA
MIZORAM
NAGALAND
ODISHA
PUNJAB
RAJASTHAN
SIKKIM
TAMIL NADU
TELANGANA
TRIPURA
UTTAR PRADESH
UTTARAKHAND

student@ai-HP-ProDesk-600-G4-MT: ~/Desktop/422169_unix\$ cat states.txt | tr [:lower:] [:upper:]

ANDHRA PRADESH
ARUNACHAL PRADESH
ASSAM
BIHAR
CHHATTISGARH
GOA .
GOA .
GOA .

Activities Terminal Feb 14 16:39

student@ai-HP-ProDesk-600-G4-MT: ~/Desktop/422169_unix

student@ai-HP-ProDesk-600-G4-MT: ~/Desktop/422169_unix

ODISHA
PUNJAB
RAJASTHAN
SIKKIM
TAMIL NADU
TELANGANA
TRIPURA
UTTAR PRADESH
UTTARAKHAND

student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422169_unix\$ cat states.txt | tr [:lower:] [:upper:]

ANDHRA PRADESH
ARUNACHAL PRADESH
ASSAM
BIHAR
CHHATTISGARH
GOA
GOA
GOA.
GUJARAT
HARYANA
HIMACHAL PRADESH
JAMMU AND KASHMIR
JHARKHAND
KARNATAKA
KERALA
MADHYA PRADESH
MAHARASHTRA
MANIPUR
MEGHALAYA
MIZORAM
NAGALAND
ODISHA
PUNJAB
RAJASTHAN
SIKKIM
TAMIL NADU
TELANGANA
TRIPURA
UTTAR PRADESH
UTTARAKHAND

student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422169_unix\$ \$ tr "{}" "()" <states.txt > newfile.txt