

Experiment No. 8

Aim: Use simple and advanced filters: **pr**, **head**, **tail**, **cut**, **paste**, **sort**, **uniq**, **te**, **grep**, **sed**, **awk**.

1. pr command:

```
manish28@ubuntu:~/Desktop$ pr -t abc.txt
1
2
3
4
5
6
7
8
9
10
manish28@ubuntu:~/Desktop$
```

2. head command:

```
manish28@ubuntu:~/Desktop$ head jadhav.txt
Manish Jadhav
IT
Raigad
Maharashtra
Jai Shree Ram
Dwarka
Ayodhya
Jagannath Puri
Pali
Shivneri
manish28@ubuntu:~/Desktop$
```

- **head -n** (display n lines):

```
manish28@ubuntu:~/Desktop$ head -n 5 jadhav.txt
Manish Jadhav
IT
Raigad
Maharashtra
Jai Shree Ram
manish28@ubuntu:~/Desktop$
```

3. tail command:

```
manish28@ubuntu:~/Desktop$ tail jadhav.txt
Dwarka
Ayodhya
Jagannath Puri
Pali
Shivneri
Dasgaon
Mahad
Hastinapur
Kurukskhetra
Kedarnath
manish28@ubuntu:~/Desktop$
```

- **tail -v** (data from the specified file is always preceded by its file name.):

```
manish28@ubuntu:~/Desktop$ tail -v jadhav.txt
==> jadhav.txt <==
Dwarka
Ayodhya
Jagannath Puri
Pali
Shivneri
Dasgaon
Mahad
Hastinapur
Kurukskhetra
Kedarnath
manish28@ubuntu:~/Desktop$
```

4. cut command:

- cut -b (To extract the specific bytes without range):

```
manish28@ubuntu:~/Desktop$ cut -b 1,2,3 jadhav.txt
Man
IT
Rai
Mah
Jai
Dwa
Ayo
Jag
Pal
Shi
Das
Mah
Has
Kur
Ked
manish28@ubuntu:~/Desktop$
```

- cut -b (To extract the specific bytes with range):

```
manish28@ubuntu:~/Desktop$ cut -b 1-4,8-10 jadhav.txt
ManiJad
IT
Raig
Mahaatr
Jai ee
Dwar
Ayod
Jagath
Pali
Shivi
Dasg
Maha
Hastpur
Kuruhet
Kedath
manish28@ubuntu:~/Desktop$
```

5. paste command:

```
manish28@ubuntu:~/Desktop$ paste state capital
```

```
Maharashtra      Mumbai
```

```
Gujrat  Gandhinagar
```

```
karnataka      Bengaluru
```

```
kerala  Thiruvananthapuram
```

```
manish28@ubuntu:~/Desktop$
```

```
manish28@ubuntu:~/Desktop$ paste -d "|" state capital
```

```
Maharashtra|Mumbai
```

```
Gujrat|Gandhinagar
```

```
karnataka|Bengaluru
```

```
kerala|Thiruvananthapuram
```

```
manish28@ubuntu:~/Desktop$
```

6. sort command:

```
manish28@ubuntu:~/Desktop$ sort -r manish.txt
```

```
I am from Dasgaon.
```

```
I am 18 years old.
```

```
manish28@ubuntu:~/Desktop$ sort -n num.txt
```

```
9
```

```
28
```

```
40
```

```
50
```

```
80
```

```
100
```

```
manish28@ubuntu:~/Desktop$ sort -m manish.txt jadhav.txt
```

```
I am 18 years old.
```

```
I am from Dasgaon.
```

```
Manish Jadhav
```

```
manish28@ubuntu:~/Desktop$
```

7. uniq command:

```
manish28@ubuntu:~/Desktop$ uniq asch.txt
I am Manish

IT

manish28@ubuntu:~/Desktop$
```

- `uniq -c` (counts the number of duplicate line):

```
manish28@ubuntu:~/Desktop$ uniq -c asch.txt
  2 I am Manish
  1
  5 IT
  1
manish28@ubuntu:~/Desktop$
```

8. tr command:

```
manish28@ubuntu:~/Desktop$ cat state
Maharashtra
Gujrat
karnataka
keralamanish28@ubuntu:~/Desktop$
manish28@ubuntu:~/Desktop$ cat state | tr [a-z] [A-Z]
MAHARASHTRA
GUJRAT
KARNATAKA
KERALAMANish28@ubuntu:~/Desktop$
```

9. grep command:

```
manish28@ubuntu:~/Desktop$ grep -c "Manish Jadhav" manish.txt
1
manish28@ubuntu:~/Desktop$ grep -l "Manish Jadhav" *
jadhav.txt
manish.txt
manish28@ubuntu:~/Desktop$ grep -o "Manish" num.txt
Manish
Manish
Manish
Manish
Manish
Manish
Manish
manish28@ubuntu:~/Desktop$ grep -n "Manish" manish.txt jadhav.txt num.txt
manish.txt:1:Manish Jadhav
jadhav.txt:1:Manish Jadhav
num.txt:7:Manish
num.txt:9:Manish
num.txt:10:Manish
num.txt:11:Manish Manish Manish
num.txt:12:Manish
manish28@ubuntu:~/Desktop$
```

10. sed command:

- Counts line number:

```
manish28@ubuntu:~/Desktop$ sed '=' capital.txt
1
Mumbai
2
Gandhinagar
3
Bengaluru
4
Thiruvananthapuram
manish28@ubuntu:~/Desktop$
```

- Removes the line with specified word:

```
manish28@ubuntu:~/Desktop$ cat capital.txt | sed '/Mumbai/d'
Gandhinagar
Bengaluru
Thiruvananthapuram
manish28@ubuntu:~/Desktop$
```

11. awk command:

```
manish28@ubuntu:~/Desktop$ awk '{print}' manish.txt
Manish Jadhav
I am 18 years old.
I am from Dasgaon.

manish28@ubuntu:~/Desktop$ awk '/am/ {print}' manish.txt
I am 18 years old.
I am from Dasgaon.
manish28@ubuntu:~/Desktop$
```

Practical Performance (4)	Writeup & Oral (4)	Attendance (2)	Total (10)