

# Section : A Roll no : 422141

## 1)grep:

1>grep -c pattern filename~ this prints only a count of the lines that match the pattern(words,nums,charcs).

2>grep -h pattern filename ~ display the matched lines, but do not display the filenames . 3>grep -i pattern filename ~ ignores case for matching.

4>grep -n pattern filename ~ display the matched lines and their line numbers. 5>grep -v pattern filename ~ this prints out all the lines that do not matches the pattern.

```

[akshaya@Akshayas-MacBook-Pro ~ % cat > new.txt
unix lab
roll no: 422141
sectuon : A
unix lab
roll no: 422141
section: A
[akshaya@Akshayas-MacBook-Pro ~ % grep -c lines new.txt
0
[akshaya@Akshayas-MacBook-Pro ~ % grep -c lines file.txt
0
[akshaya@Akshayas-MacBook-Pro ~ % cat > newfile.txt
lines
lines
new lines
[akshaya@Akshayas-MacBook-Pro ~ % grep -c lines newfile.txt
3
[akshaya@Akshayas-MacBook-Pro ~ % grep -h lines newfile.txt
lines
lines
new lines
[akshaya@Akshayas-MacBook-Pro ~ % grep -i lines newfile.txt
lines
lines
new lines
[akshaya@Akshayas-MacBook-Pro ~ % grep -n lines newfile.txt
1:lines
2:lines
3:new lines
[akshaya@Akshayas-MacBook-Pro ~ % grep -v lines newfile.txt
[akshaya@Akshayas-MacBook-Pro ~ % cat >> newfile.txt
unix lab
os
[akshaya@Akshayas-MacBook-Pro ~ % grep -v lines newfile.txt
unix lab
os
[akshaya@Akshayas-MacBook-Pro ~ % █

```

## 2. uniq command:

1>uniq -c filename~ it tells how many times a line was repeated by displaying a number as a prefix with the line

2>uniq -d filename ~ it only prints the repeated lines and not the lines which aren't repeated

3>uniq -f N - ~ -skip fields(N) : it allows you to skip N fields (a field is a group of characters, delimited by whitespace) of a line before determining the uniqueness of a line

4>uniq -i - ~ -ignore case : By default, comparisons done are case sensitive but with option(i) case insensitive comparisons can be made

5>uniq -s N - ~ skip chars(N) : it doesn't compare the first N characters of each line while determining

uniqueness.this is like the -f option but it skips the individual characters rather than fields

6>uniq -u ~ -unique : it allows you to print only unique lines

7>uniq -z ~ -zero terminated: it will make a line end with 0 bytes(NULL),instead of a newline

8>uniq -w N ~ check chars(N) ~it only compares N characters in line x`

```
akshaya@Akshayas-MacBook-Pro: ~ % cd Desktop
akshaya@Akshayas-MacBook-Pro Desktop % cat > new2.txt
repeated line
repeated line
  this is a new line
  this is a new line
repeated line
created the new line that was not repeated
created the new line that was not repeated
add a new line
delete the previous line
1 repeated line
1 repeated line
2 this is a new line
1 repeated line
1 created the new line that was not repeated
1 created the new line that was not repeated
1 add a new line
1 delete the previous line
this is a new line
akshaya@Akshayas-MacBook-Pro Desktop % uniq -n new2.txt
uniq: illegal field skip value: N
akshaya@Akshayas-MacBook-Pro Desktop % uniq -f3 new2.txt
repeated line
  this is a new line
repeated line
created the new line that was not repeated
add a new line
delete the previous line
repeated line
repeated line
  this is a new line
repeated line
created the new line that was not repeated
created the new line that was not repeated
add a new line
delete the previous line
repeated line
repeated line
  this is a new line
repeated line
created the new line that was not repeated
created the new line that was not repeated
add a new line
akshaya@Akshayas-MacBook-Pro Desktop %
```

```
add a new line
delete the previous line
repeated line
repeated line
  this is a new line
repeated line
created the new line that was not repeated
created the new line that was not repeated
add a new line
delete the previous line
repeated line
repeated line
  this is a new line
repeated line
created the new line that was not repeated
created the new line that was not repeated
add a new line
akshaya@Akshayas-MacBook-Pro Desktop % uniq -f3 new2.txt
uniq: illegal field skip value: N
akshaya@Akshayas-MacBook-Pro Desktop % uniq -f3 new2.txt
repeated line
  this is a new line
repeated line
created the new line that was not repeated
created the new line that was not repeated
add a new line
delete the previous line
usage: uniq [-c] [-d] [-D] [-u] [-s] [-f] fields] [-s chars] [input [output]]
akshaya@Akshayas-MacBook-Pro Desktop % uniq -s 3 new2.txt
repeated line
  this is a new line
repeated line
created the new line that was not repeated
created the new line that was not repeated
add a new line
delete the previous line
akshaya@Akshayas-MacBook-Pro Desktop % uniq -s new2.txt
repeated line
repeated line
created the new line that was not repeated
created the new line that was not repeated
add a new line
delete the previous line
akshaya@Akshayas-MacBook-Pro Desktop % uniq -d new2.txt
repeated line
repeated line
created the new line that was not repeated
created the new line that was not repeated
add a new line
delete the previous line
akshaya@Akshayas-MacBook-Pro Desktop %
```

# 3)tr command





4>paste -s file1 file2 file3 AND paste -s -d ":" file1 file2 file3 ~ we can merge the file in sequentially manner using the -s option. It reads all the lines from a single file and merges all these lines into a single line with each line separated by tab . and these single lines are separated by newline.

5>cat file1 | paste - - (or) paste - - - < file~ the paste command can also be used to merge Nconsecutive lines from file into a single line.here N can be specified by specifying number hyphens(-) after paste.

6>cut -d " " -f 1 file1 | file2 file3 ~cut command is used with -f option for cutting out first field of state and output is pipelined with paste command having one filename and instead of second file name hyphen is specified (if hyphen is not specified the input from shell is not pasted)

7>cut -d " " -f 1 file1 | paste - file2 ~ ordering of pasting can be changed by altering the location of hyphen

output:

akshaya@Akshayas-MacBook-Pro ~ % clear

akshaya@Akshayas-MacBook-Pro ~ % cat > file6.txt a

b

c

d

e

f

g

h

akshaya@Akshayas-MacBook-Pro ~ % cat > file7.txt A

B

C

D

E

F

G

H%

akshaya@Akshayas-MacBook-Pro ~ % cat number cat: number: No such file or directory  
akshaya@Akshayas-MacBook-Pro ~ % cat > number 1

2

3

4

5

6

7

8%

akshaya@Akshayas-MacBook-Pro ~ % paste number file6.txtfile7.txt

1 a A

2 b B

3 c C

4 d D

5 e E

6 f F

7 g G

8 h H

akshaya@Akshayas-MacBook-Pro ~ % paste -d "|," number file6.txtfile7.txt

1|a,A

```
2|b,B
3|c,C
4|d,D
5|e,E
6|f,F
7|g,G
8|h,H
akshaya@Akshayas-MacBook-Pro ~ % paste -d "|," number file6.txtfile7.txt
```

```
1|a,A
2|b,B
3|c,C
4|d,D
5|e,E
6|f,F
7|g,G
8|h,H
akshaya@Akshayas-MacBook-Pro ~ % paste -s "|," number file6.txtfile7.txt
```

```
paste: |: No such file or directory
1 2 3 4 5 6 7 8a b c h
A ██████████ % akshaya@Akshayas-MacBook-Pro~%paste < file6.txt
usage: paste [-s] [-d delimiters] file ... akshaya@Akshayas-MacBook-Pro ~ % cat file7.txt | paste
usage: paste [-s] [-d delimiters] file ... akshaya@Akshayas-MacBook-Pro ~ % cat file7.txt
```

```
A
B
C
D
E
F
G
H %
```

```
akshaya@Akshayas-MacBook-Pro ~ % cat file7.txt | paste--A B
```

```
C D
E F
G H
akshaya@Akshayas-MacBook-Pro ~ % cat file7.txt | paste - - A B
```

```
C D
E F
G H
akshaya@Akshayas-MacBook-Pro ~ % cut -d " " -f 1 file7.txt | pastenumber
```

```
1
2
3
4
5
6
7
8
akshaya@Akshayas-MacBook-Pro ~ % cat file7.txt | paste - - A B
```

```
C D
E F
G H
akshaya@Akshayas-MacBook-Pro ~ %
```

## 7. head command:

- Displays the first few lines of a file. Command used: head filename
- Display a specific number of lines: Command used: head -n 10 filename

output:

G H

akshaya@Akshayas-MacBook-Pro ~ % cat file7.txt | paste - - A B

C D

E F

G H

akshaya@Akshayas-MacBook-Pro ~ % cut -d " " -f 1 file7.txt | pastenumber

1

2

3

4

5

6

7

8

akshaya@Akshayas-MacBook-Pro ~ % cat file7.txt | paste - - A B

C D

E F

G H

akshaya@Akshayas-MacBook-Pro ~ % lear

zsh: command not found: lear

akshaya@Akshayas-MacBook-Pro ~ % clear

akshaya@Akshayas-MacBook-Pro ~ % head file2.txt head: file2.txt: No such file or directory  
akshaya@Akshayas-MacBook-Pro ~ % head file6.txt a

b

c

d

e

f

g

h

akshaya@Akshayas-MacBook-Pro ~ % head new.txt unix lab

roll no: 422141

sectuon : A

unix lab

roll no: 422141

section: A

akshaya@Akshayas-MacBook-Pro ~ % head -n 2 new.txt unix lab

roll no: 422141

akshaya@Akshayas-MacBook-Pro ~ %



## 8.Tail

- Displays the last few lines of a file. Command used: tail filename
- Display a specific number of lines: Command used: tail -n 10 filename Follow the growth of a file (similar to tail -f): Command used: tail -f filename

output:

```
akshaya@Akshayas-MacBook-Pro ~ % head file2.txt head: file2.txt: No such file or directory
akshaya@Akshayas-MacBook-Pro ~ % head file6.txt a
```

```
b
c
d
e
f
g
h
```

```
akshaya@Akshayas-MacBook-Pro ~ % head new.txt unix lab
```

```
roll no: 422141
```

```
sectuon : A
```

```
unix lab
```

```
roll no: 422141
```

```
section: A
```

```
akshaya@Akshayas-MacBook-Pro ~ % head -n 2 new.txt unix lab
```

```
roll no: 422141
```

```
akshaya@Akshayas-MacBook-Pro ~ % clear
```

```
akshaya@Akshayas-MacBook-Pro ~ % tail new.txt unix lab
```

```
roll no: 422141
```

```
sectuon : A
```

```
unix lab
```

```
roll no: 422141
```

```
section: A
```

```
akshaya@Akshayas-MacBook-Pro ~ % tail -n 2 new.txt roll no: 422141
```

```
section: A
```

```
akshaya@Akshayas-MacBook-Pro ~ % tail -f new.txt unix lab
```

```
roll no: 422141
```

```
sectuon : A
```

```
unix lab
```

```
roll no: 422141
```

```
section: A
```

# 9.Sort

- Sort a file alphabetically: Command used: sort filename
- Sort a file numerically: Command used: sort -n filename
- Sort a file in reverse order: Command used: sort -r filename Sort a file and remove duplicate lines: Command used: sort -u filename

Sort a file based on a specific column (using space as the delimiter): Command used: sort -k filename

- Sort a file in a case-insensitive manner: Command used: sort -f filename
- Sort lines in memory for faster sorting: Command used: sort -S filename
- Sort based on the month abbreviation (e.g., Jan, Feb, Mar): Command used: sort -Mfilename

output:

Last login: Sun Feb 18 21:55:40 on ttys000 akshaya@Akshayas-MacBook-Pro ~ %

sort new.txt roll no: 422141

roll no: 422141

section: A

sectuon : A

unix lab

unix lab

akshaya@Akshayas-MacBook-Pro ~ % sort -n new.txt roll no: 422141

roll no: 422141

section: A

sectuon : A

unix lab

unix lab

akshaya@Akshayas-MacBook-Pro ~ % sort -r new.txt unix lab

unix lab

sectuon : A

section: A

roll no: 422141

roll no: 422141

akshaya@Akshayas-MacBook-Pro ~ % sort -u new.txt roll no: 422141

section: A

sectuon : A

unix lab

akshaya@Akshayas-MacBook-Pro ~ % sort -k new.txt sort: -k new.txt: Invalid argument

akshaya@Akshayas-MacBook-Pro ~ % sort -k 1 new.txt roll no: 422141

roll no: 422141

section: A

sectuon : A

unix lab

unix lab

akshaya@Akshayas-MacBook-Pro ~ % sort -k 10 new.txt roll no: 422141

roll no: 422141

section: A

sectuon : A

unix lab

unix lab

akshaya@Akshayas-MacBook-Pro ~ % sort -f new.txt roll no: 422141

roll no: 422141

section: A

sectuon : A

unix lab

unix lab

akshaya@Akshayas-MacBook-Pro ~ % sort -m new.txt unix lab

roll no: 422141

sectuon : A

unix lab

roll no: 422141

section: A