Section: A

Roll no : 422159

## 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.

```
(base) student@st-MP-ProDesk-600-G4-MT:-/Desktop/422159.unix/Assignment - 15 cat > file.txt
unix lab
roll no : 222159
section : A
val no : 222159
section : A)
coll no : 222159
section : A)
(base) student@st-MP-ProDesk-600-G4-MT:-/Desktop/422159.unix/Assignment - 15 grep -c lines file.txt
(base) student@st-MP-ProDesk-600-G4-MT:-/Desktop/422159.unix/Assignment - 15 grep -c lines file.txt
(base) student@st-MP-ProDesk-600-G4-MT:-/Desktop/422159.unix/Assignment - 15 grep -c lines newfile.txt
lines
colleged to the student@st-MP-ProDesk-600-G4-MT:-/Desktop/422159.unix/Assignment - 15 grep -c lines newfile.txt
(base) student@st-MP-ProDesk-600-G4-MT:-/Desktop/422159.unix/Assignment - 15 grep -c lines newfile.txt
(base) student@st-MP-ProDesk-600-G4-MT:-/Desktop/422159.unix/Assignment - 15 grep -c lines newfile.txt
(base) student@st-MP-ProDesk-600-G4-MT:-/Desktop/422159.unix/Assignment - 15 grep -v lines newfile.txt

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**Colleged to the student@st-MP-ProDesk-600-G4-MT:-/Desktop/422159.unix/Assignment - 15 grep -v lines newfile.txt
```

### 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 arent repeated

3>uniq -f N -  $\sim$  -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 -  $^{\sim}$  -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) ~iit only compares N characters in line

```
tose) studented. IP. Probesk-600-Cd-NT:-/Desktop/422159.unix/Assignment - 15 uniq -f1 file2.txt
uniq: Ki nundi number of fields to skip
(base) studentgit. IP. Probesk-600-Cd-NT:-/Desktop/422159.unix/Assignment - 15 uniq -f3 file2.txt
repeated line
this is a new line
this is a new line
dad a new line
(base) studentgit. IP. Probesk-600-Cd-NT:-/Desktop/422159.unix/Assignment - 15 uniq -i file2.txt
repeated line
repeated line
repeated the new line that was not repeated
add a new line
repeated the new line that was not repeated
add a new line
repeated the new line that was not repeated
add a new line
repeated the new line that was not repeated
add a new line
repeated the new line that was not repeated
add a new line
repeated line
repeated
```

# 3)tr command

1>cat filename | tr [a-z] [A-Z] ~ converts lower case characters to upper case characters
2>cat filename |tr [:lower:] [:upper:] ~ converts lower case characters to upper case characters
3>echo "sentence" | tr [:space:] '\t' ~ translates white-space characters to tabs
4>\$ tr "{}" "()" newfile.txt~ translates braces into parenthesis.

5>echo "sentence" | tr -s " " $^{\sim}$  to squeeze a sequence of repetitive characters using -s option

6>tr -s " " <<< "sentence" ~to squeeze a sequence of repetitive characters using -s option but using a string here

7>echo "sentence" | tr -d W~ to delete specified characters using -d option.

8>tr -d W <<< "sentence" ~ to delete specified characters using -d option using a string here.

9>echo "sentence containing digits" | tr -d [:digit:]~to remove all the digits from string.

10>tr -d [:digit:] <<< "sentence containing digits"  $\sim$  to remove all the digits from string .

11>echo "sentence containing digits" | tr -cd [:digit:]~complement the sets using -c option .

12>tr -cd [:digit:] <<< "sentence containing digits" ~complement the sets using -c option

# 4)pr command:

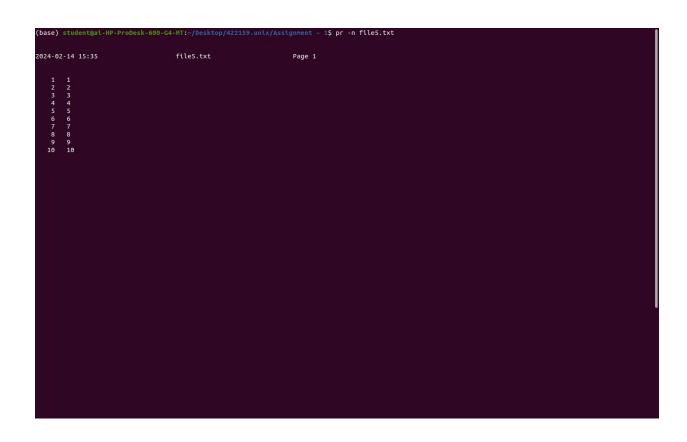
1>pr -k filename ~ we can print the content in k columns .

2>pr -d filename ~ to double paces input,reduces clutter -d option is used.

3>pr -n filename ~ to provide the number lines which helpps in debugging the code -n option is used .4>pr - -help ~it gives the detail of all options of pr.

5>pr - -version ~ to print the version number of command pr

#### 5>pr - -version ~ to print the version numbe



### 5)paste command:

1>paste file1 file2 file 3 ~ without any option paste merges the files in parallel. The paste command writes corresponding lines from the files with tab as a deliminator on the terminal .

2>paste -d "|" file1 file2 file3 ~ it prints even if any character is specified.

3>paste -d "|," file1 file2 file3 ~ it prints even multi characters are specified.

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 N consecutive 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 piipelined 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  $\sim$  ordering of pasting can be changed by altering the location of hyphen

### 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

### 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

```
(base) studential-IMP-Probesh-808-64-NT:-/Desktop/422159.unix/Assignment - 15 tall file2.txt
we were in the unix lab
Assignment
which is sten
problem to sten
```

### 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 -M filename