

ASSIGNEMENT-1

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SEC: A

Write all shell script for searching for various patterns using 1.

Grep

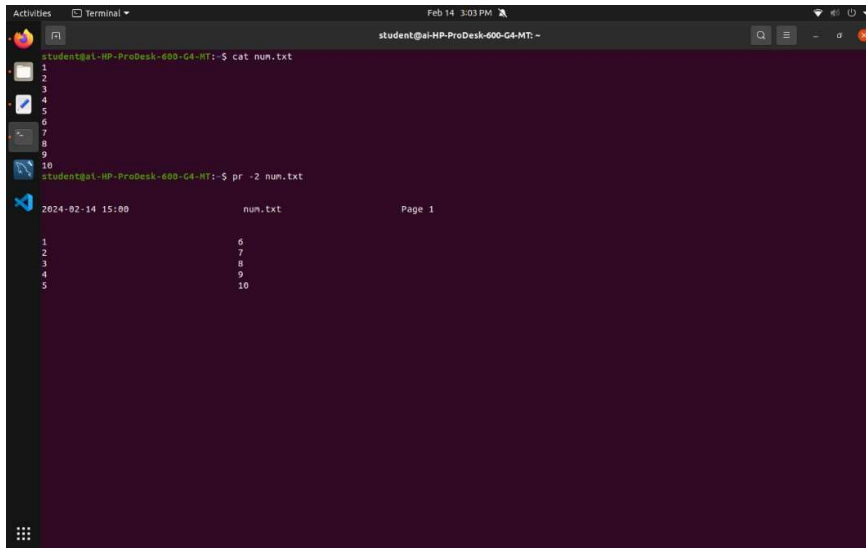
```
student@ai-HP-ProDesk-600-G4-MT:~$ cat grep.txt
This is the first paragraph bla bla bla
This is another line in the same paragraph bla bla
This is a third line bla bla

This is the second paragraph bla bla bla
Second line bla bla My keyword is here!
bla bla bla
bla

Hey, third paragraph bla bla bla!
bla bla

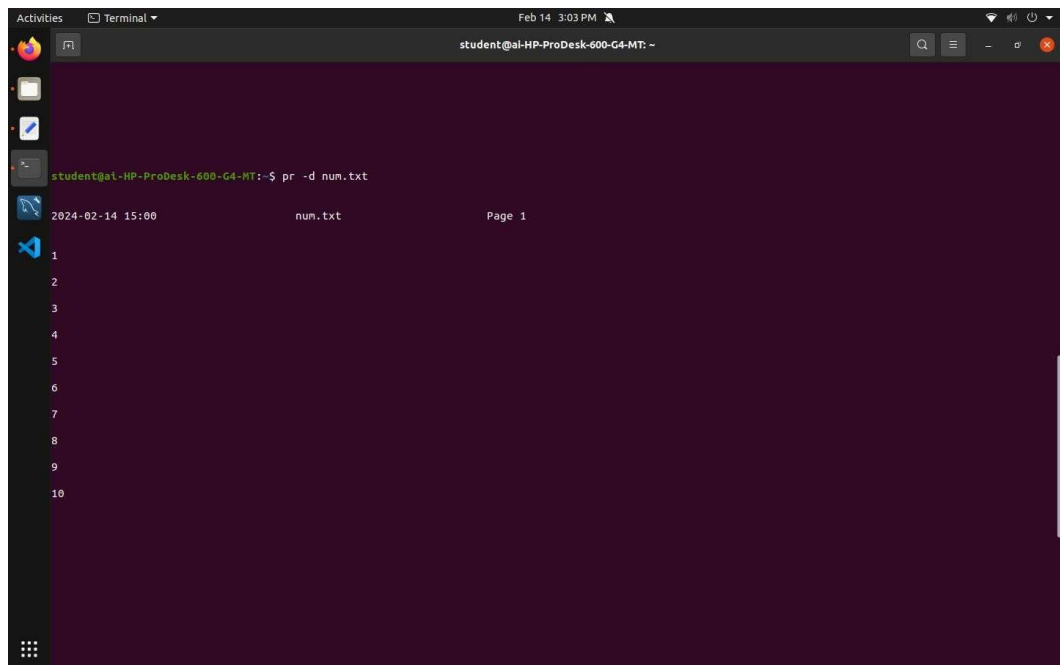
keyword keyword
keyword
Another line! bla
student@ai-HP-ProDesk-600-G4-MT:~$ grep -i "bla" grep.txt
This is the first paragraph bla bla bla
This is another line in the same paragraph bla bla
This is a third line bla bla
This is the second paragraph bla bla bla
Second line bla bla My keyword is here!
bla bla bla
bla
Hey, third paragraph bla bla bla!
bla bla
Another line! bla
student@ai-HP-ProDesk-600-G4-MT:~$ grep -c "bla" grep.txt
10
student@ai-HP-ProDesk-600-G4-MT:~$ grep -l "bla" *
grep: 422120: Is a directory
grep: 422139: Is a directory
grep: 622176: Is a directory
grep: 622204: Is a directory
grep.txt
grep: Lab: Is a directory
grep: snap: Is a directory
student@ai-HP-ProDesk-600-G4-MT:~$ grep -o "bla" grep.txt
bla
bla
bla
bla
bla
bla
bla
bla
bla
bla
bla
```

2. Pr



A terminal window titled 'student@ai-HP-ProDesk-600-G4-MT: ~' showing the execution of two commands. The first command is `cat nun.txt`, which displays the contents of the file 'nun.txt' as a single column of numbers 1 through 10. The second command is `pr -2 nun.txt`, which displays the same numbers in two columns, with the first column containing 1-5 and the second column containing 6-10. The terminal output is as follows:

```
student@ai-HP-ProDesk-600-G4-MT:~$ cat nun.txt
1
2
3
4
5
6
7
8
9
10
student@ai-HP-ProDesk-600-G4-MT:~$ pr -2 nun.txt
2024-02-14 15:00      nun.txt      Page 1
1          6
2          7
3          8
4          9
5         10
```



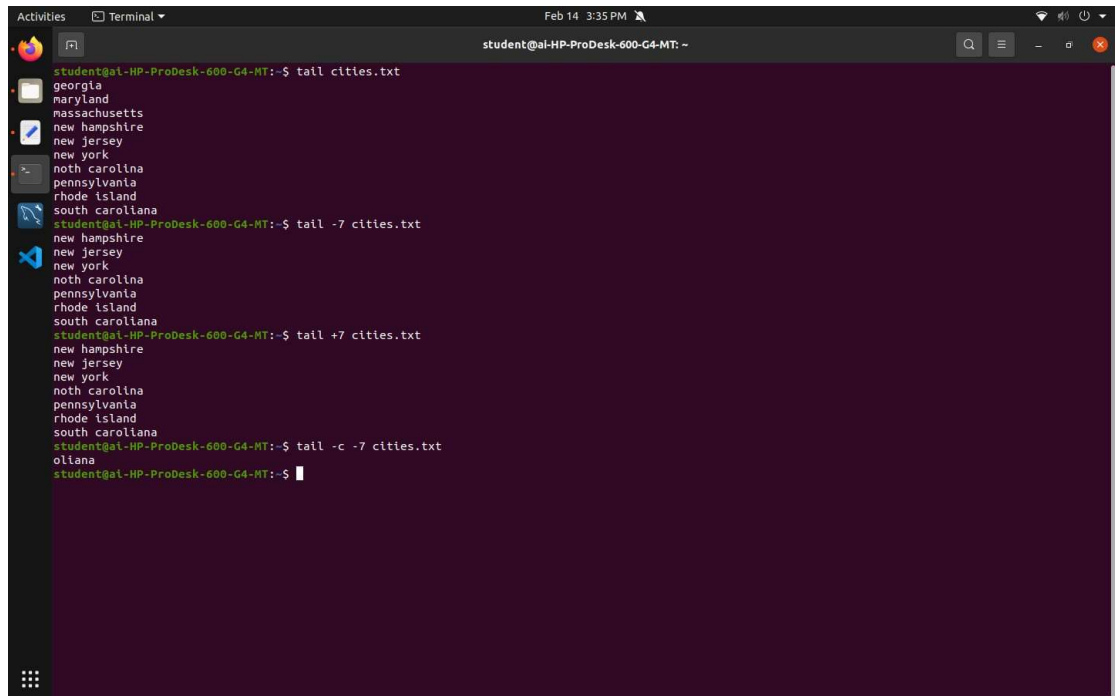
A terminal window titled 'student@ai-HP-ProDesk-600-G4-MT: ~' showing the execution of the command `pr -d nun.txt`. The output displays the numbers 1 through 10 in a single column. The terminal output is as follows:

```
student@ai-HP-ProDesk-600-G4-MT:~$ pr -d nun.txt
2024-02-14 15:00      nun.txt      Page 1
1
2
3
4
5
6
7
8
9
10
```

3. Head

```
Activities Terminal Feb 14 3:19 PM student@ai-HP-ProDesk-600-G4-MT: ~
student@ai-HP-ProDesk-600-G4-MT:~$ cat cities.txt
virginia
connecticut
delaware
georgia
maryland
massachusetts
new hampshire
new jersey
new york
noth carolina
pennsylvania
rhode island
south caroliana
student@ai-HP-ProDesk-600-G4-MT:~$ head cities.txt
virginia
connecticut
delaware
georgia
maryland
massachusetts
new hampshire
new jersey
new york
noth carolina
student@ai-HP-ProDesk-600-G4-MT:~$ head cities.txt num.txt
==> cities.txt <==
virginia
connecticut
delaware
georgia
maryland
massachusetts
new hampshire
new jersey
new york
noth carolina
==> num.txt <==
1
2
3
4
5
6
7
student@ai-HP-ProDesk-600-G4-MT:~$ head -q cities.txt num.txt
virginia
connecticut
delaware
georgia
maryland
massachusetts
new hampshire
new jersey
new york
noth carolina
1
2
3
4
5
6
7
8
9
10
student@ai-HP-ProDesk-600-G4-MT:~$
```

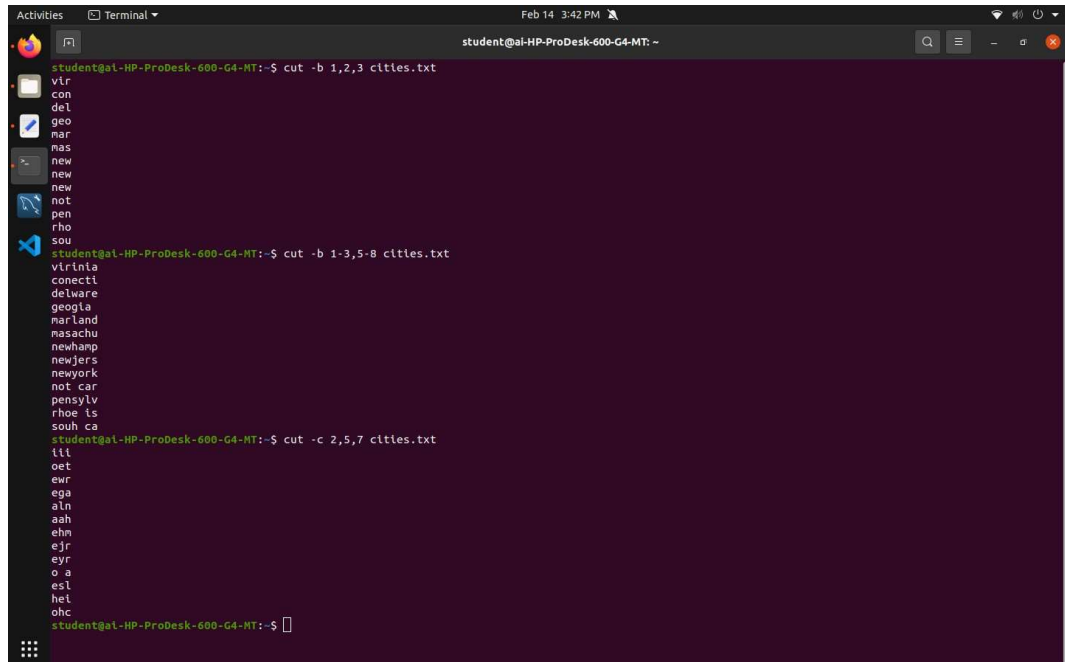
4. Tail



A terminal window titled "student@al-HP-ProDesk-600-G4-MT: ~" showing the execution of the `tail` command on a file named `cities.txt`. The terminal output displays the last seven lines of the file, which are state names: georgia, maryland, massachusetts, new hampshire, new jersey, new york, north carolina, pennsylvania, rhode island, south carolina, new hampshire, new jersey, new york, north carolina, pennsylvania, rhode island, south carolina. The user then runs `tail -7 cities.txt`, which outputs the same seven lines. Next, the user runs `tail +7 cities.txt`, which outputs the same seven lines. Finally, the user runs `tail -c -7 cities.txt`, which outputs the last seven characters of the file: oliaana.

```
student@al-HP-ProDesk-600-G4-MT:~$ tail cities.txt
georgia
maryland
massachusetts
new hampshire
new jersey
new york
north carolina
pennsylvania
rhode island
south carolina
new hampshire
new jersey
new york
north carolina
pennsylvania
rhode island
south carolina
student@al-HP-ProDesk-600-G4-MT:~$ tail -7 cities.txt
new hampshire
new jersey
new york
north carolina
pennsylvania
rhode island
south carolina
student@al-HP-ProDesk-600-G4-MT:~$ tail +7 cities.txt
new hampshire
new jersey
new york
north carolina
pennsylvania
rhode island
south carolina
student@al-HP-ProDesk-600-G4-MT:~$ tail -c -7 cities.txt
oliaana
student@al-HP-ProDesk-600-G4-MT:~$
```

5. Cut



A terminal window titled "student@al-HP-ProDesk-600-G4-MT: ~" showing the execution of the `cut` command on a file named `cities.txt`. The terminal output displays the first three characters of each line: vir, con, del, geo, mar, mas, new, new, not, pen, rho, sou. The user then runs `cut -b 1,3,5-8 cities.txt`, which outputs the first, third, fifth through eighth characters of each line: virginia, connecti, delaware, georgia, marland, masachu, newhamp, newjers, newyork, not car, pensylv, rhoe is, south ca. Finally, the user runs `cut -c 2,5,7 cities.txt`, which outputs the second, fifth, and seventh characters of each line: ill, oet, ewr, ega, aln, aah, ehv, ejr, eyr, o a, esl, hel, ohc.

```
student@al-HP-ProDesk-600-G4-MT:~$ cut -b 1,2,3 cities.txt
vir
con
del
geo
mar
mas
new
new
not
pen
rho
sou
student@al-HP-ProDesk-600-G4-MT:~$ cut -b 1,3,5-8 cities.txt
virginia
connecti
delaware
georgia
marland
masachu
newhamp
newjers
newyork
not car
pensylv
rhoe is
south ca
student@al-HP-ProDesk-600-G4-MT:~$ cut -c 2,5,7 cities.txt
ill
oet
ewr
ega
aln
aah
ehv
ejr
eyr
o a
esl
hel
ohc
student@al-HP-ProDesk-600-G4-MT:~$
```

6. Paste

```
Activities Terminal Feb 14 3:51 PM student@ai-HP-ProDesk-600-G4-MT: ~
student@ai-HP-ProDesk-600-G4-MT:~$ paste cities.txt
virginia
connecticut
delaware
georgia
maryland
massachusetts
new hampshire
new jersey
new york
noth carolina
pennsylvania
rhode island
south caroliana
student@ai-HP-ProDesk-600-G4-MT:~$ paste -d "|" num.txt cities.txt
1|virginia
2|connecticut
3|delaware
4|georgia
5|maryland
6|massachusetts
7|new hampshire
8|new jersey
9|new york
10|noth carolina
|pennsylvania
|rhode island
|south caroliana
student@ai-HP-ProDesk-600-G4-MT:~$ paste -s num.txt cities.txt
1      2      3      4      5      6      7      8      9      10
virginia connecticut delaware georgia maryland massachusetts new hampshire new jersey new york noth carolina p
ennsylvania rhode island south caroliana
student@ai-HP-ProDesk-600-G4-MT:~$
```

7. Sort

```
Activities Terminal Feb 14 3:59 PM student@ai-HP-ProDesk-600-G4-MT: ~
student@ai-HP-ProDesk-600-G4-MT:~$ cat cities.txt
virginia
connecticut
delaware
georgia
maryland
massachusetts
new hampshire
new jersey
new york
noth carolina
pennsylvania
rhode island
south caroliana
student@ai-HP-ProDesk-600-G4-MT:~$ sort cities.txt
connecticut
delaware
georgia
maryland
massachusetts
new hampshire
new jersey
new york
noth carolina
pennsylvania
rhode island
south caroliana
virginia
student@ai-HP-ProDesk-600-G4-MT:~$ sort -r cities.txt
virginia
south caroliana
rhode island
pennsylvania
noth carolina
new york
new jersey
new hampshire
massachusetts
maryland
georgia
delaware
connecticut
student@ai-HP-ProDesk-600-G4-MT:~$
```

8. Uniq

```
student@a1-HP-ProDesk-600-G4-MT:~$ cat cities.txt
virginia
connecticut
delaware
delaware
georgia
maryland
maryland
maryland
massachusetts
new hampshire
new jersey
new york
new york
1

student@a1-HP-ProDesk-600-G4-MT:~$ uniq cities.txt
virginia
connecticut
delaware
georgia
maryland
massachusetts
new hampshire
new jersey
new york
1

student@a1-HP-ProDesk-600-G4-MT:~$ uniq -c cities.txt
1 virginia
1 connecticut
2 delaware
1 georgia
3 maryland
1 massachusetts
1 new hampshire
1 new jersey
2 new york
1

student@a1-HP-ProDesk-600-G4-MT:~$ uniq -d cities.txt
delaware
maryland
new york

student@a1-HP-ProDesk-600-G4-MT:~$ uniq -u cities.txt
virginia
connecticut
georgia
massachusetts
new hampshire
new jersey

student@a1-HP-ProDesk-600-G4-MT:~$
```

9. Tr

```
Activities Terminal Feb 14 4:09 PM student@a1-HP-ProDesk-600-G4-MT: ~
student@a1-HP-ProDesk-600-G4-MT:~$ cat cities.txt
virginia
connecticut
delaware
georgia
maryland
massachusetts
new hampshire
new jersey
new york
north carolina
pennsylvania
rhode island
south carolina

student@a1-HP-ProDesk-600-G4-MT:~$ cat cities.txt | tr [a-z] [A-Z]
VIRGINIA
CONNECTICUT
DELAWARE
GEORGIA
MARYLAND
MASSACHUSETTS
NEW HAMPSHIRE
NEW JERSEY
NEW YORK
NORTH CAROLINA
PENNSYLVANIA
RHODE ISLAND
SOUTH CAROLINA

student@a1-HP-ProDesk-600-G4-MT:~$ echo "My name is xyz" | tr -d M
y name is xyz
student@a1-HP-ProDesk-600-G4-MT:~$ echo "My ID is 5678" | tr -d [:digit:]
My ID is
student@a1-HP-ProDesk-600-G4-MT:~$
```