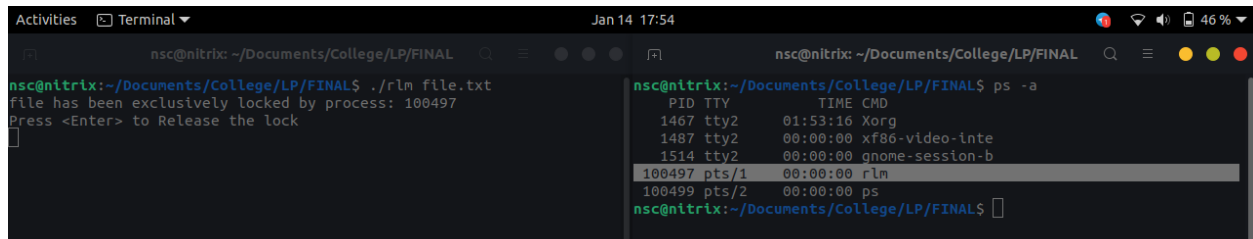


**TASK:** Solve the process synchronization on I/O using the record-locking mechanism.

**OUTPUT:**

Create a file called “file.txt”

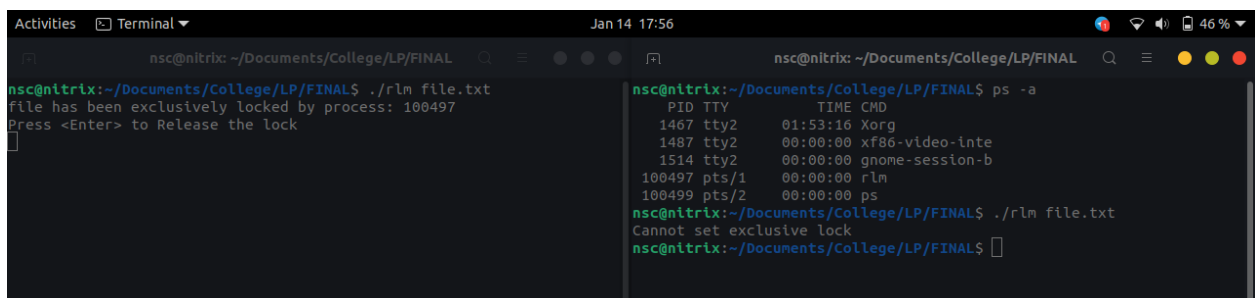
1. Lock “file.txt” and monitor the processes in another terminal



```
nsc@nitrix: ~/Documents/College/LP/FINAL
nsc@nitrix:~/Documents/College/LP/FINAL$ ./rlm file.txt
file has been exclusively locked by process: 100497
Press <Enter> to Release the lock

nsc@nitrix:~/Documents/College/LP/FINAL$ ps -a
PID TTY      TIME CMD
1467 tty2      01:53:16 Xorg
1487 tty2      00:00:00 xf86-video-inte
1514 tty2      00:00:00 gnome-session-b
100497 pts/1    00:00:00 rlm
100499 pts/2    00:00:00 ps
nsc@nitrix:~/Documents/College/LP/FINAL$
```

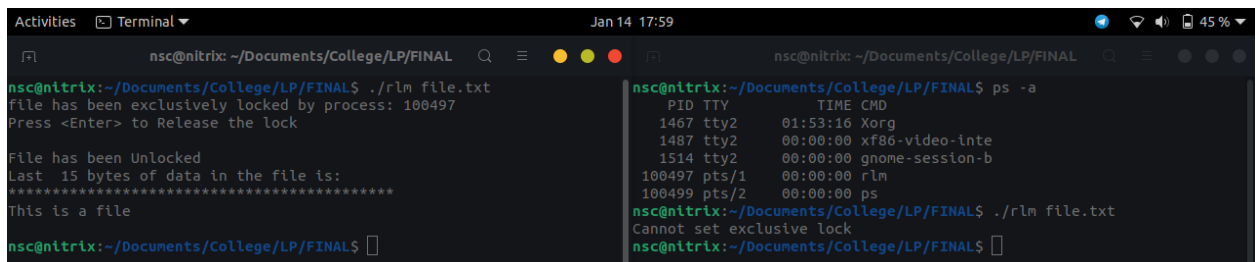
2. Try to lock “file.txt” again in the other terminal..



```
nsc@nitrix:~/Documents/College/LP/FINAL
nsc@nitrix:~/Documents/College/LP/FINAL$ ./rlm file.txt
file has been exclusively locked by process: 100497
Press <Enter> to Release the lock

nsc@nitrix:~/Documents/College/LP/FINAL$ ps -a
PID TTY      TIME CMD
1467 tty2      01:53:16 Xorg
1487 tty2      00:00:00 xf86-video-inte
1514 tty2      00:00:00 gnome-session-b
100497 pts/1    00:00:00 rlm
100499 pts/2    00:00:00 ps
nsc@nitrix:~/Documents/College/LP/FINAL$ ./rlm file.txt
Cannot set exclusive lock
nsc@nitrix:~/Documents/College/LP/FINAL$
```

3. Now release the lock...



```
nsc@nitrix:~/Documents/College/LP/FINAL
nsc@nitrix:~/Documents/College/LP/FINAL$ ./rlm file.txt
file has been exclusively locked by process: 100497
Press <Enter> to Release the lock

File has been Unlocked
Last 15 bytes of data in the file is:
*****
This is a file
nsc@nitrix:~/Documents/College/LP/FINAL$

nsc@nitrix:~/Documents/College/LP/FINAL$ ps -a
PID TTY      TIME CMD
1467 tty2      01:53:16 Xorg
1487 tty2      00:00:00 xf86-video-inte
1514 tty2      00:00:00 gnome-session-b
100497 pts/1    00:00:00 rlm
100499 pts/2    00:00:00 ps
nsc@nitrix:~/Documents/College/LP/FINAL$ ./rlm file.txt
Cannot set exclusive lock
nsc@nitrix:~/Documents/College/LP/FINAL$
```

Now we can lock the file in another terminal....