Name - Yash Lakhtariya
Enrollment number - 21162101012
Branch - CBA Batch - 61
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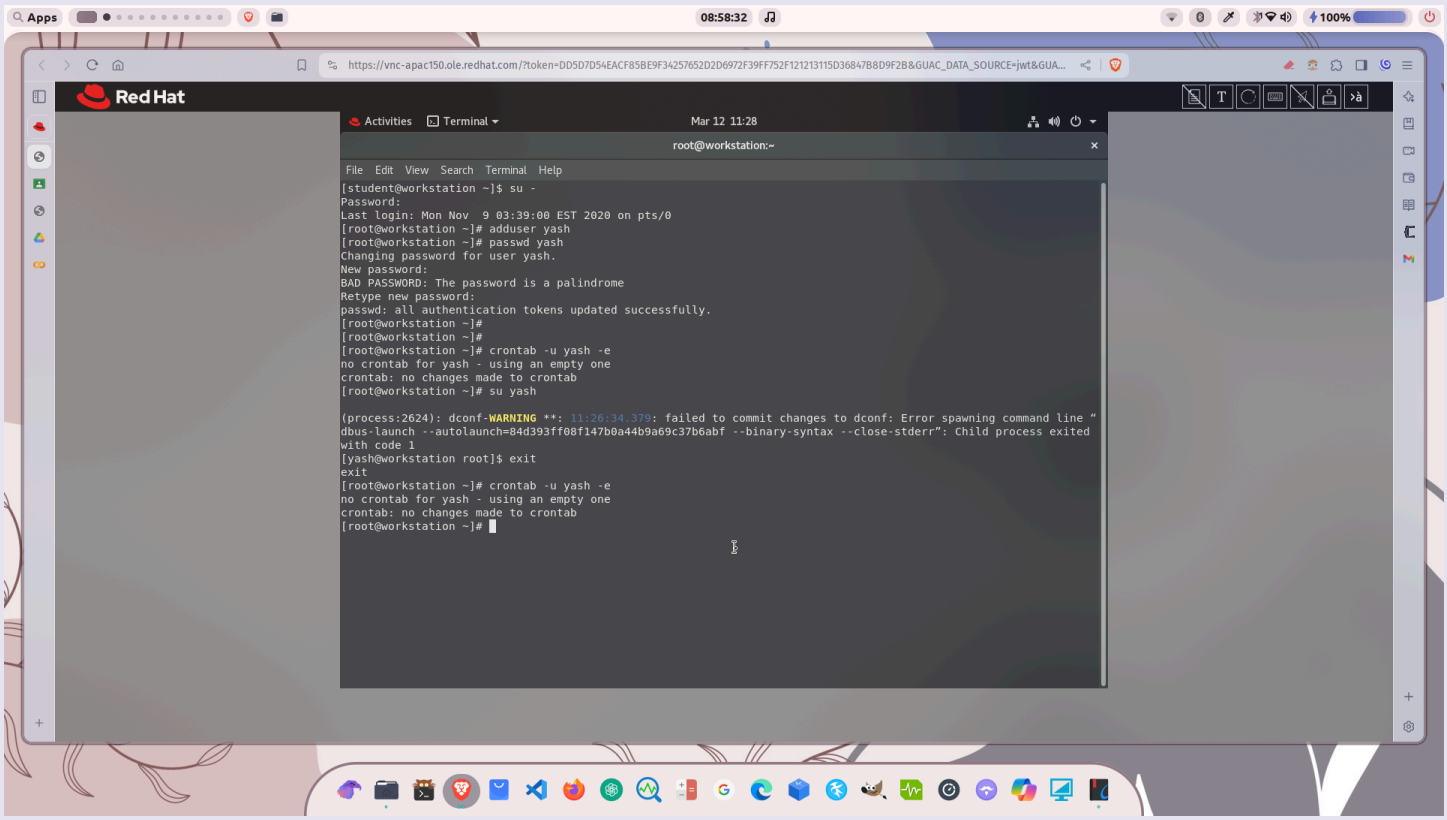
Tasks and practical :

Task 1: Create a user of your name and schedule a job to create a file which have the current date and time stored in it. The job should be executed on a specific date and time (you can specify the date and time as per your convenience)



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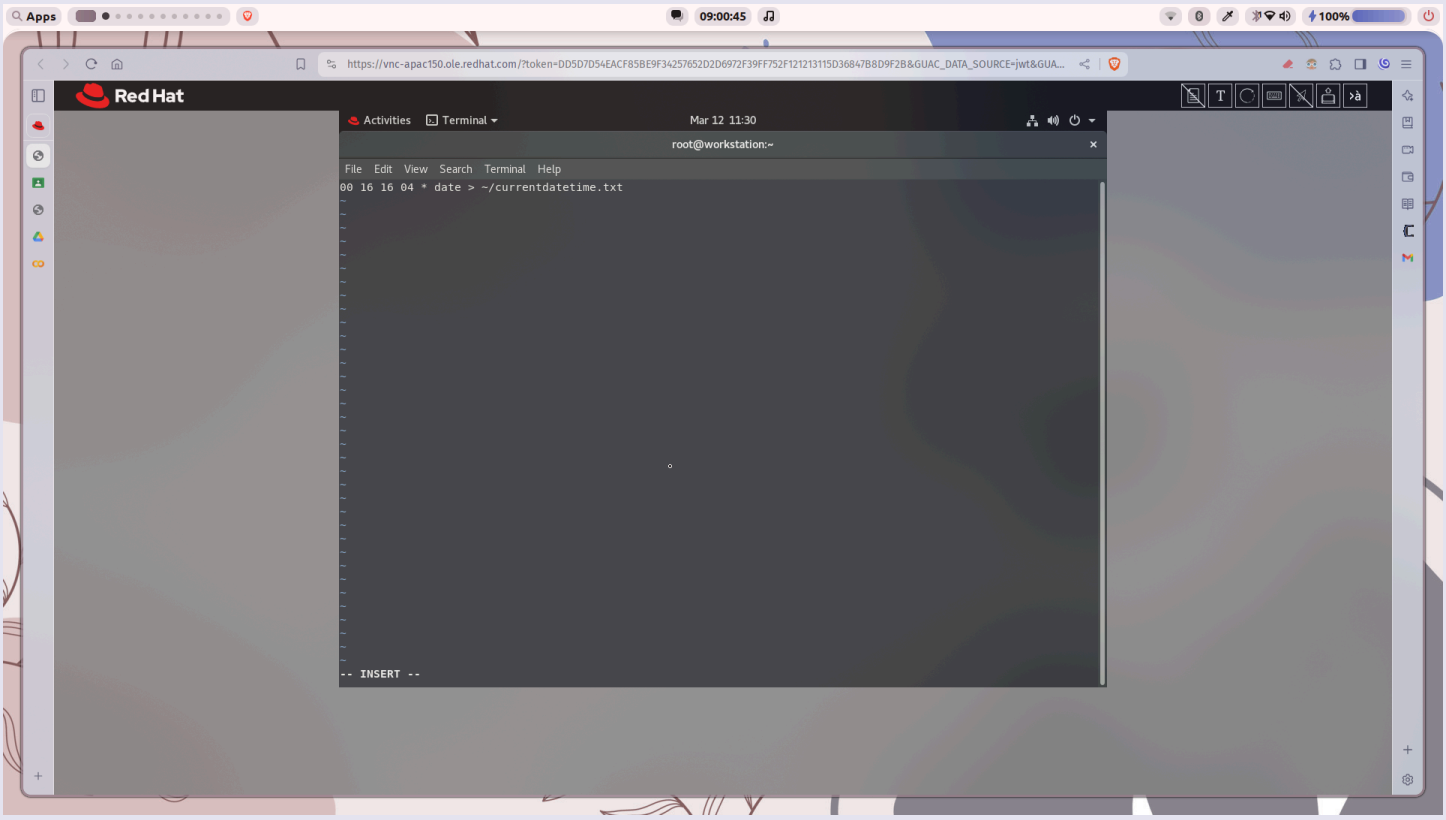

Commands :

- adduser yash (to create user)
- passwd yash (to assign password to user)
- crontab -u yash -e (open or create crontab file for user specified by -u)

Syntax of crontab entry :
_ _ _ _ _ command

where first 5 char represents minutes, hours, date, month, day (0 to 6) respectively and * indicates every minute, hour or so, while */x represents every x units execute the command

Here,
00 16 16 04 * date > ~/currentdatetime.txt

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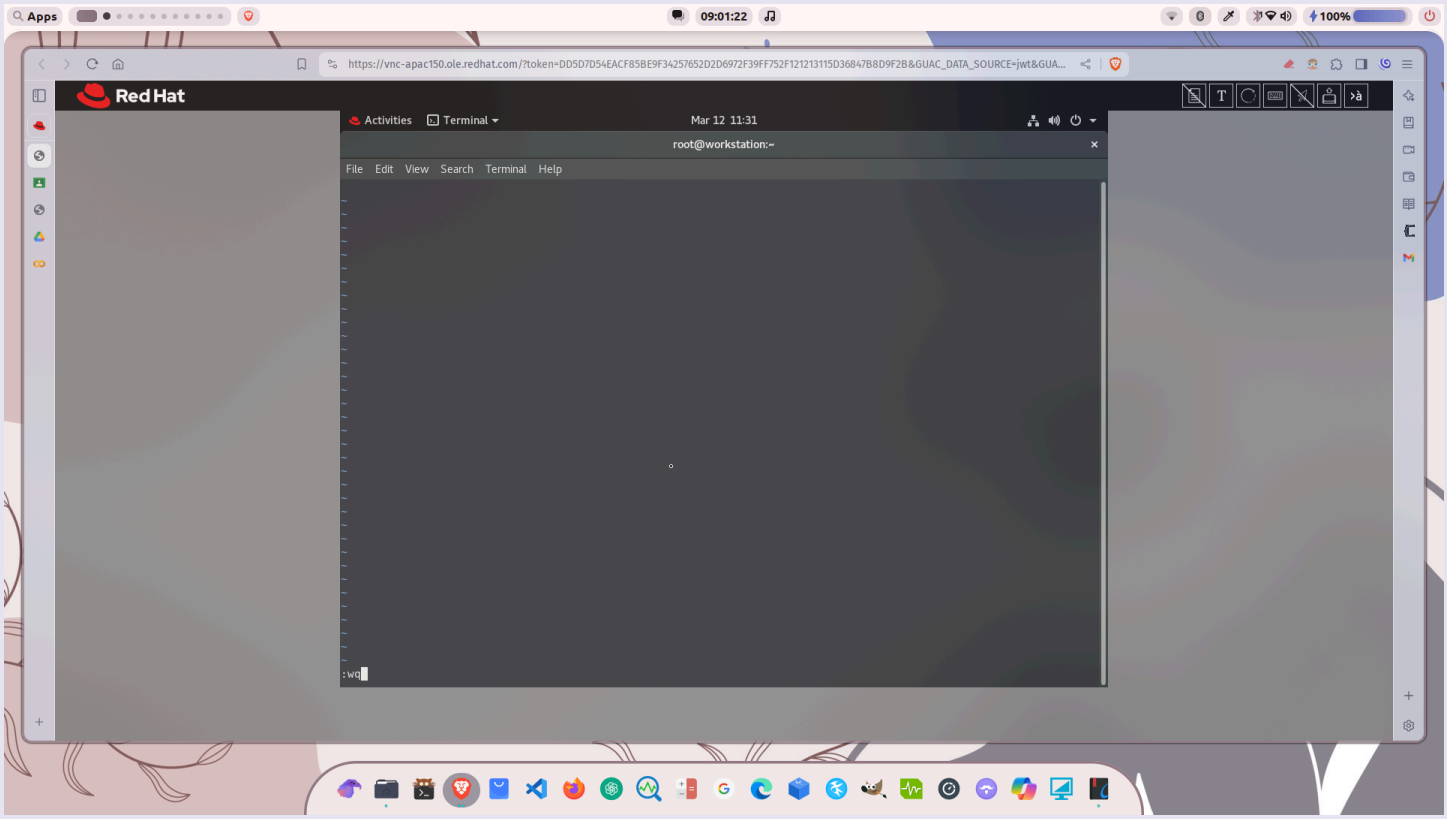
Task 2: Demonstrate how to remove a Scheduled job



Remove entry from crontab file via opening with ***crontab -u user -e***

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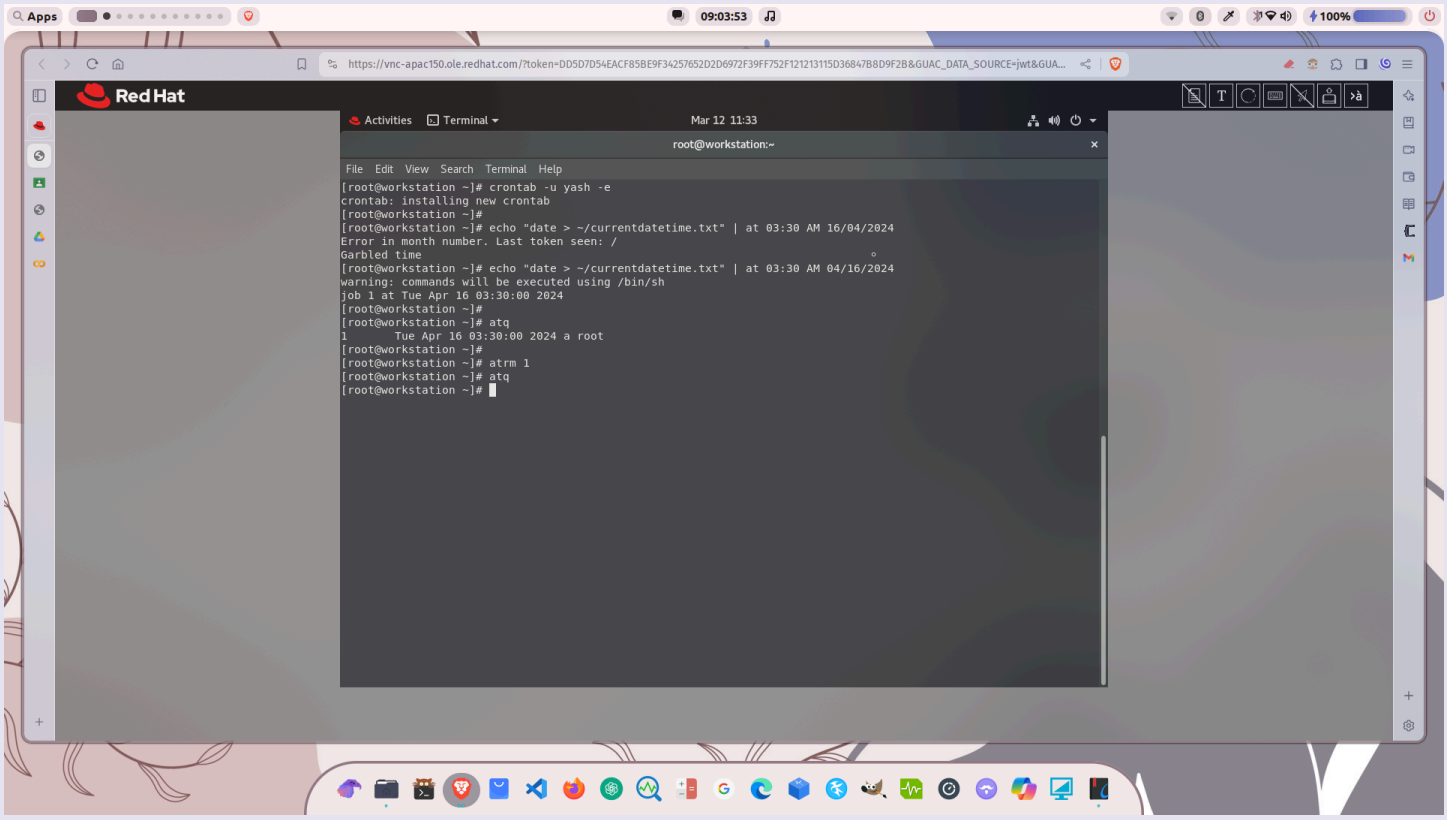

Commands :

- **echo “date > ~/currentdatetime.txt” | at 03:30 AM 04/16/2024** (to schedule job using ‘at’ where time and date in mm/dd/yyyy format is specified)
- **atq** (to list the jobs)
- **atrm 1** (to remove job with jobID 1)

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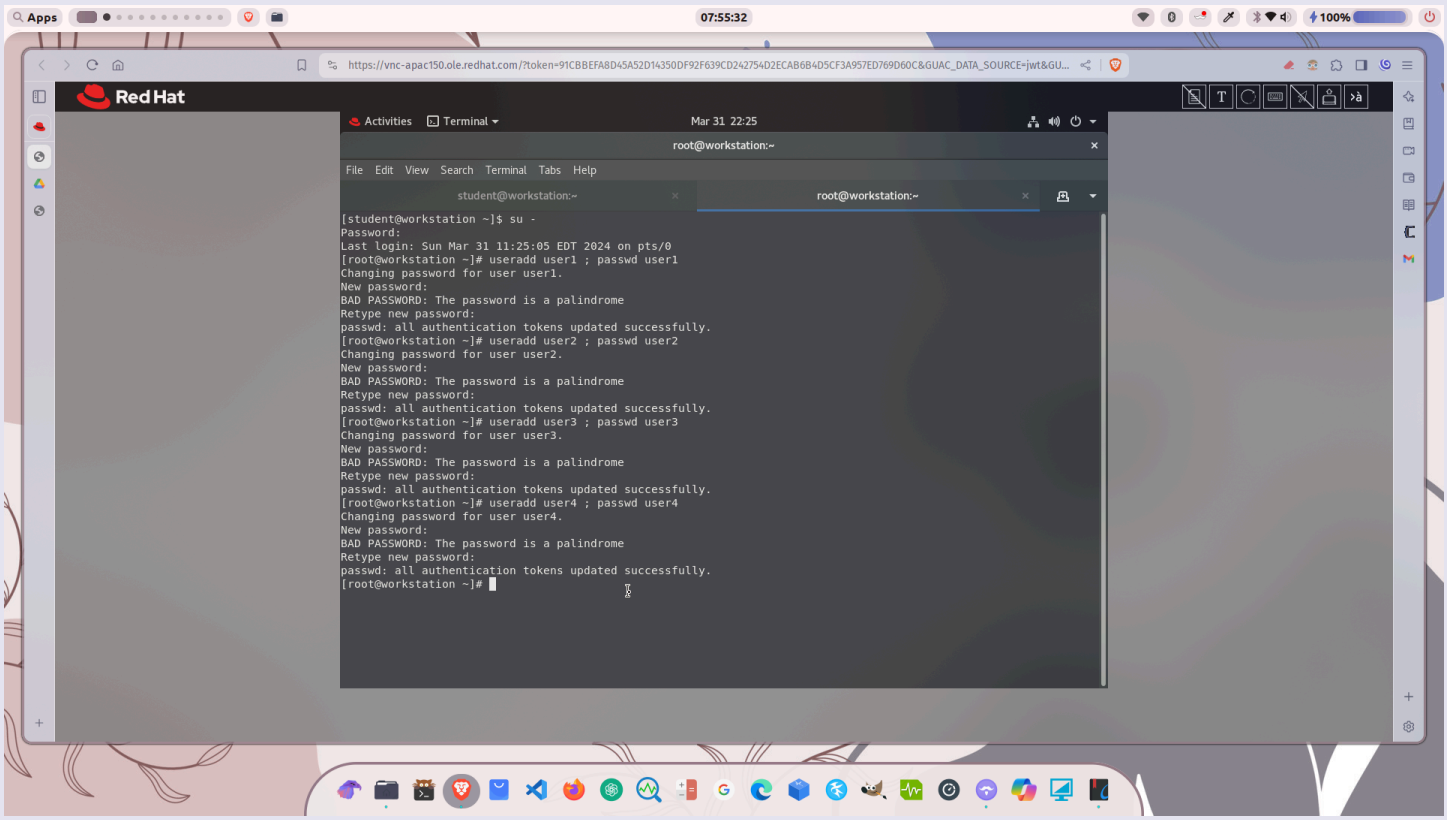
Task 3: Do the configuration in such a way that only user1 and user2 is able to schedule the job, while user3 and user4 should not be able to schedule any job.



Commands :

- **useradd username**
- **passwd username**

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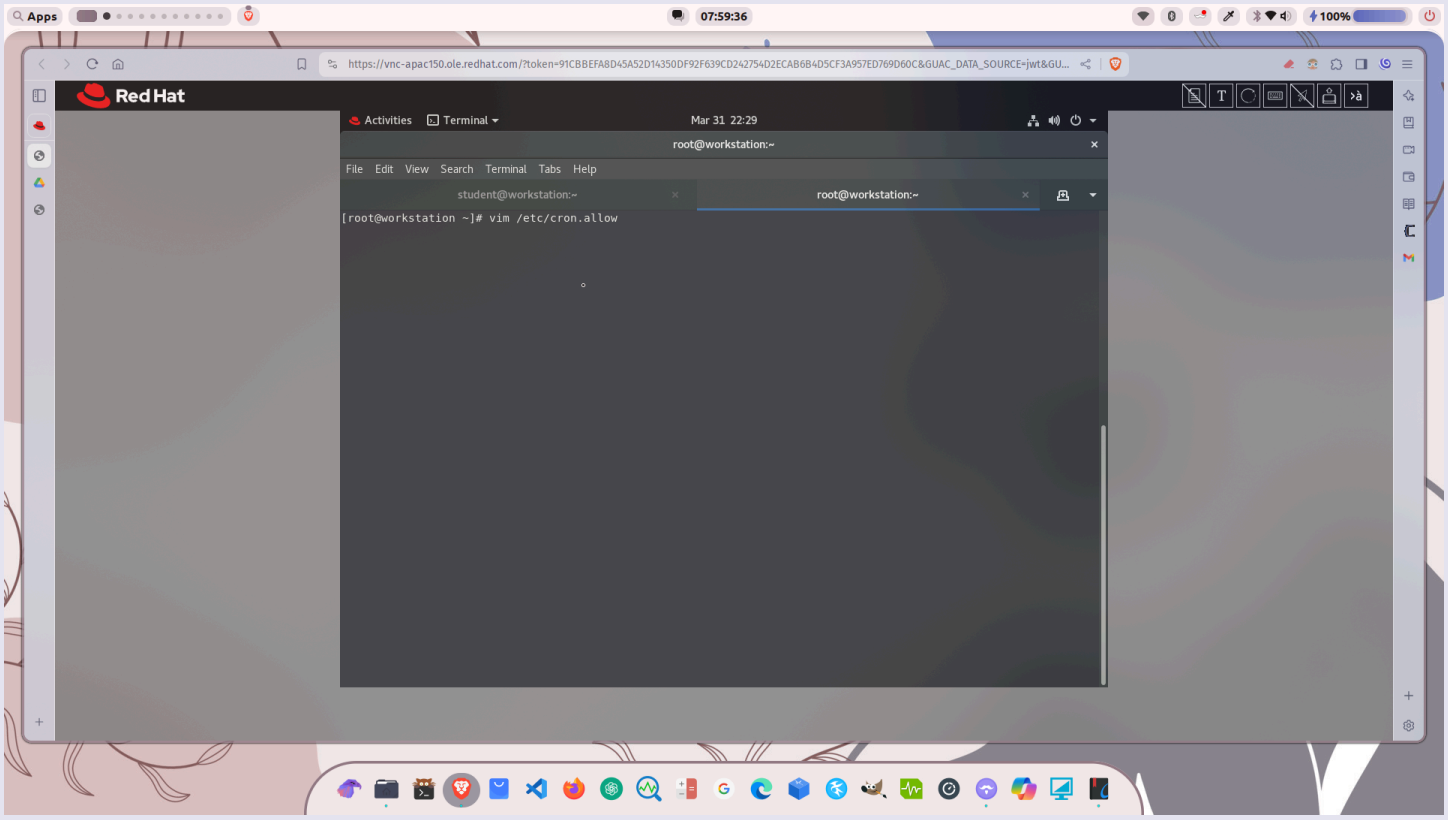

Command : **vim /etc/cron.allow** (where username allowed to use cron is specified)

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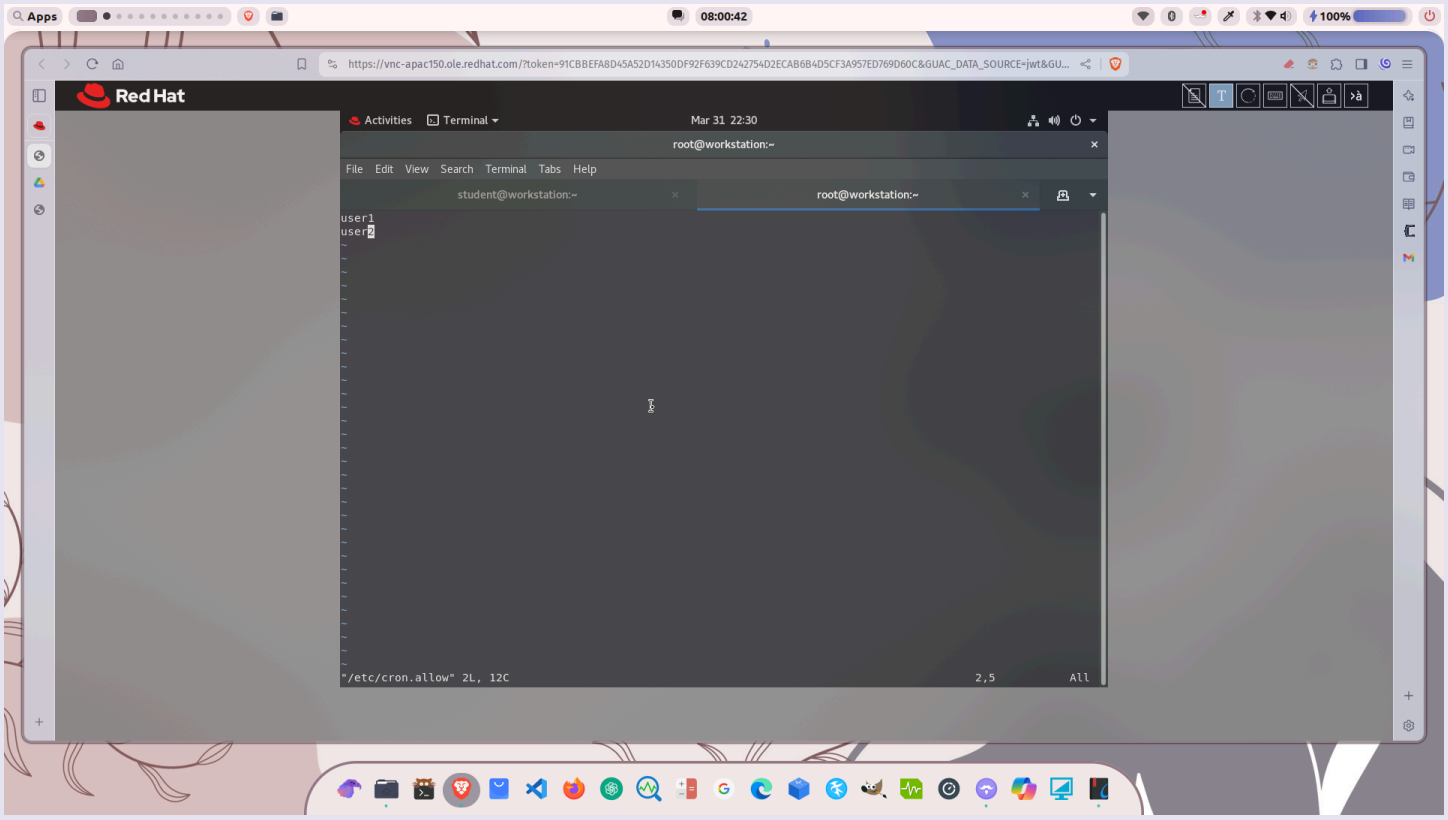

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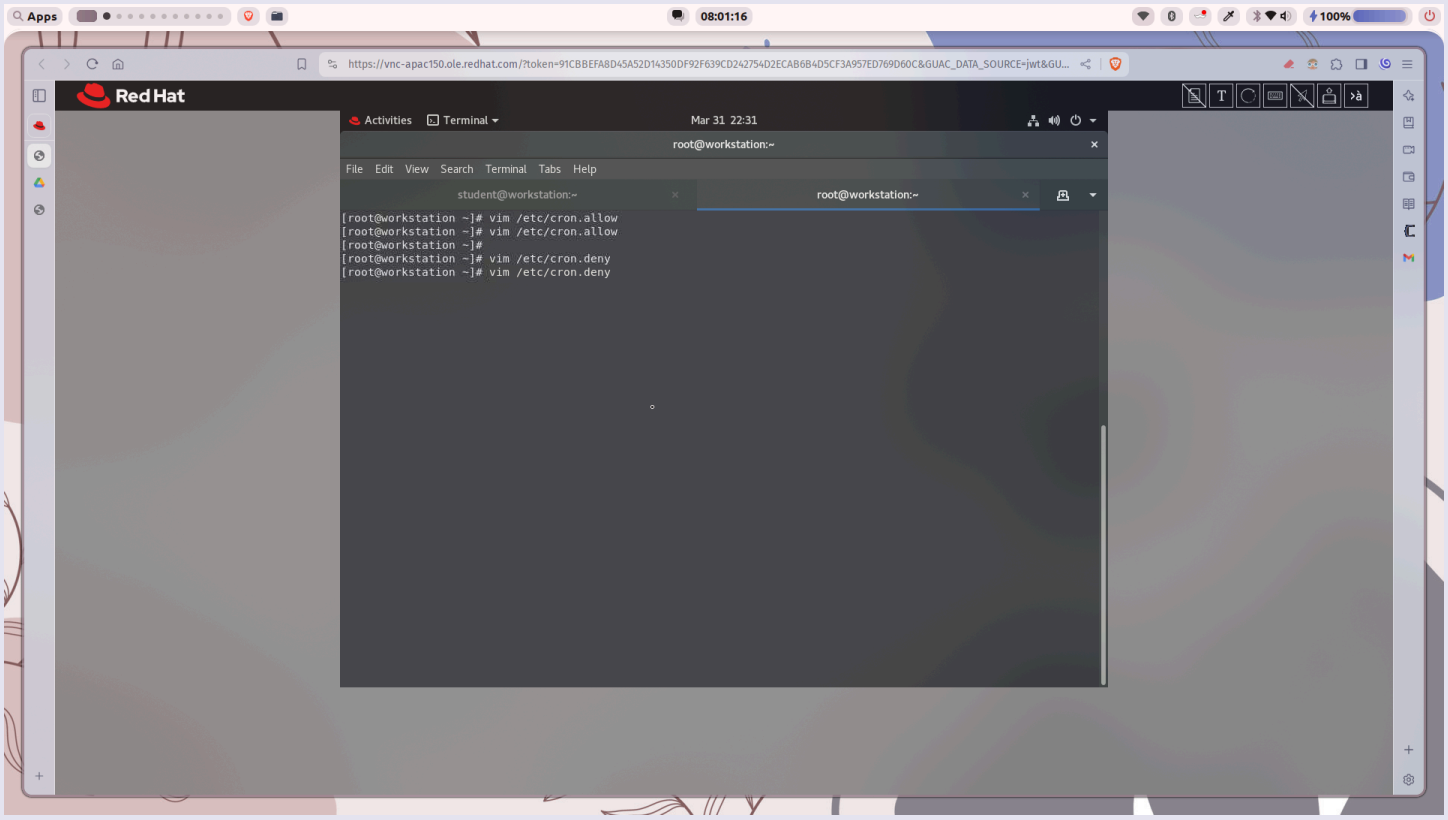

Command : **vim /etc/cron.deny** (where users with no access to cron is specified)

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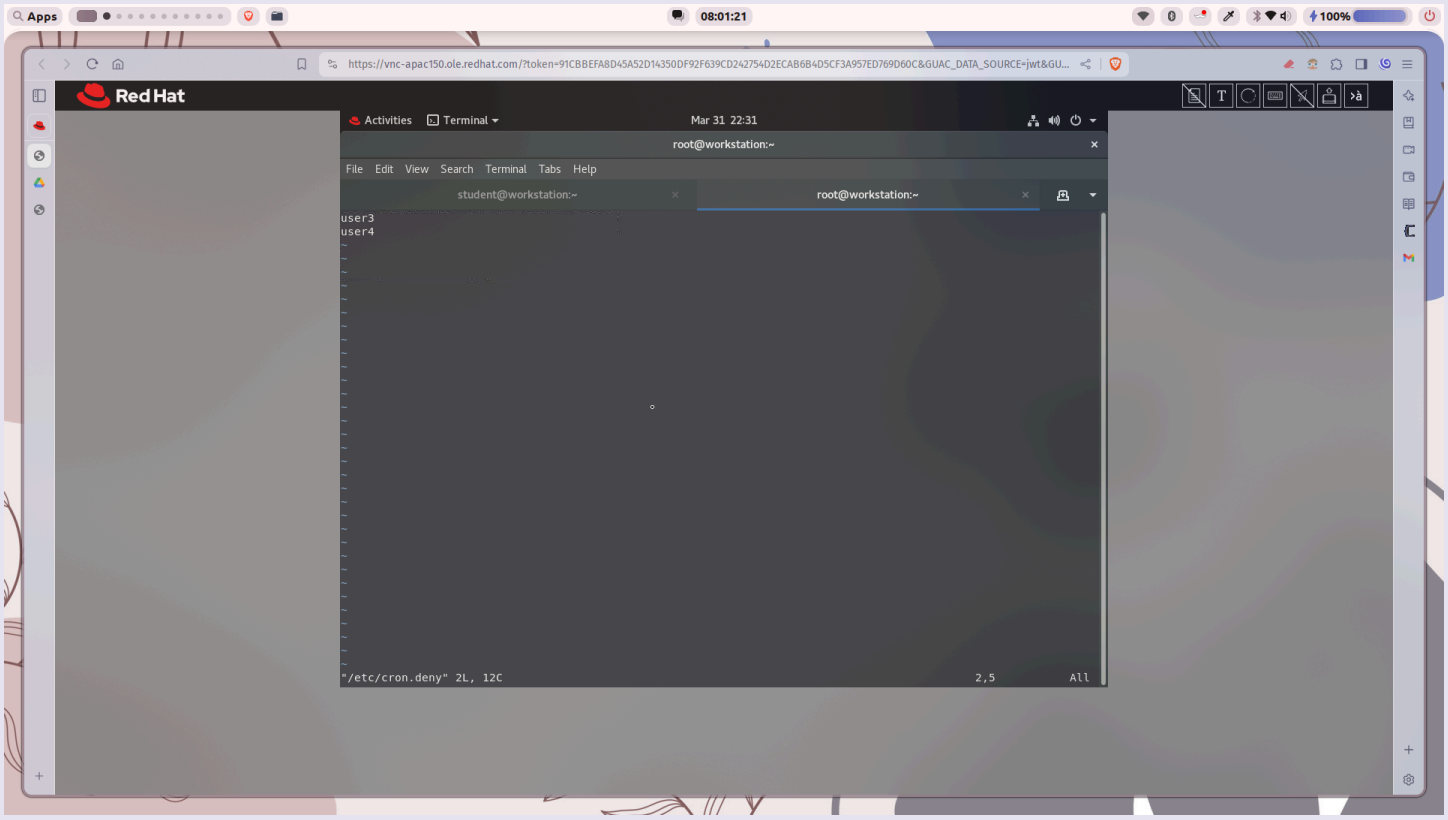

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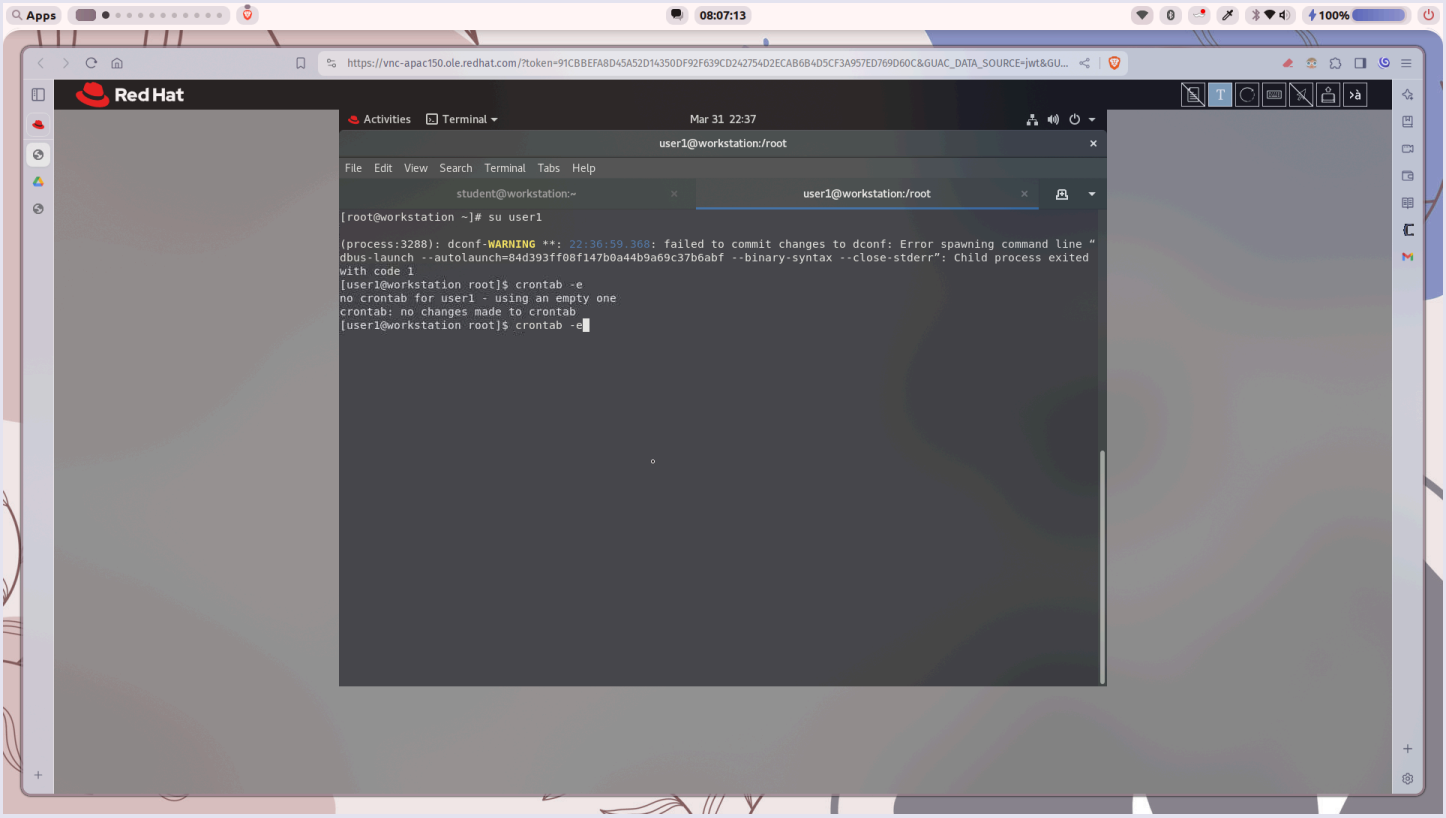

Checking user1 access and scheduling demo job

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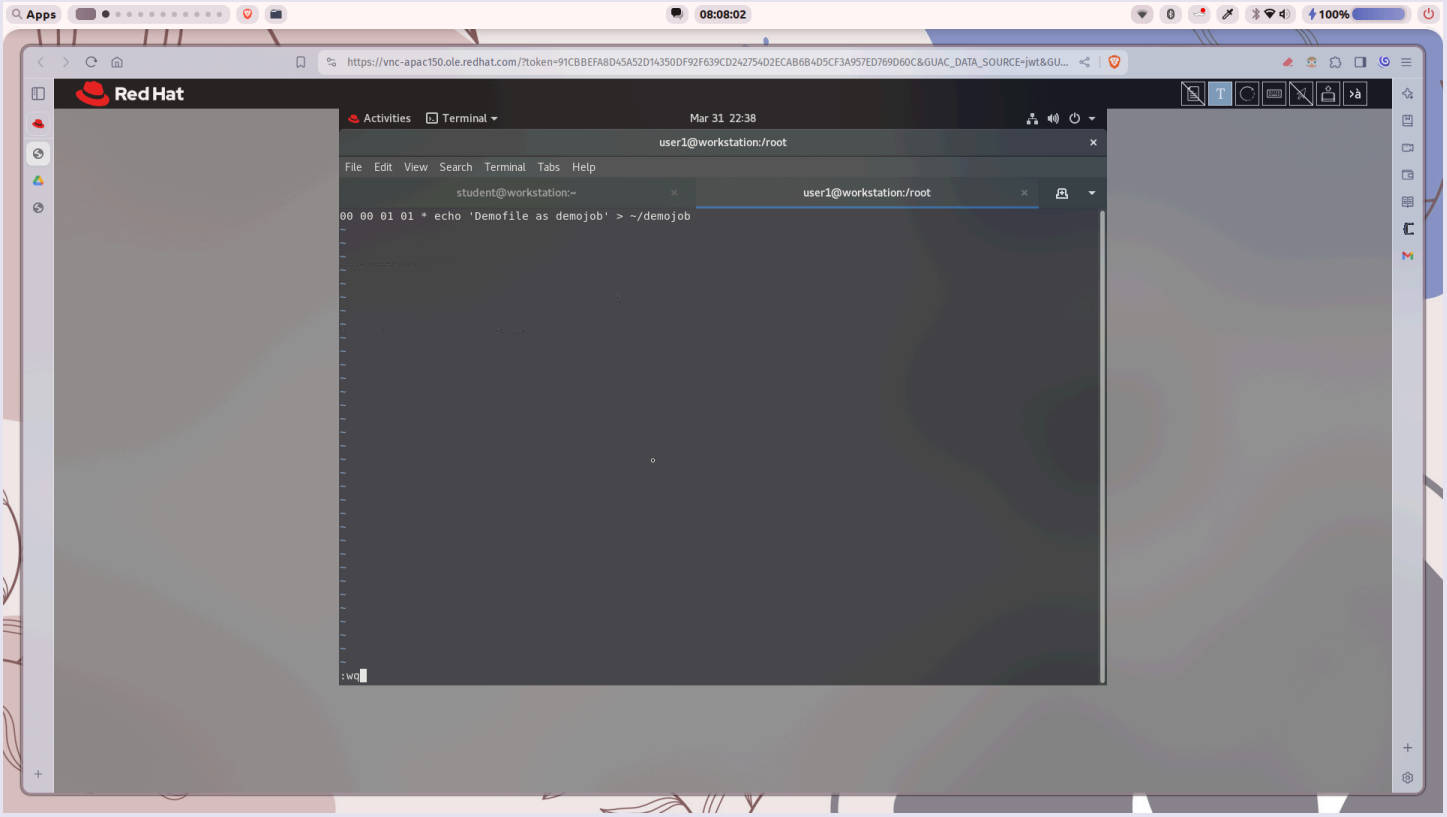

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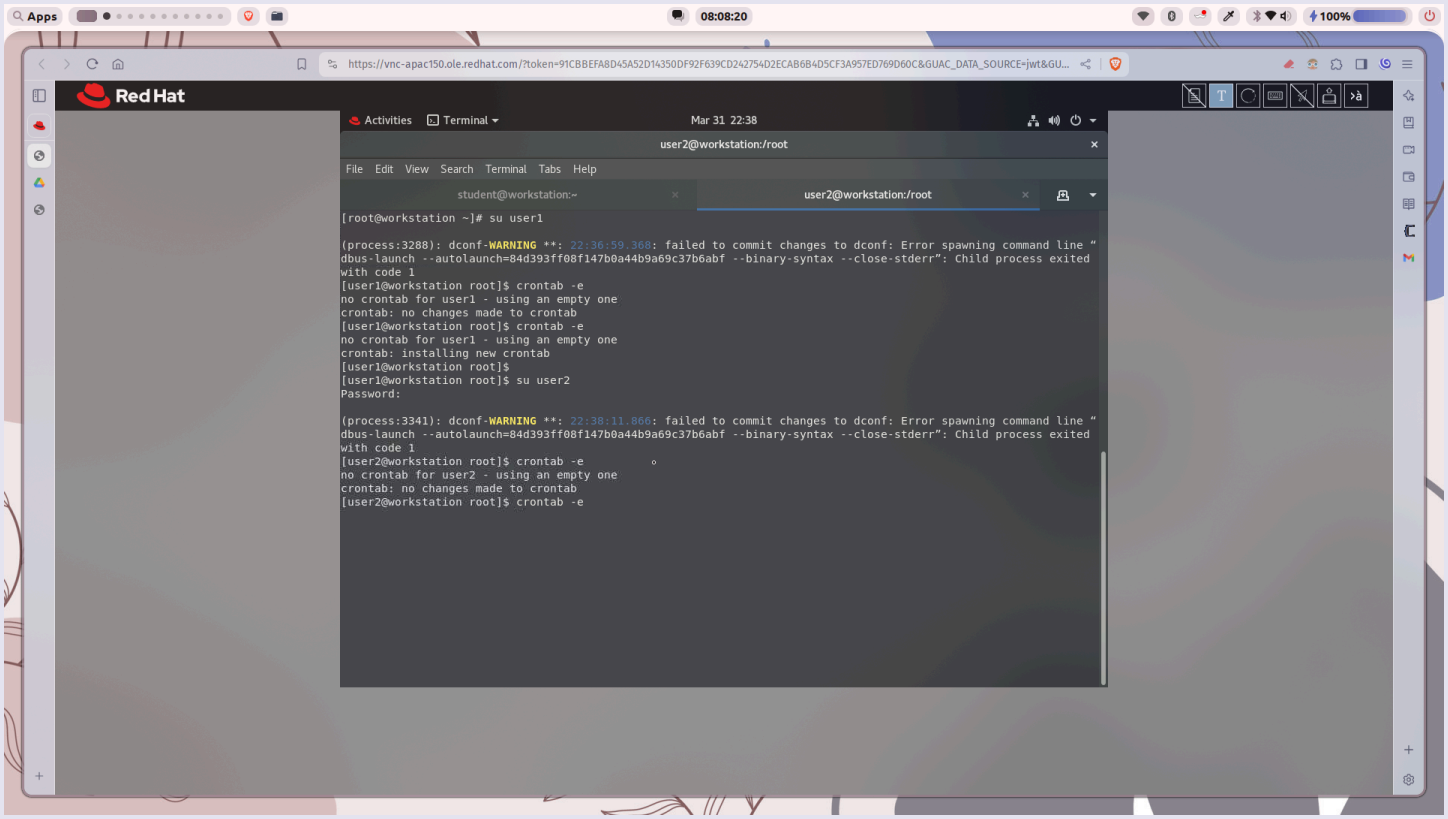

User2 is also able to access crontab

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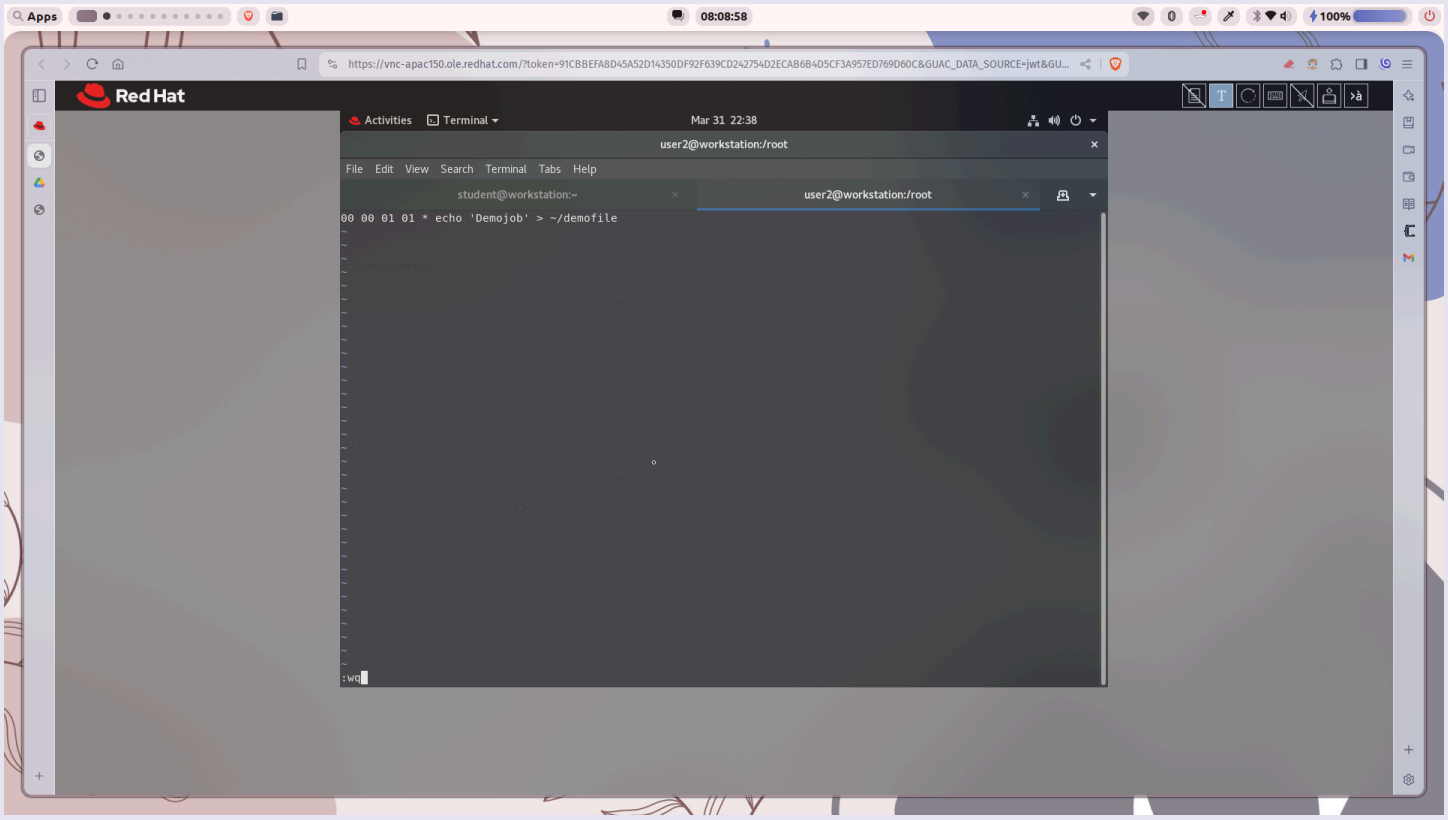

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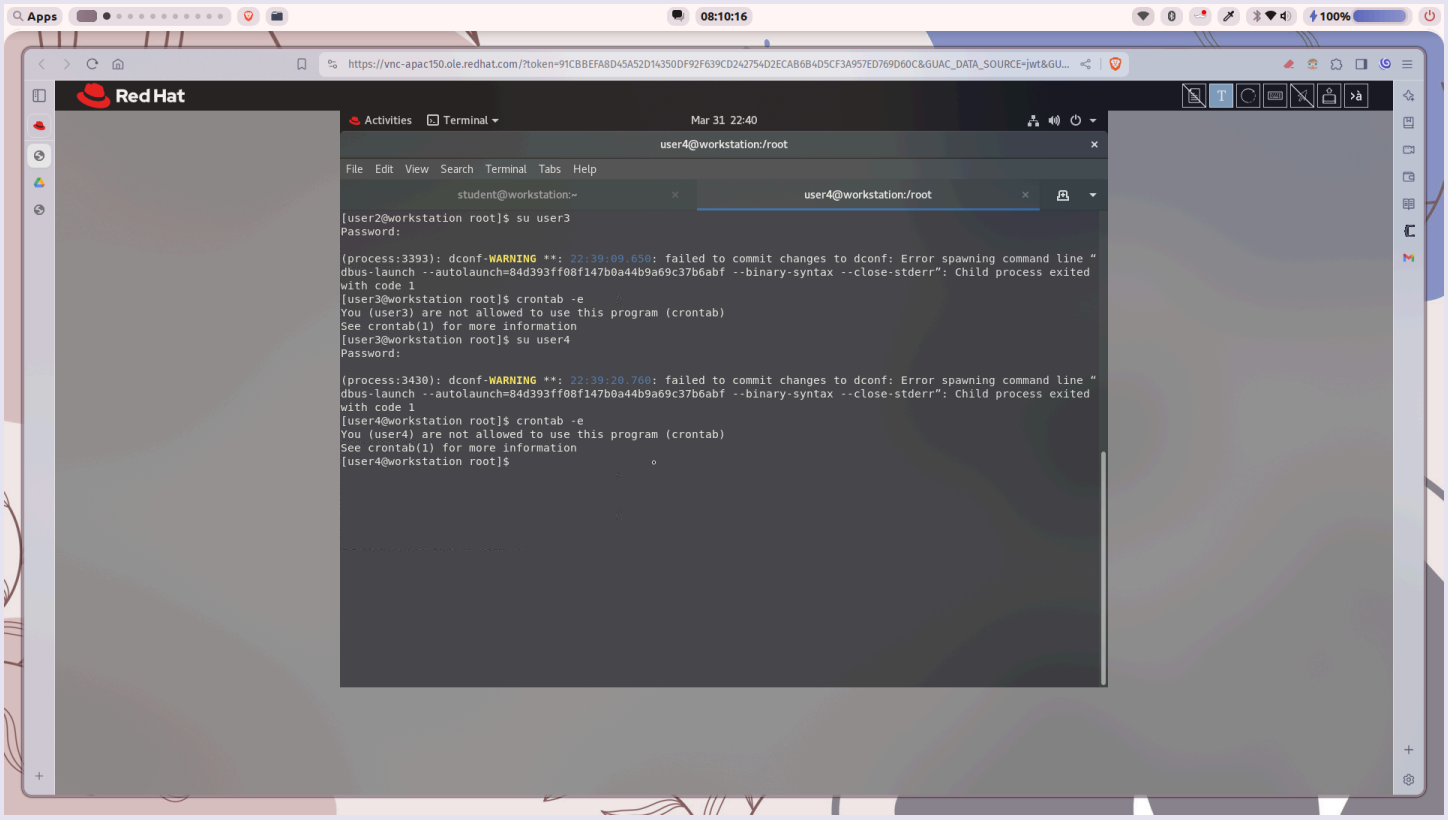

user3 and user4 are not able to access crontab

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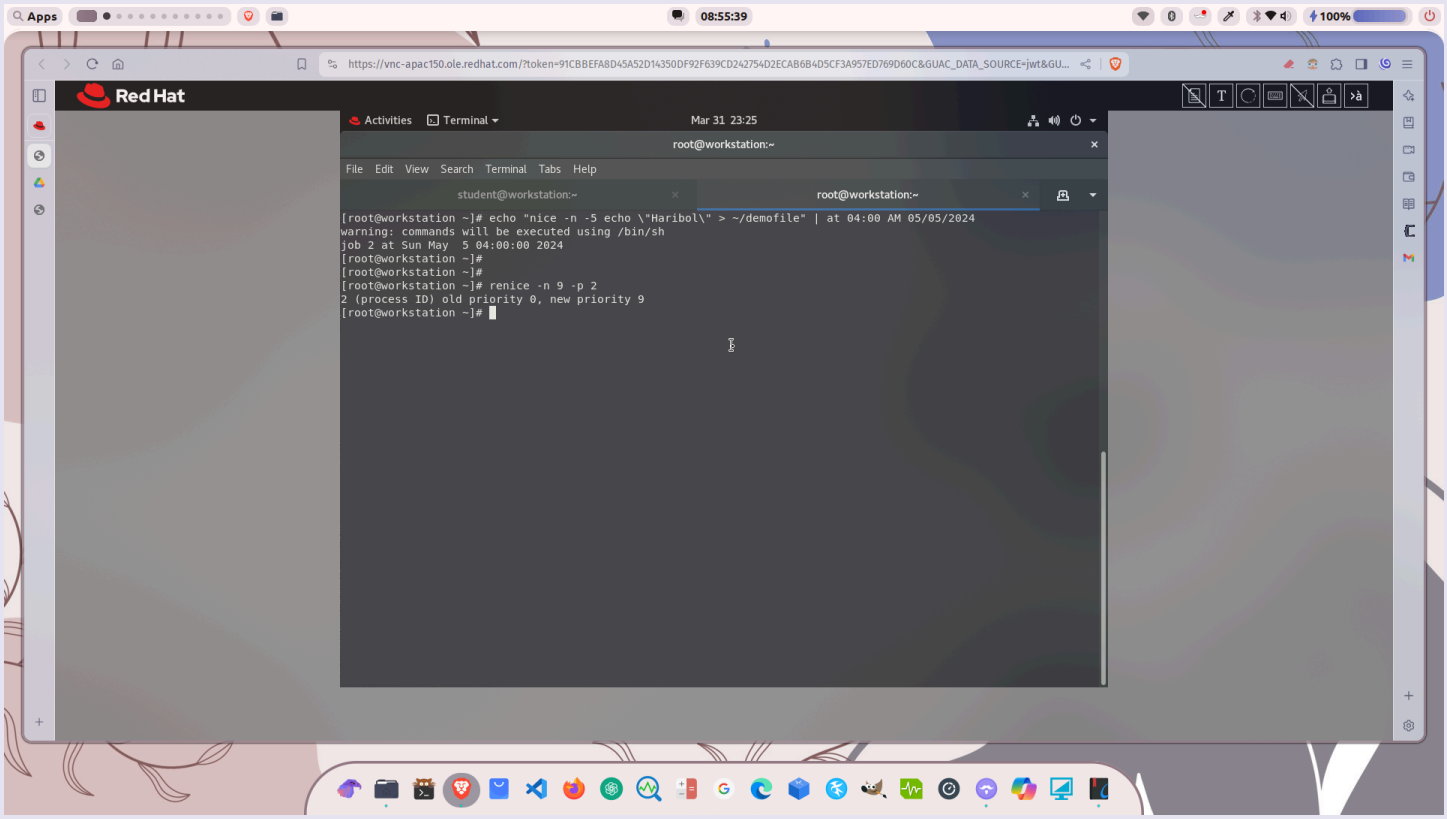
Task 4: Specify, how you can change the priority of the job



Commands :

- **echo “nice -n -5 echo ‘Haribol’ > ~/demofile” | at 04:00 AM 05/05/2024** (to schedule job using nice with priority -5 specified by -n)
- **renice -n 9 -p 2** (to renice, i.e. change priority of job 2 specified by -p to 9 specified by -n)

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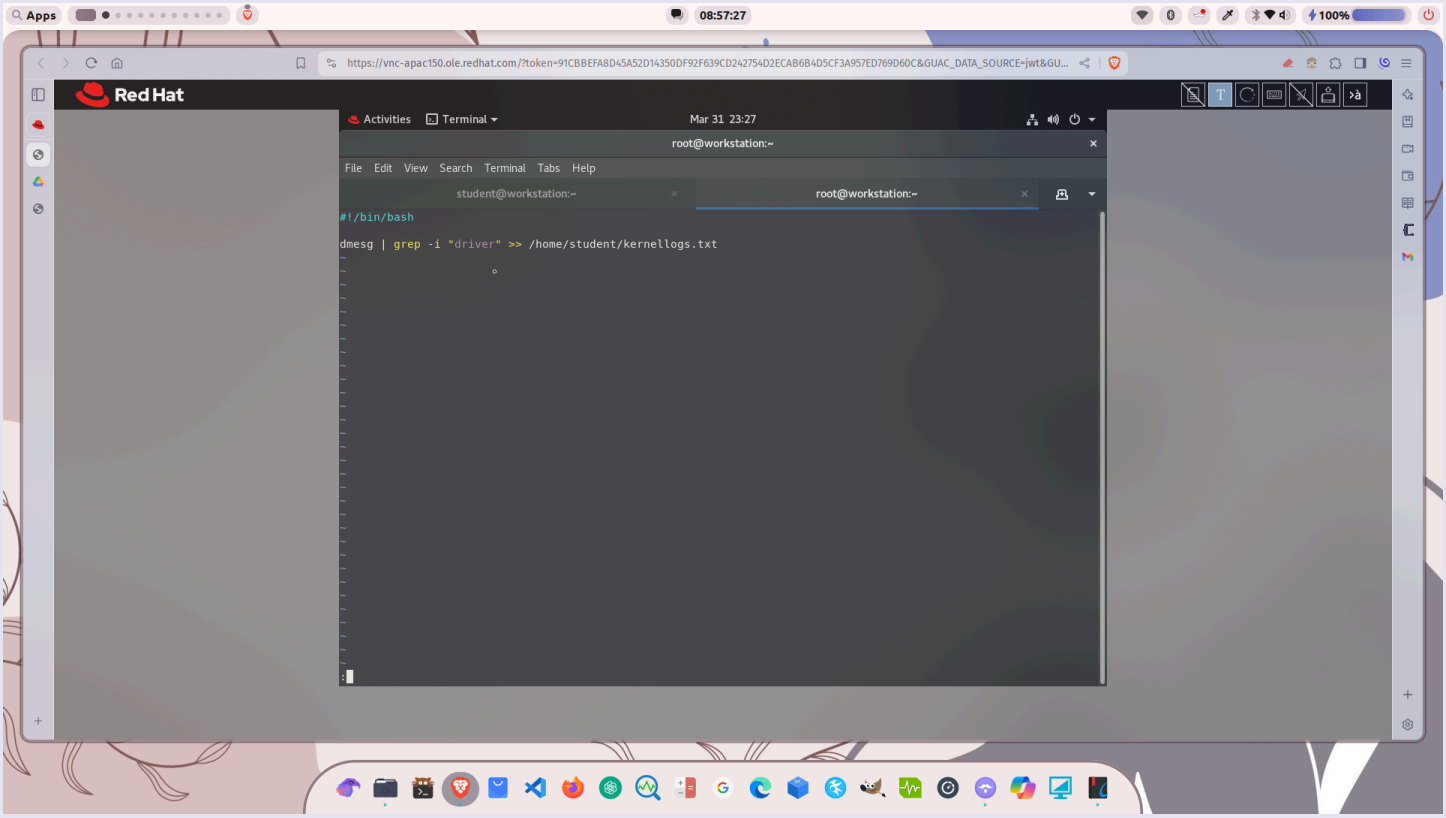
Task 5: You need to create a script that will store the details about the kernel messages related to drivers in a specific file. And this task should be executed every day at 3 pm.



Write script that uses dmesg command and make entry in crontab

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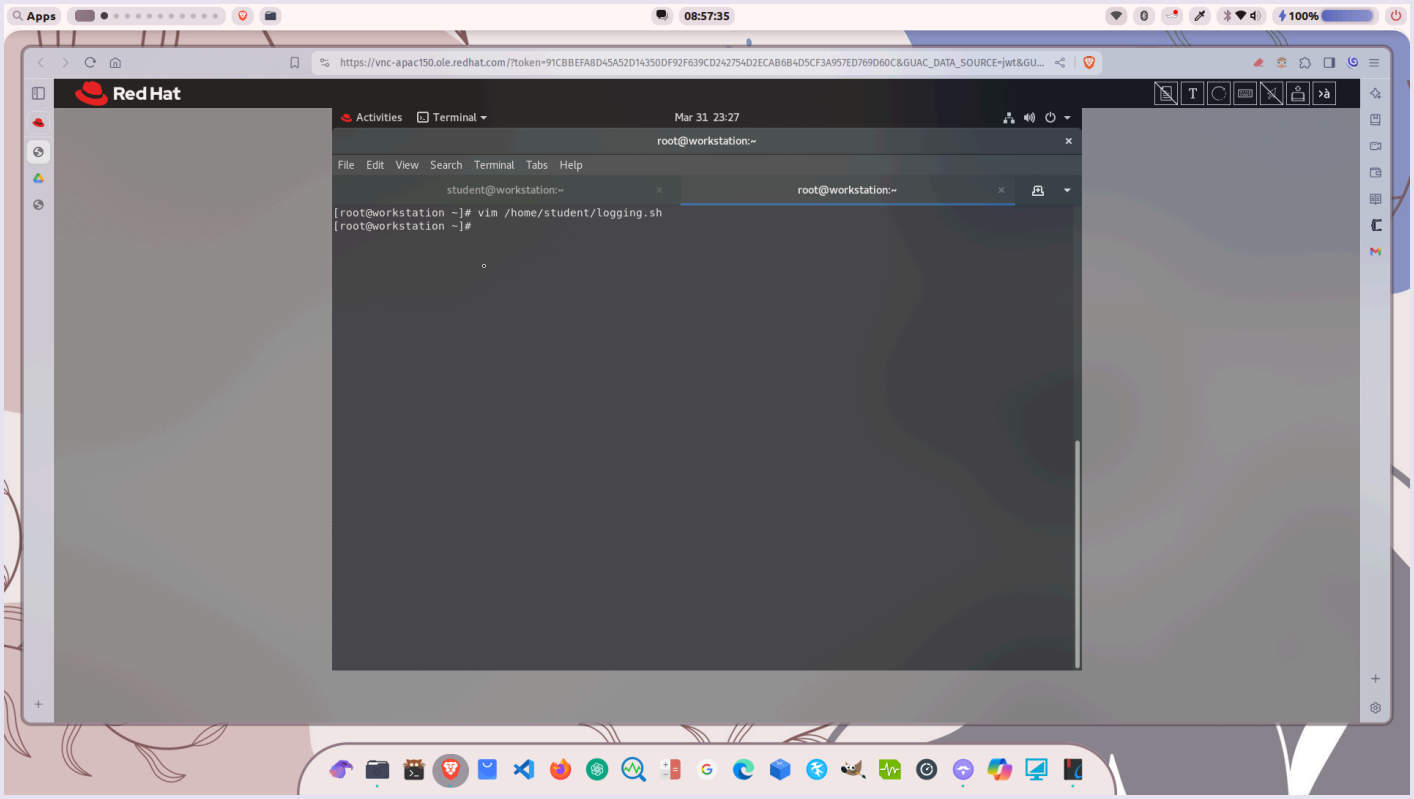

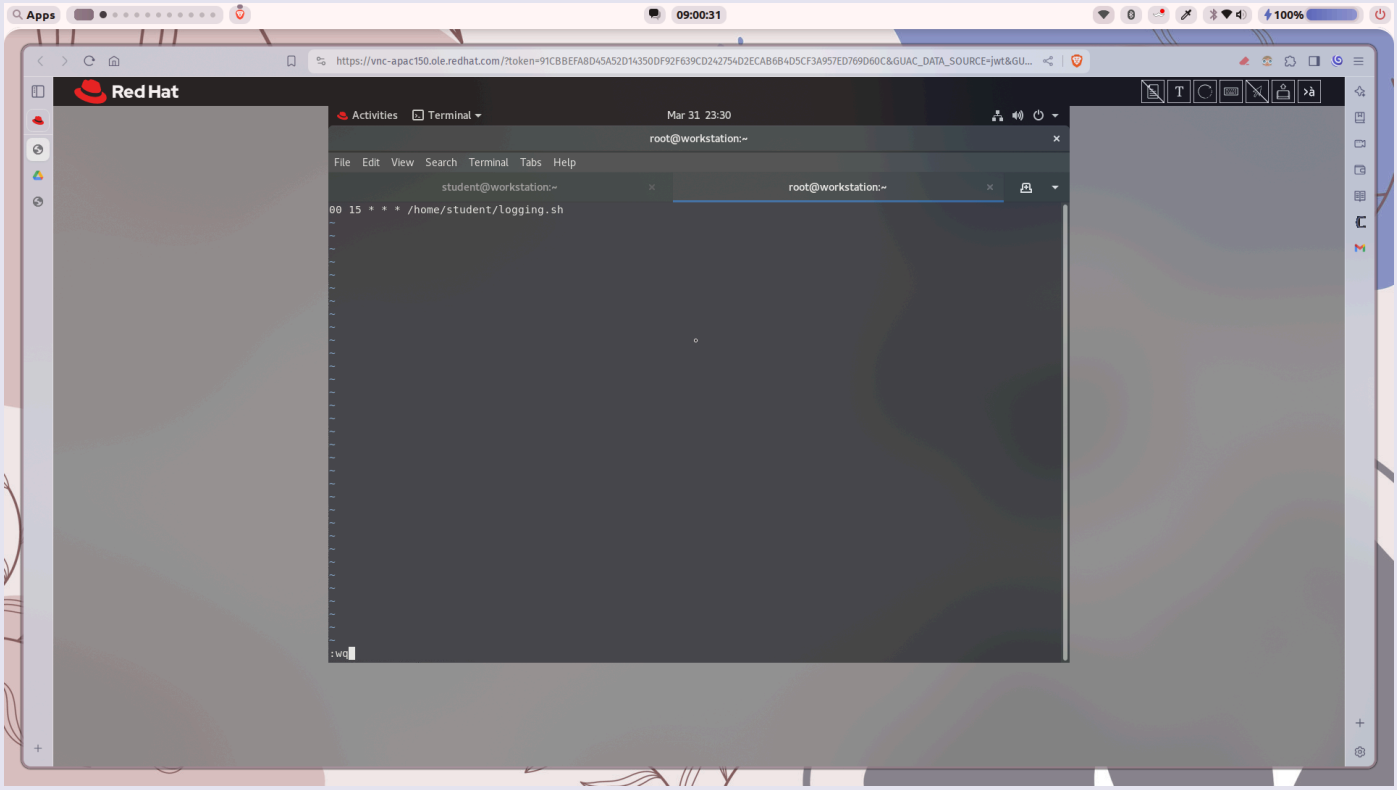

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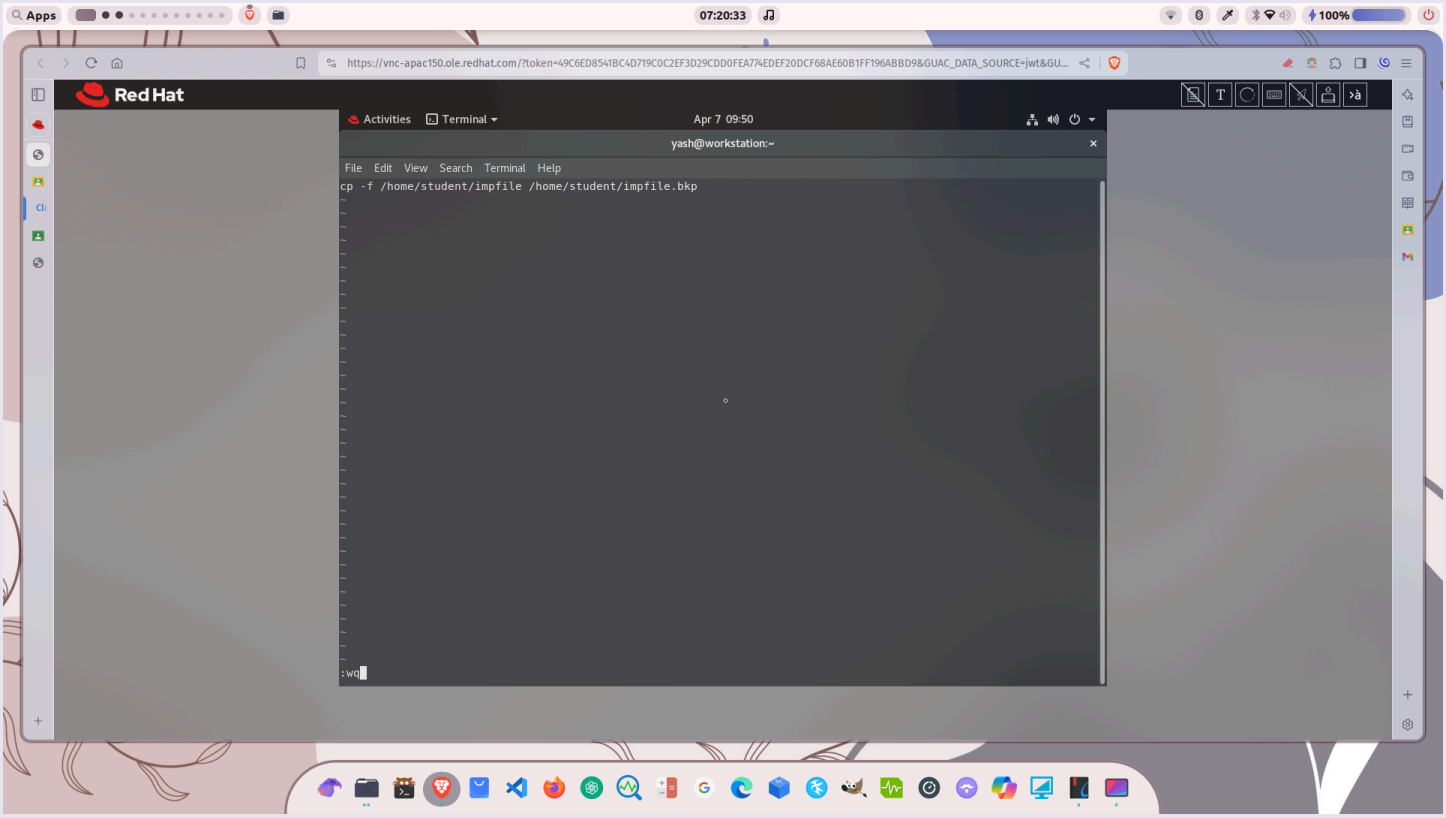
Task 6: Schedule the backup script to run at 1 pm every Saturday

Create a backup script which backs up the important file



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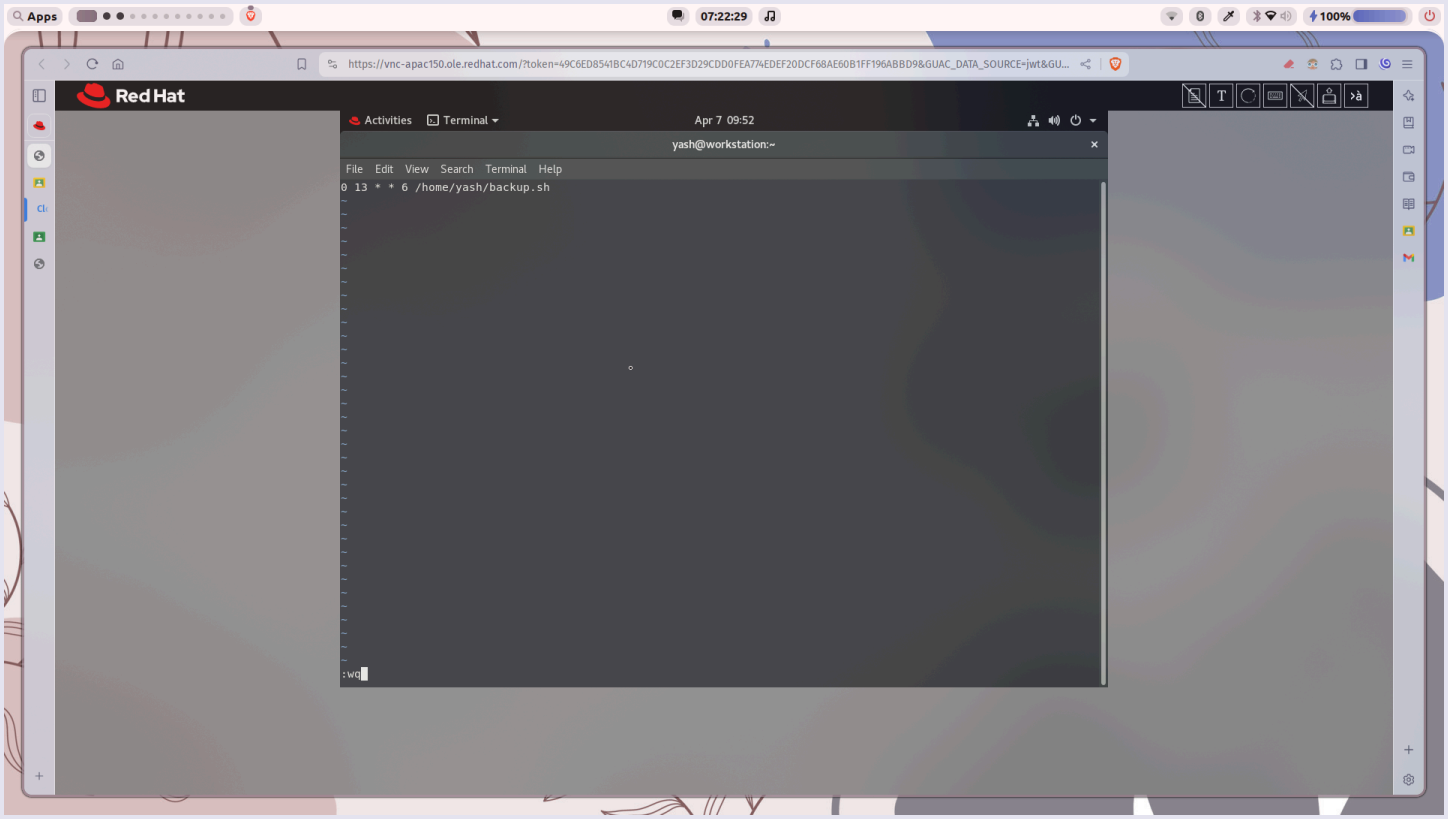
Entry in crontab file :



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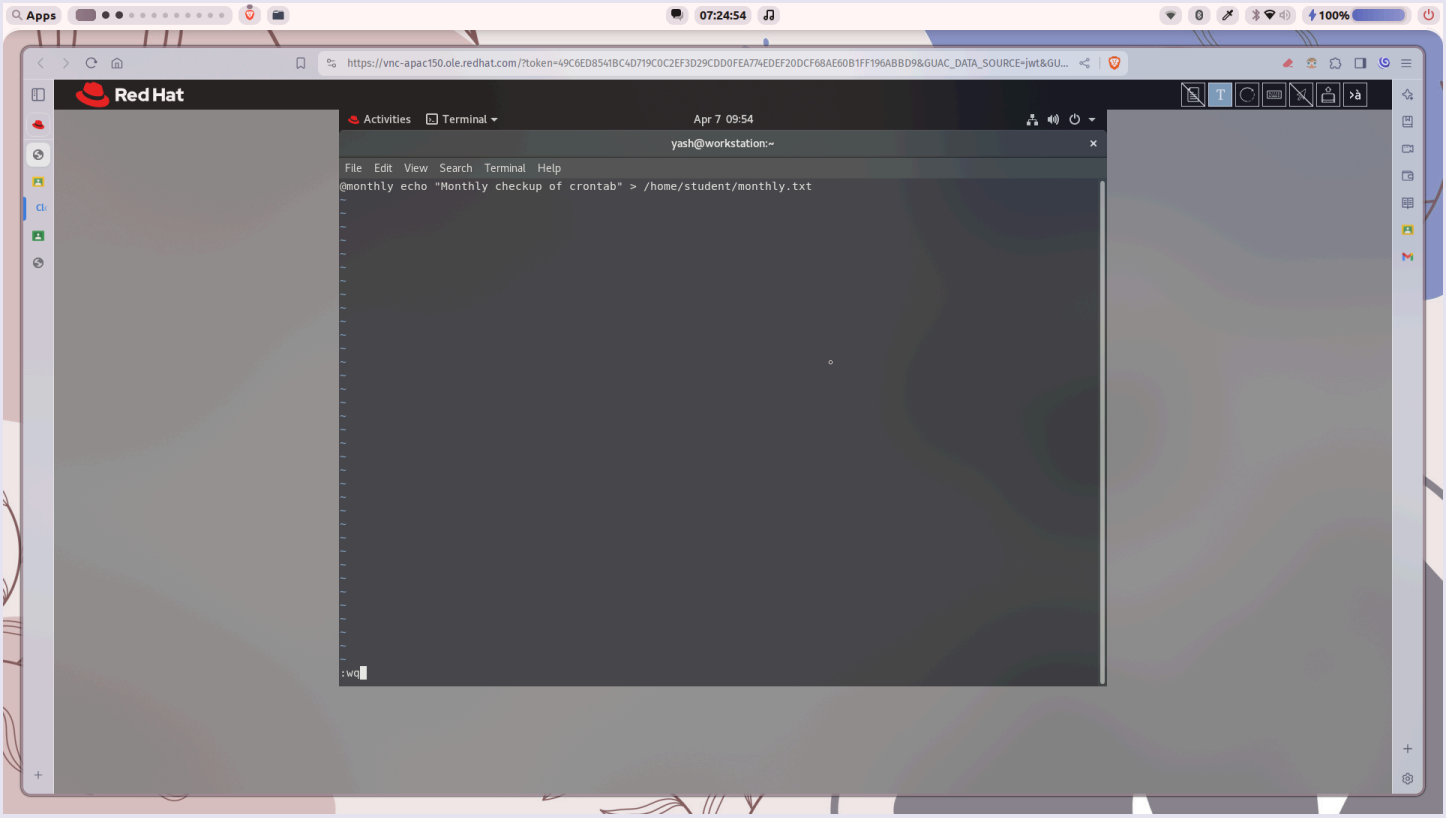
Task 7: Schedule a job beginning of every month by using @monthly keyword.

In crontab file, @monthly keyword will execute the command every month



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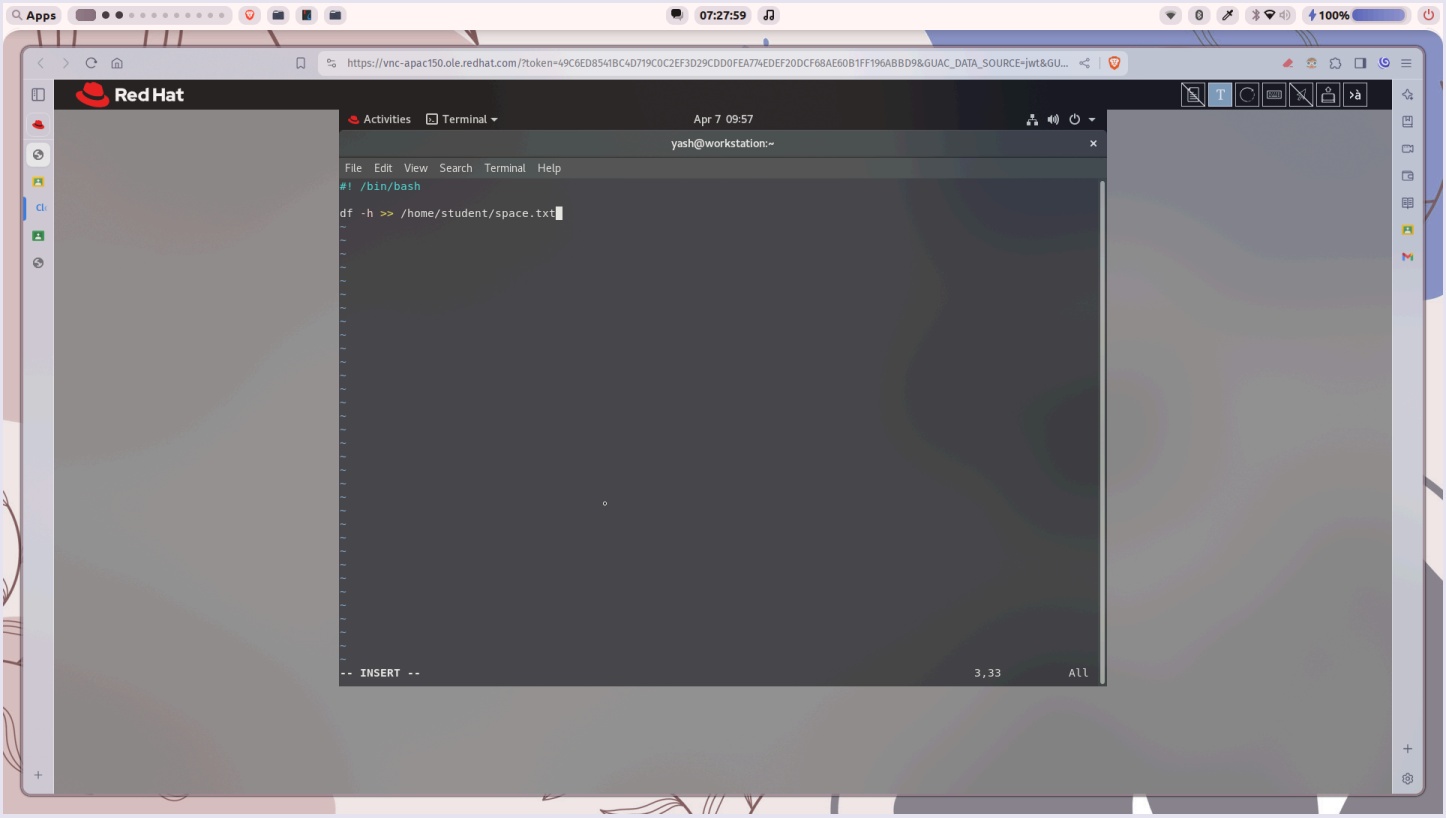
Task 8: Script to check the disk space every 10 minutes.

Create a script space.sh which checks space via df command and pipes output to a file



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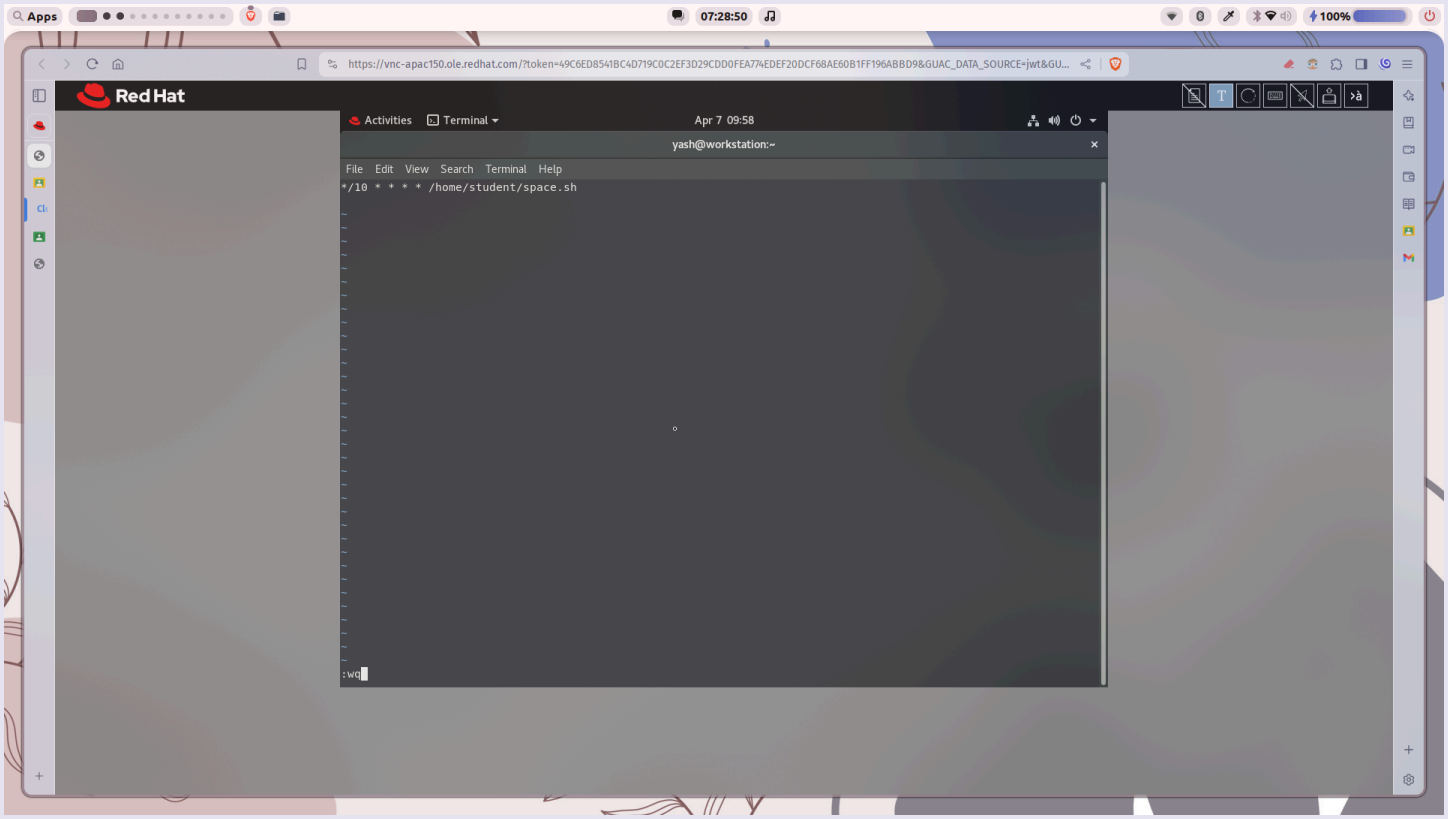
Entry in crontab file :



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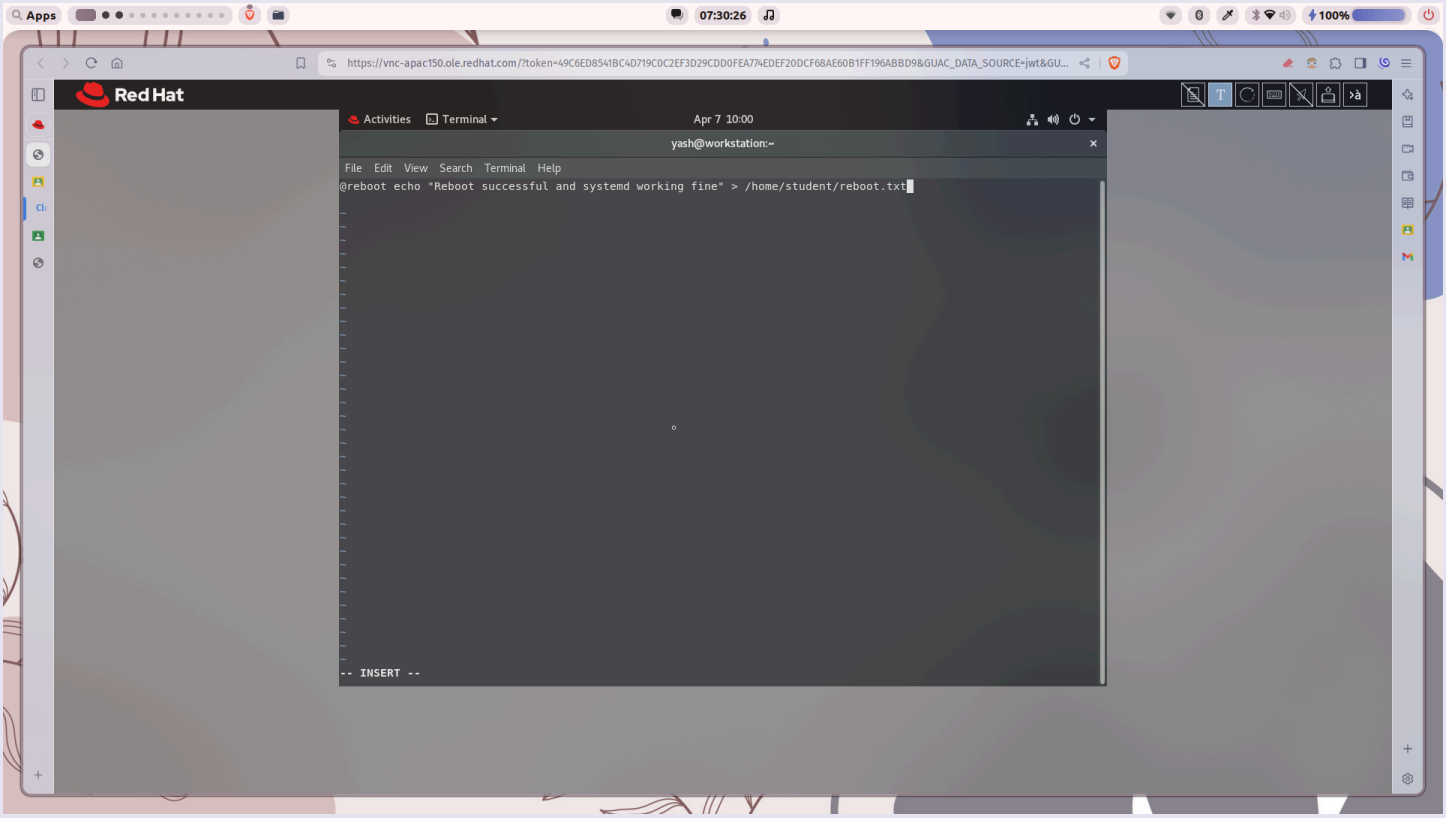
Task 9: Schedule a job that will be executed after every reboot

This can also be done like previous, but using @reboot keyword



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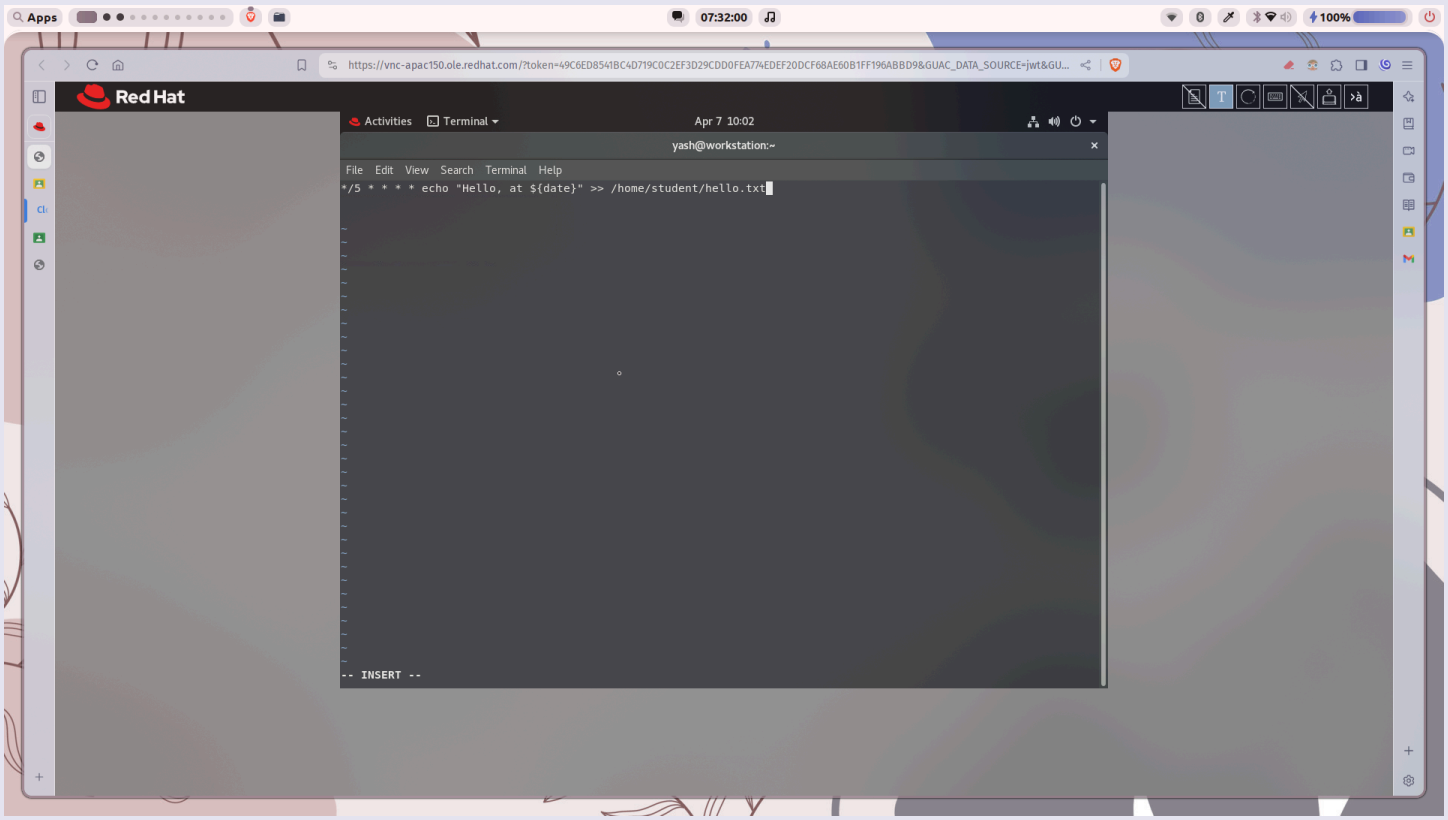
Task 10: Schedule a job that will display a hello message with the current time after every 5 minutes.



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