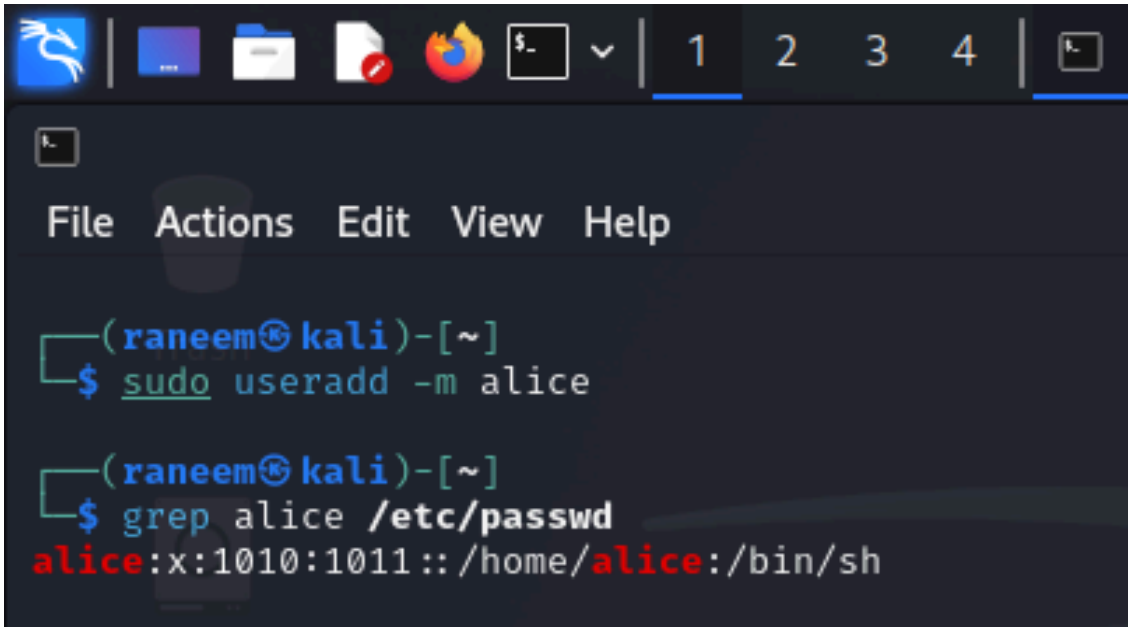
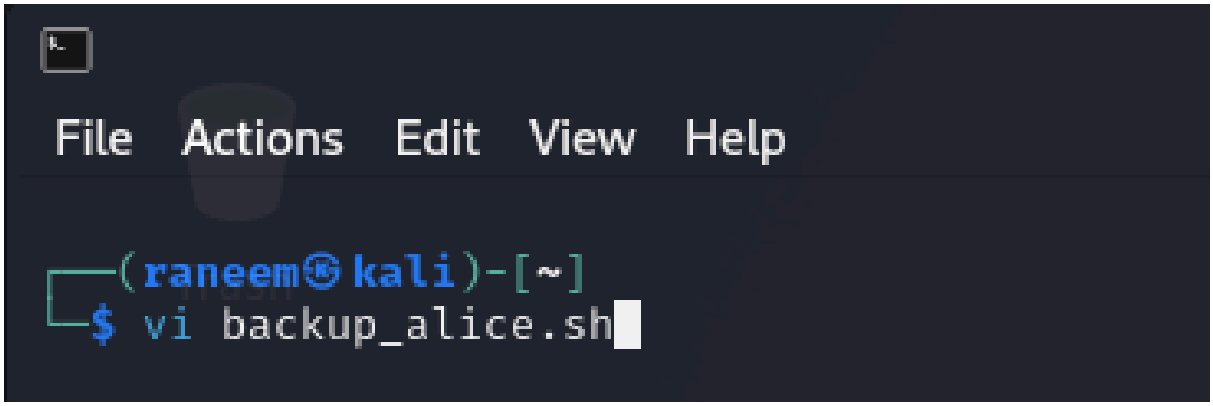
TASK A – Backup Your System (Using Crontab)

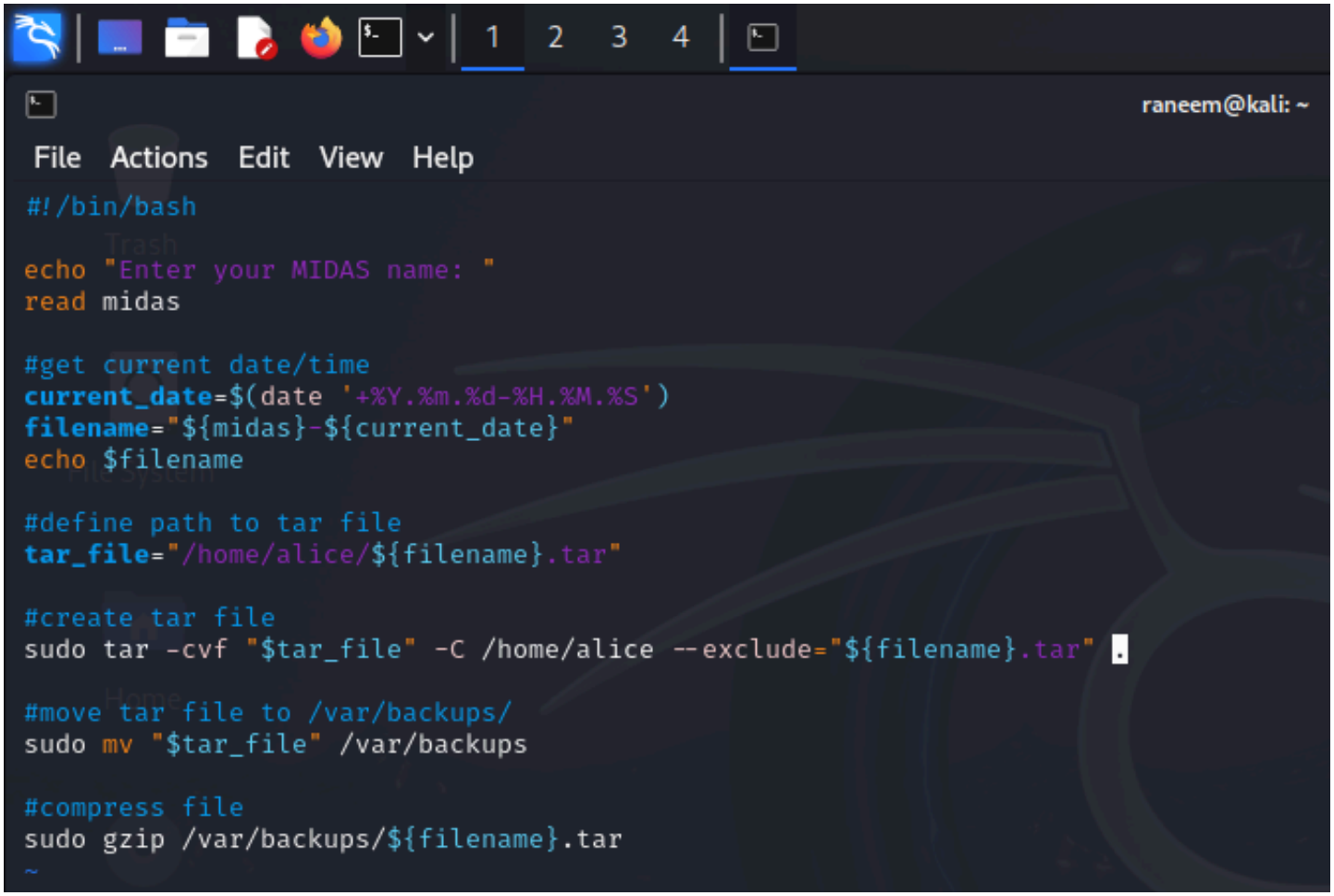
1. Create a new user Alice (with home directory)

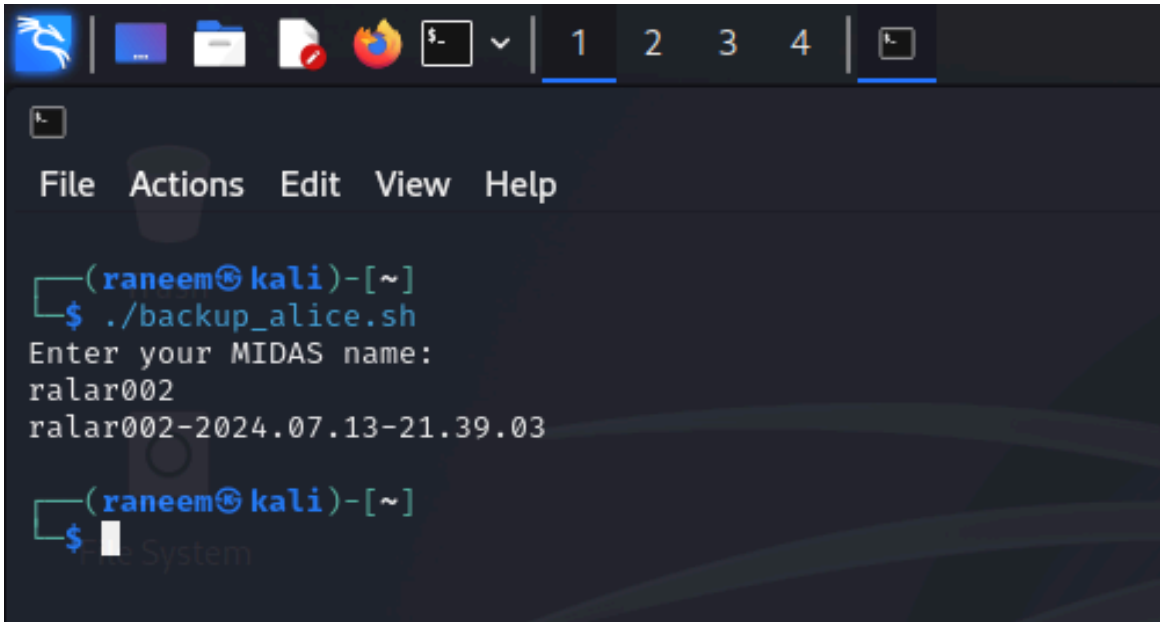


2. Write a shell script that backups Alice's home directory by creating a tar file (tape archive), using the following steps:
   A.
   - Take 2 inputs with their values- your MIDAS name and current date (midas = ralar002)
   - Create a variable named as filename that should be assigned the value as MIDAS-date
   - Using tar command, create a tape archive for Alice's home directory (/home/Alice) and the filename created above (in step-2-ii)

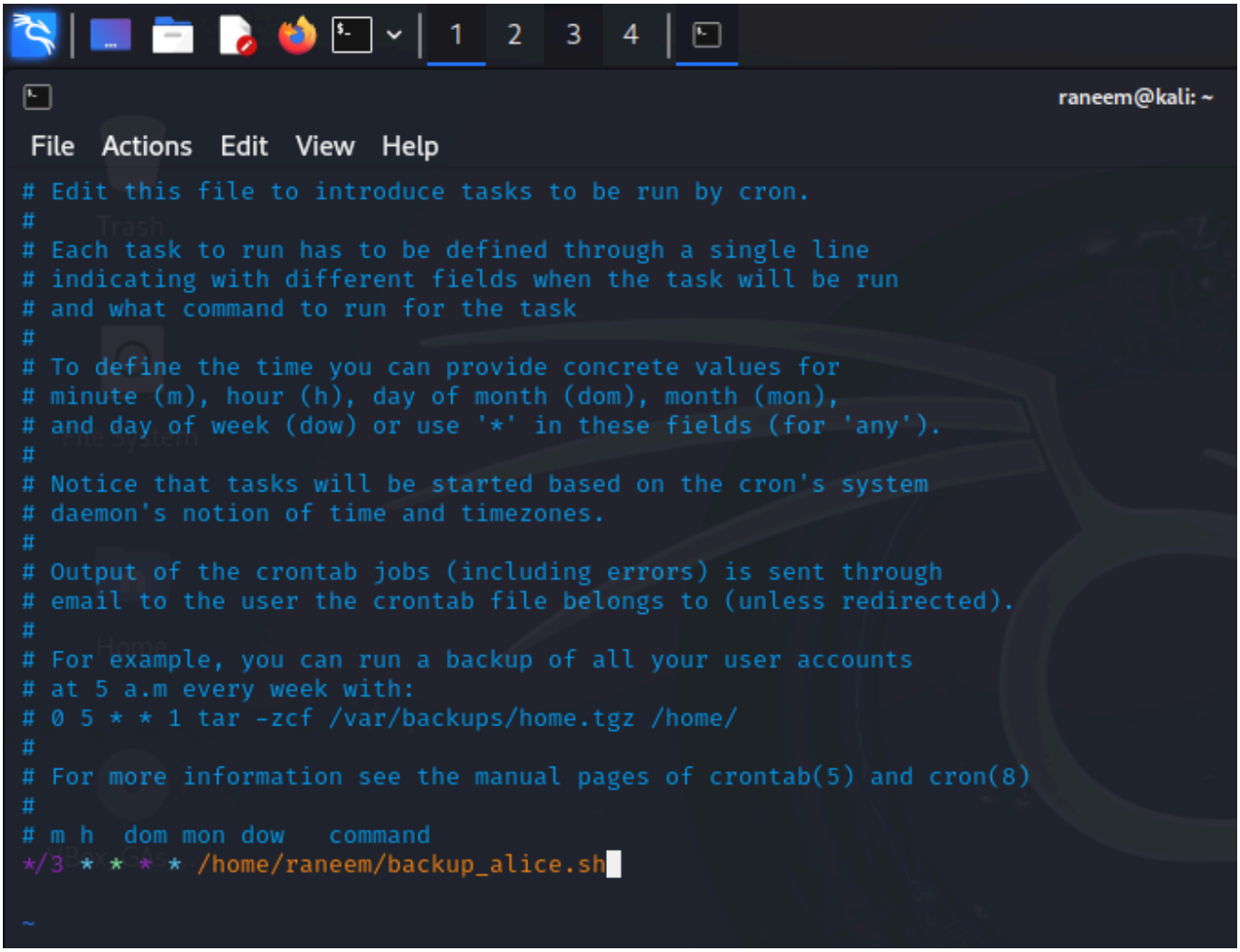
   B. Move the tape archive file/tar file (created in step 2-iii) to /var/backups/ directory using correct command in linux
   C. To optimize the disk usage, pick a compression algorithm (bz2, gzip, or xv) to compress the tar file you created in /var/backups/ in the previous step-2b


File Actions Edit View Help
(raneem㉿kali)-[~]
$ vi backup_alice.sh


1 2 3 4
raneem@kali: ~
File Actions Edit View Help
#!/bin/bash
echo "Enter your MIDAS name: "
read midas
#get current date/time
current_date=$(date '+%Y.%m.%d-%H.%M.%S')
filename="${midas}-${current_date}"
echo $filename
#define path to tar file
tar_file="/home/alice/${filename}.tar"
#create tar file
sudo tar -cvf "$tar_file" -C /home/alice --exclude="${filename}.tar" .
#move tar file to /var/backups/
sudo mv "$tar_file" /var/backups
#compress file
sudo gzip /var/backups/${filename}.tar
~



3. **Create a crontab file** to keep the scheduled task running for 3 minutes, then check the contents in the /var/backups directory



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┌──(raneem㉿kali)-[~]
└─$ crontab -e
crontab: installing new crontab

┌──(raneem㉿kali)-[~]
└─$
```

```
┌──(raneem㉿kali)-[/var/backups]
└─$ ls /var/backups
Alice                       dpkg.arch.0          ralar002-2024.07.13-15.51.26.tar.gz  raneem-2024.07.13-21.54.31.tar.gz
alternatives.tar.0          dpkg.diversions.0    ralar002-2024.07.13-15.53.41.tar.gz  tmp
apt.extended_states.0       dpkg.statoverride.0  ralar002-2024.07.13-21.55.16.tar.gz
apt.extended_states.1.gz    dpkg.status.0        ralar002-2024.07.13-21.57.27.tar.gz

┌──(raneem㉿kali)-[/var/backups]
└─$
```

4. **Cancel the crontab** jobs