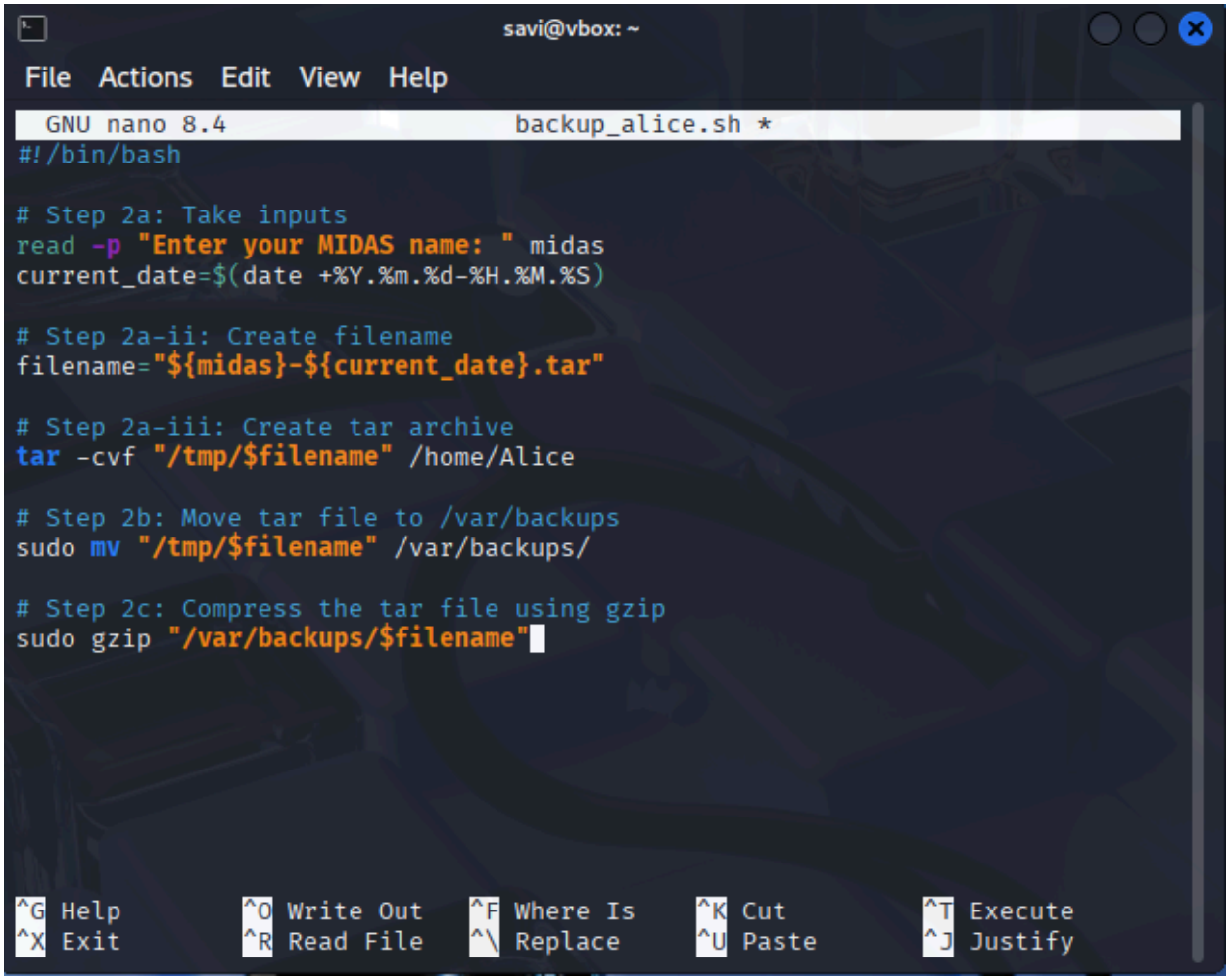
Lab 9 - Task Automation

Task A - Main task

Step one:

```
┌──(savi㉿vbox)-[~]
└─$ sudo useradd -m Alice
[sudo] password for savi:
```

Step two:




```
┌──(savi㉿vbox)-[~]
└─$ chmod +x backup_alice.sh
```

Step three:

```
┌──(savi㉿vbox)-[~]
└─$ crontab -e
no crontab for savi - using an empty one
Select an editor.  To change later, run select-editor again.
  1. /bin/nano        <---- easiest
  2. /usr/bin/vim.basic
  3. /usr/bin/vim.tiny

Choose 1-3 [1]: 1
crontab: installing new crontab
```

```
└─$ crontab -l
# Edit this file to introduce tasks to be run by cron.
#
# Each task to run has to be defined through a single line
# indicating with different fields when the task will be run
# and what command to run for the task
#
# To define the time you can provide concrete values for
# minute (m), hour (h), day of month (dom), month (mon),
# and day of week (dow) or use '*' in these fields (for 'any').
#
# Notice that tasks will be started based on the cron's system
# daemon's notion of time and timezones.
#
# Output of the crontab jobs (including errors) is sent through
# email to the user the crontab file belongs to (unless redirected).
#
# For example, you can run a backup of all your user accounts
# at 5 a.m every week with:
# 0 5 * * 1 tar -zcf /var/backups/home.tgz /home/
#
# For more information see the manual pages of crontab(5) and cron(8)
#
# m h  dom mon dow   command
43-45 21 * * * /home/xavier/backup_alice.sh
```

```
┌──(savi㉿vbox)-[~]
└─$ ls /var/backups
alternatives.tar.0      dpkg.statoverride.0
apt.extended_states.0   dpkg.status.0
dpkg.arch.0             Xavier-2025.11.09-22.04.48.tar.gz
dpkg.diversions.0
```

Step four:

```
┌──(savi㉿vbox)-[~]
└─$ crontab -r

┌──(savi㉿vbox)-[~]
└─$ crontab -l
no crontab for savi

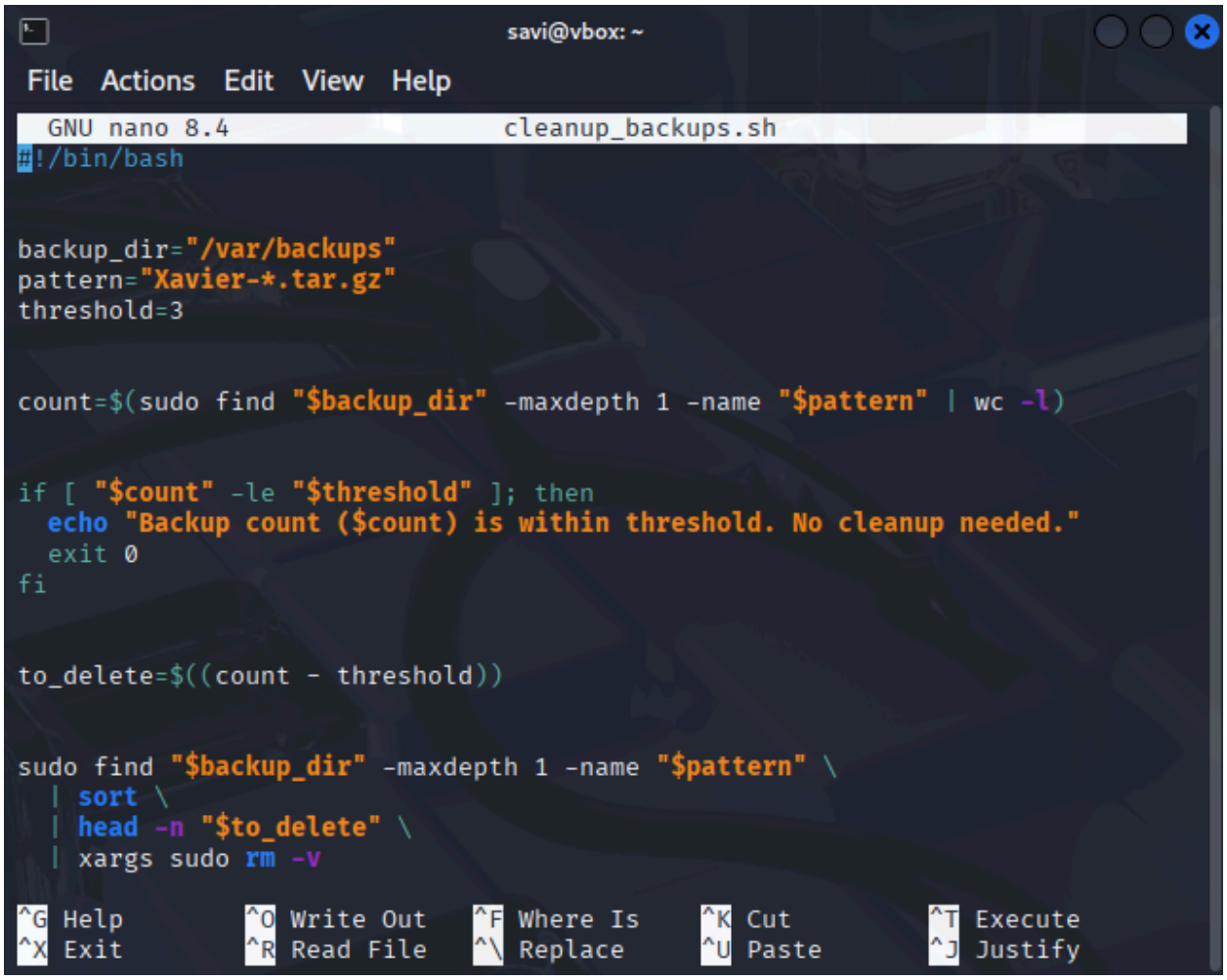
┌──(savi㉿vbox)-[~]
└─$
```

Task B - Alternative task (Extra Credit)

Step one:

```
┌──(savi㉿vbox)-[~]
└─$ nano cleanup_backups.sh
```

Step two:



```
echo "Deleted $to_delete old backup(s) to maintain threshold of $threshold."
```

Step three:

```
┌──(savi㉿vbox)-[~]
└─$ chmod +x /home/xavier/cleanup_backups.sh
```

Step four:

```
┌──(savi㉿vbox)-[~]
└─$ sudo crontab -e
[sudo] password for savi:
no crontab for root - using an empty one
Select an editor.  To change later, run select-editor again.
  1. /bin/nano        <---- easiest
  2. /usr/bin/vim.basic
  3. /usr/bin/vim.tiny

Choose 1-3 [1]: 1
crontab: installing new crontab
```

```
└─$ sudo crontab -l
# Edit this file to introduce tasks to be run by cron.
#
# Each task to run has to be defined through a single line
# indicating with different fields when the task will be run
# and what command to run for the task
#
# To define the time you can provide concrete values for
# minute (m), hour (h), day of month (dom), month (mon),
# and day of week (dow) or use '*' in these fields (for 'any').
#
# Notice that tasks will be started based on the cron's system
# daemon's notion of time and timezones.
#
# Output of the crontab jobs (including errors) is sent through
# email to the user the crontab file belongs to (unless redirected).
#
# For example, you can run a backup of all your user accounts
# at 5 a.m every week with:
# 0 5 * * 1 tar -zcf /var/backups/home.tgz /home/
#
# For more information see the manual pages of crontab(5) and cron(8)
#
# m h  dom mon dow   command
0 23 * * * /home/xavier/cleanup_backups.sh
```

Step 5 (execution):

