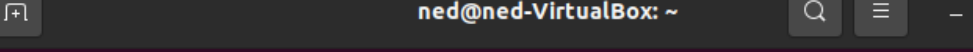


## Assignment 10

### Step 1

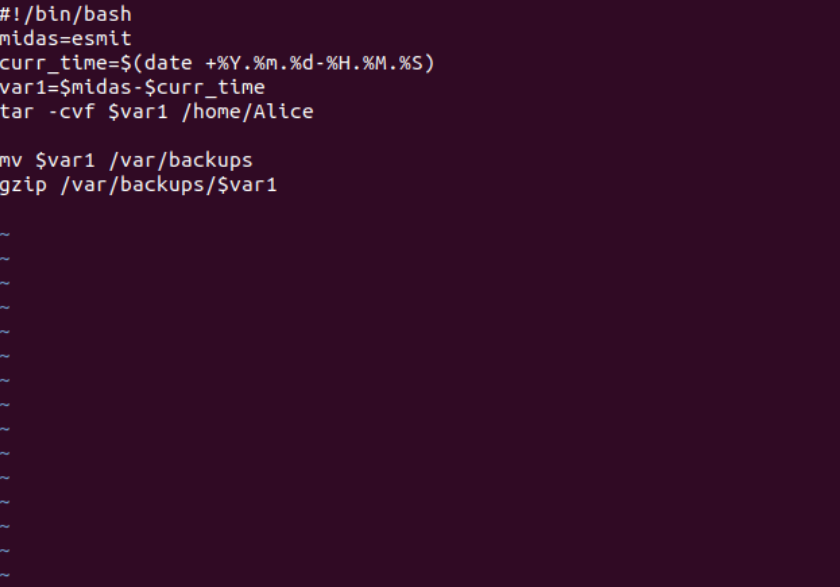


The screenshot shows a terminal window with a dark purple background. At the top, the title bar reads 'ned@ned-VirtualBox: ~'. On the left side of the terminal, there are three icons: a Firefox logo, a Twitter logo, and a folder icon. The terminal text is as follows:

```
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

ned@ned-VirtualBox:~$ useradd -m -k /etc/skel Alice
useradd: Permission denied.
useradd: cannot lock /etc/passwd; try again later.
ned@ned-VirtualBox:~$ sudo useradd -m -k /etc/skel Alice
[sudo] password for ned:
```

### Steps 1a-1c



```
#!/bin/bash
midas=esmit
curr_time=$(date +%Y.%m.%d-%H.%M.%S)
var1=$midas-$curr_time
tar -cvf $var1 /home/Alice

mv $var1 /var/backups
gzip /var/backups/$var1
```

## Checking /var/backups

```

ned@ned-VirtualBox:~$ chmod +x backupfile2.sh
ned@ned-VirtualBox:~$ ./backupfile2.sh
tar: Removing leading '/' from member names
/home/Alice/
/home/Alice/.profile
/home/Alice/.bashrc
/home/Alice/.bash_logout
mv: cannot move 'esmit-2022.11.16-15.13.39' to '/var/backups/esmit-2022.11.16-15.13.39': Permission denied
gzip: /var/backups/esmit-2022.11.16-15.13.39: No such file or directory
ned@ned-VirtualBox:~$ sudo ./backupfile2.sh
tar: Removing leading '/' from member names
/home/Alice/
/home/Alice/.profile
/home/Alice/.bashrc
/home/Alice/.bash_logout
ned@ned-VirtualBox:~$ ls /var/backups
esmit-2022.11.16-15.13.51.gz

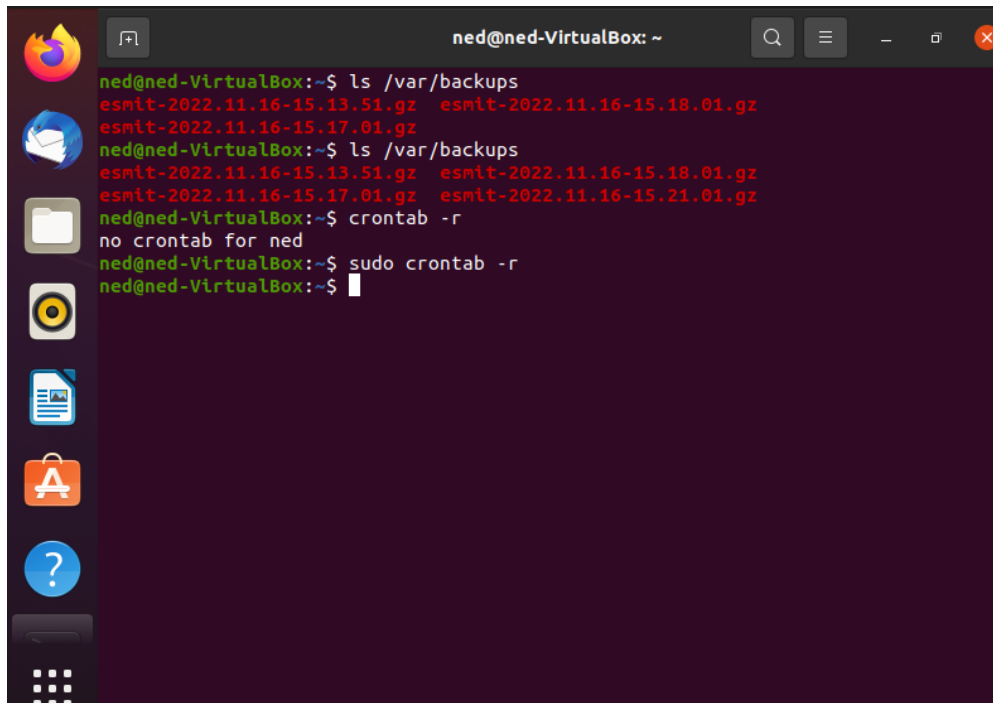
```

## Steps 2-3

```

# 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
*/3 * * * * /home/ned/backupfile2.sh
~
~
~

```

A terminal window titled 'ned@ned-VirtualBox: ~' with a dark background. The window shows the following commands and output:

```
ned@ned-VirtualBox:~$ ls /var/backups
esmit-2022.11.16-15.13.51.gz  esmit-2022.11.16-15.18.01.gz
esmit-2022.11.16-15.17.01.gz
ned@ned-VirtualBox:~$ ls /var/backups
esmit-2022.11.16-15.13.51.gz  esmit-2022.11.16-15.18.01.gz
esmit-2022.11.16-15.17.01.gz  esmit-2022.11.16-15.21.01.gz
ned@ned-VirtualBox:~$ crontab -r
no crontab for ned
ned@ned-VirtualBox:~$ sudo crontab -r
ned@ned-VirtualBox:~$
```

## Extra Credit

Category	IP Address	Binary Format
Address	75.99.120.100	01001011.01100011.01111000.01100100
Netmask	28	11111111.11111111.11111111.11110000
Network	75.99.120.96	01001011.01100011.01111000.01100000
Broadcast	75.99.120.111	01001011.01100011.01111000.01101111
First IP	75.99.120.97	01001011.01100011.01111000.01100001
Last IP	75.99.120.110	01001011.01100011.01111000.01101110
Maximum Host in Network		14