

Task A

Step 1 (sudo useradd -m Alice):

```
File Actions Edit View Help
(tiaw@Tia-Kali)-[~]
$ sudo useradd -m Alice
[sudo] password for tiaw:
(tiaw@Tia-Kali)-[~]
$
```

Step 2 (Script and Result):

Note: Script has to run with sudo to access another user's home directory. Need to pass a command line argument for the filename, but *read* could've been used.

Used -j for bzip2 format

```
tiaw@Tia-Kali: ~
File Actions Edit View Help
#!/bin/bash
current_time=$(date +%Y.%m.%d-%H.%M.%S)
echo "The file will use the name: $1"
echo "The date in the name will be $current_time"
filename=$1-$current_time
tar -cjvf $filename.tar.gz /home/Alice
mv $filename.tar.gz /var/backups/
echo "Backup created and moved to /var/backups"
~
```

```
(tiaw@Tia-Kali)-[~]
$ sudo ./Alice_home_backup.sh twarr013
The file will use the name: twarr013
The date in the name will be 2025.11.09-18.30.22
tar: Removing leading `/' from member names
```

```
(tiaw@Tia-Kali)-[~]
└─$ ls /var/backups
alternatives.tar.0      dpkg.arch.1.gz          dpkg.statoverride.0    dpkg.status.2.gz
apt.extended_states.0  dpkg.arch.2.gz          dpkg.statoverride.1.gz twarr013-2025.11.09-18.26.36.tar.gz
apt.extended_states.1.gz dpkg.diversions.0       dpkg.statoverride.2.gz twarr013-2025.11.09-18.30.22.tar.gz
apt.extended_states.2.gz dpkg.diversions.1.gz    dpkg.status.0
dpkg.arch.0             dpkg.diversions.2.gz    dpkg.status.1.gz
```

Step 3 (crontab -e):

Note: As stated previously, the script needed sudo, so this is the root crontab. How can I avoid doing this since it's a security issue?

```
# 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/
# /usr/Downloads
# For more information see the manual pages of crontab(5) and cron(8)
# devices
# m h dom mon dow   command
* * * * * /home/tiaw/Alice_home_backup.sh twarr013
```

```
(tiaw@Tia-Kali)-[~]
└─$ ls /var/backups
alternatives.tar.0      dpkg.diversions.0      dpkg.status.1.gz
apt.extended_states.0  dpkg.diversions.1.gz   dpkg.status.2.gz
apt.extended_states.1.gz dpkg.diversions.2.gz   twarr013-2025.11.09-18.26.36.tar.gz
apt.extended_states.2.gz dpkg.statoverride.0     twarr013-2025.11.09-18.30.22.tar.gz
dpkg.arch.0            dpkg.statoverride.1.gz twarr013-2025.11.09-19.04.01.tar.gz
dpkg.arch.1.gz         dpkg.statoverride.2.gz twarr013-2025.11.09-19.05.01.tar.gz
dpkg.arch.2.gz         dpkg.status.0          twarr013-2025.11.09-19.06.01.tar.gz
```

Step 4 (crontab -r):

```
(tiaw@Tia-Kali)-[~]
└─$ sudo crontab -r
```

```
(tiaw@Tia-Kali)-[~]
└─$ sudo crontab -l
no crontab for root
```

```
(tiaw@Tia-Kali)-[~]
└─$ crontab -r
```

```
(tiaw@Tia-Kali)-[~]
└─$ crontab -l
no crontab for tiaw
```

```
(tiaw@Tia-Kali)-[~]
└─$
```

```
(tiaw@Tia-Kali)-[~]
```

```
└─$ ls
01277094.hash      Downloads      if_practice.sh  Public
10                 error_log.txt  input.txt        rockyou.txt
archive.tar        Extra_Checkfile.sh md5_extra-credit.hash shadow
Checkfile.sh      file1          Music            Templates
copyright_cyse270 file2          name.sh          test_david.txt
data              files_list.txt odu.txt          test.txt
demo_funny.txt    fruit.txt     Pictures         touch
demo.txt          Greater.sh     practice_delete.txt variable.sh
Desktop           groupfile.txt practice_folder  Videos
Documents        hello.sh      practice.txt
```

```
(tiaw@Tia-Kali)-[~]
```

```
└─$ ./Extra_Checkfile.sh
Enter a name to see if it is a directory or filename: cookie.txt
cookie.txt does not exist. File created.
The contents of the file are:
Tia M Warren!
```

```
(tiaw@Tia-Kali)-[~]
```

```
└─$ ls
01277094.hash      Documents      hello.sh         practice.txt
10                 Downloads     if_practice.sh  Public
archive.tar        error_log.txt  input.txt        rockyou.txt
Checkfile.sh      Extra_Checkfile.sh md5_extra-credit.hash shadow
cookie.txt         file1          Music            Templates
copyright_cyse270 file2          name.sh          test_david.txt
data              files_list.txt odu.txt          test.txt
demo_funny.txt    fruit.txt     Pictures         touch
demo.txt          Greater.sh     practice_delete.txt variable.sh
Desktop           groupfile.txt practice_folder  Videos
Documents
```

```
(tiaw@Tia-Kali)-[~]
```

```
└─$
```