

1.

```
lydia-robb@kali: ~  
File Actions Edit View Help  
MB]  
Get:4 http://kali.download/kali kali-rolling/contrib amd64 Packages [116 kB]  
Get:5 http://kali.download/kali kali-rolling/contrib amd64 Contents (deb) [31  
9 kB]  
Get:6 http://kali.download/kali kali-rolling/non-free amd64 Packages [186 kB]  
Get:7 http://kali.download/kali kali-rolling/non-free amd64 Contents (deb) [8  
93 kB]  
Get:8 http://kali.download/kali kali-rolling/non-free-firmware amd64 Packages  
[11.3 kB]  
Get:9 http://kali.download/kali kali-rolling/non-free-firmware amd64 Contents  
(deb) [28.4 kB]  
Fetched 74.8 MB in 10s (7,134 kB/s)  
1404 packages can be upgraded. Run 'apt list --upgradable' to see them.  
  
(lydia-robb@kali)-[~]  
└─$ sudo mkdir -p /var/backups  
  
(lydia-robb@kali)-[~]  
└─$ sudo useradd -m -s /bin/bash Alice  
  
(lydia-robb@kali)-[~]  
└─$ sudo passwd Alice  
New password:  
Retype new password:  
passwd: password updated successfully  
  
(lydia-robb@kali)-[~]  
└─$
```

2. Shell script

```
lydia-robb@kali: ~
File Actions Edit View Help
GNU nano 8.4 /home/lydia-robb/lab9/backup_alice.sh *
#!/bin/bash
set -eou pipfail
if [ $# -ne 2 ]; then
echo "Usage: $0 <MIDAS> <DATESTAMP>" >&2
exit 1
fi
MIDAS="$1"
DATESTAMP="$2"
filename="${MIDAS}-${DATESTAMP}"

tarpath="/tmp/${filename}.tar"
sudo tar -cvf "$tarpath" /home/Alice
sudo mv "$tarpath" /var/backups/
sudo gzip -f "/var/backups/${filename}.tar"
echo "Created: /var/backups/${filename}.tar.gz"
chmod +X ~/lab9/backup_alice.sh

```

^G Help    ^O Write Out    ^F Where Is    ^K Cut    ^T Execute  
^X Exit    ^R Read File    ^\ Replace    ^U Paste    ^J Justify

```
#
# 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
* * * * * STAMP="$(date +%Y.%m.%d-%H.%M.%S)";
/home/lydia-robb/lab9/backup_alice.sh "lrobb005" "$STAMP" >>
/var/log/backup_alice.log 2>&1

```

```
(lydia-robb@kali)-[~]
└─$ ls -lh /var/backups
total 3.8M
-rw-r--r-- 1 root root 170K Aug 30 12:32 alternatives.tar.0
-rw-r--r-- 1 root root 162K Oct 10 09:29 apt.extended_states.0
-rw-r--r-- 1 root root 19K Sep 4 21:27 apt.extended_states.1.gz
-rw-r--r-- 1 root root 0 Sep 5 00:00 dpkg.arch.0
-rw-r--r-- 1 root root 32 Aug 30 12:32 dpkg.arch.1.gz
-rw-r--r-- 1 root root 8.3K Aug 29 16:03 dpkg.diversions.0
-rw-r--r-- 1 root root 1.6K Aug 29 16:03 dpkg.diversions.1.gz
-rw-r--r-- 1 root root 683 Aug 29 15:52 dpkg.statoverride.0
-rw-r--r-- 1 root root 287 Aug 29 15:52 dpkg.statoverride.1.gz
-rw-r--r-- 1 root root 2.7M Sep 4 21:27 dpkg.status.0
-rw-r--r-- 1 root root 694K Aug 29 16:02 dpkg.status.1.gz
-rw-r--r-- 1 root root 11K Nov 7 09:12 lrobb005-2025.11.07-09.12.00.tar.gz
-rw-r--r-- 1 root root 11K Nov 7 09:29 lrobb005-2025.11.07-09.29.01.tar.gz
-rw-r--r-- 1 root root 11K Nov 7 09:30 lrobb005-2025.11.07-09.30.01.tar.gz
-rw-r--r-- 1 root root 11K Nov 7 09:31 lrobb005-2025.11.07-09.31.01.tar.gz
-rw-r--r-- 1 root root 11K Nov 7 09:32 lrobb005-2025.11.07-09.32.01.tar.gz
-rw-r--r-- 1 root root 11K Nov 7 09:33 lrobb005-2025.11.07-09.33.06.tar.gz

(lydia-robb@kali)-[~]
└─$ █
```

3.

```
File Actions Edit View Help
-rw-r--r-- 1 root root 19K Sep 4 21:27 apt.extended_states.1.gz
-rw-r--r-- 1 root root 0 Sep 5 00:00 dpkg.arch.0
-rw-r--r-- 1 root root 32 Aug 30 12:32 dpkg.arch.1.gz
-rw-r--r-- 1 root root 8.3K Aug 29 16:03 dpkg.diversions.0
-rw-r--r-- 1 root root 1.6K Aug 29 16:03 dpkg.diversions.1.gz
-rw-r--r-- 1 root root 683 Aug 29 15:52 dpkg.statoverride.0
-rw-r--r-- 1 root root 287 Aug 29 15:52 dpkg.statoverride.1.gz
-rw-r--r-- 1 root root 2.7M Sep 4 21:27 dpkg.status.0
-rw-r--r-- 1 root root 694K Aug 29 16:02 dpkg.status.1.gz
-rw-r--r-- 1 root root 11K Nov 7 09:12 lrobb005-2025.11.07-09.12.00.tar.gz

(lydia-robb@kali)-[~]
└─$ sudo crontab -e
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
"/tmp/crontab.5qPQXe/crontab":23: bad minute
errors in crontab file, can't install.
Do you want to retry the same edit? (y/n) y
crontab: installing new crontab

(lydia-robb@kali)-[~]
└─$
```

```
lydia-robb@kali: ~
File Actions Edit View Help
└─$ 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
(lydia-robb@kali)-[~]
└─$
```

4.

Proof that crontab jobs are cancelled