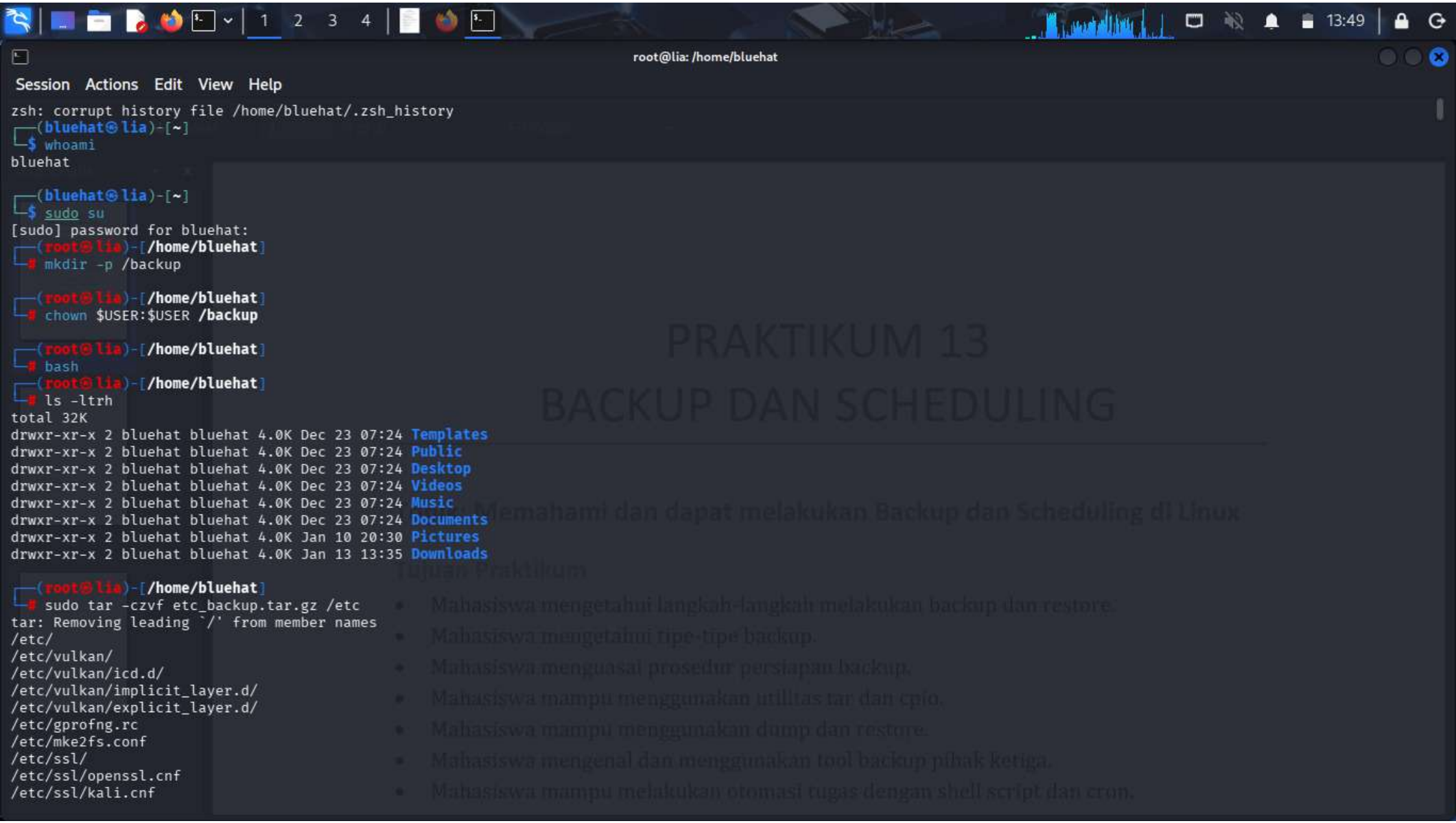


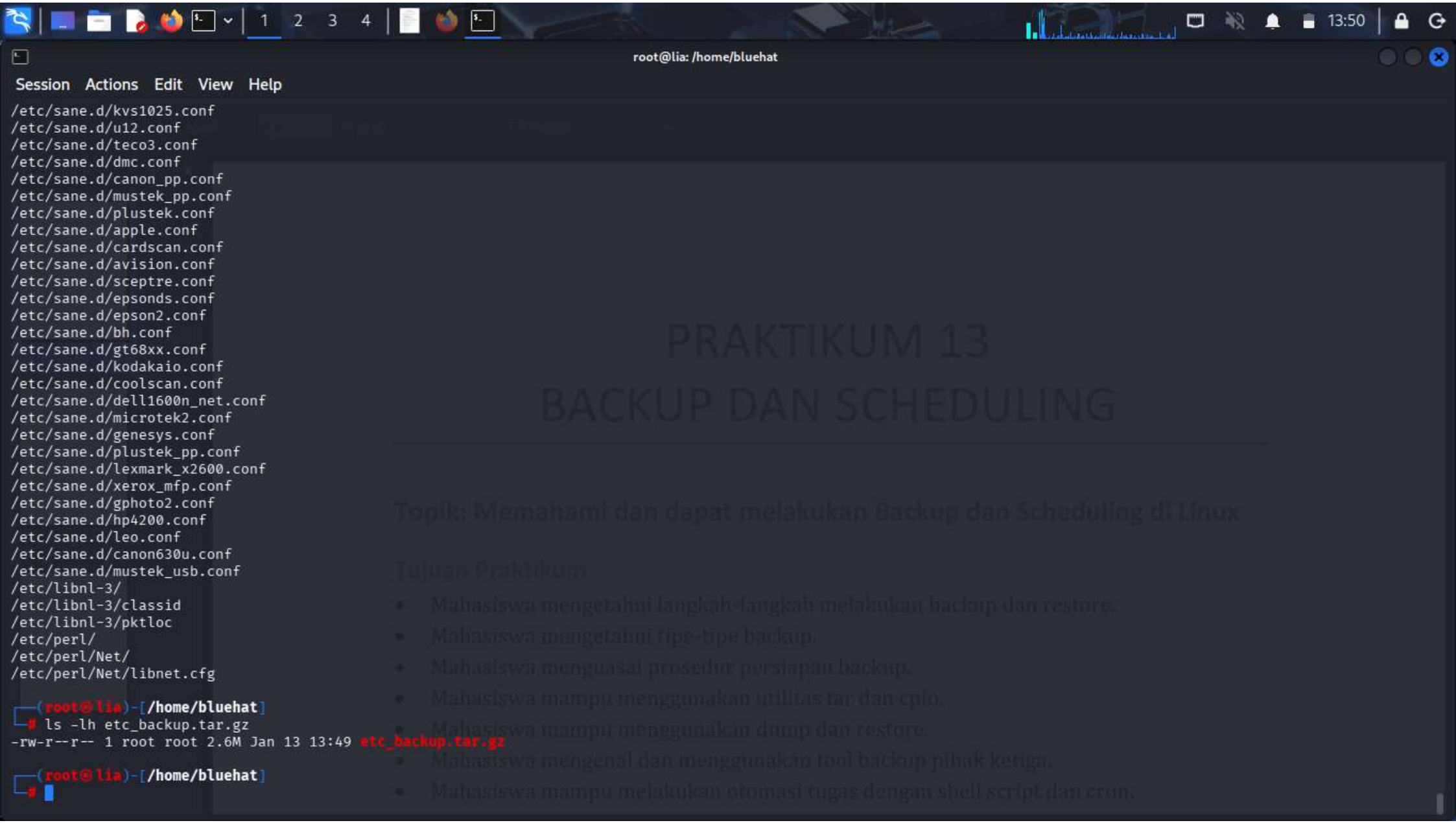
PRAKTIKUM 13

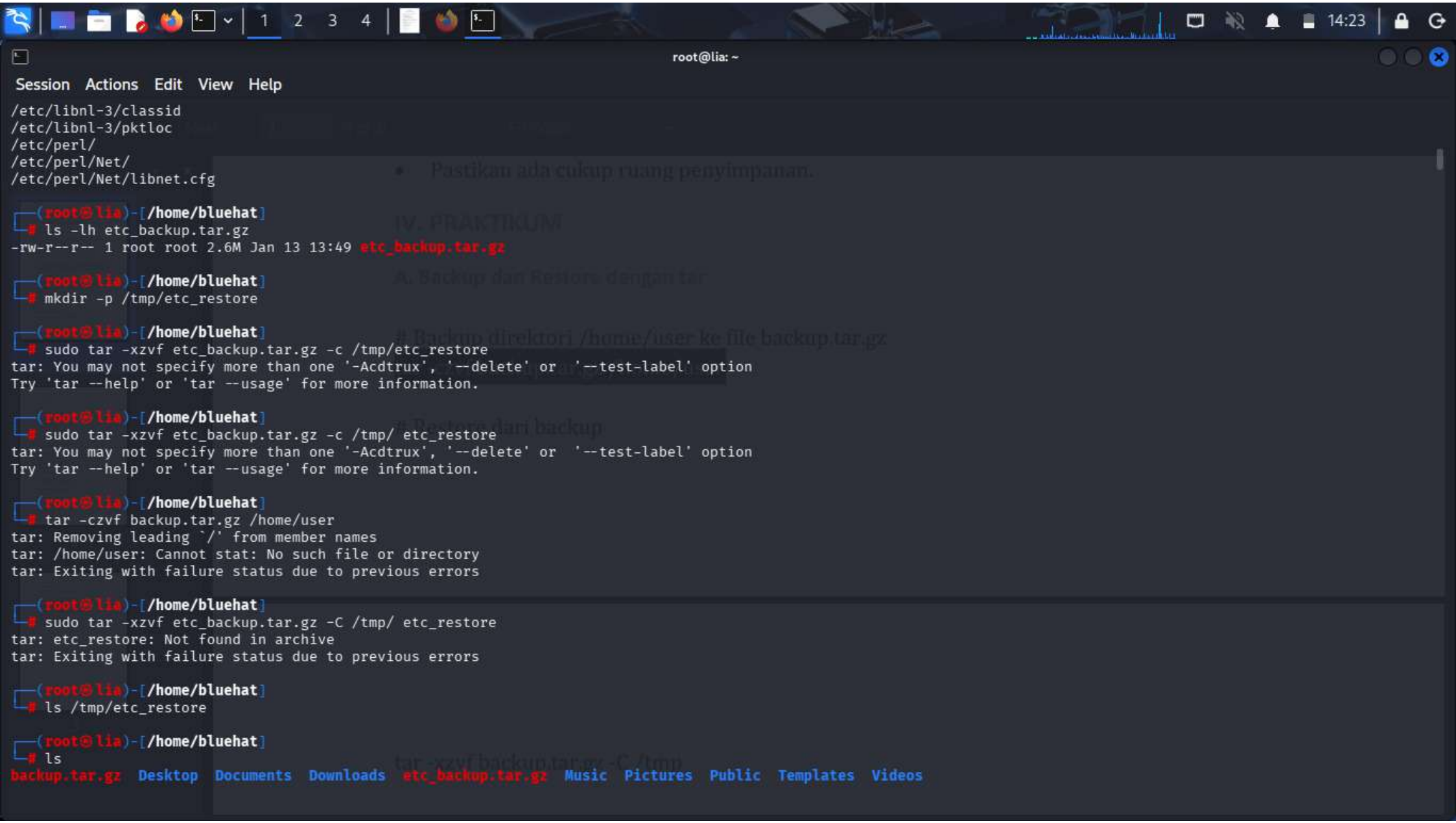
BACKUP DAN SCHEDULING

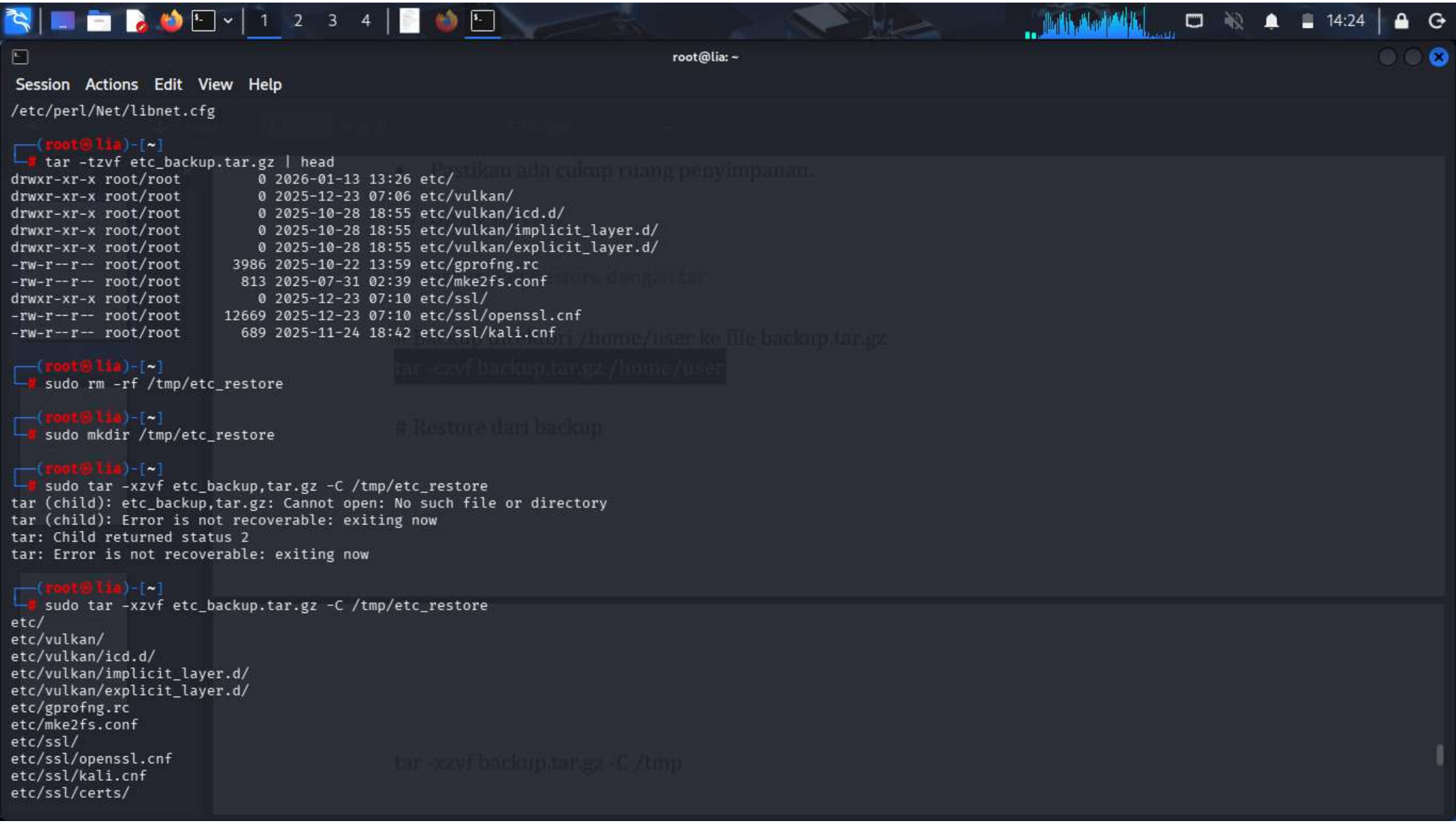
Mahasiswa memahami dan dapat melakukan Backup dan Scheduling di Linux

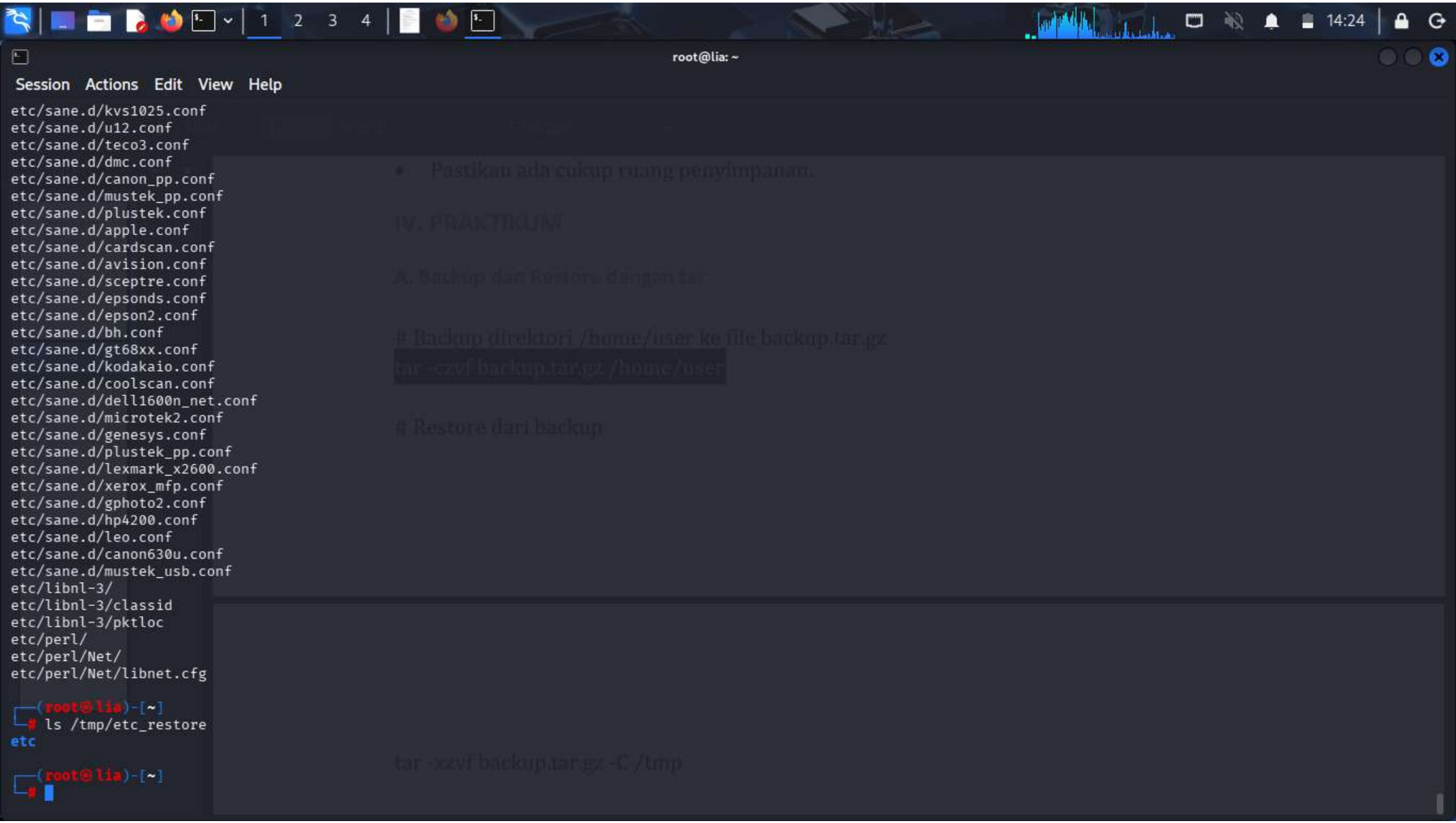
Tujuan Praktikum

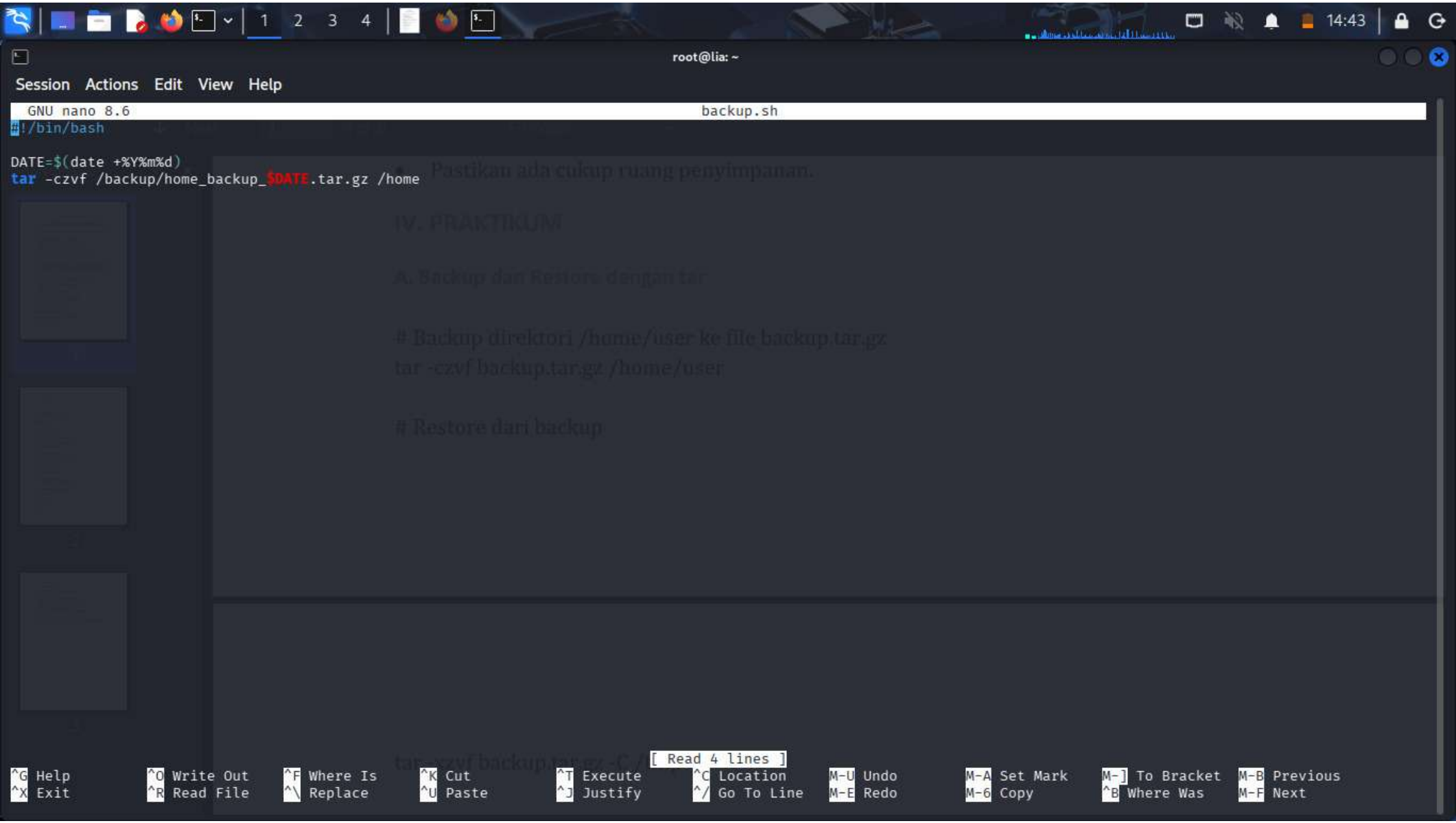
- Mahasiswa mengetahui langkah-langkah melakukan backup dan restore.
- Mahasiswa mengetahui tipe-tipe backup.
- Mahasiswa menguasai prosedur persiapan backup.
- Mahasiswa mampu menggunakan utilitas tar dan cpio.
- Mahasiswa mampu menggunakan dump dan restore.
- Mahasiswa mengenal dan menggunakan tool backup pihak ketiga.
- Mahasiswa mampu melakukan otomasi tugas dengan shell script dan cron.

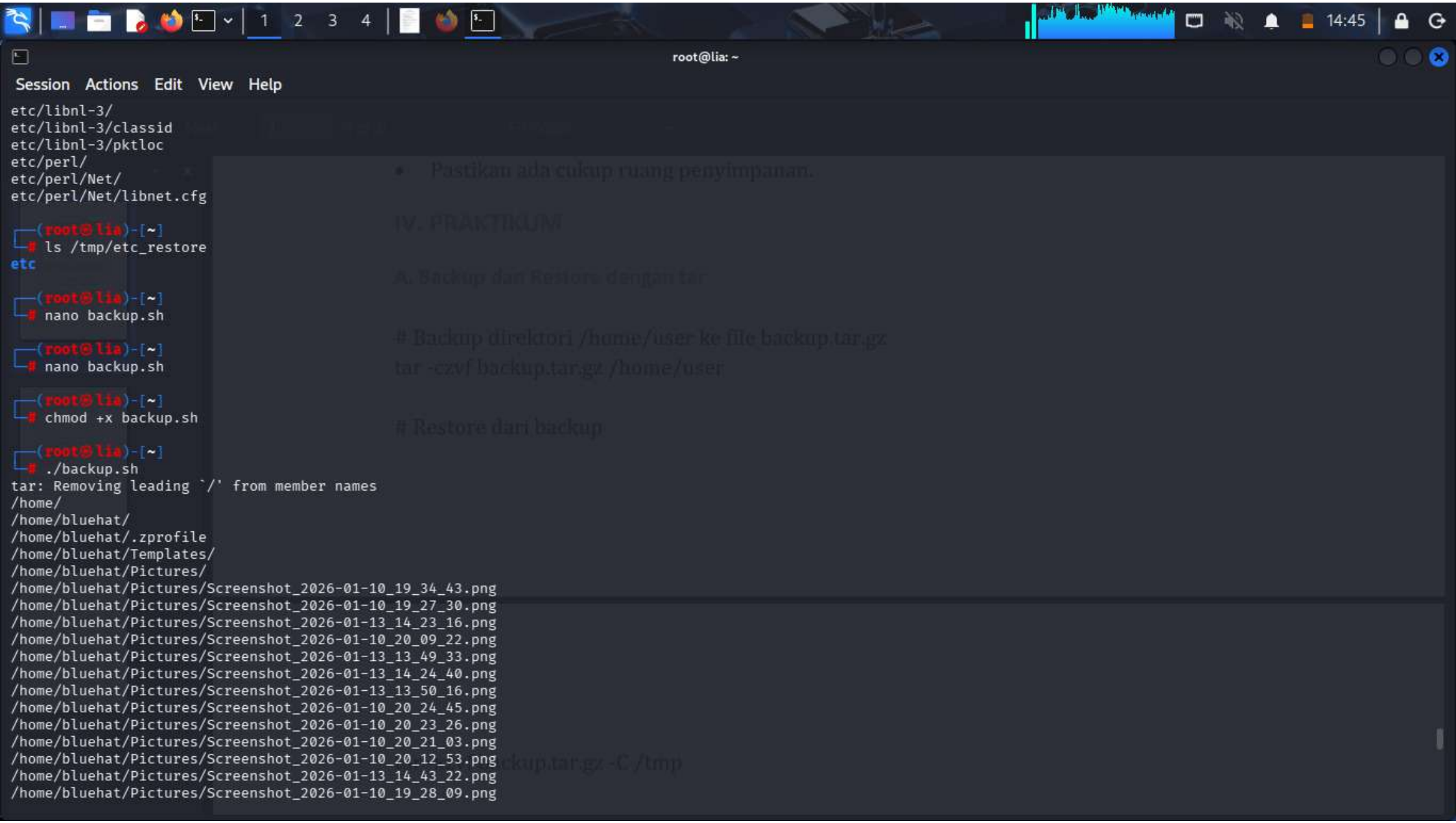

1 2 3 4
13:50
root@lia: /home/bluehat
Session Actions Edit View Help
/etc/sane.d/kvs1025.conf
/etc/sane.d/u12.conf
/etc/sane.d/teco3.conf
/etc/sane.d/dmc.conf
/etc/sane.d/canon_pp.conf
/etc/sane.d/mustek_pp.conf
/etc/sane.d/plustek.conf
/etc/sane.d/apple.conf
/etc/sane.d/cardscan.conf
/etc/sane.d/avision.conf
/etc/sane.d/sceptre.conf
/etc/sane.d/epsonds.conf
/etc/sane.d/epson2.conf
/etc/sane.d/bh.conf
/etc/sane.d/gt68xx.conf
/etc/sane.d/kodakaio.conf
/etc/sane.d/coolscan.conf
/etc/sane.d/dell1600n_net.conf
/etc/sane.d/microtek2.conf
/etc/sane.d/genesys.conf
/etc/sane.d/plustek_pp.conf
/etc/sane.d/lexmark_x2600.conf
/etc/sane.d/xerox_mfp.conf
/etc/sane.d/gphoto2.conf
/etc/sane.d/hp4200.conf
/etc/sane.d/leo.conf
/etc/sane.d/canon630u.conf
/etc/sane.d/mustek_usb.conf
/etc/libnl-3/
/etc/libnl-3/classid
/etc/libnl-3/pktloc
/etc/perl/
/etc/perl/Net/
/etc/perl/Net/libnet.cfg
┌──(root㉿lia)-[/home/bluehat]
└─# ls -lh etc_backup.tar.gz
-rw-r--r-- 1 root root 2.6M Jan 13 13:49 etc_backup.tar.gz
┌──(root㉿lia)-[/home/bluehat]
└─#
PRAKTIKUM 13
BACKUP DAN SCHEDULING
Topik: Memahami dan dapat melakukan Backup dan Scheduling di Linux
Tujuan Praktikum
Mahasiswa mengetahui langkah-langkah melakukan backup dan restore.
Mahasiswa mengetahui tipe-tipe backup.
Mahasiswa menguasai prosedur persiapan backup.
Mahasiswa mampu menggunakan utilitas tar dan cpio.
Mahasiswa mampu menggunakan dump dan restore.
Mahasiswa mengenal dan menggunakan tool backup pihak ketiga.
Mahasiswa mampu melakukan otomasi tugas dengan shell script dan cron.

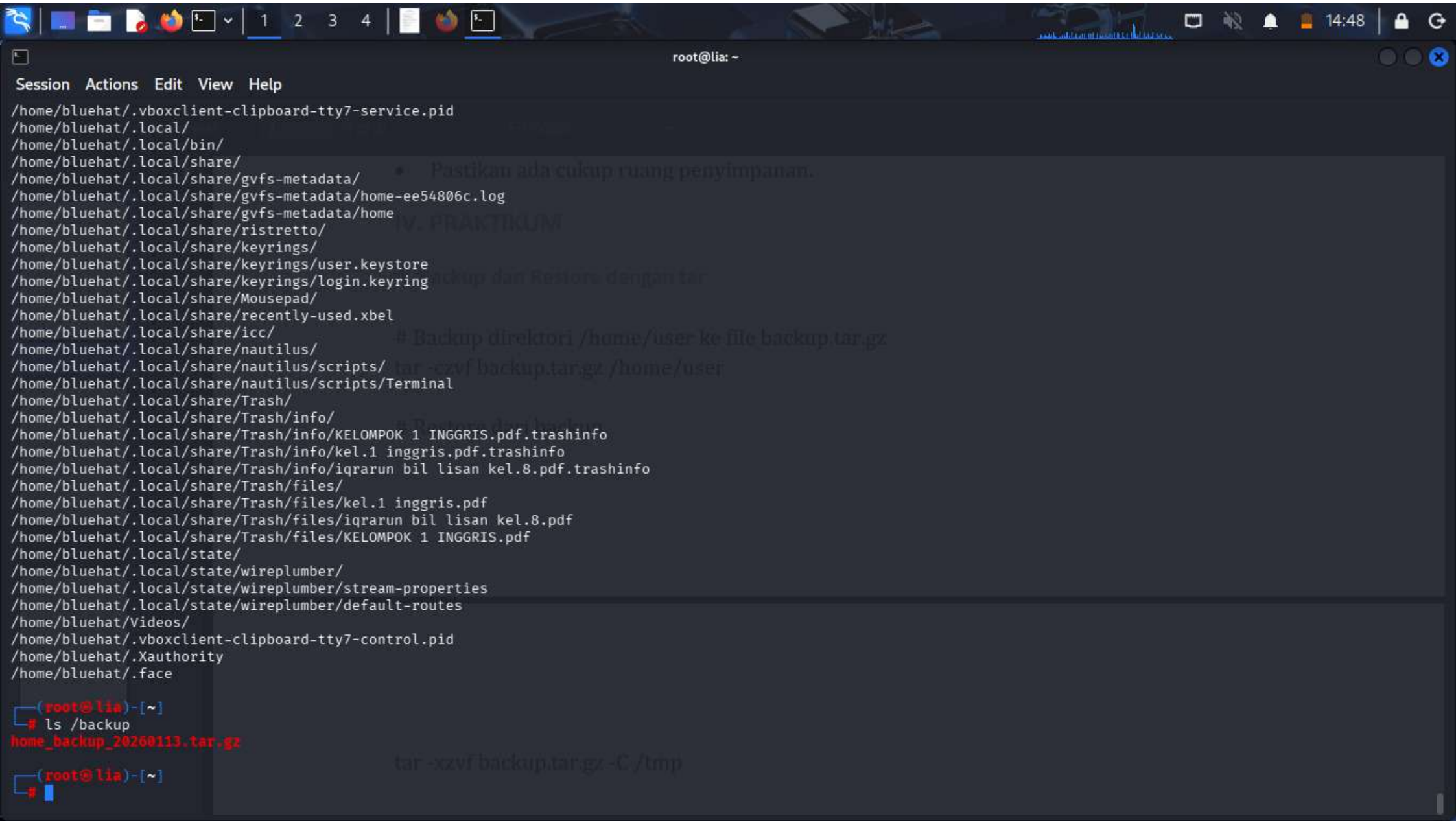

1 2 3 4
14:23
root@lia: ~
Session Actions Edit View Help
/etc/libnl-3/classid
/etc/libnl-3/pktloc
/etc/perl/
/etc/perl/Net/
/etc/perl/Net/libnet.cfg
┌──(root㉿lia)-[/home/bluehat]
└─# ls -lh etc_backup.tar.gz
-rw-r--r-- 1 root root 2.6M Jan 13 13:49 etc_backup.tar.gz
┌──(root㉿lia)-[/home/bluehat]
└─# mkdir -p /tmp/etc_restore
┌──(root㉿lia)-[/home/bluehat]
└─# sudo tar -xzvf etc_backup.tar.gz -c /tmp/etc_restore
tar: You may not specify more than one '-Acdtrux', '--delete' or '--test-label' option
Try 'tar --help' or 'tar --usage' for more information.
┌──(root㉿lia)-[/home/bluehat]
└─# sudo tar -xzvf etc_backup.tar.gz -c /tmp/ etc_restore
tar: You may not specify more than one '-Acdtrux', '--delete' or '--test-label' option
Try 'tar --help' or 'tar --usage' for more information.
┌──(root㉿lia)-[/home/bluehat]
└─# tar -czvf backup.tar.gz /home/user
tar: Removing leading `/' from member names
tar: /home/user: Cannot stat: No such file or directory
tar: Exiting with failure status due to previous errors
┌──(root㉿lia)-[/home/bluehat]
└─# sudo tar -xzvf etc_backup.tar.gz -C /tmp/ etc_restore
tar: etc_restore: Not found in archive
tar: Exiting with failure status due to previous errors
┌──(root㉿lia)-[/home/bluehat]
└─# ls /tmp/etc_restore
┌──(root㉿lia)-[/home/bluehat]
└─# ls
backup.tar.gz Desktop Documents Downloads etc_backup.tar.gz Music Pictures Public Templates Videos

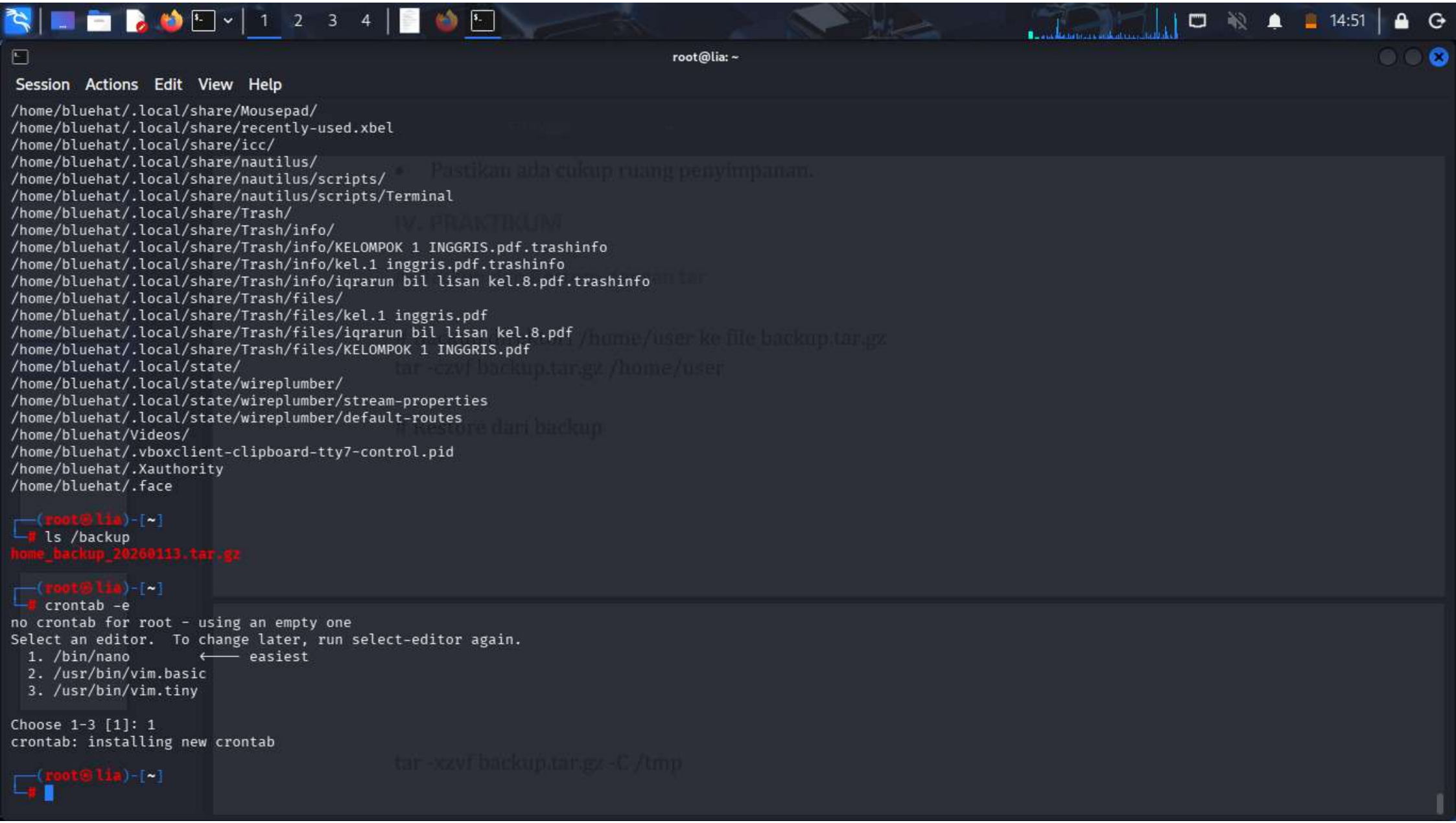

1 2 3 4
14:24
root@lia: ~
Session Actions Edit View Help
/etc/perl/Net/libnet.cfg
┌──(root㉿lia)-[~]
└─# tar -tzvf etc_backup.tar.gz | head
drwxr-xr-x root/root 0 2026-01-13 13:26 etc/
drwxr-xr-x root/root 0 2025-12-23 07:06 etc/vulkan/
drwxr-xr-x root/root 0 2025-10-28 18:55 etc/vulkan/icd.d/
drwxr-xr-x root/root 0 2025-10-28 18:55 etc/vulkan/implicit_layer.d/
drwxr-xr-x root/root 0 2025-10-28 18:55 etc/vulkan/explicit_layer.d/
-rw-r--r-- root/root 3986 2025-10-22 13:59 etc/gprofng.rc
-rw-r--r-- root/root 813 2025-07-31 02:39 etc/mke2fs.conf
drwxr-xr-x root/root 0 2025-12-23 07:10 etc/ssl/
-rw-r--r-- root/root 12669 2025-12-23 07:10 etc/ssl/openssl.cnf
-rw-r--r-- root/root 689 2025-11-24 18:42 etc/ssl/kali.cnf
┌──(root㉿lia)-[~]
└─# sudo rm -rf /tmp/etc_restore
┌──(root㉿lia)-[~]
└─# sudo mkdir /tmp/etc_restore
┌──(root㉿lia)-[~]
└─# sudo tar -xzvf etc_backup,tar.gz -C /tmp/etc_restore
tar (child): etc_backup,tar.gz: Cannot open: No such file or directory
tar (child): Error is not recoverable: exiting now
tar: Child returned status 2
tar: Error is not recoverable: exiting now
┌──(root㉿lia)-[~]
└─# sudo tar -xzvf etc_backup.tar.gz -C /tmp/etc_restore
etc/
etc/vulkan/
etc/vulkan/icd.d/
etc/vulkan/implicit_layer.d/
etc/vulkan/explicit_layer.d/
etc/gprofng.rc
etc/mke2fs.conf
etc/ssl/
etc/ssl/openssl.cnf
etc/ssl/kali.cnf
etc/ssl/certs/

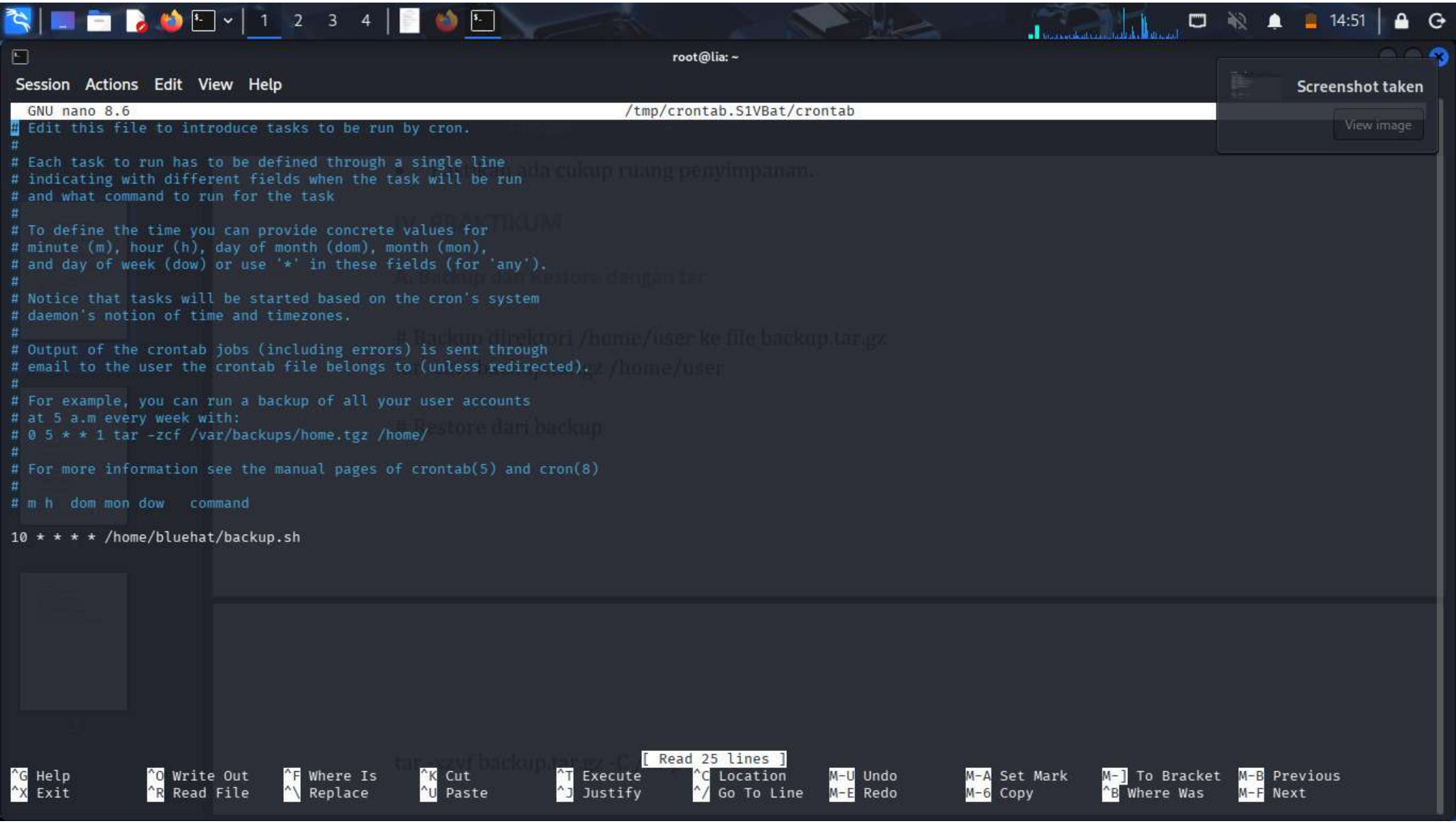

1 2 3 4
14:24
root@lia: ~
Session Actions Edit View Help
etc/sane.d/kvs1025.conf
etc/sane.d/u12.conf
etc/sane.d/teco3.conf
etc/sane.d/dmc.conf
etc/sane.d/canon_pp.conf
etc/sane.d/mustek_pp.conf
etc/sane.d/plustek.conf
etc/sane.d/apple.conf
etc/sane.d/cardscan.conf
etc/sane.d/avision.conf
etc/sane.d/sceptre.conf
etc/sane.d/epsonds.conf
etc/sane.d/epson2.conf
etc/sane.d/bh.conf
etc/sane.d/gt68xx.conf
etc/sane.d/kodakaio.conf
etc/sane.d/coolscan.conf
etc/sane.d/dell1600n_net.conf
etc/sane.d/microtek2.conf
etc/sane.d/genesys.conf
etc/sane.d/plustek_pp.conf
etc/sane.d/lexmark_x2600.conf
etc/sane.d/xerox_mfp.conf
etc/sane.d/gphoto2.conf
etc/sane.d/hp4200.conf
etc/sane.d/leo.conf
etc/sane.d/canon630u.conf
etc/sane.d/mustek_usb.conf
etc/libnl-3/
etc/libnl-3/classid
etc/libnl-3/pktloc
etc/perl/
etc/perl/Net/
etc/perl/Net/libnet.cfg
(root@lia)-[~]
ls /tmp/etc_restore
etc
(root@lia)-[~]
#

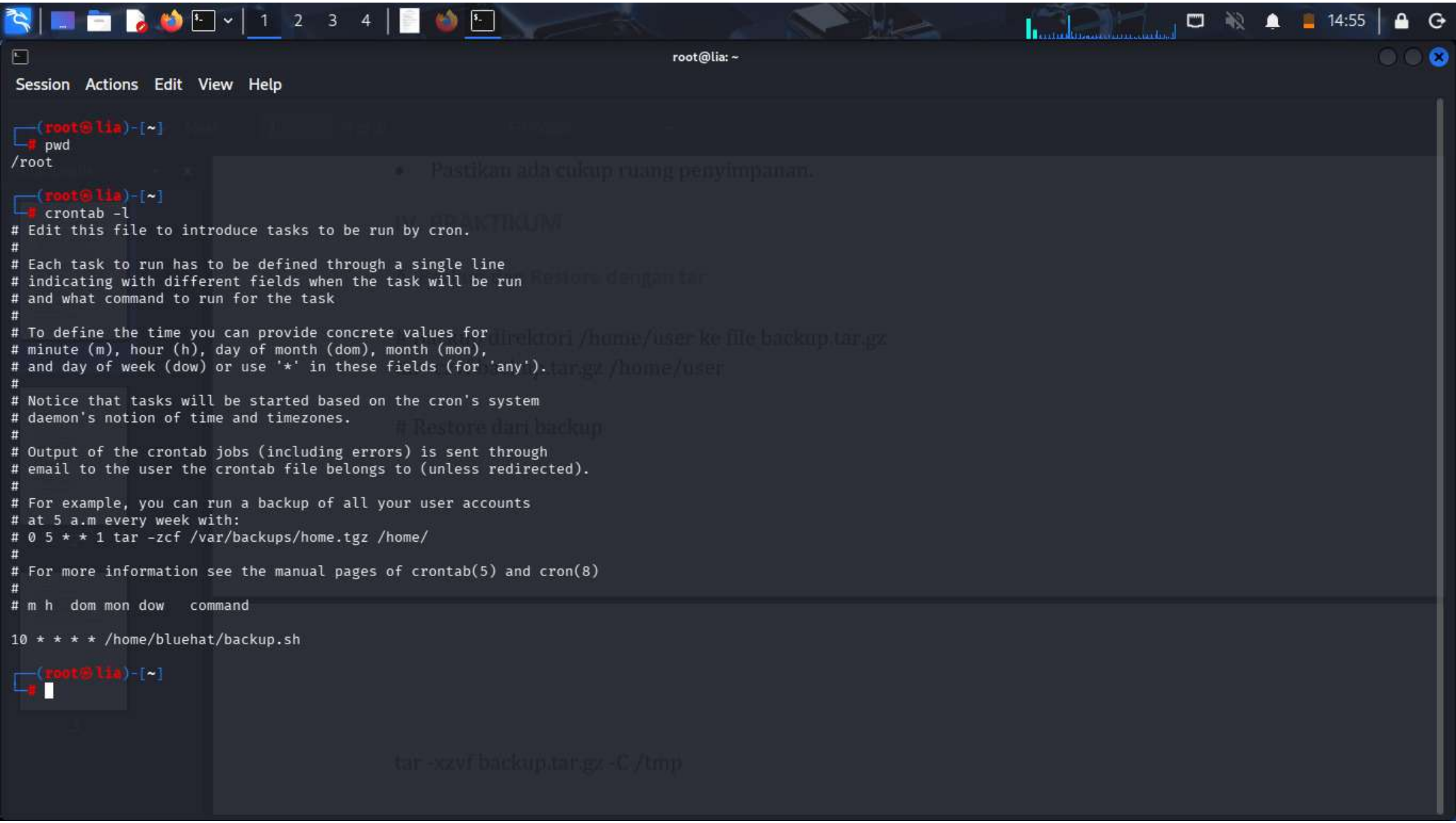

1 2 3 4
14:43
root@lia: ~
Session Actions Edit View Help
GNU nano 8.6 backup.sh
#!/bin/bash
DATE=$(date +%Y%m%d)
tar -czvf /backup/home_backup_$DATE.tar.gz /home
[Read 4 lines]
^G Help ^O Write Out ^F Where Is ^K Cut ^T Execute ^C Location M-U Undo M-A Set Mark M-] To Bracket M-B Previous
^X Exit ^R Read File ^\ Replace ^U Paste ^J Justify ^/ Go To Line M-E Redo M-6 Copy ^B Where Was M-F Next

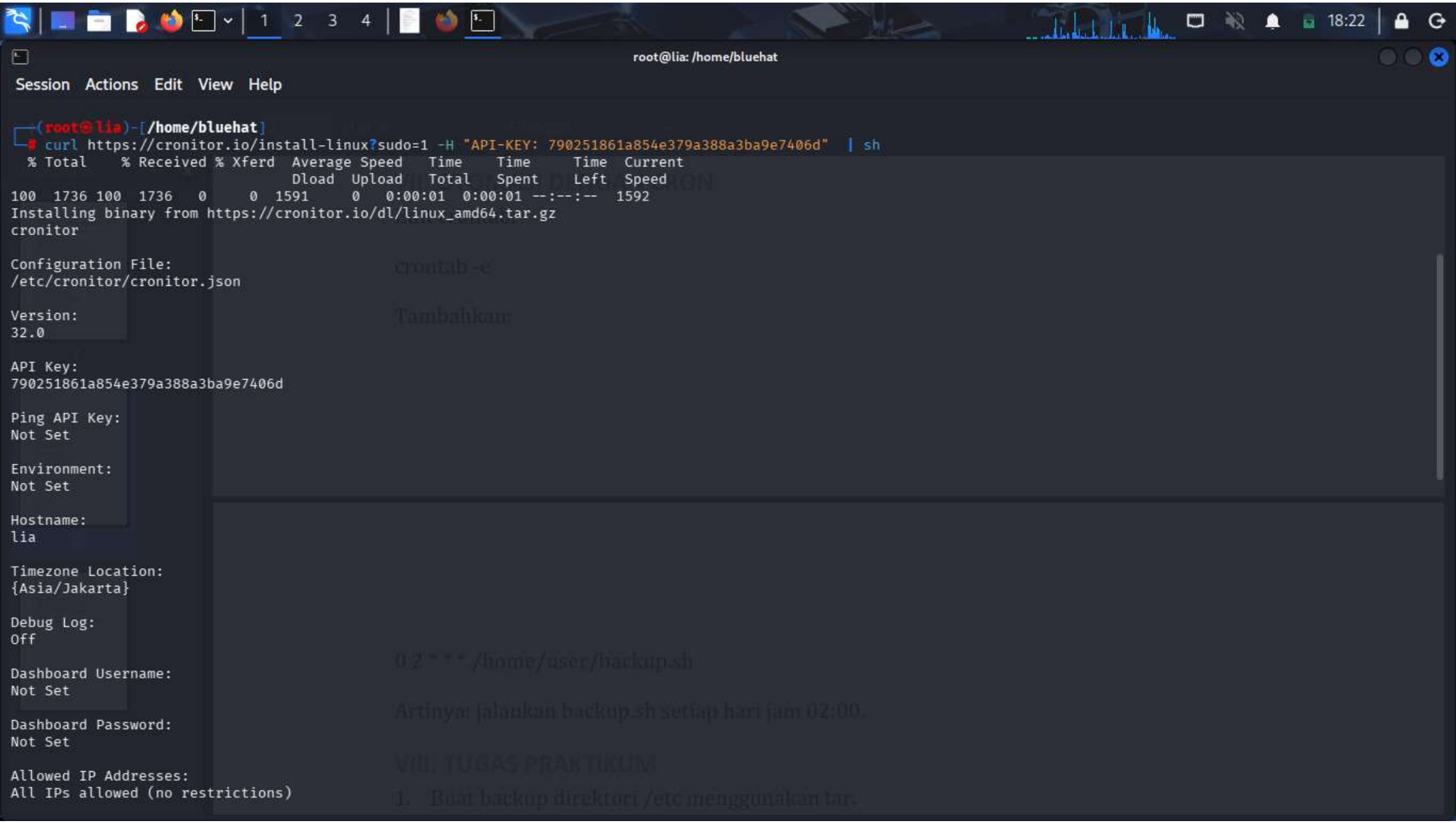

1 2 3 4
14:45
root@lia: ~
Session Actions Edit View Help
etc/libnl-3/
etc/libnl-3/classid
etc/libnl-3/pktloc
etc/perl/
etc/perl/Net/
etc/perl/Net/libnet.cfg
┌──(root㉿lia)-[~]
└─# ls /tmp/etc_restore
etc
┌──(root㉿lia)-[~]
└─# nano backup.sh
┌──(root㉿lia)-[~]
└─# nano backup.sh
┌──(root㉿lia)-[~]
└─# chmod +x backup.sh
┌──(root㉿lia)-[~]
└─# ./backup.sh
tar: Removing leading `/' from member names
/home/
/home/bluehat/
/home/bluehat/.zprofile
/home/bluehat/Templates/
/home/bluehat/Pictures/
/home/bluehat/Pictures/Screenshot_2026-01-10_19_34_43.png
/home/bluehat/Pictures/Screenshot_2026-01-10_19_27_30.png
/home/bluehat/Pictures/Screenshot_2026-01-13_14_23_16.png
/home/bluehat/Pictures/Screenshot_2026-01-10_20_09_22.png
/home/bluehat/Pictures/Screenshot_2026-01-13_13_49_33.png
/home/bluehat/Pictures/Screenshot_2026-01-13_14_24_40.png
/home/bluehat/Pictures/Screenshot_2026-01-13_13_50_16.png
/home/bluehat/Pictures/Screenshot_2026-01-10_20_24_45.png
/home/bluehat/Pictures/Screenshot_2026-01-10_20_23_26.png
/home/bluehat/Pictures/Screenshot_2026-01-10_20_21_03.png
/home/bluehat/Pictures/Screenshot_2026-01-10_20_12_53.png
/home/bluehat/Pictures/Screenshot_2026-01-13_14_43_22.png
/home/bluehat/Pictures/Screenshot_2026-01-10_19_28_09.png

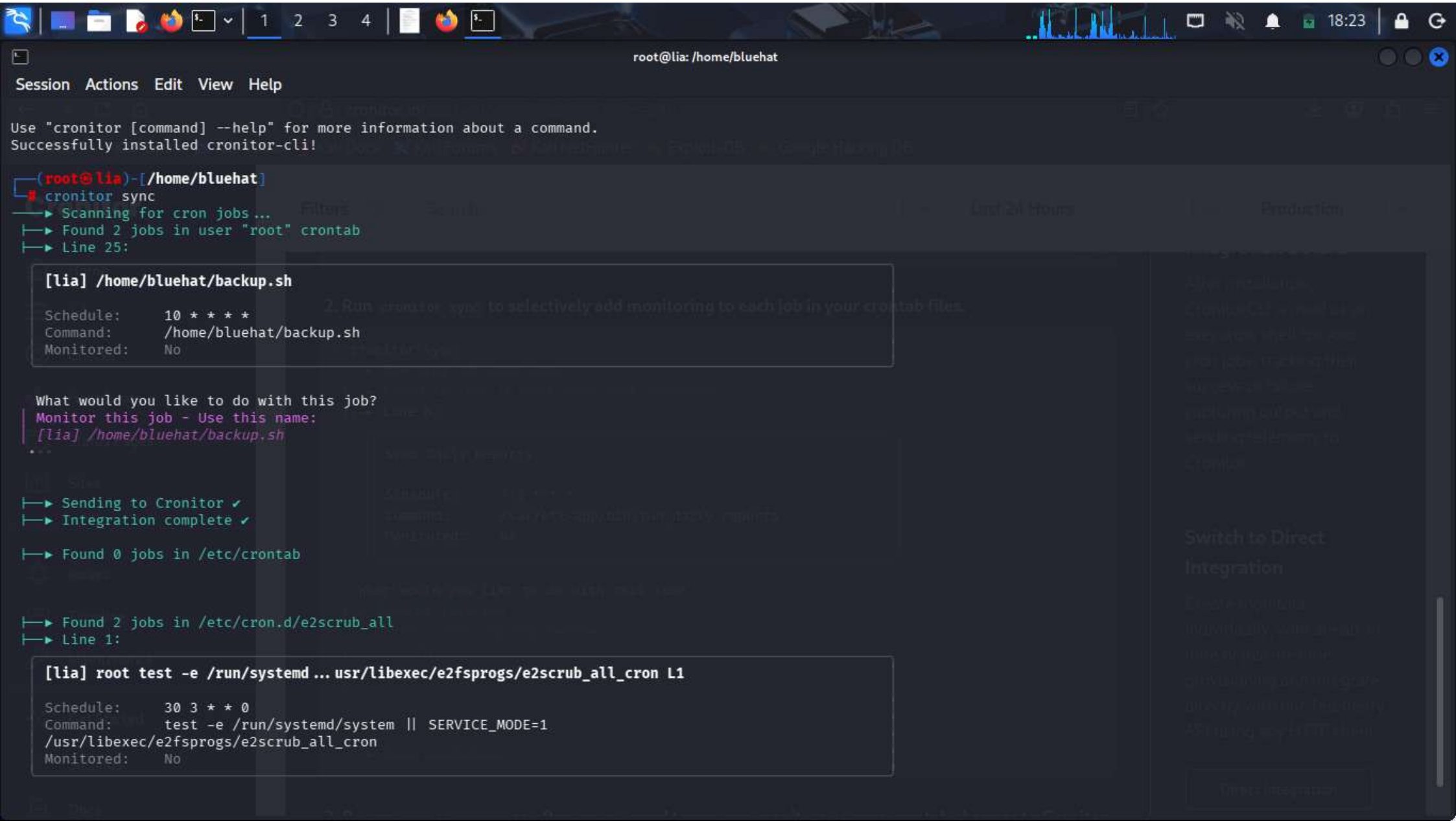

1 2 3 4
14:48
root@lia: ~
Session Actions Edit View Help
/home/bluehat/.vboxclient-clipboard-tty7-service.pid
/home/bluehat/.local/
/home/bluehat/.local/bin/
/home/bluehat/.local/share/
/home/bluehat/.local/share/gvfs-metadata/
/home/bluehat/.local/share/gvfs-metadata/home-ee54806c.log
/home/bluehat/.local/share/gvfs-metadata/home
/home/bluehat/.local/share/ristretto/
/home/bluehat/.local/share/keyrings/
/home/bluehat/.local/share/keyrings/user.keystore
/home/bluehat/.local/share/keyrings/login.keyring
/home/bluehat/.local/share/Mousepad/
/home/bluehat/.local/share/recently-used.xbel
/home/bluehat/.local/share/icc/
/home/bluehat/.local/share/nautilus/
/home/bluehat/.local/share/nautilus/scripts/
/home/bluehat/.local/share/nautilus/scripts/Terminal
/home/bluehat/.local/share/Trash/
/home/bluehat/.local/share/Trash/info/
/home/bluehat/.local/share/Trash/info/KELOMPOK 1 INGGRIS.pdf.trashinfo
/home/bluehat/.local/share/Trash/info/kel.1 inggris.pdf.trashinfo
/home/bluehat/.local/share/Trash/info/iqrarun bil lisan kel.8.pdf.trashinfo
/home/bluehat/.local/share/Trash/files/
/home/bluehat/.local/share/Trash/files/kel.1 inggris.pdf
/home/bluehat/.local/share/Trash/files/iqrarun bil lisan kel.8.pdf
/home/bluehat/.local/share/Trash/files/KELOMPOK 1 INGGRIS.pdf
/home/bluehat/.local/state/
/home/bluehat/.local/state/wireplumber/
/home/bluehat/.local/state/wireplumber/stream-properties
/home/bluehat/.local/state/wireplumber/default-routes
/home/bluehat/Videos/
/home/bluehat/.vboxclient-clipboard-tty7-control.pid
/home/bluehat/.Xauthority
/home/bluehat/.face
┌──(root㉿lia)-[~]
└─# ls /backup
home_backup_20260113.tar.gz
┌──(root㉿lia)-[~]
└─#

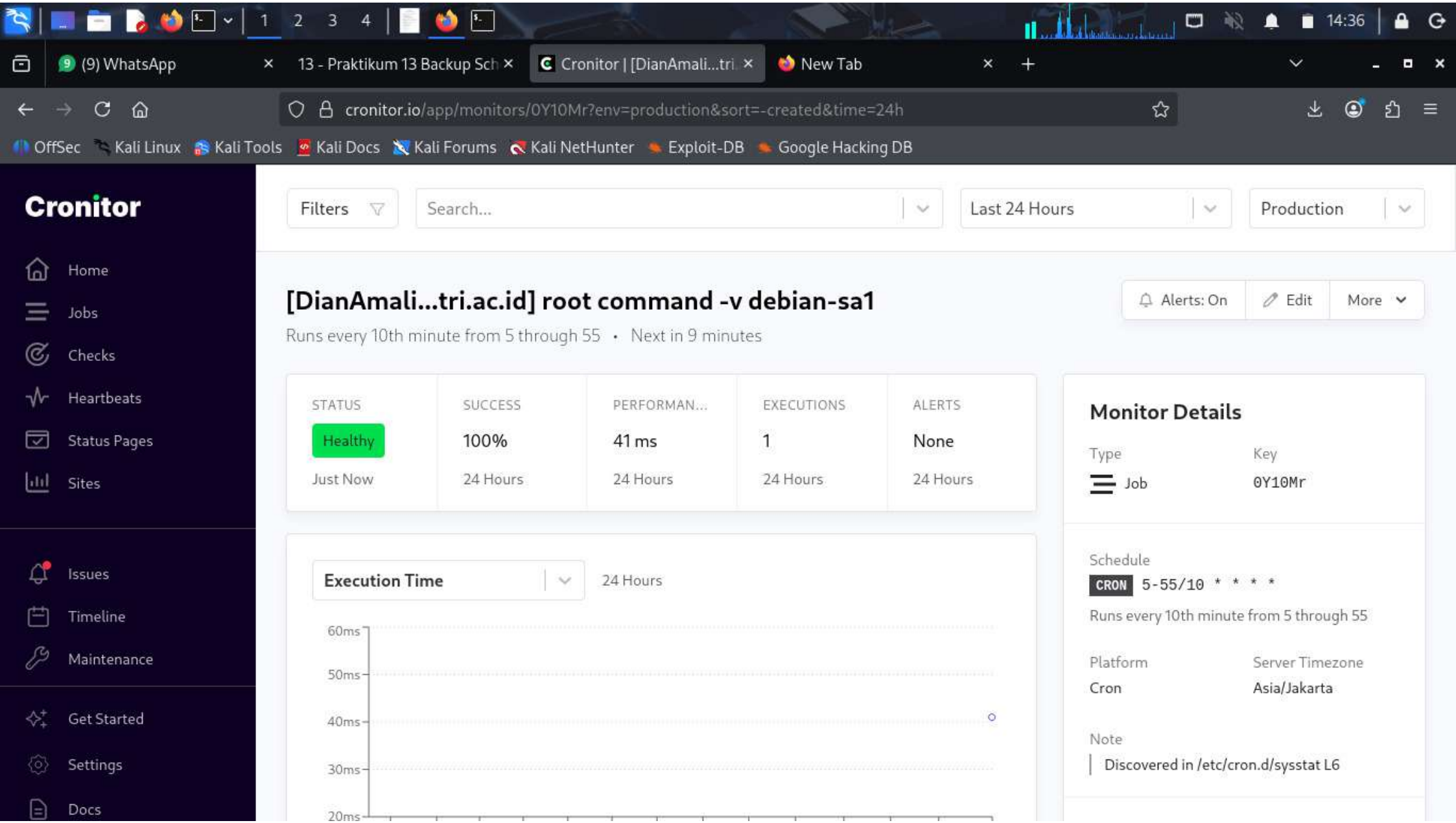

1 2 3 4
14:51
root@lia: ~
Session Actions Edit View Help
/home/bluehat/.local/share/Mousepad/
/home/bluehat/.local/share/recently-used.xbel
/home/bluehat/.local/share/icc/
/home/bluehat/.local/share/nautilus/
/home/bluehat/.local/share/nautilus/scripts/
/home/bluehat/.local/share/nautilus/scripts/Terminal
/home/bluehat/.local/share/Trash/
/home/bluehat/.local/share/Trash/info/
/home/bluehat/.local/share/Trash/info/KELOMPOK 1 INGGRIS.pdf.trashinfo
/home/bluehat/.local/share/Trash/info/kel.1 inggris.pdf.trashinfo
/home/bluehat/.local/share/Trash/info/iqrarun bil lisan kel.8.pdf.trashinfo
/home/bluehat/.local/share/Trash/files/
/home/bluehat/.local/share/Trash/files/kel.1 inggris.pdf
/home/bluehat/.local/share/Trash/files/iqrarun bil lisan kel.8.pdf
/home/bluehat/.local/share/Trash/files/KELOMPOK 1 INGGRIS.pdf
/home/bluehat/.local/state/
/home/bluehat/.local/state/wireplumber/
/home/bluehat/.local/state/wireplumber/stream-properties
/home/bluehat/.local/state/wireplumber/default-routes
/home/bluehat/Videos/
/home/bluehat/.vboxclient-clipboard-tty7-control.pid
/home/bluehat/.Xauthority
/home/bluehat/.face
┌──(root㉿lia)-[~]
└─# ls /backup
home_backup_20260113.tar.gz
┌──(root㉿lia)-[~]
└─# 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
┌──(root㉿lia)-[~]
└─#


1 2 3 4
14:51
root@lia: ~
Session Actions Edit View Help
Screenshot taken
View image
GNU nano 8.6 /tmp/crontab.S1VBat/crontab
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
10 * * * * /home/bluehat/backup.sh
[Read 25 lines]
^G Help ^O Write Out ^F Where Is ^K Cut ^T Execute ^C Location M-U Undo M-A Set Mark M-] To Bracket M-B Previous
^X Exit ^R Read File ^\ Replace ^U Paste ^J Justify ^/ Go To Line M-E Redo M-6 Copy ^B Where Was M-F Next


1 2 3 4
14:55
root@lia: ~
Session Actions Edit View Help
(root@lia)-[~]
pwd
/root
(root@lia)-[~]
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
10 * * * * /home/bluehat/backup.sh
(root@lia)-[~]
#


1 2 3 4
18:22
root@lia: /home/bluehat
Session Actions Edit View Help
┌──(root㉿lia)-[/home/bluehat]
└─# curl https://cronitor.io/install-linux?sudo=1 -H "API-KEY: 790251861a854e379a388a3ba9e7406d" | sh
% Total % Received % Xferd Average Speed Time Time Time Current
Dload Upload Total Spent Left Speed
100 1736 100 1736 0 0 1591 0 0:00:01 0:00:01 --:--:-- 1592
Installing binary from https://cronitor.io/dl/linux_amd64.tar.gz
cronitor
Configuration File:
/etc/cronitor/cronitor.json
Version:
32.0
API Key:
790251861a854e379a388a3ba9e7406d
Ping API Key:
Not Set
Environment:
Not Set
Hostname:
lia
Timezone Location:
{Asia/Jakarta}
Debug Log:
Off
Dashboard Username:
Not Set
Dashboard Password:
Not Set
Allowed IP Addresses:
All IPs allowed (no restrictions)


1 2 3 4
18:23
root@lia: /home/bluehat
Session Actions Edit View Help
Use "cronitor [command] --help" for more information about a command.
Successfully installed cronitor-cli!
┌──(root㉿lia)-[/home/bluehat]
└─# cronitor sync
──▸ Scanning for cron jobs ...
├──▸ Found 2 jobs in user "root" crontab
├──▸ Line 25:
[lia] /home/bluehat/backup.sh
Schedule: 10 * * * *
Command: /home/bluehat/backup.sh
Monitored: No
What would you like to do with this job?
Monitor this job - Use this name:
[lia] /home/bluehat/backup.sh
├──▸ Sending to Cronitor ✔
├──▸ Integration complete ✔
├──▸ Found 0 jobs in /etc/crontab
├──▸ Found 2 jobs in /etc/cron.d/e2scrub_all
├──▸ Line 1:
[lia] root test -e /run/systemd ... usr/libexec/e2fsprogs/e2scrub_all_cron L1
Schedule: 30 3 * * 0
Command: test -e /run/systemd/system || SERVICE_MODE=1
/usr/libexec/e2fsprogs/e2scrub_all_cron
Monitored: No


14:36
(9) WhatsApp
13 - Praktikum 13 Backup Sch
Cronitor | [DianAmali...tri
New Tab
cronitor.io/app/monitors/0Y10Mr?env=production&sort=-created&time=24h
OffSec
Kali Linux
Kali Tools
Kali Docs
Kali Forums
Kali NetHunter
Exploit-DB
Google Hacking DB
Cronitor
Home
Jobs
Checks
Heartbeats
Status Pages
Sites
Issues
Timeline
Maintenance
Get Started
Settings
Docs
Filters
Search...
Last 24 Hours
Production
[DianAmali...tri.ac.id] root command -v debian-sa1
Alerts: On
Edit
More
Runs every 10th minute from 5 through 55 • Next in 9 minutes
STATUS
Healthy
Just Now
SUCCESS
100%
24 Hours
PERFORMAN...
41 ms
24 Hours
EXECUTIONS
1
24 Hours
ALERTS
None
24 Hours
Execution Time
24 Hours
60ms
50ms
40ms
30ms
20ms
Monitor Details
Type
Job
Key
0Y10Mr
Schedule
CRON 5-55/10 * * * *
Runs every 10th minute from 5 through 55
Platform
Cron
Server Timezone
Asia/Jakarta
Note
Discovered in /etc/cron.d/sysstat L6