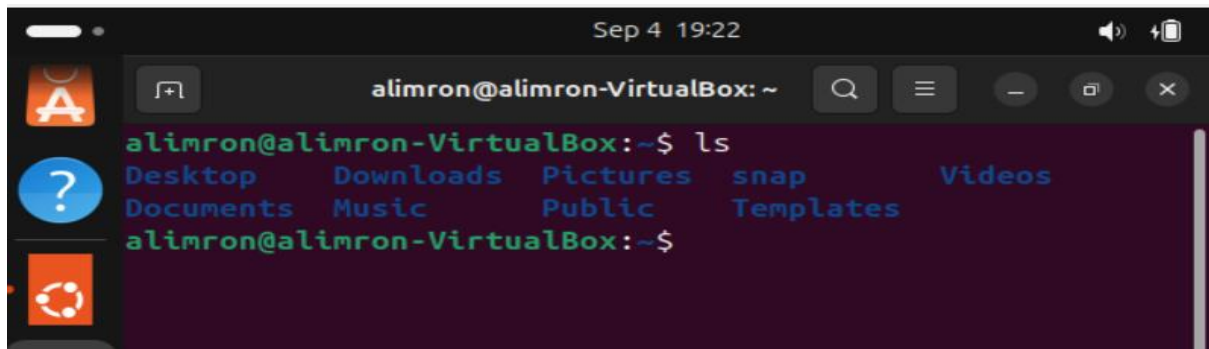


Nama : AL Imron

Nim : 09011282126043

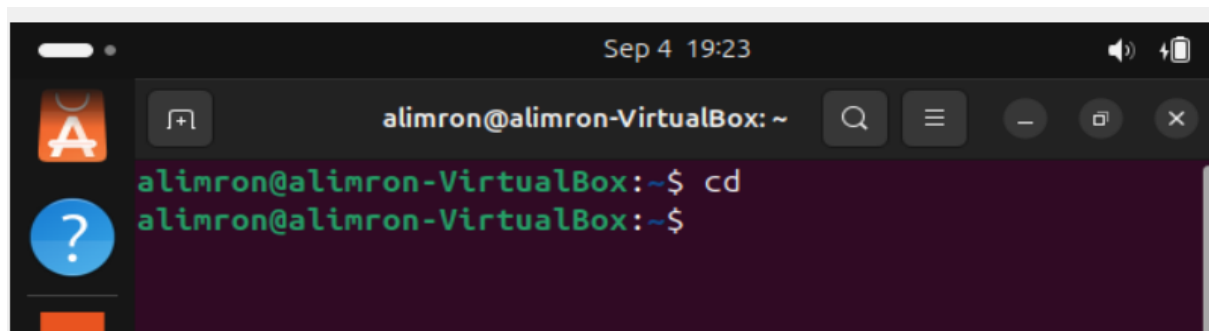
Berikut adalah ringkasan percobaan dari 1 hingga 50 di Linux beserta fungsinya:

1. **ls**: Menampilkan daftar file dan direktori dalam direktori saat ini.

A terminal window titled 'alimron@alimron-VirtualBox: ~' with a timestamp of 'Sep 4 19:22'. The terminal shows the command 'ls' being executed, resulting in a list of directories: Desktop, Downloads, Pictures, snap, Videos, Documents, Music, Public, and Templates. The prompt 'alimron@alimron-VirtualBox:~\$' is visible at the bottom.

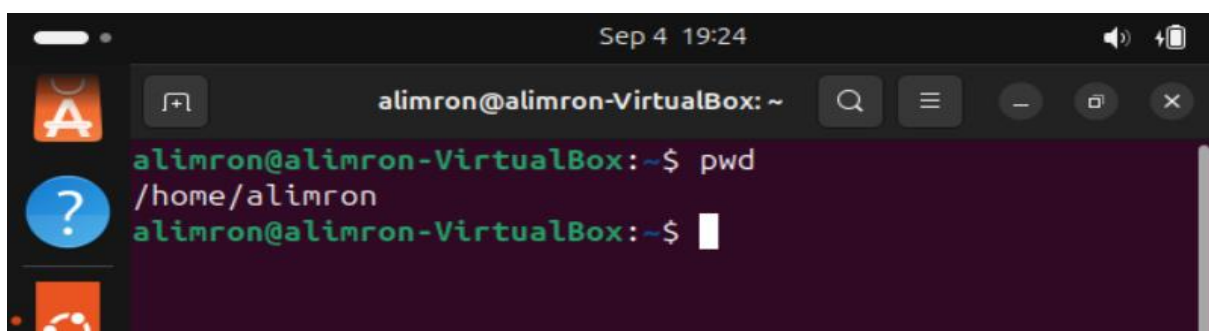
```
alimron@alimron-VirtualBox:~$ ls
Desktop  Downloads  Pictures  snap      Videos
Documents Music      Public    Templates
```

2. **cd**: Mengubah direktori kerja saat ini.

A terminal window titled 'alimron@alimron-VirtualBox: ~' with a timestamp of 'Sep 4 19:23'. The terminal shows the command 'cd' being executed. The prompt changes to 'alimron@alimron-VirtualBox:~\$' after the command is entered.

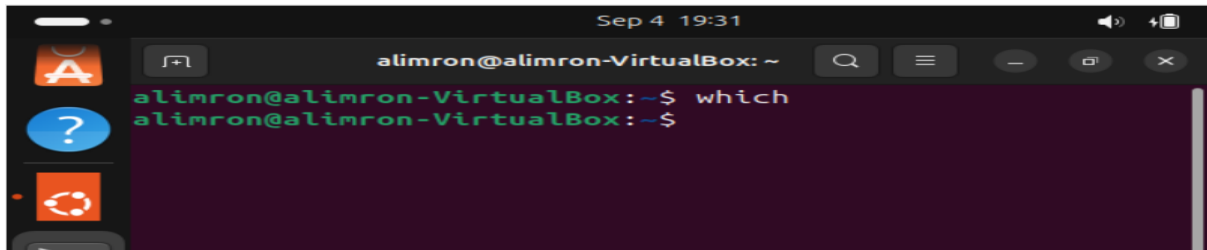
```
alimron@alimron-VirtualBox:~$ cd
alimron@alimron-VirtualBox:~$
```

3. **pwd**: Menampilkan direktori kerja saat ini.

A terminal window titled 'alimron@alimron-VirtualBox: ~' with a timestamp of 'Sep 4 19:24'. The terminal shows the command 'pwd' being executed, resulting in the output '/home/alimron'. The prompt 'alimron@alimron-VirtualBox:~\$' is visible at the bottom.

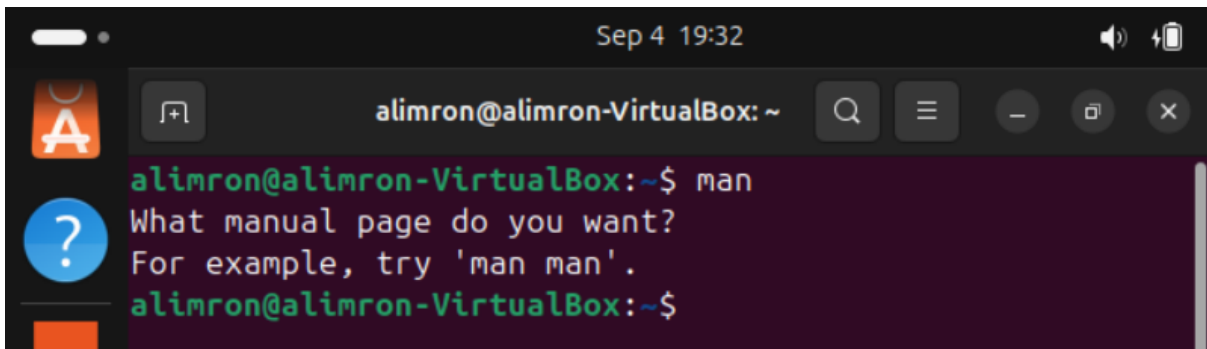
```
alimron@alimron-VirtualBox:~$ pwd
/home/alimron
```

4. **which**: Menampilkan path dari executable yang akan dijalankan.

A terminal window titled 'alimron@alimron-VirtualBox: ~' with a search bar and window controls. The prompt is 'alimron@alimron-VirtualBox:~\$' and the command 'which' has been entered.

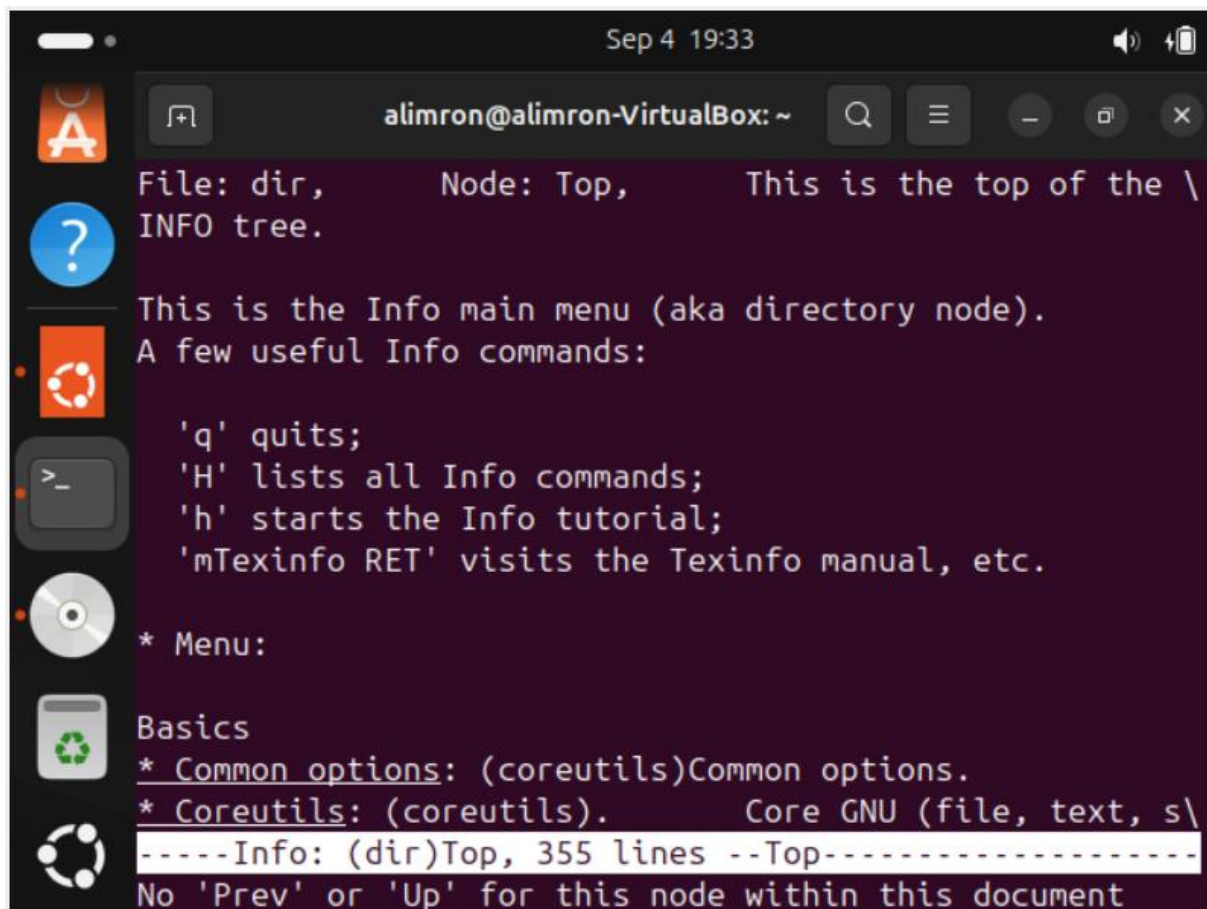
```
alimron@alimron-VirtualBox:~$ which
alimron@alimron-VirtualBox:~$
```

5. **man**: Menampilkan manual untuk perintah atau fungsi.

A terminal window titled 'alimron@alimron-VirtualBox: ~' with a search bar and window controls. The prompt is 'alimron@alimron-VirtualBox:~\$' and the command 'man' has been entered. The output shows a prompt for a manual page.

```
alimron@alimron-VirtualBox:~$ man
What manual page do you want?
For example, try 'man man'.
alimron@alimron-VirtualBox:~$
```

6. **info**: Menampilkan informasi lebih detail tentang perintah.

A terminal window titled 'alimron@alimron-VirtualBox: ~' with a search bar and window controls. The prompt is 'alimron@alimron-VirtualBox:~\$' and the command 'info' has been entered. The output shows the top of the Info tree and a list of useful Info commands.

```
File: dir,      Node: Top,      This is the top of the \
INFO tree.

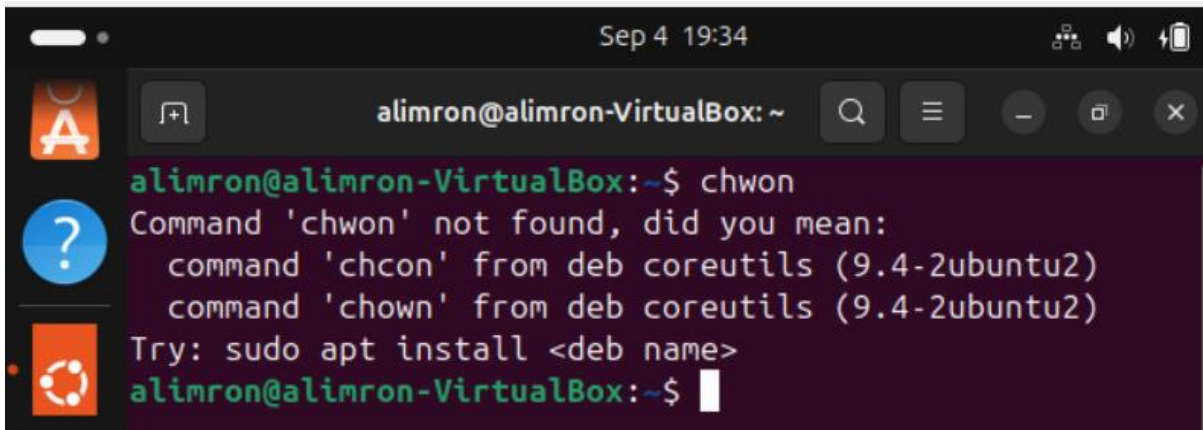
This is the Info main menu (aka directory node).
A few useful Info commands:

'q' quits;
'H' lists all Info commands;
'h' starts the Info tutorial;
'mTexinfo RET' visits the Texinfo manual, etc.

* Menu:

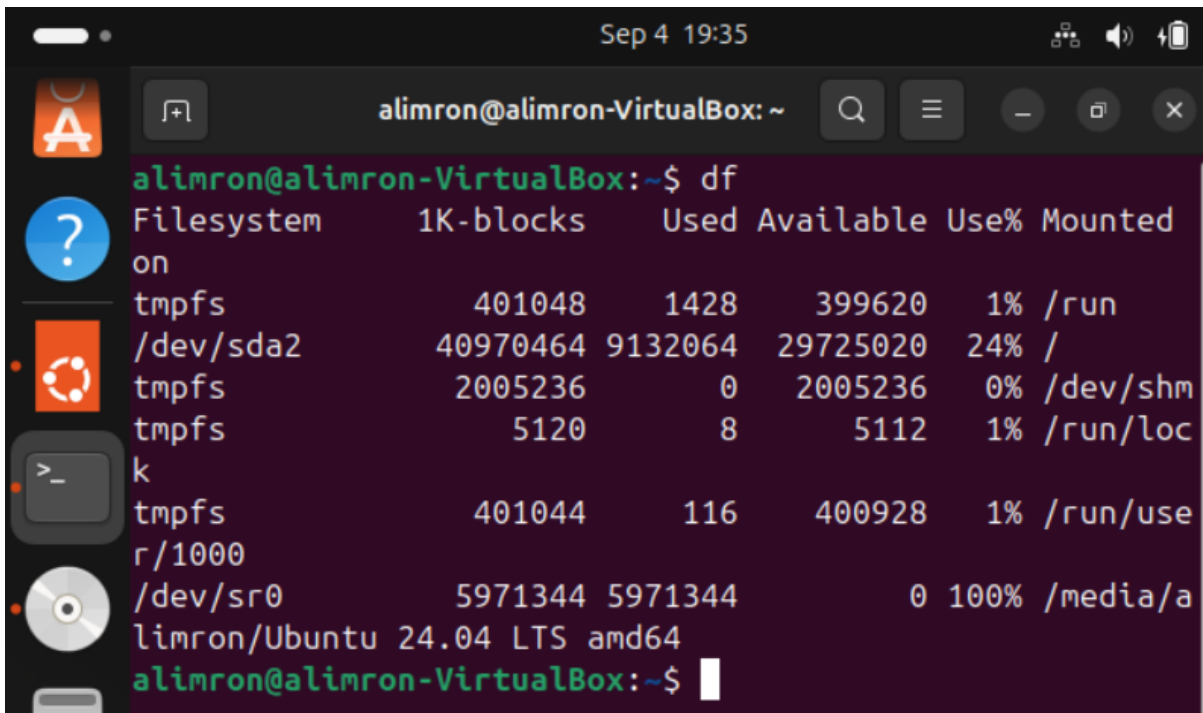
Basics
* Common options: (coreutils)Common options.
* Coreutils: (coreutils).      Core GNU (file, text, s\
-----Info: (dir)Top, 355 lines --Top-----
No 'Prev' or 'Up' for this node within this document
```

7. **chown**: Mengubah kepemilikan file atau direktori.



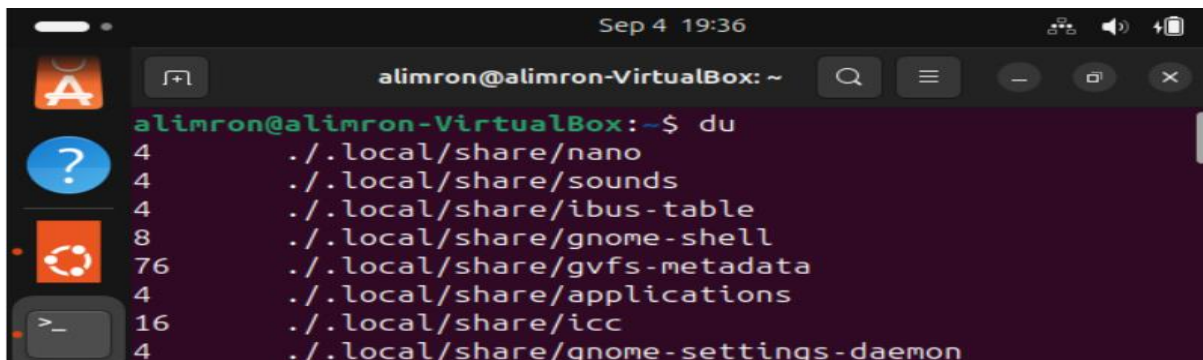
```
alimron@alimron-VirtualBox: ~$ chwon
Command 'chwon' not found, did you mean:
  command 'chcon' from deb coreutils (9.4-2ubuntu2)
  command 'chown' from deb coreutils (9.4-2ubuntu2)
Try: sudo apt install <deb name>
alimron@alimron-VirtualBox:~$
```

8. **df**: Menampilkan informasi penggunaan ruang disk pada sistem file.



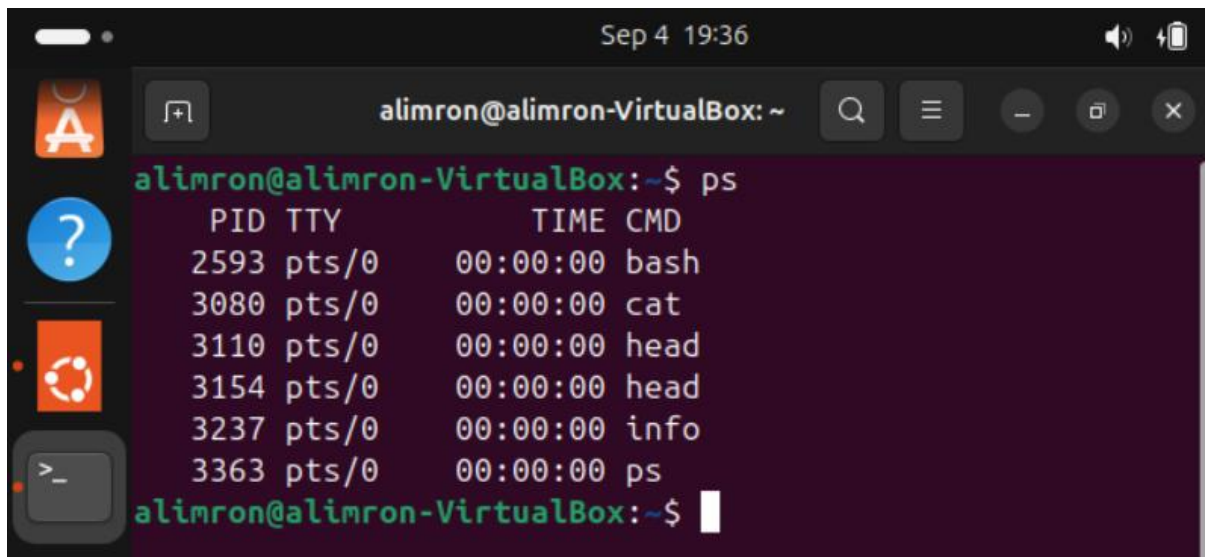
```
alimron@alimron-VirtualBox:~$ df
Filesystem      1K-blocks    Used Available Use% Mounted on
tmpfs            401048      1428    399620    1% /run
/dev/sda2        40970464  9132064  29725020   24% /
tmpfs            2005236        0   2005236    0% /dev/shm
tmpfs             5120         8     5112    1% /run/lock
tmpfs            401044      116    400928    1% /run/user/1000
/dev/sr0         5971344  5971344        0 100% /media/albumron/Ubuntu 24.04 LTS amd64
alimron@alimron-VirtualBox:~$
```

9. **du**: Menampilkan penggunaan ruang disk untuk file dan direktori.



```
alimron@alimron-VirtualBox:~$ du
4      ../local/share/nano
4      ../local/share/sounds
4      ../local/share/ibus-table
8      ../local/share/gnome-shell
76     ../local/share/gvfs-metadata
4      ../local/share/applications
16     ../local/share/icc
4      ../local/share/gnome-settings-daemon
```

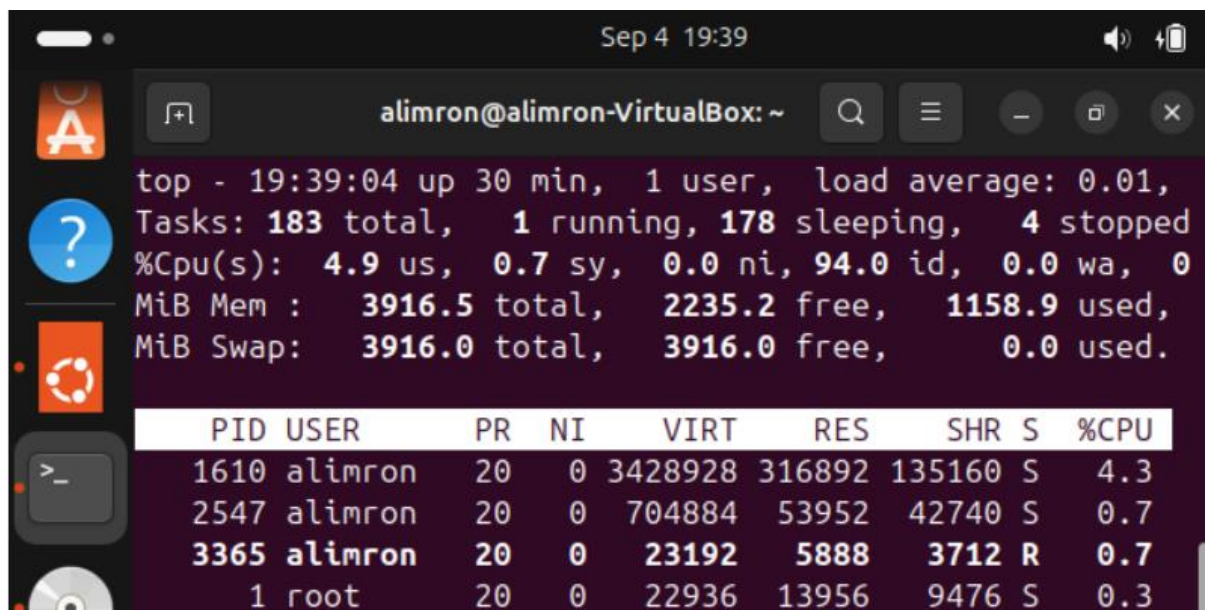
10. **ps**: Menampilkan daftar proses yang sedang berjalan.



The screenshot shows a terminal window titled 'alimron@alimron-VirtualBox: ~' with a search bar and window controls. The command 'ps' has been executed, displaying a list of processes in a table format. The processes listed are: bash (PID 2593), cat (PID 3080), head (PID 3110), head (PID 3154), info (PID 3237), and ps (PID 3363). All processes are running on pts/0 with a time of 00:00:00.

```
alimron@alimron-VirtualBox:~$ ps
  PID TTY          TIME CMD
 2593 pts/0    00:00:00 bash
 3080 pts/0    00:00:00 cat
 3110 pts/0    00:00:00 head
 3154 pts/0    00:00:00 head
 3237 pts/0    00:00:00 info
 3363 pts/0    00:00:00 ps
alimron@alimron-VirtualBox:~$
```

11. **top**: Menampilkan informasi tentang proses yang sedang berjalan dalam format yang dinamis.



The screenshot shows a terminal window titled 'alimron@alimron-VirtualBox: ~' with a search bar and window controls. The command 'top' has been executed, displaying system statistics and a table of running processes. The statistics show: 19:39:04 up 30 min, 1 user, load average: 0.01, Tasks: 183 total, 1 running, 178 sleeping, 4 stopped, %Cpu(s): 4.9 us, 0.7 sy, 0.0 ni, 94.0 id, 0.0 wa, 0 MiB Mem: 3916.5 total, 2235.2 free, 1158.9 used, MiB Swap: 3916.0 total, 3916.0 free, 0.0 used. The table of processes shows PID, USER, PR, NI, VIRT, RES, SHR, S, and %CPU. The processes listed are: alimron (PID 1610), alimron (PID 2547), alimron (PID 3365), and root (PID 1).

```
top - 19:39:04 up 30 min, 1 user, load average: 0.01,
Tasks: 183 total, 1 running, 178 sleeping, 4 stopped
%Cpu(s): 4.9 us, 0.7 sy, 0.0 ni, 94.0 id, 0.0 wa, 0
MiB Mem : 3916.5 total, 2235.2 free, 1158.9 used,
MiB Swap: 3916.0 total, 3916.0 free, 0.0 used.

  PID USER      PR  NI   VIRT   RES   SHR  S  %CPU
 1610 alimron   20   0 3428928 316892 135160 S   4.3
 2547 alimron   20   0 704884 53952 42740 S   0.7
 3365 alimron   20   0 23192 5888 3712 R   0.7
    1 root      20   0 22936 13956 9476 S   0.3
```

12. **kill**: Mengirim sinyal ke proses, umumnya untuk menghentikannya.


```
Sep 4 19:39
alimron@alimron-VirtualBox: ~
alimron@alimron-VirtualBox:~$ kil
Command 'kil' not found, did you mean:
  command 'kig' from deb kig (4:23.08.4-0ubuntu2)
  command 'kill' from deb procs (2:4.0.4-2ubuntu1)
  command 'kic' from deb kic (2.4c-1)
  command 'kile' from deb kile (4:2.9.93-2)
  command 'cil' from deb cil (0.07.00-12)
```

13. **killall**: Mengirim sinyal ke semua proses dengan nama tertentu.

```
Sep 4 19:40
alimron@alimron-VirtualBox: ~
alimron@alimron-VirtualBox:~$ killall
Usage: killall [OPTION]... [--] NAME...
  killall -l, --list
  killall -V, --version

  -e, --exact          require exact match for very long
names
  -I, --ignore-case    case insensitive process name matc
h
  -g, --process-group  kill process group instead of proc
```

14. **jobs**: Menampilkan daftar pekerjaan yang sedang berjalan di latar belakang.

```
Sep 4 19:41
alimron@alimron-VirtualBox: ~
alimron@alimron-VirtualBox:~$ jobs
[1]   Stopped                  cat
[2]   Stopped                  head
[3]   Stopped                  head
[4]-  Stopped                  info
[5]+  Stopped                  top
```

15. **bg**: Melanjutkan pekerjaan yang tertunda di latar belakang.

```
Sep 4 19:41
alimron@alimron-VirtualBox: ~
alimron@alimron-VirtualBox:~$ bg
[5]+ top &
alimron@alimron-VirtualBox:~$
```

16. **fg**: Membawa pekerjaan yang tertunda ke latar depan.

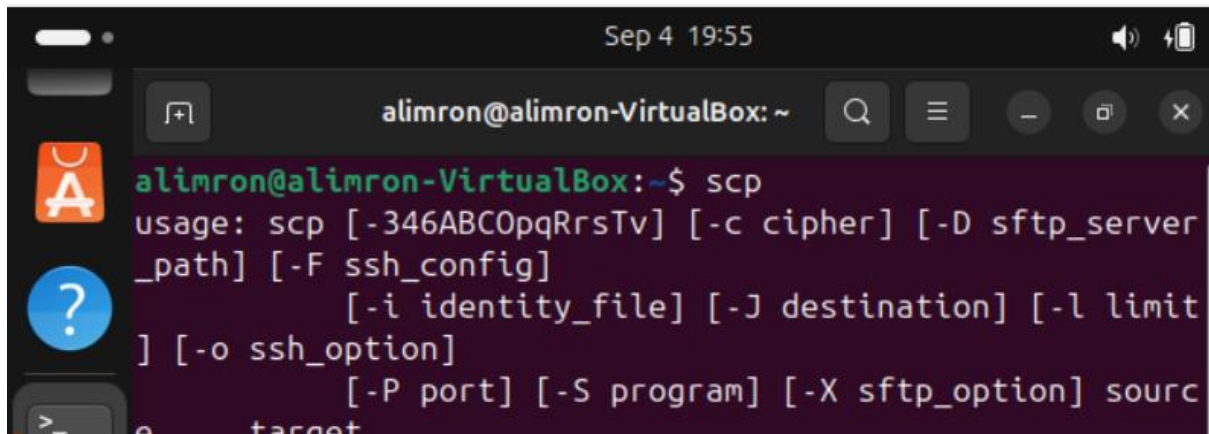
```
Sep 4 19:42
alimron@alimron-VirtualBox: ~
top - 19:42:49 up 33 min, 1 user, load average: 0.00,
Tasks: 183 total, 1 running, 178 sleeping, 4 stopped
%Cpu(s): 1.4 us, 0.7 sy, 0.0 ni, 97.6 id, 0.0 wa, 0
MiB Mem : 3916.5 total, 2231.8 free, 1161.6 used,
MiB Swap: 3916.0 total, 3916.0 free, 0.0 used.

  PID USER      PR  NI   VIRT   RES   SHR  S  %CPU
 3365 alimron   20   0  23192   5888  3712  R   0.7
    43 root      0  -20     0     0     0   I   0.3
```

17. **wget**: Mengunduh file dari web.

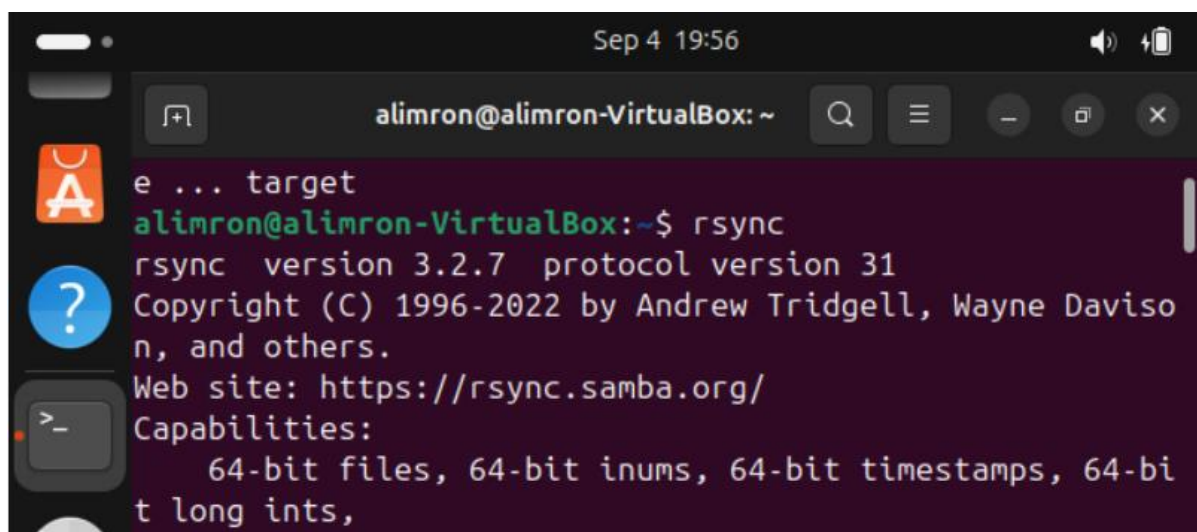
```
Sep 4 19:43
alimron@alimron-VirtualBox: ~
alimron@alimron-VirtualBox:~$ wget
wget: missing URL
Usage: wget [OPTION]... [URL]...
```

18. **scp**: Menyalin file antara host lokal dan remote.



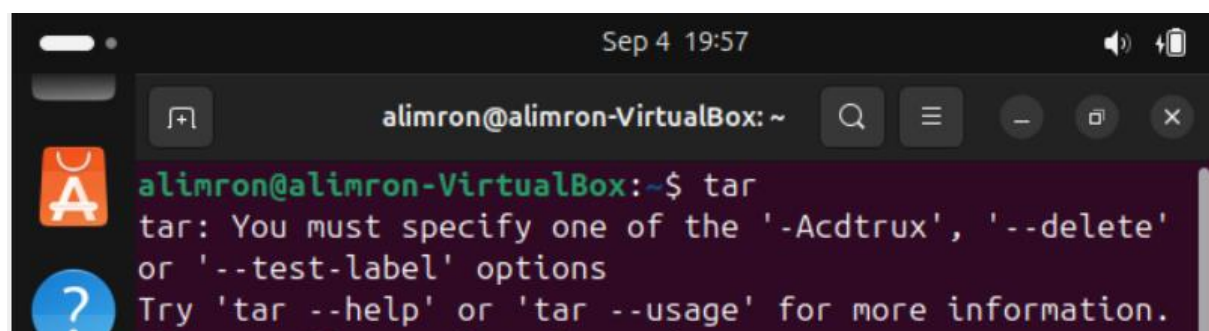
```
Sep 4 19:55
alimron@alimron-VirtualBox: ~
alimron@alimron-VirtualBox:~$ scp
usage: scp [-346ABCOpqRrsTv] [-c cipher] [-D sftp_server_path] [-F ssh_config]
          [-i identity_file] [-J destination] [-l limit] [-o ssh_option]
          [-P port] [-S program] [-X sftp_option] source target
```

19. **rsync**: Menyalin dan menyinkronkan file dan direktori.



```
Sep 4 19:56
alimron@alimron-VirtualBox: ~
e ... target
alimron@alimron-VirtualBox:~$ rsync
rsync version 3.2.7 protocol version 31
Copyright (C) 1996-2022 by Andrew Tridgell, Wayne Davis, and others.
Web site: https://rsync.samba.org/
Capabilities:
    64-bit files, 64-bit inums, 64-bit timestamps, 64-bit long ints,
```

20. **tar**: Membuat atau mengekstrak arsip file.



```
Sep 4 19:57
alimron@alimron-VirtualBox: ~
alimron@alimron-VirtualBox:~$ tar
tar: You must specify one of the '-Acdrux', '--delete' or '--test-label' options
Try 'tar --help' or 'tar --usage' for more information.
```

21. **zip**: Mengompresi file dalam format zip.


```
Sep 4 19:58
alimron@alimron-VirtualBox: ~
alimron@alimron-VirtualBox:~$ zip
Copyright (c) 1990-2008 Info-ZIP - Type 'zip "-L"' for s
software license.
Zip 3.0 (July 5th 2008). Usage:
zip [-options] [-b path] [-t mmddyyyy] [-n suffixes] [zi
pfile list] [-xi list]
The default action is to add or replace zipfile entrie
s from list, which
```

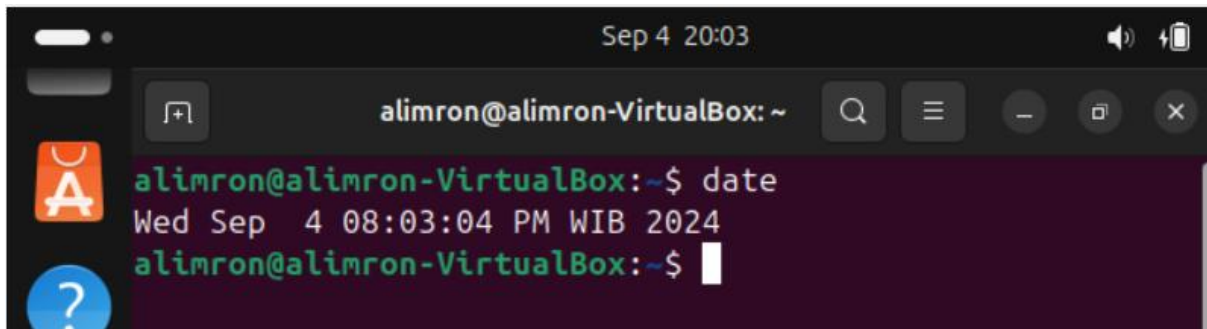
22. **unzip**: Mengekstrak file dari arsip zip.

```
Sep 4 19:59
alimron@alimron-VirtualBox: ~
alimron@alimron-VirtualBox:~$ unzip
UnZip 6.00 of 20 April 2009, by Debian. Original by Info
-ZIP.
Usage: unzip [-Z] [-opts[modifiers]] file[.zip] [list] [
-x xlist] [-d exdir]
Default action is to extract files in list, except tho
se in xlist, to exdir;
```

23. **bunzip2**: Mengekstrak file yang dikompresi dengan bzip2.

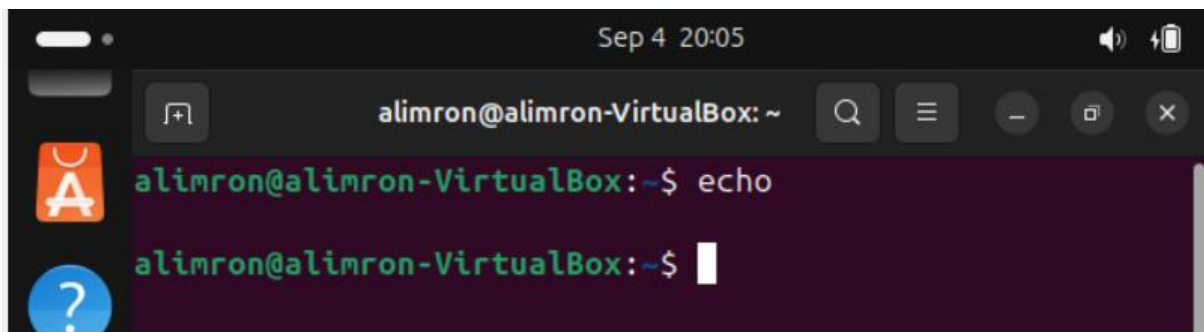
```
Sep 4 20:02
alimron@alimron-VirtualBox: ~
alimron@alimron-VirtualBox:~$ bunzip2
Command 'bunzip2' not found, but can be installed with:
sudo apt install bzip2
alimron@alimron-VirtualBox:~$ sudo apt install bzip2
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
```

24. **date**: Menampilkan atau mengatur tanggal dan waktu sistem.

A terminal window titled 'alimron@alimron-VirtualBox: ~' with a search bar and window controls. The prompt is 'alimron@alimron-VirtualBox:~\$'. The command 'date' has been entered, and the output is 'Wed Sep 4 08:03:04 PM WIB 2024'.

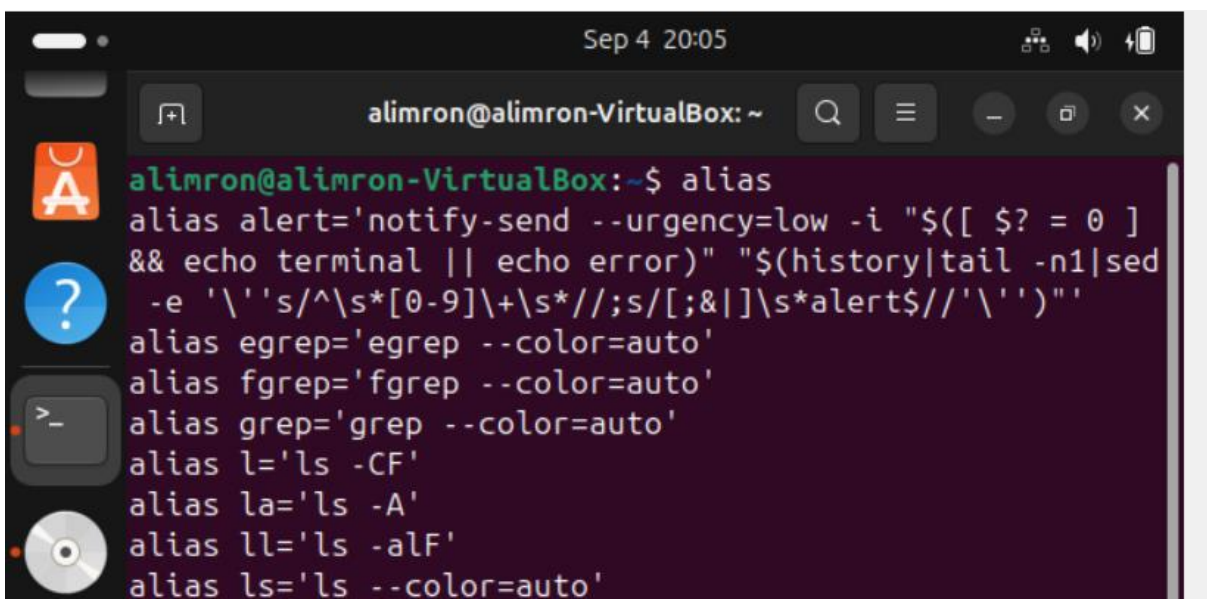
```
alimron@alimron-VirtualBox:~$ date
Wed Sep 4 08:03:04 PM WIB 2024
alimron@alimron-VirtualBox:~$
```

25. **echo**: Menampilkan teks ke terminal.

A terminal window titled 'alimron@alimron-VirtualBox: ~' with a search bar and window controls. The prompt is 'alimron@alimron-VirtualBox:~\$'. The command 'echo' has been entered, and the cursor is waiting for input.

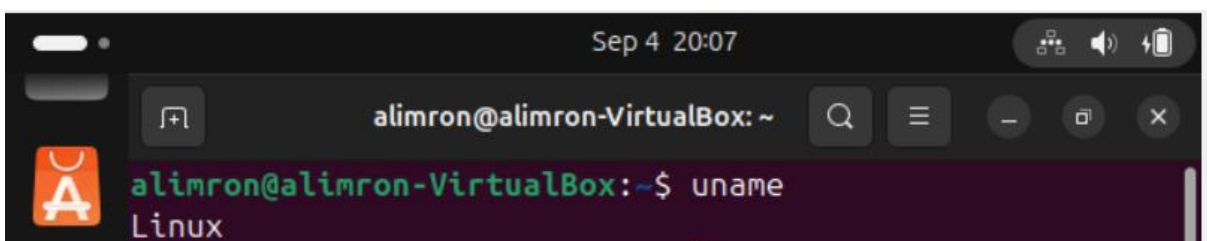
```
alimron@alimron-VirtualBox:~$ echo
alimron@alimron-VirtualBox:~$
```

26. **alias**: Membuat alias untuk perintah yang sering digunakan.

A terminal window titled 'alimron@alimron-VirtualBox: ~' with a search bar and window controls. The prompt is 'alimron@alimron-VirtualBox:~\$'. The command 'alias' has been entered, and the output lists several aliases: 'alias alert='notify-send --urgency=low -i "\${([\$? = 0] && echo terminal || echo error)}" "\${history|tail -n1|sed -e '\''s/^\s*[0-9]\+\s*//;s/[;&|]\s*alert\$/'\''}"', 'alias egrep='egrep --color=auto'', 'alias fgrep='fgrep --color=auto'', 'alias grep='grep --color=auto'', 'alias l='ls -CF'', 'alias la='ls -A'', 'alias ll='ls -alF'', and 'alias ls='ls --color=auto''.

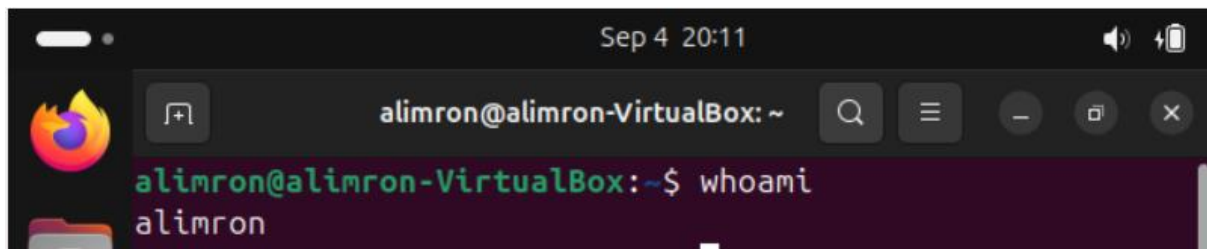
```
alimron@alimron-VirtualBox:~$ alias
alias alert='notify-send --urgency=low -i "${([ $? = 0 ]
&& echo terminal || echo error)}" "${history|tail -n1|sed
-e '\''s/^\s*[0-9]\+\s*//;s/[;&|]\s*alert$/'\''}"'
alias egrep='egrep --color=auto'
alias fgrep='fgrep --color=auto'
alias grep='grep --color=auto'
alias l='ls -CF'
alias la='ls -A'
alias ll='ls -alF'
alias ls='ls --color=auto'
```

27. **uname** : Menampilkan informasi sistem, seperti nama kernel.

A terminal window titled 'alimron@alimron-VirtualBox: ~' with a search bar and window controls. The prompt is 'alimron@alimron-VirtualBox:~\$'. The command 'uname' has been entered, and the output is 'Linux'.

```
alimron@alimron-VirtualBox:~$ uname
Linux
```

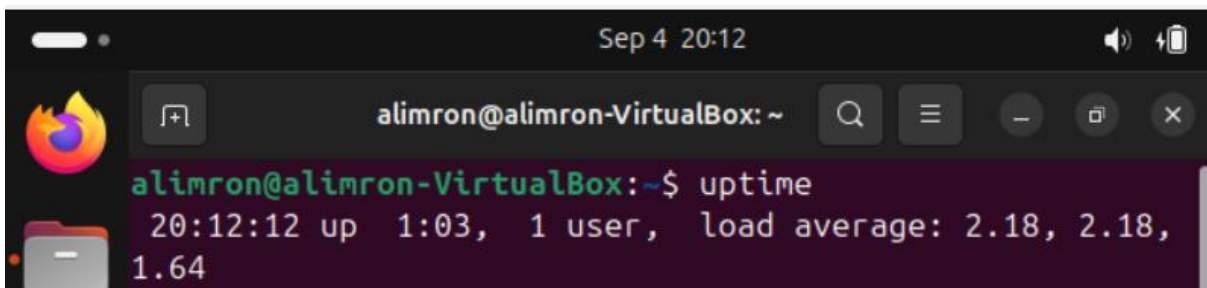
28. **whoami**: Menampilkan nama pengguna saat ini.



```
alimron@alimron-VirtualBox: ~$ whoami
alimron
```

A terminal window titled 'alimron@alimron-VirtualBox: ~' showing the command 'whoami' being executed. The output is 'alimron'.

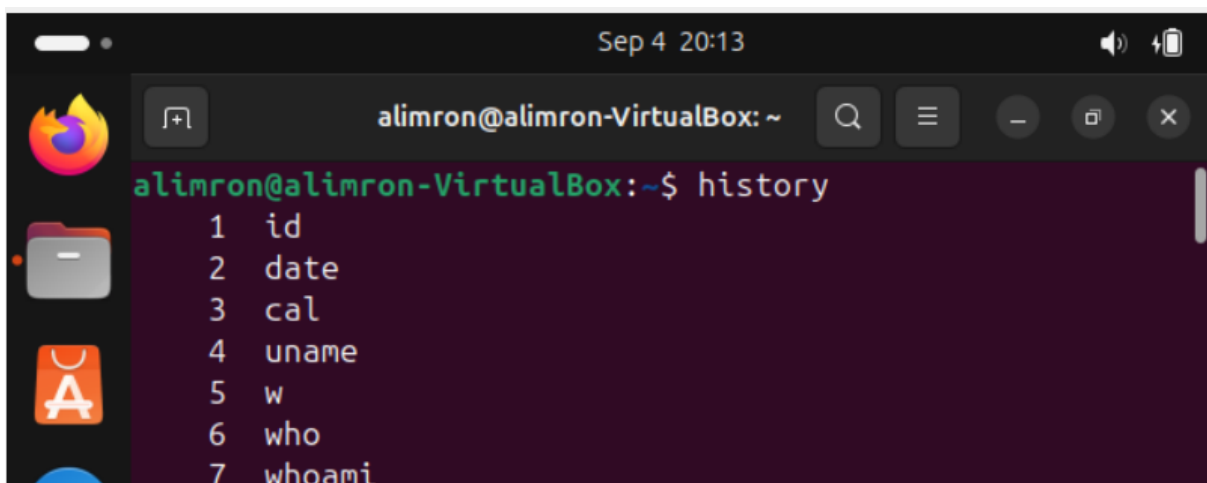
29. **uptime**: Menampilkan berapa lama sistem telah berjalan sejak terakhir kali dinyalakan.



```
alimron@alimron-VirtualBox: ~$ uptime
20:12:12 up 1:03, 1 user, load average: 2.18, 2.18, 1.64
```

A terminal window titled 'alimron@alimron-VirtualBox: ~' showing the command 'uptime' being executed. The output is '20:12:12 up 1:03, 1 user, load average: 2.18, 2.18, 1.64'.

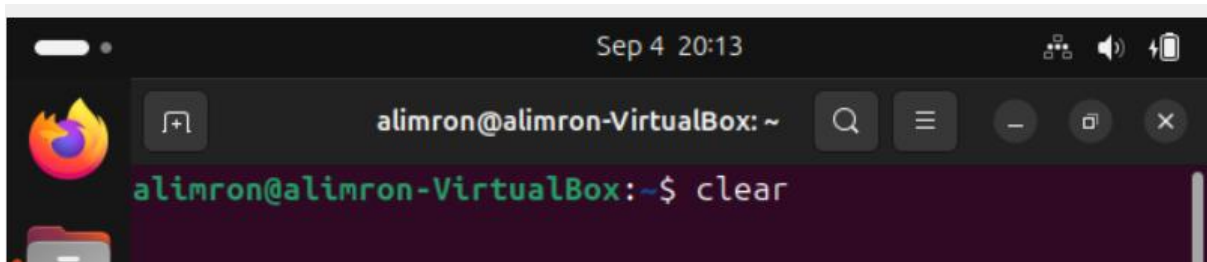
30. **history**: Menampilkan daftar perintah yang telah dijalankan.



```
alimron@alimron-VirtualBox: ~$ history
1 id
2 date
3 cal
4 uname
5 w
6 who
7 whoami
```

A terminal window titled 'alimron@alimron-VirtualBox: ~' showing the command 'history' being executed. The output is a list of commands: '1 id', '2 date', '3 cal', '4 uname', '5 w', '6 who', '7 whoami'.

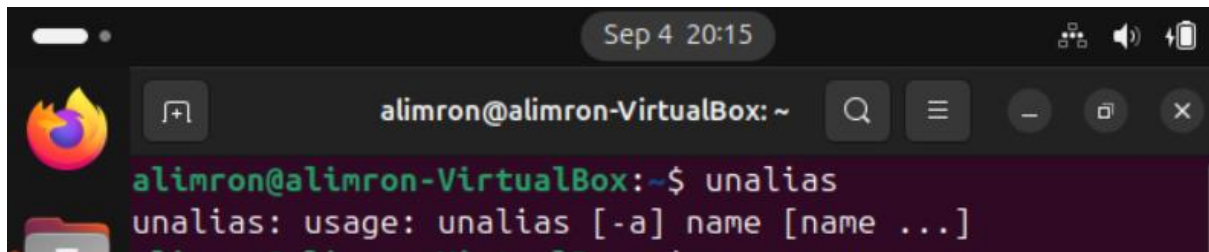
31. **clear**: Membersihkan layar terminal.



```
alimron@alimron-VirtualBox: ~$ clear
```

A terminal window titled 'alimron@alimron-VirtualBox: ~' showing the command 'clear' being executed. The terminal screen is cleared.

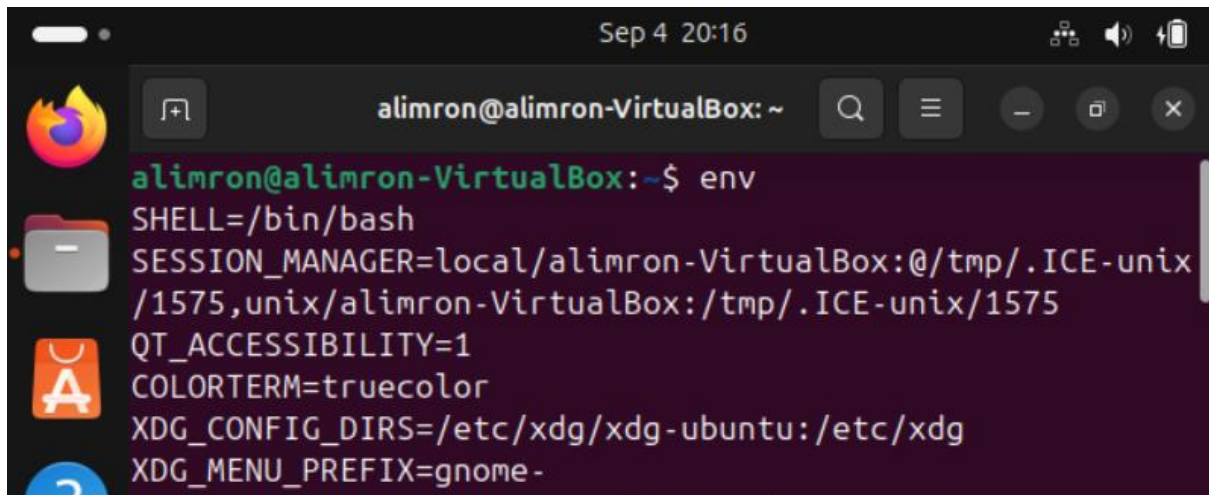
32. **unalias**: Menghapus alias yang dibuat sebelumnya.



A terminal window titled 'alimron@alimron-VirtualBox: ~' with a timestamp of 'Sep 4 20:15'. The prompt is 'alimron@alimron-VirtualBox:~\$'. The command 'unalias' has been entered, and the output is 'unalias: usage: unalias [-a] name [name ...]'.

```
alimron@alimron-VirtualBox:~$ unalias
unalias: usage: unalias [-a] name [name ...]
```

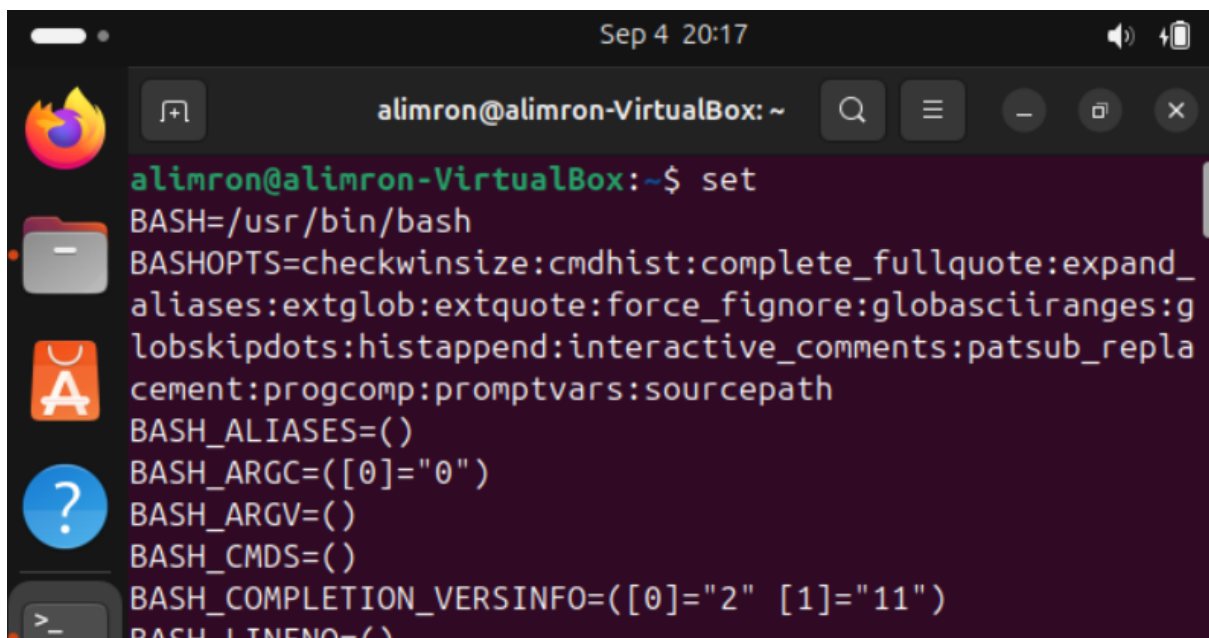
33. **env**: Menampilkan semua variabel lingkungan saat ini.



A terminal window titled 'alimron@alimron-VirtualBox: ~' with a timestamp of 'Sep 4 20:16'. The prompt is 'alimron@alimron-VirtualBox:~\$'. The command 'env' has been entered, and the output lists various environment variables.

```
alimron@alimron-VirtualBox:~$ env
SHELL=/bin/bash
SESSION_MANAGER=local/alimron-VirtualBox:@/tmp/.ICE-unix/1575,unix/alimron-VirtualBox:/tmp/.ICE-unix/1575
QT_ACCESSIBILITY=1
COLORTERM=truecolor
XDG_CONFIG_DIRS=/etc/xdg/xdg-ubuntu:/etc/xdg
XDG_MENU_PREFIX=gnome-
```

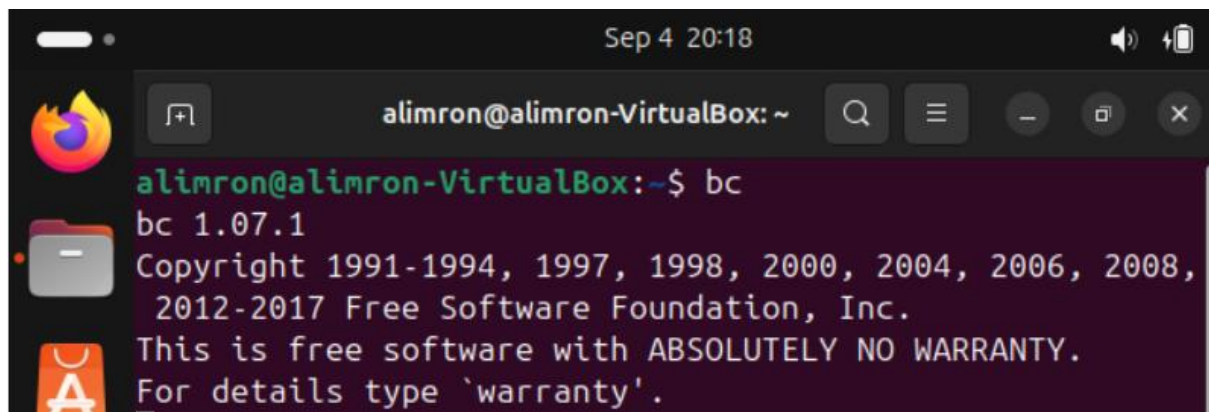
34. **set**: Menampilkan semua variabel shell dan lingkungan.



A terminal window titled 'alimron@alimron-VirtualBox: ~' with a timestamp of 'Sep 4 20:17'. The prompt is 'alimron@alimron-VirtualBox:~\$'. The command 'set' has been entered, and the output lists various shell variables.

```
alimron@alimron-VirtualBox:~$ set
BASH=/usr/bin/bash
BASHOPTS=checkwinsize:cmdhist:complete_fullquote:expand_
aliases:extglob:extquote:force_ignores:globasciiranges:g
lobskipdots:histappend:interactive_comments:patsub_repla
cement:progcomp:promptvars:sourcepath
BASH_ALIASES=()
BASH_ARGC=([0]="0")
BASH_ARGV=()
BASH_CMDS=()
BASH_COMPLETION_VERSIONINFO=([0]="2" [1]="11")
BASH_LINENO=()
```

35. **bc**: Kalkulator bahasa pemrograman yang bisa dipanggil dari terminal.

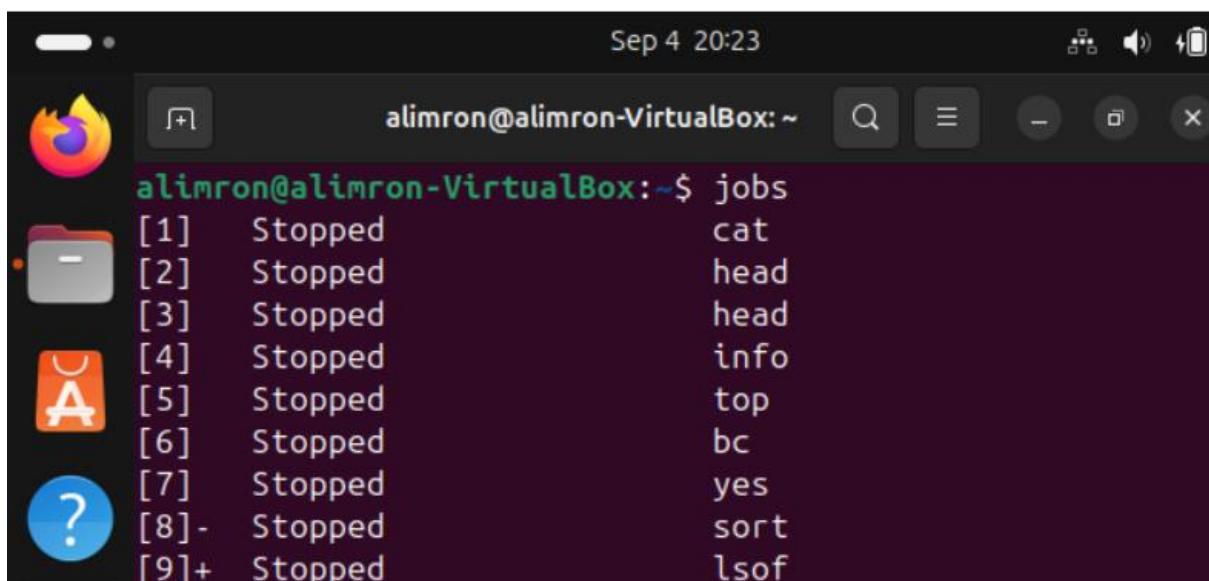


Sep 4 20:18

alimron@alimron-VirtualBox: ~

```
alimron@alimron-VirtualBox:~$ bc
bc 1.07.1
Copyright 1991-1994, 1997, 1998, 2000, 2004, 2006, 2008,
2012-2017 Free Software Foundation, Inc.
This is free software with ABSOLUTELY NO WARRANTY.
For details type `warranty'.
```

36. **jobs**: Menampilkan status dari tugas-tugas latar belakang yang sedang berjalan (pengulangan tapi penting untuk pengelolaan tugas).

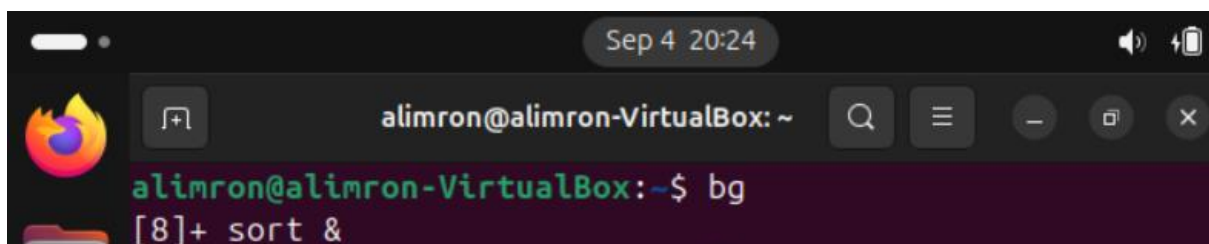


Sep 4 20:23

alimron@alimron-VirtualBox: ~

```
alimron@alimron-VirtualBox:~$ jobs
[1]  Stopped                  cat
[2]  Stopped                  head
[3]  Stopped                  head
[4]  Stopped                  info
[5]  Stopped                  top
[6]  Stopped                  bc
[7]  Stopped                  yes
[8]- Stopped                  sort
[9]+ Stopped                  lsof
```

37. **bg**: Mengirim tugas ke latar belakang (pengulangan dengan penekanan latar belakang).

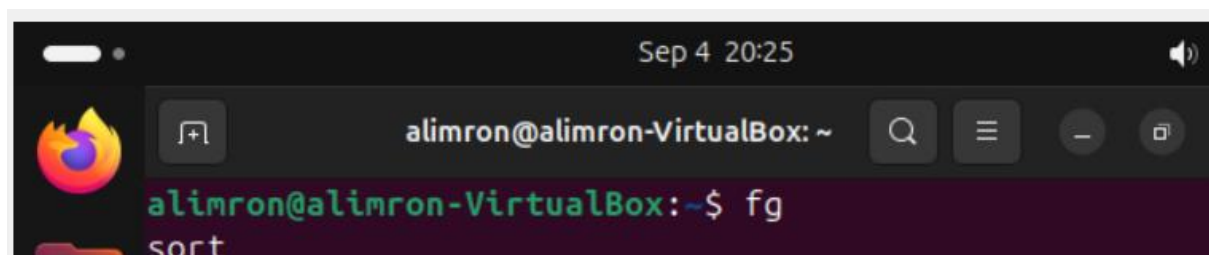


Sep 4 20:24

alimron@alimron-VirtualBox: ~

```
alimron@alimron-VirtualBox:~$ bg
[8]+ sort &
```

38. **fg**: Mengembalikan tugas ke latar depan (pengulangan untuk kontras dengan **bg**).

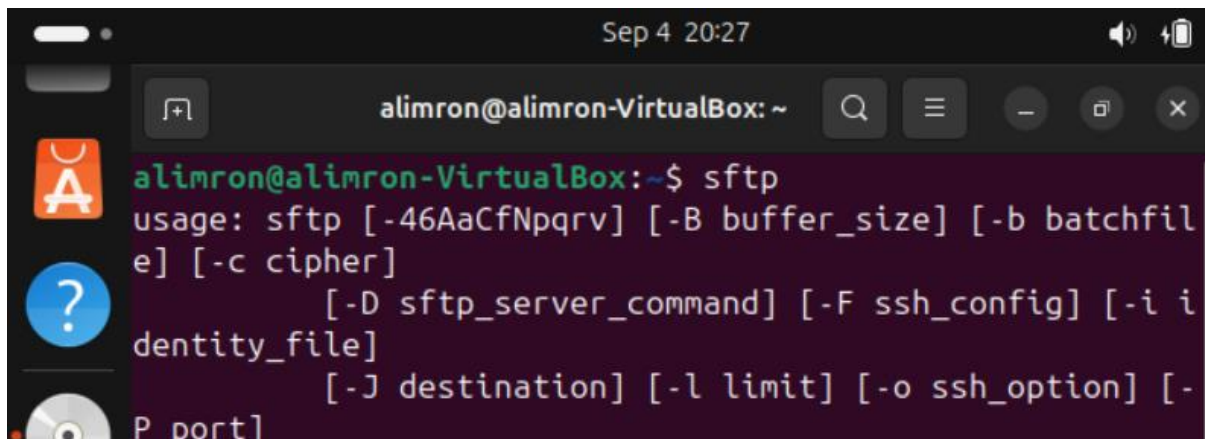


Sep 4 20:25

alimron@alimron-VirtualBox: ~

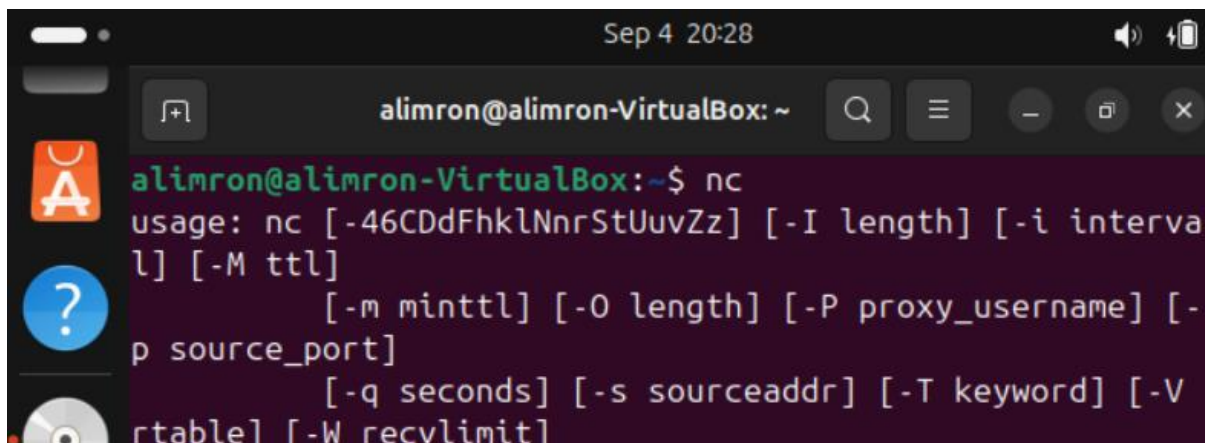
```
alimron@alimron-VirtualBox:~$ fg
sort
```


39. **sftp**: FTP aman melalui SSH

A terminal window titled 'alimron@alimron-VirtualBox: ~' with a search bar and window controls. The terminal shows the command 'sftp' and its usage: 'usage: sftp [-46AaCfNpqrv] [-B buffer_size] [-b batchfile] [-c cipher] [-D sftp_server_command] [-F ssh_config] [-i identity_file] [-J destination] [-l limit] [-o ssh_option] [-P port]'.

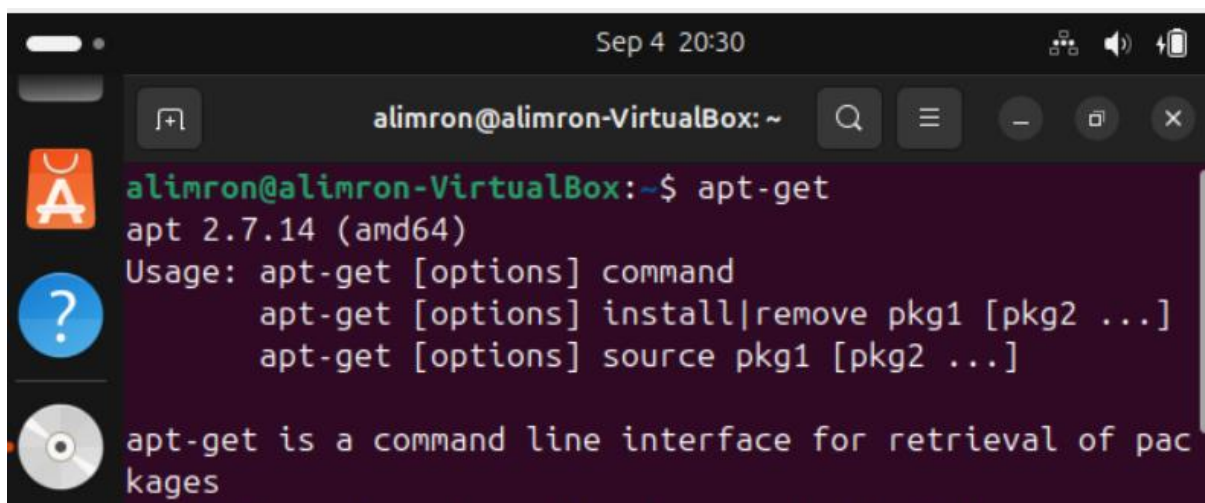
```
alimron@alimron-VirtualBox:~$ sftp
usage: sftp [-46AaCfNpqrv] [-B buffer_size] [-b batchfile] [-c cipher]
          [-D sftp_server_command] [-F ssh_config] [-i identity_file]
          [-J destination] [-l limit] [-o ssh_option] [-P port]
```

40. **nc**: Membaca dan menulis data melalui koneksi jaringan menggunakan protokol TCP atau UDP.

A terminal window titled 'alimron@alimron-VirtualBox: ~' with a search bar and window controls. The terminal shows the command 'nc' and its usage: 'usage: nc [-46CDdFhklNnrStUuvZz] [-I length] [-i interval] [-M ttl] [-m minttl] [-O length] [-P proxy_username] [-p source_port] [-q seconds] [-s sourceaddr] [-T keyword] [-V rtable] [-W recvlimit]'.

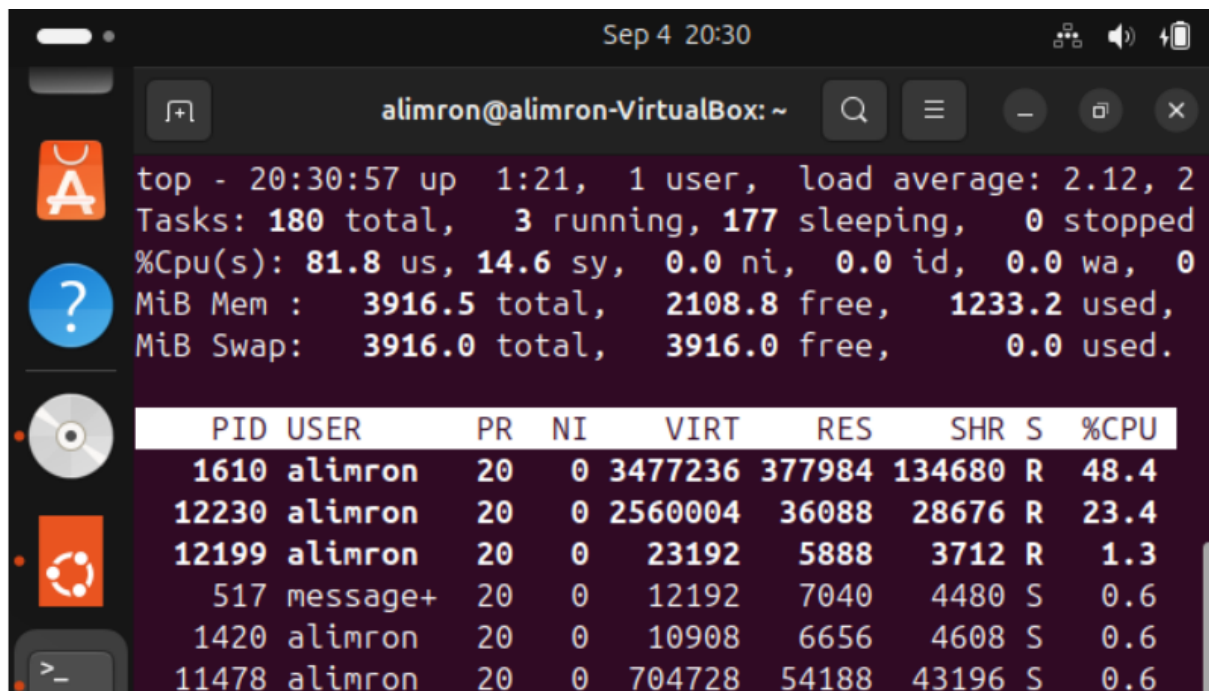
```
alimron@alimron-VirtualBox:~$ nc
usage: nc [-46CDdFhklNnrStUuvZz] [-I length] [-i interval] [-M ttl]
          [-m minttl] [-O length] [-P proxy_username] [-p source_port]
          [-q seconds] [-s sourceaddr] [-T keyword] [-V rtable] [-W recvlimit]
```

41. **apt-get**: Mengelola paket perangkat lunak pada sistem berbasis Debian (menginstal, menghapus, memperbarui perangkat lunak).

A terminal window titled 'alimron@alimron-VirtualBox: ~' with a search bar and window controls. The terminal shows the command 'apt-get' and its usage: 'apt 2.7.14 (amd64) Usage: apt-get [options] command apt-get [options] install|remove pkg1 [pkg2 ...] apt-get [options] source pkg1 [pkg2 ...] apt-get is a command line interface for retrieval of packages'.

```
alimron@alimron-VirtualBox:~$ apt-get
apt 2.7.14 (amd64)
Usage: apt-get [options] command
       apt-get [options] install|remove pkg1 [pkg2 ...]
       apt-get [options] source pkg1 [pkg2 ...]
apt-get is a command line interface for retrieval of packages
```

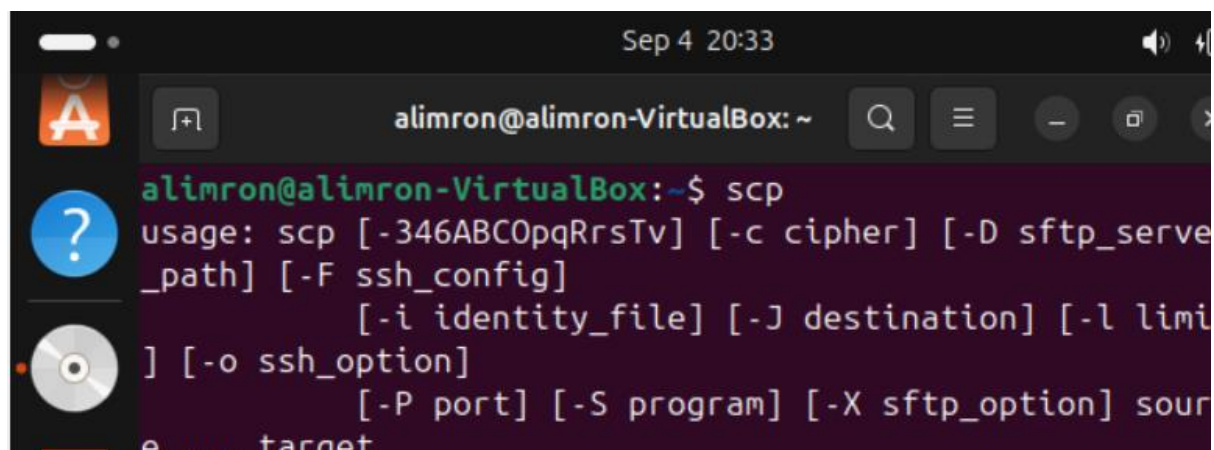
42. **top**: Memantau proses sistem secara real-time, menampilkan penggunaan CPU, memori, dan sumber daya lainnya.



```
top - 20:30:57 up 1:21, 1 user, load average: 2.12, 2
Tasks: 180 total, 3 running, 177 sleeping, 0 stopped
%Cpu(s): 81.8 us, 14.6 sy, 0.0 ni, 0.0 id, 0.0 wa, 0
MiB Mem : 3916.5 total, 2108.8 free, 1233.2 used,
MiB Swap: 3916.0 total, 3916.0 free, 0.0 used.
```

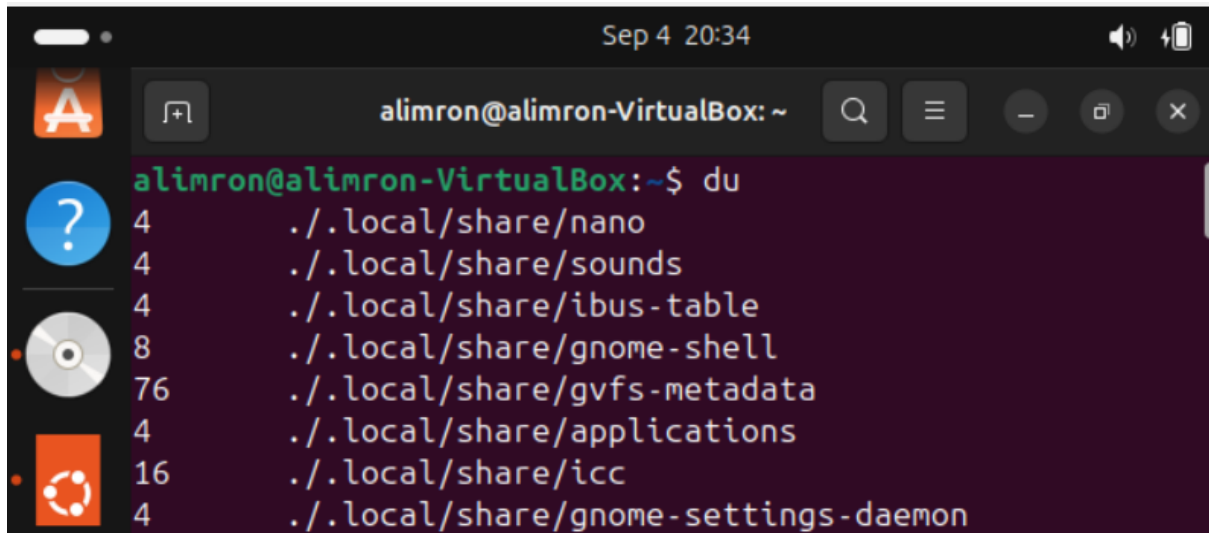
PID	USER	PR	NI	VIRT	RES	SHR	S	%CPU
1610	alimron	20	0	3477236	377984	134680	R	48.4
12230	alimron	20	0	2560004	36088	28676	R	23.4
12199	alimron	20	0	23192	5888	3712	R	1.3
517	message+	20	0	12192	7040	4480	S	0.6
1420	alimron	20	0	10908	6656	4608	S	0.6
11478	alimron	20	0	704728	54188	43196	S	0.6

43. **scp**: Mengirim file secara aman antara komputer melalui SSH.



```
alimron@alimron-VirtualBox:~$ scp
usage: scp [-346ABCOpqRrsTv] [-c cipher] [-D sftp_server
_path] [-F ssh_config]
        [-i identity_file] [-J destination] [-l limit]
] [-o ssh_option]
        [-P port] [-S program] [-X sftp_option] source
e ... target
```

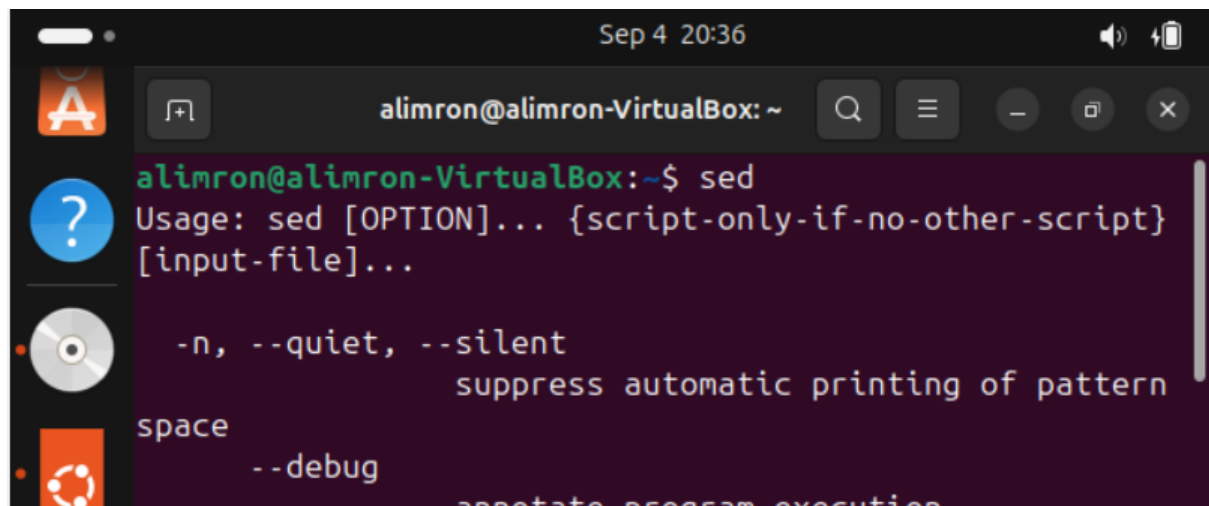
44. **du**: Menampilkan ukuran dari file dan direktori.



A terminal window titled 'alimron@alimron-VirtualBox: ~' showing the output of the 'du' command. The output lists the size of various directories in the '/.local/share/' path. The window has a dark theme and a sidebar with application icons on the left.

```
alimron@alimron-VirtualBox:~$ du
4      ../local/share/nano
4      ../local/share/sounds
4      ../local/share/ibus-table
8      ../local/share/gnome-shell
76     ../local/share/gvfs-metadata
4      ../local/share/applications
16     ../local/share/icc
4      ../local/share/gnome-settings-daemon
```

45. **sed**: Stream editor untuk memanipulasi teks, sering digunakan untuk pencarian dan penggantian dalam file.

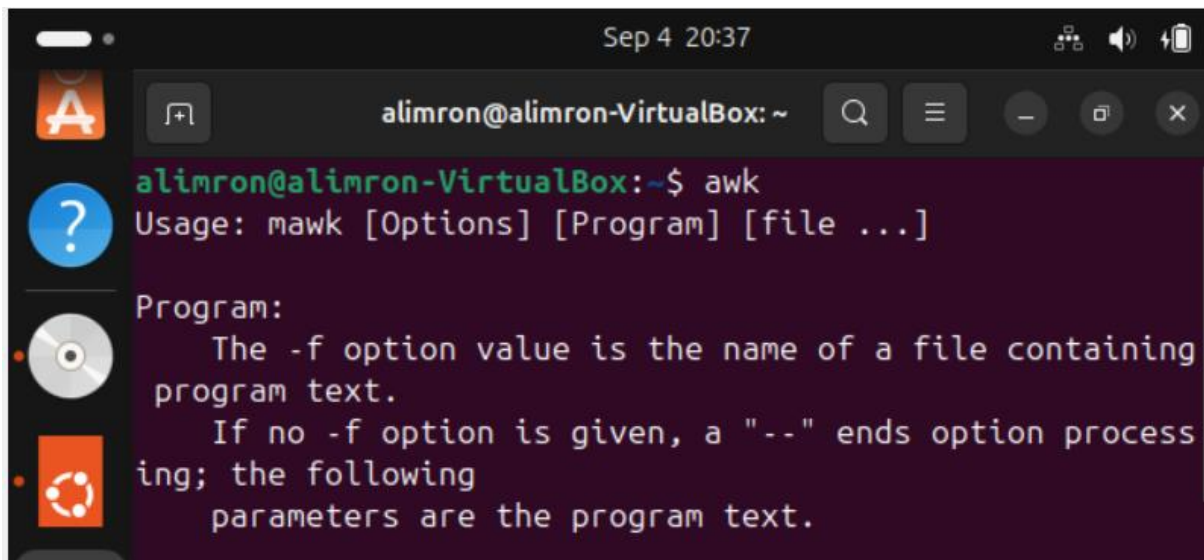


A terminal window titled 'alimron@alimron-VirtualBox: ~' showing the usage of the 'sed' command. The output displays the usage syntax and some options. The window has a dark theme and a sidebar with application icons on the left.

```
alimron@alimron-VirtualBox:~$ sed
Usage: sed [OPTION]... {script-only-if-no-other-script}
[input-file]...

-n, --quiet, --silent
                        suppress automatic printing of pattern
space
--debug
                        annotate program execution
```

46. **awk**: Alat pemrosesan teks yang kuat untuk memanipulasi data berbasis pola dan kolom dalam file teks.



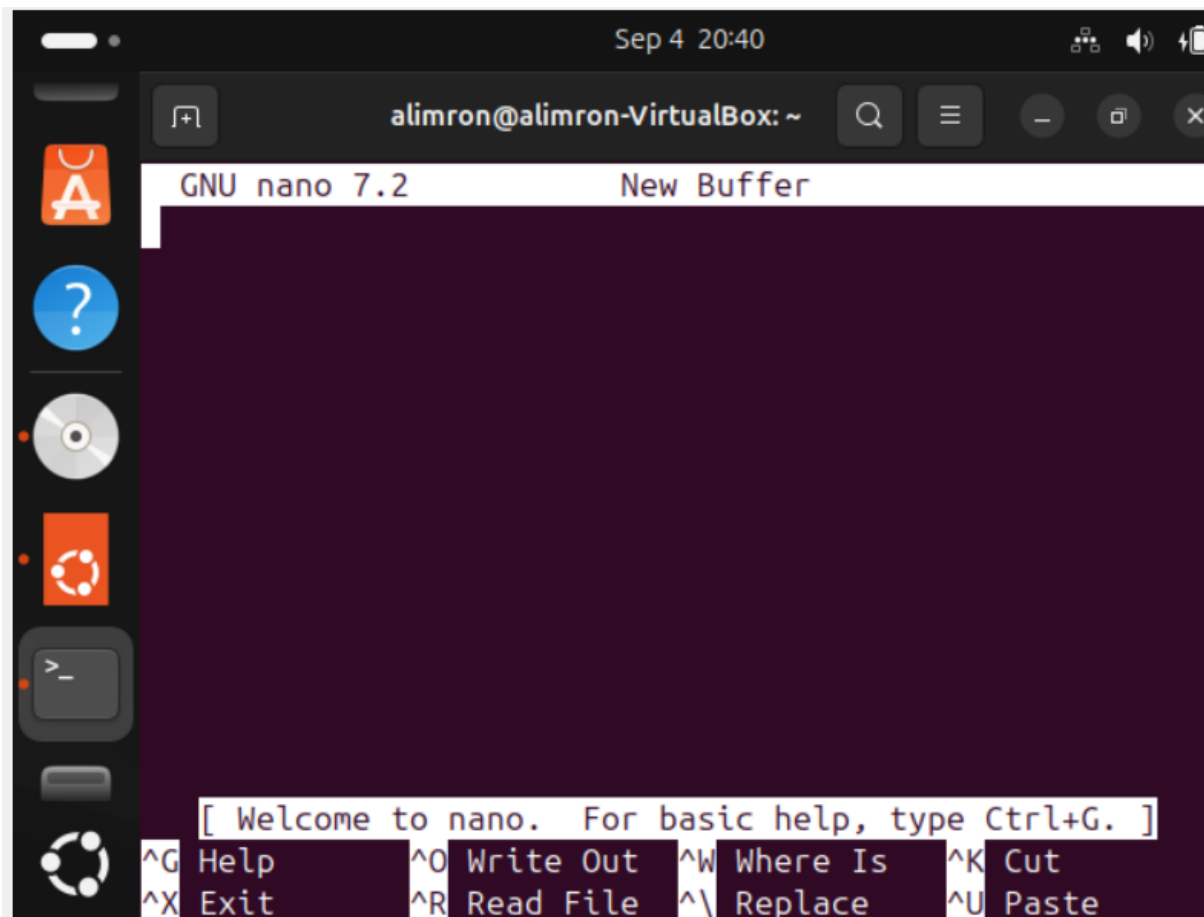
Sep 4 20:37

alimron@alimron-VirtualBox: ~

```
alimron@alimron-VirtualBox:~$ awk
Usage: mawk [Options] [Program] [file ...]

Program:
  The -f option value is the name of a file containing
  program text.
  If no -f option is given, a "--" ends option process
  ing; the following
  parameters are the program text.
```

47. **nano**: Editor teks sederhana yang sering digunakan untuk mengedit file di terminal.



Sep 4 20:40

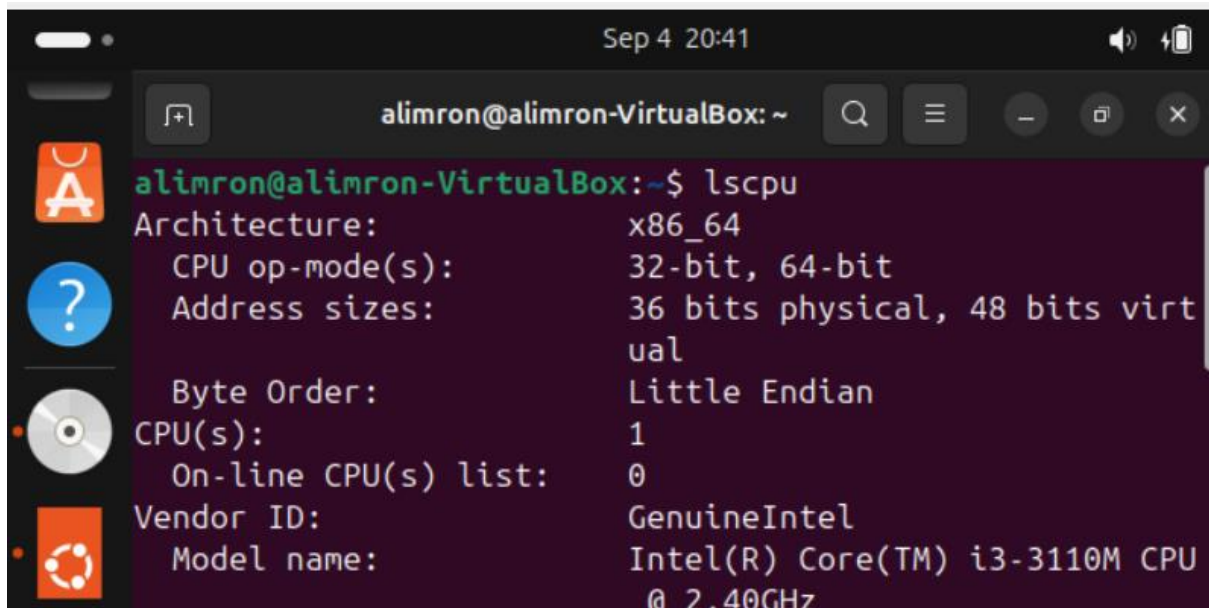
alimron@alimron-VirtualBox: ~

GNU nano 7.2 New Buffer

[Welcome to nano. For basic help, type Ctrl+G.]

^G Help	^O Write Out	^W Where Is	^K Cut
^X Exit	^R Read File	^_ Replace	^U Paste

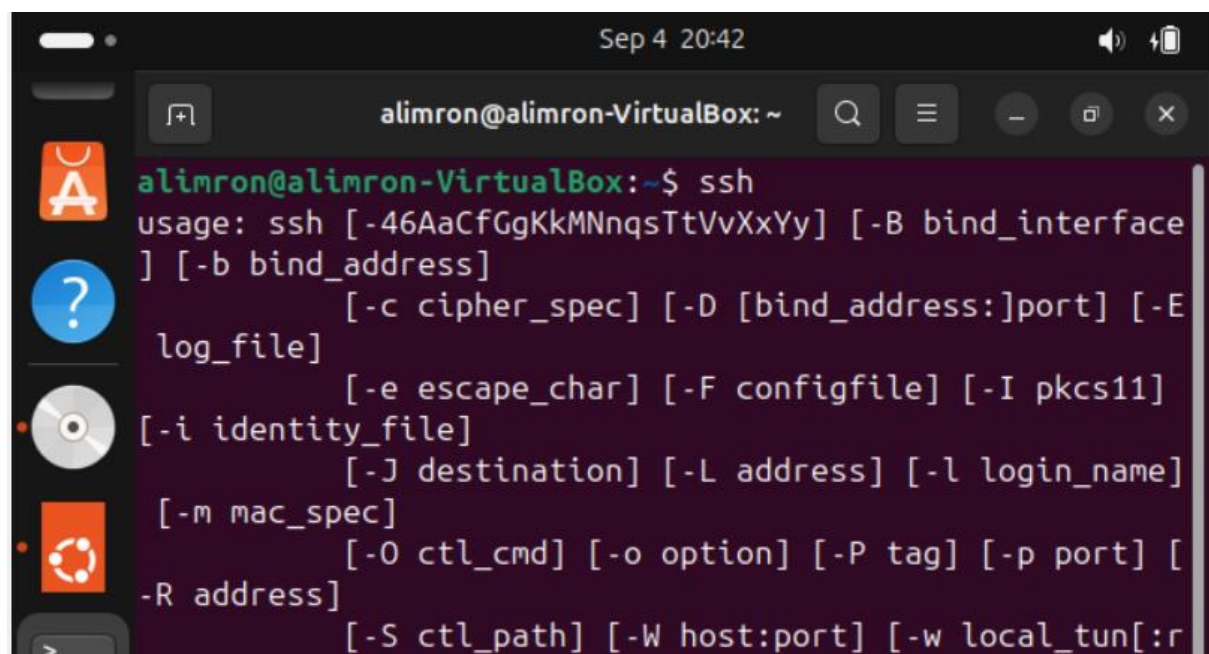
48. **lscpu**: Menampilkan informasi detail tentang arsitektur CPU, termasuk jumlah core, model CPU, dan fitur lainnya.



A terminal window titled 'alimron@alimron-VirtualBox: ~' showing the output of the 'lscpu' command. The output lists system architecture details: Architecture: x86_64, CPU op-mode(s): 32-bit, 64-bit, Address sizes: 36 bits physical, 48 bits virtual, Byte Order: Little Endian, CPU(s): 1, On-line CPU(s) list: 0, Vendor ID: GenuineIntel, and Model name: Intel(R) Core(TM) i3-3110M CPU @ 2.40GHz. The window includes a sidebar with application icons and a top status bar showing the date and time as 'Sep 4 20:41'.

```
alimron@alimron-VirtualBox:~$ lscpu
Architecture:                x86_64
CPU op-mode(s):              32-bit, 64-bit
Address sizes:                36 bits physical, 48 bits virtual
Byte Order:                   Little Endian
CPU(s):                       1
On-line CPU(s) list:         0
Vendor ID:                    GenuineIntel
Model name:                   Intel(R) Core(TM) i3-3110M CPU
                              @ 2.40GHz
```

49. **ssh**: Mengakses komputer lain secara aman melalui jaringan menggunakan protokol Secure Shell (SSH).



A terminal window titled 'alimron@alimron-VirtualBox: ~' showing the usage of the 'ssh' command. The output lists various options: [-46AaCfGgKkMnqsTtVvXxYy], [-B bind_interface], [-b bind_address], [-c cipher_spec], [-D [bind_address:]port], [-E log_file], [-e escape_char], [-F configfile], [-I pkcs11], [-i identity_file], [-J destination], [-L address], [-l login_name], [-m mac_spec], [-O ctl_cmd], [-o option], [-P tag], [-p port], [-R address], [-S ctl_path], [-W host:port], and [-w local_tun[:r]]. The window includes a sidebar with application icons and a top status bar showing the date and time as 'Sep 4 20:42'.

```
alimron@alimron-VirtualBox:~$ ssh
usage: ssh [-46AaCfGgKkMnqsTtVvXxYy] [-B bind_interface]
          [-b bind_address]
          [-c cipher_spec] [-D [bind_address:]port] [-E
log_file]
          [-e escape_char] [-F configfile] [-I pkcs11]
          [-i identity_file]
          [-J destination] [-L address] [-l login_name]
          [-m mac_spec]
          [-O ctl_cmd] [-o option] [-P tag] [-p port] [
-R address]
          [-S ctl_path] [-W host:port] [-w local_tun[:r
```

50. **df**: Menampilkan informasi tentang penggunaan ruang disk pada sistem file.

Sep 4 20:42

alimron@alimron-VirtualBox: ~

alimron@alimron-VirtualBox:~\$ df

Filesystem	1K-blocks	Used	Available	Use%	Mounted
tmpfs	401048	1428	399620	1%	/run
/dev/sda2	40970464	9133276	29723808	24%	/
tmpfs	2005236	0	2005236	0%	/dev/shm
tmpfs	5120	8	5112	1%	/run/lock
tmpfs	401044	120	400924	1%	/run/user
/dev/sr0	5971344	5971344	0	100%	/media/...