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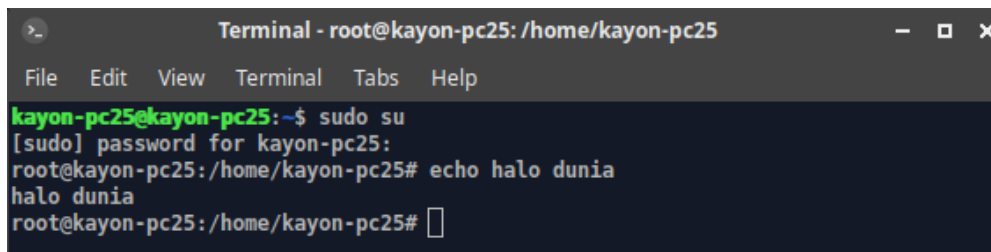
Kelas : C

Tugas Praktikum

Sistem Operasi

1. echo halo dunia

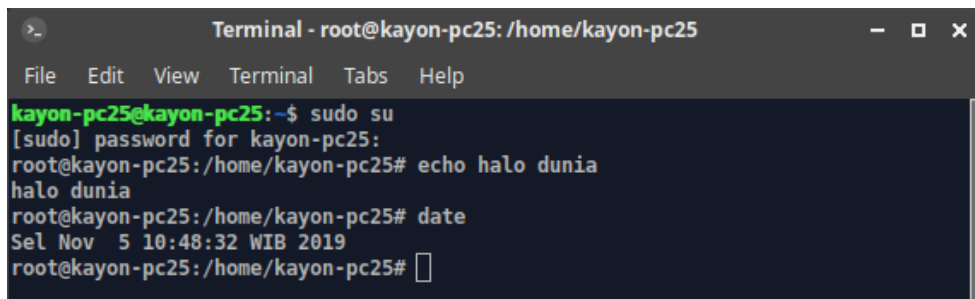
Menampilkan pada layar terminal tulisan “halo dunia”.

A terminal window titled "Terminal - root@kayon-pc25: /home/kayon-pc25" with a menu bar (File, Edit, View, Terminal, Tabs, Help). The prompt is "kayon-pc25@kayon-pc25:~\$". The user enters "sudo su", followed by a password prompt "[sudo] password for kayon-pc25:". The prompt changes to "root@kayon-pc25:/home/kayon-pc25#". The user enters "echo halo dunia", and the output "halo dunia" is displayed. The prompt returns to "root@kayon-pc25:/home/kayon-pc25#".

```
Terminal - root@kayon-pc25: /home/kayon-pc25
File Edit View Terminal Tabs Help
kayon-pc25@kayon-pc25:~$ sudo su
[sudo] password for kayon-pc25:
root@kayon-pc25:/home/kayon-pc25# echo halo dunia
halo dunia
root@kayon-pc25:/home/kayon-pc25#
```

2. date

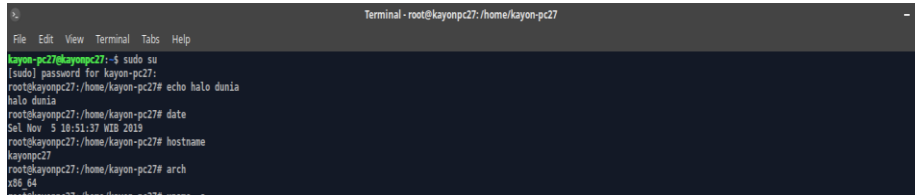
Menampilkan pada terminal berupa keterangan hari, tanggal, bulan, tahun dan waktu pada pemanggilan command.

A terminal window titled "Terminal - root@kayon-pc25: /home/kayon-pc25" with a menu bar (File, Edit, View, Terminal, Tabs, Help). The prompt is "kayon-pc25@kayon-pc25:~\$". The user enters "sudo su", followed by a password prompt "[sudo] password for kayon-pc25:". The prompt changes to "root@kayon-pc25:/home/kayon-pc25#". The user enters "echo halo dunia", and the output "halo dunia" is displayed. The user then enters "date", and the output "Sat Nov 5 10:48:32 WIB 2019" is displayed. The prompt returns to "root@kayon-pc25:/home/kayon-pc25#".

```
Terminal - root@kayon-pc25: /home/kayon-pc25
File Edit View Terminal Tabs Help
kayon-pc25@kayon-pc25:~$ sudo su
[sudo] password for kayon-pc25:
root@kayon-pc25:/home/kayon-pc25# echo halo dunia
halo dunia
root@kayon-pc25:/home/kayon-pc25# date
Sat Nov 5 10:48:32 WIB 2019
root@kayon-pc25:/home/kayon-pc25#
```

3. hostname

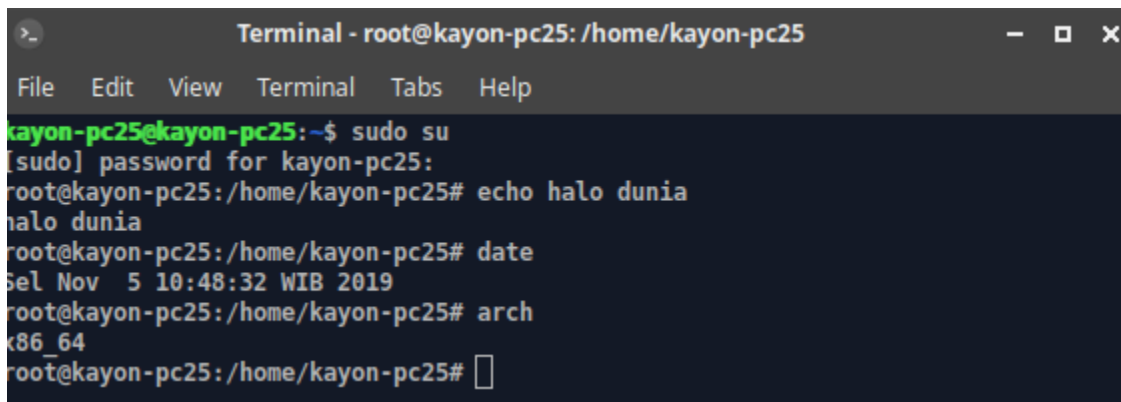
Menampilkan nama host dari Sistem Operasi Linux itu sendiri. (root). Nb : Mbak yang hostname aku minta sama punya temenku, aku lupa command kemarin.

A terminal window titled 'Terminal - root@kayonpc27: /home/kayon-pc27'. The user 'kayon-pc27@kayonpc27' runs 'sudo su' and enters the password. As root, they run 'echo halo dunia' (output: halo dunia), 'date' (output: Sat Nov 9 18:51:37 WIB 2019), 'hostname' (output: kayonpc27), and 'arch' (output: x86_64).

```
Terminal - root@kayonpc27: /home/kayon-pc27
kayon-pc27@kayonpc27:~$ sudo su
[sudo] password for kayon-pc27:
root@kayonpc27: /home/kayon-pc27# echo halo dunia
halo dunia
root@kayonpc27: /home/kayon-pc27# date
Sat Nov 9 18:51:37 WIB 2019
root@kayonpc27: /home/kayon-pc27# hostname
kayonpc27
root@kayonpc27: /home/kayon-pc27# arch
x86_64
```

4.arch

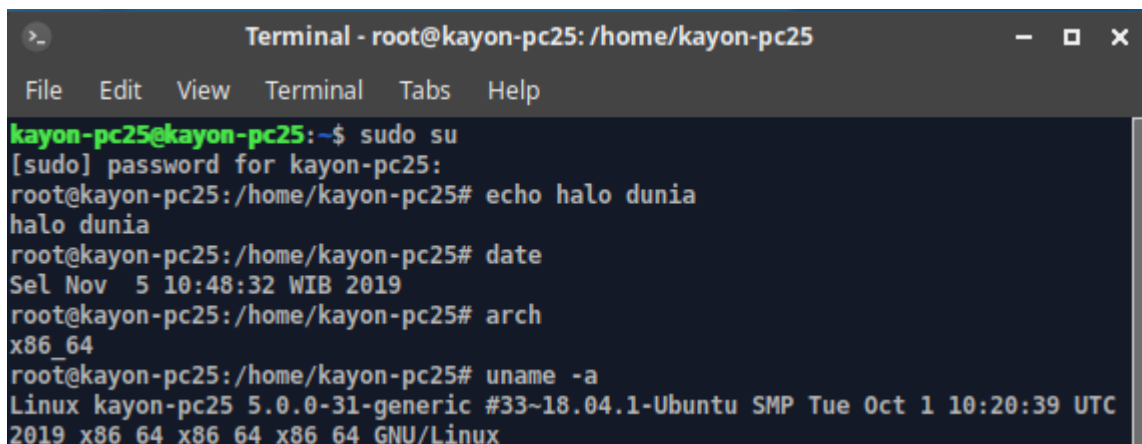
Menampilkan jenis arsitektur mesin.

A terminal window titled 'Terminal - root@kayon-pc25: /home/kayon-pc25'. The user 'kayon-pc25@kayon-pc25' runs 'sudo su' and enters the password. As root, they run 'echo halo dunia' (output: halo dunia), 'date' (output: Sat Nov 5 10:48:32 WIB 2019), and 'arch' (output: x86_64).

```
Terminal - root@kayon-pc25: /home/kayon-pc25
kayon-pc25@kayon-pc25:~$ sudo su
[sudo] password for kayon-pc25:
root@kayon-pc25: /home/kayon-pc25# echo halo dunia
halo dunia
root@kayon-pc25: /home/kayon-pc25# date
Sat Nov 5 10:48:32 WIB 2019
root@kayon-pc25: /home/kayon-pc25# arch
x86_64
root@kayon-pc25: /home/kayon-pc25#
```

5. uname -a

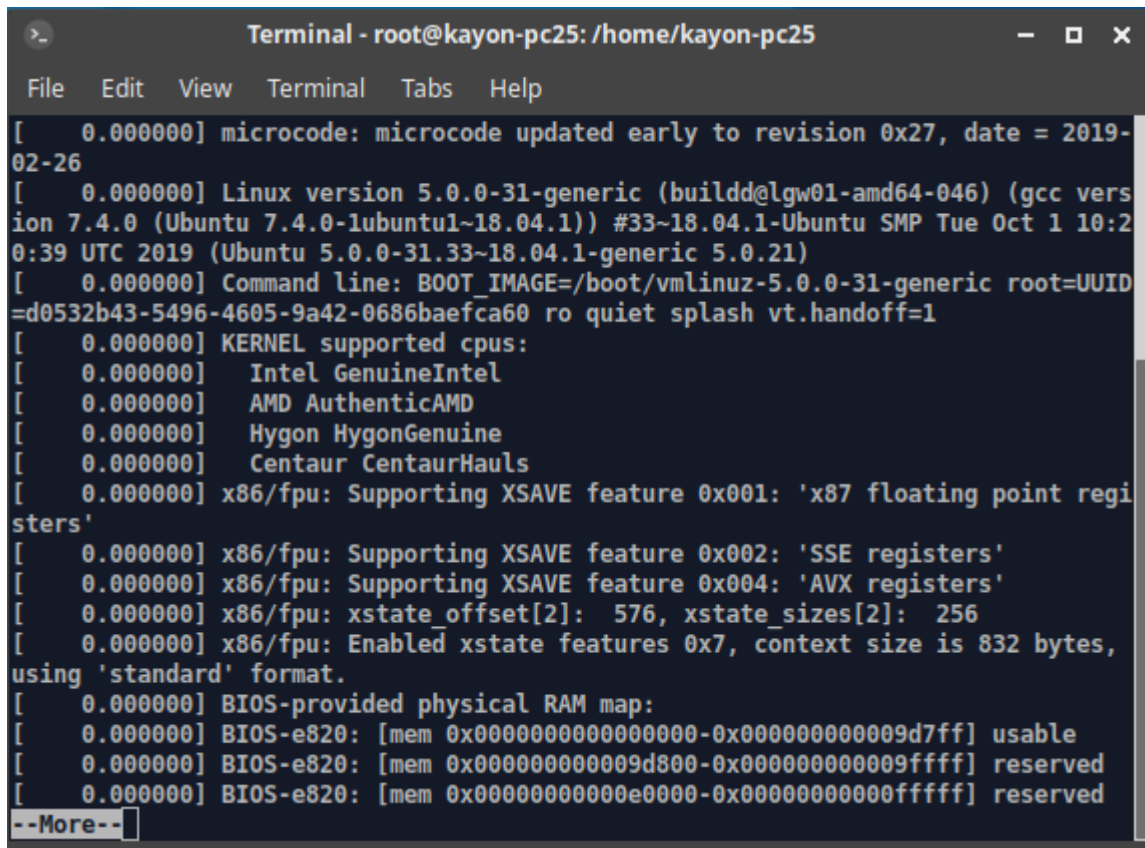
Menampilkan informasi dari Sistem Operasi.

A terminal window titled 'Terminal - root@kayon-pc25: /home/kayon-pc25'. The user 'kayon-pc25@kayon-pc25' runs 'sudo su' and enters the password. As root, they run 'echo halo dunia' (output: halo dunia), 'date' (output: Sat Nov 5 10:48:32 WIB 2019), 'arch' (output: x86_64), and 'uname -a' (output: Linux kayon-pc25 5.0.0-31-generic #33~18.04.1-Ubuntu SMP Tue Oct 1 10:20:39 UTC 2019 x86_64 x86_64 x86_64 GNU/Linux).

```
Terminal - root@kayon-pc25: /home/kayon-pc25
kayon-pc25@kayon-pc25:~$ sudo su
[sudo] password for kayon-pc25:
root@kayon-pc25: /home/kayon-pc25# echo halo dunia
halo dunia
root@kayon-pc25: /home/kayon-pc25# date
Sat Nov 5 10:48:32 WIB 2019
root@kayon-pc25: /home/kayon-pc25# arch
x86_64
root@kayon-pc25: /home/kayon-pc25# uname -a
Linux kayon-pc25 5.0.0-31-generic #33~18.04.1-Ubuntu SMP Tue Oct 1 10:20:39 UTC
2019 x86_64 x86_64 x86_64 GNU/Linux
```

6. dmesg | more (tekan q untuk keluar)

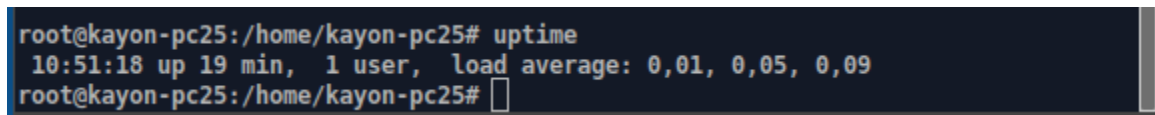
Menampilkan pesan-pesan pada waktu proses booting di terminal.

A screenshot of a terminal window titled "Terminal - root@kayon-pc25: /home/kayon-pc25". The terminal shows the output of the 'dmesg' command, displaying various system boot messages. The messages include microcode updates, Linux version information (5.0.0-31-generic), command line details, kernel supported CPUs (Intel, AMD, Hygon, Centaur), x86/fpu features (XSAVE, SSE, AVX), and BIOS-provided physical RAM map details. The output is paginated, with a "--More--" prompt at the bottom.

```
Terminal - root@kayon-pc25: /home/kayon-pc25
File Edit View Terminal Tabs Help
[ 0.000000] microcode: microcode updated early to revision 0x27, date = 2019-02-26
[ 0.000000] Linux version 5.0.0-31-generic (buildd@lgw01-amd64-046) (gcc vers
ion 7.4.0 (Ubuntu 7.4.0-1ubuntu1~18.04.1)) #33~18.04.1-Ubuntu SMP Tue Oct 1 10:2
0:39 UTC 2019 (Ubuntu 5.0.0-31.33~18.04.1-generic 5.0.21)
[ 0.000000] Command line: BOOT_IMAGE=/boot/vmlinuz-5.0.0-31-generic root=UUID
=d0532b43-5496-4605-9a42-0686baefca60 ro quiet splash vt.handoff=1
[ 0.000000] KERNEL supported cpus:
[ 0.000000] Intel GenuineIntel
[ 0.000000] AMD AuthenticAMD
[ 0.000000] Hygon HygonGenuine
[ 0.000000] Centaur CentaurHauls
[ 0.000000] x86/fpu: Supporting XSAVE feature 0x001: 'x87 floating point regi
sters'
[ 0.000000] x86/fpu: Supporting XSAVE feature 0x002: 'SSE registers'
[ 0.000000] x86/fpu: Supporting XSAVE feature 0x004: 'AVX registers'
[ 0.000000] x86/fpu: xstate_offset[2]: 576, xstate_sizes[2]: 256
[ 0.000000] x86/fpu: Enabled xstate features 0x7, context size is 832 bytes,
using 'standard' format.
[ 0.000000] BIOS-provided physical RAM map:
[ 0.000000] BIOS-e820: [mem 0x0000000000000000-0x00000000000009d7ff] usable
[ 0.000000] BIOS-e820: [mem 0x00000000000009d800-0x00000000000009ffff] reserved
[ 0.000000] BIOS-e820: [mem 0x0000000000000e0000-0x0000000000000fffff] reserved
--More--
```

7. uptime

Mengetahui informasi tentang durasi atau lamanya waktu terakhir sistem berjalan setelah reboot/mati.

A screenshot of a terminal window showing the output of the 'uptime' command. The output displays the current time (10:51:18), system uptime (up 19 min), number of users (1 user), and load averages (0.01, 0.05, 0.09).

```
root@kayon-pc25:/home/kayon-pc25# uptime
10:51:18 up 19 min, 1 user, load average: 0,01, 0,05, 0,09
root@kayon-pc25:/home/kayon-pc25#
```

8. whoami

Menanyakan nama user yang sedang menggunakan terminal yang sedang bekerja.

```
root@kayon-pc25:/home/kayon-pc25# uptime
10:51:18 up 19 min, 1 user, load average: 0,01, 0,05, 0,09
root@kayon-pc25:/home/kayon-pc25# whoiam
whoiam: command not found
root@kayon-pc25:/home/kayon-pc25# whoami
root
root@kayon-pc25:/home/kayon-pc25#
```

9. who

Menampilkan siapa saja user yang telah login/masuk Sistem Operasi.

```
root@kayon-pc25:/home/kayon-pc25# uptime
10:51:18 up 19 min, 1 user, load average: 0,01, 0,05, 0,09
root@kayon-pc25:/home/kayon-pc25# whoiam
whoiam: command not found
root@kayon-pc25:/home/kayon-pc25# whoami
root
root@kayon-pc25:/home/kayon-pc25# who
kayon-pc25 tty7      2019-11-05 10:32 (:0)
root@kayon-pc25:/home/kayon-pc25#
```

10. id

Menampilkan identitas dari user.

```
root@kayon-pc25:/home/kayon-pc25# uptime
10:51:18 up 19 min, 1 user, load average: 0,01, 0,05, 0,09
root@kayon-pc25:/home/kayon-pc25# whoiam
whoiam: command not found
root@kayon-pc25:/home/kayon-pc25# whoami
root
root@kayon-pc25:/home/kayon-pc25# who
kayon-pc25 tty7      2019-11-05 10:32 (:0)
root@kayon-pc25:/home/kayon-pc25# id
uid=0(root) gid=0(root) groups=0(root)
root@kayon-pc25:/home/kayon-pc25#
```

11. last

Menampilkan daftar login terakhir dari user yang berada di sistem. Pengambilan data berasal dari file/var/log/wtmp.

```

root@kayon-pc25:/home/kayon-pc25# uptime
10:51:18 up 19 min, 1 user, load average: 0,01, 0,05, 0,09
root@kayon-pc25:/home/kayon-pc25# whoiam
whoiam: command not found
root@kayon-pc25:/home/kayon-pc25# whoami
root
root@kayon-pc25:/home/kayon-pc25# who
kayon-pc25 tty7          2019-11-05 10:32 (:0)
root@kayon-pc25:/home/kayon-pc25# id
uid=0(root) gid=0(root) groups=0(root)
root@kayon-pc25:/home/kayon-pc25# last

wtmp begins Tue Nov  5 10:37:07 2019
root@kayon-pc25:/home/kayon-pc25#

```

12.finger

Melihat informasi dari finger.

```

root@kayon-pc25:/home/kayon-pc25# finger

Command 'finger' not found, but can be installed with:

apt install finger

root@kayon-pc25:/home/kayon-pc25#

```

```

root@kayon-pc25:/home/kayon-pc25# finger
Login      Name      Tty      Idle  Login Time  Office      Office Phone
kayon-pc25 kaayon-pc 25  tty7          Nov  5 10:32 (:0)
root@kayon-pc25:/home/kayon-pc25#

```

13. w

Menampilkan ke terminal siapa saja yang sedang aktif.

```

root@kayon-pc25:/home/kayon-pc25# finger

Command 'finger' not found, but can be installed with:

apt install finger

root@kayon-pc25:/home/kayon-pc25# w
10:53:58 up 22 min, 1 user, load average: 0,00, 0,02, 0,07
USER      TTY      FROM      LOGIN@   IDLE   JCPU   PCPU WHAT
kayon-pc  tty7      :0         10:32    ?      17.67s  0.01s /bin/sh /etc/xd
root@kayon-pc25:/home/kayon-pc25#

```

14. top

Menampilkan ke terminal proses yang sedang berjalan, diurutkan dari proses yang paling benar.

```
Terminal - root@kayon-pc25: /home/kayon-pc25
File Edit View Terminal Tabs Help
top - 10:54:34 up 22 min, 1 user, load average: 0,00, 0,02, 0,07
Tasks: 188 total, 1 running, 139 sleeping, 0 stopped, 0 zombie
%Cpu(s): 0,2 us, 0,1 sy, 0,0 ni, 99,7 id, 0,0 wa, 0,0 hi, 0,1 si, 0,0 st
KiB Mem : 8103664 total, 6556088 free, 432584 used, 1114992 buff/cache
KiB Swap: 902668 total, 902668 free, 0 used. 7387940 avail Mem

  PID USER      PR  NI    VIRT    RES    SHR S  %CPU  %MEM     TIME+ COMMAND
  932 root        20   0   319972   62072  42636 S   3,3   0,8   0:18.47 Xorg
 4225 kayon-p+   20   0   385796   28028  22352 S   2,3   0,3   0:00.17 xfce4-scre+
 1814 kayon-p+  20   0   190996   21988  17828 S   1,0   0,3   0:02.57 xfwm4
   10 root        20   0         0         0      0 I   0,3   0,0   0:03.47 rcu_sched
   949 root        20   0         0         0      0 S   0,3   0,0   0:01.71 nv_queue
 1718 kayon-p+  20   0    50560    5156   3960 S   0,3   0,1   0:00.55 dbus-daemon
 4224 root        20   0    51648    4148   3512 R   0,3   0,1   0:00.06 top
    1 root        20   0   159900    9244   6804 S   0,0   0,1   0:01.19 systemd
    2 root        20   0         0         0      0 S   0,0   0,0   0:00.00 kthreadd
    3 root         0 -20         0         0      0 I   0,0   0,0   0:00.00 rcu_gp
    4 root         0 -20         0         0      0 I   0,0   0,0   0:00.00 rcu_par_gp
    6 root         0 -20         0         0      0 I   0,0   0,0   0:00.00 kworker/0:
    8 root         0 -20         0         0      0 I   0,0   0,0   0:00.00 mm_percpu_
    9 root        20   0         0         0      0 S   0,0   0,0   0:00.01 ksoftirqd/0
   11 root        rt    0         0         0      0 S   0,0   0,0   0:00.00 migration/0
   12 root       -51   0         0         0      0 S   0,0   0,0   0:00.00 idle_injec+
   13 root        20   0         0         0      0 I   0,0   0,0   0:00.05 kworker/0:+
```

15. echo \$SHELL

Bin/bash.

```
root@kayon-pc25:/home/kayon-pc25# echo $SHELL
/bin/bash
root@kayon-pc25:/home/kayon-pc25# echo {con.pre}{sent,fer}{s,ed}
{con.pre}sents {con.pre}sented {con.pre}fers {con.pre}fered
root@kayon-pc25:/home/kayon-pc25#
```

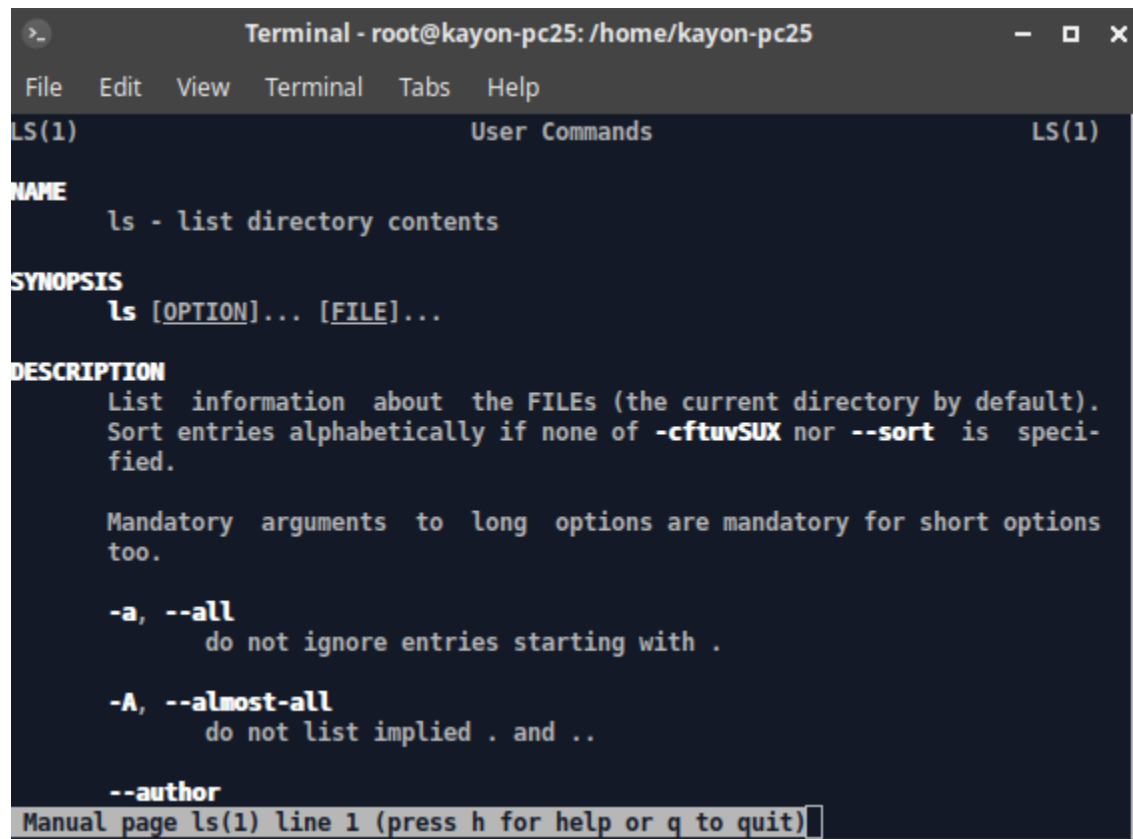
16. echo{con,pre} {sent,fer} {s,ed}

Menyusun kata.

```
root@kayon-pc25:/home/kayon-pc25# echo $SHELL
/bin/bash
root@kayon-pc25:/home/kayon-pc25# echo {con.pre}{sent,fer}{s,ed}
{con.pre}sents {con.pre}sented {con.pre}fers {con.pre}fered
root@kayon-pc25:/home/kayon-pc25#
```

17. man ls

Menampilkan informasi ls ke terminal.



The screenshot shows a terminal window titled "Terminal - root@kayon-pc25: /home/kayon-pc25". The window has a menu bar with "File", "Edit", "View", "Terminal", "Tabs", and "Help". The main content area displays the man page for "ls(1)". The page is divided into sections: "NAME", "SYNOPSIS", and "DESCRIPTION". The "NAME" section states "ls - list directory contents". The "SYNOPSIS" section shows "ls [OPTION]... [FILE]...". The "DESCRIPTION" section explains that "ls" lists information about files in the current directory by default, sorted alphabetically unless specified otherwise. It lists several options: "-a, --all" (do not ignore entries starting with .), "-A, --almost-all" (do not list implied . and ..), and "--author". At the bottom, a status bar indicates "Manual page ls(1) line 1 (press h for help or q to quit)".

```
Terminal - root@kayon-pc25: /home/kayon-pc25
File Edit View Terminal Tabs Help
LS(1) User Commands LS(1)
NAME
    ls - list directory contents
SYNOPSIS
    ls [OPTION]... [FILE]...
DESCRIPTION
    List information about the FILES (the current directory by default).
    Sort entries alphabetically if none of -cftuvSUX nor --sort is speci-
    fied.

    Mandatory arguments to long options are mandatory for short options
    too.

    -a, --all
        do not ignore entries starting with .

    -A, --almost-all
        do not list implied . and ..

    --author
Manual page ls(1) line 1 (press h for help or q to quit)
```

18. man who

Menampilkan informasi who.

```
Terminal - root@kayon-pc25: /home/kayon-pc25
File Edit View Terminal Tabs Help
WHO(1) User Commands WHO(1)
NAME
  who - show who is logged on
SYNOPSIS
  who [OPTION]... [ FILE | ARG1 ARG2 ]
DESCRIPTION
  Print information about users who are currently logged in.
  -a, --all
      same as -b -d --login -p -r -t -T -u
  -b, --boot
      time of last system boot
  -d, --dead
      print dead processes
  -H, --heading
      print line of column headings
Manual page who(1) line 1/88 23% (press h for help or q to quit)
```

19. who can tell me about linux

Mengalami kegagalan karena kelebihan operandi me.

```
root@kayon-pc25:/home/kayon-pc25# echo $SHELL
/bin/bash
root@kayon-pc25:/home/kayon-pc25# echo {con.pre}{sent,fer}{s,ed}
{con.pre}sents {con.pre}sented {con.pre}fers {con.pre}fered
root@kayon-pc25:/home/kayon-pc25# man ls
root@kayon-pc25:/home/kayon-pc25# man who
root@kayon-pc25:/home/kayon-pc25# who can tell me about linux
who: extra operand 'me'
Try 'who --help' for more information.
root@kayon-pc25:/home/kayon-pc25#
```

20. last

Menampilkan daftar login terakhir dari user yang berada di sistem. Pengambilan data berasal dari file/var/log/wtmp.


```

root@kayon-pc25:/home/kayon-pc25# echo $SHELL
/bin/bash
root@kayon-pc25:/home/kayon-pc25# echo {con.pre}{sent,fer}{s,ed}
{con.pre}sents {con.pre}sented {con.pre}fers {con.pre}fered
root@kayon-pc25:/home/kayon-pc25# man ls
root@kayon-pc25:/home/kayon-pc25# man who
root@kayon-pc25:/home/kayon-pc25# who can tell me about linux
who: extra operand 'me'
Try 'who --help' for more information.
root@kayon-pc25:/home/kayon-pc25# last

wtmp begins Tue Nov  5 10:37:07 2019
root@kayon-pc25:/home/kayon-pc25# 

```

21. clear

Melakukan perintah untuk membersihkan terminal seperti awal

22. fdisk-l

Menampilkan list atau urutan partisi data pada perangkat.

```

Terminal - root@kayon-pc25: /home/kayon-pc25
File Edit View Terminal Tabs Help

Units: sectors of 1 * 512 = 512 bytes
Sector size (logical/physical): 512 bytes / 4096 bytes
I/O size (minimum/optimal): 4096 bytes / 4096 bytes
Disklabel type: dos
Disk identifier: 0x80e875a7

Device Boot      Start         End      Sectors  Size Id Type
/dev/sda1  *           2048        206847        204800    100M  7 HPFS/NTFS/exFAT
/dev/sda2             206848    417794047    417587200    199,1G  7 HPFS/NTFS/exFAT
/dev/sda3      417794048    456855551    39061504    18,6G  83 Linux

Disk /dev/sdb: 28,7 GiB, 30752636928 bytes, 60063744 sectors
Units: sectors of 1 * 512 = 512 bytes
Sector size (logical/physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes
Disklabel type: dos
Disk identifier: 0x04e521cb

Device Boot      Start         End      Sectors  Size Id Type
/dev/sdb1             2048    60063743    60061696    28,7G  7 HPFS/NTFS/exFAT
root@kayon-pc25:/home/kayon-pc25# 

```

23. users

Menampilkan data user yang sedang aktif pada sebuah perangkat.

```
root@kayon-pc25:/home/kayon-pc25# users
kayon-pc25
root@kayon-pc25:/home/kayon-pc25#
```

24. cat/etc/fstab

Melihat file sistem yang telah ter-setup.

```
root@kayon-pc25:/home/kayon-pc25# users
kayon-pc25
root@kayon-pc25:/home/kayon-pc25# cat /etc/fstab
# /etc/fstab: static file system information.
#
# Use 'blkid' to print the universally unique identifier for a
# device; this may be used with UUID= as a more robust way to name devices
# that works even if disks are added and removed. See fstab(5).
#
# <file system> <mount point> <type> <options>          <dump> <pass>
# / was on /dev/sda3 during installation
UUID=d0532b43-5496-4605-9a42-0686baefca60 /          ext4      errors=remount
-ro 0      1
/swapfile                                none      swap      sw
0        0
root@kayon-pc25:/home/kayon-pc25#
```

25. cal 2000

Menampilkan kalender tahun 2000.

```
Terminal - root@kayon-pc25:/home/kayon-pc25
File Edit View Terminal Tabs Help
2 3 4 5 6 7 8 7 8 9 10 11 12 13 4 5 6 7 8 9 10
9 10 11 12 13 14 15 14 15 16 17 18 19 20 11 12 13 14 15 16 17
16 17 18 19 20 21 22 21 22 23 24 25 26 27 18 19 20 21 22 23 24
23 24 25 26 27 28 29 28 29 30 31 25 26 27 28 29 30
30
      Juli          Agustus          September
Mi Se Se Ra Ka Ju Sa Mi Se Se Ra Ka Ju Sa Mi Se Se Ra Ka Ju Sa
      1            1 2 3 4 5            1 2
2 3 4 5 6 7 8 6 7 8 9 10 11 12 3 4 5 6 7 8 9
9 10 11 12 13 14 15 13 14 15 16 17 18 19 10 11 12 13 14 15 16
16 17 18 19 20 21 22 20 21 22 23 24 25 26 17 18 19 20 21 22 23
23 24 25 26 27 28 29 27 28 29 30 31 24 25 26 27 28 29 30
30 31
      Oktober       November       Desember
Mi Se Se Ra Ka Ju Sa Mi Se Se Ra Ka Ju Sa Mi Se Se Ra Ka Ju Sa
1 2 3 4 5 6 7 1 2 3 4 1 2 3 4
8 9 10 11 12 13 14 5 6 7 8 9 10 11 3 4 5 6 7 8 9
15 16 17 18 19 20 21 12 13 14 15 16 17 18 10 11 12 13 14 15 16
22 23 24 25 26 27 28 19 20 21 22 23 24 25 17 18 19 20 21 22 23
29 30 31 26 27 28 29 30 24 25 26 27 28 29 30
31
```

26. cal 9 1752

Menampilkan kalender bulan 9 tahun 1752.

```
root@kayon-pc25:/home/kayon-pc25# cal 9 1752
September 1752
Mi Se Se Ra Ka Ju Sa
      1  2 14 15 16
17 18 19 20 21 22 23
24 25 26 27 28 29 30
```

27. cal 10 2007

Menampilkan kalender bulan 10 tahun 2007.

```
root@kayon-pc25:/home/kayon-pc25# cal 10 2007
Oktober 2007
Mi Se Se Ra Ka Ju Sa
      1  2  3  4  5  6
 7  8  9 10 11 12 13
14 15 16 17 18 19 20
21 22 23 24 25 26 27
28 29 30 31
```

28. bc -l

Menampilkan ver bc (bahasa kalkulator).

```
root@kayon-pc25:/home/kayon-pc25# bc -l
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'.
quit
```

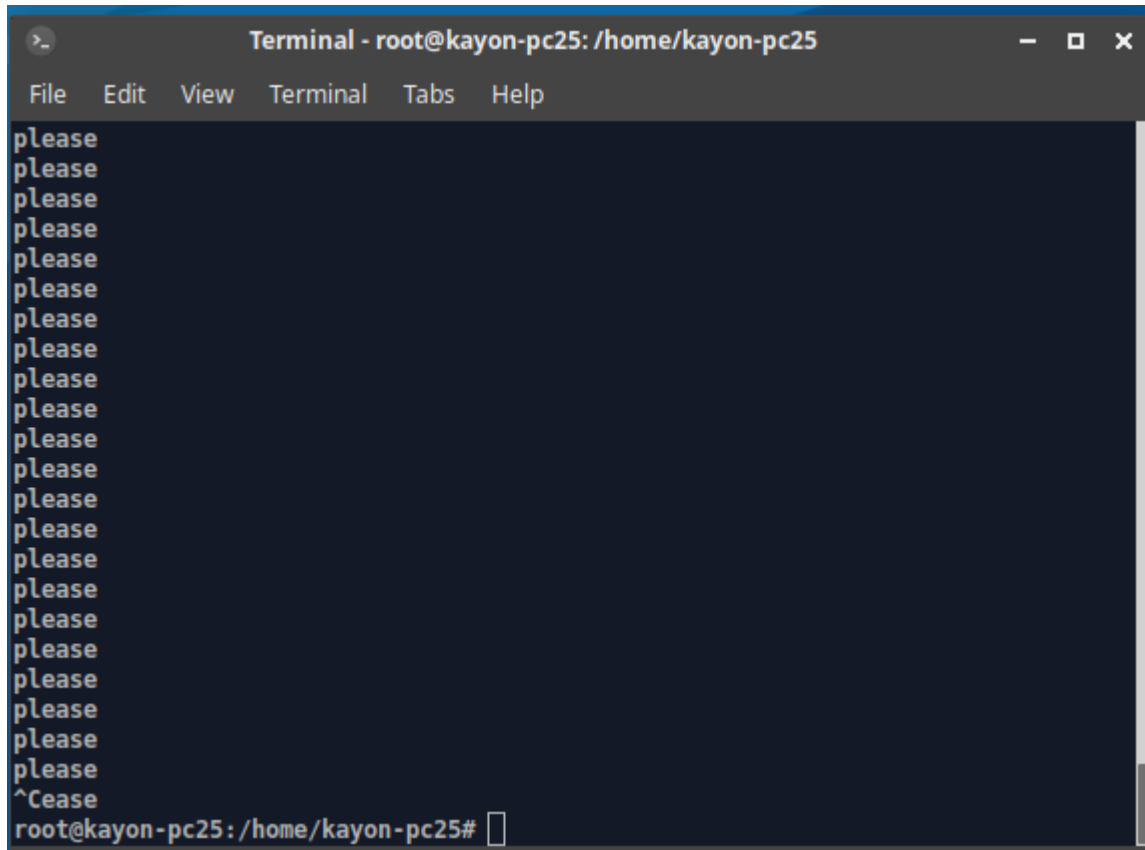
29. echo 5+4 | bc -l

Menampilkan hasil penjumlahan 5+4 dengan bahasa bc -l.

```
root@kayon-pc25:/home/kayon-pc25# echo 5+4 | bc -l
9
```

30. yes please

Mencetak atau print kata (String) “yes” sampai tak terbatas.



```
Terminal - root@kayon-pc25: /home/kayon-pc25
File Edit View Terminal Tabs Help
please
please
please
please
please
please
please
please
please
please
please
please
please
please
please
please
please
please
please
please
please
please
^Cease
root@kayon-pc25: /home/kayon-pc25#
```

31. pwd

Menampilkan posisi direktori dimana user berada sekarang.



```
root@kayon-pc25: /home/kayon-pc25# pwd
/home/kayon-pc25
```

32. history

Menampilkan riwayat terakhir dari command pada terminal.

```
Terminal - root@kayon-pc25: /home/kayon-pc25
File Edit View Terminal Tabs Help
962 last
963 dinger
964 finger
965 w
966 top
967 echo $SHELL
968 echo {con.pre}{sent,fer}{s,ed}
969 man ls
970 man who
971 who can tell me about linux
972 last
973 fdisk -l
974 fdisk -l
975 users
976 cat /etc/fstab
977 cal 2000
978 cal 9 1752
979 cal 10 2007
980 bc -l
981 echo 5+4 | bc -l
982 yes please
983 pwd
984 history
root@kayon-pc25:/home/kayon-pc25#
```

33. tail -f /var/log/message

Tidak bisa membuka direktori var./log/message karena tidak ada, serta tidak bisa menampilkan pesan.

```
root@kayon-pc25:/home/kayon-pc25# tail -f /var/log/message
tail: cannot open '/var/log/message' for reading: No such file or directory
tail: no files remaining
root@kayon-pc25:/home/kayon-pc25#
```

34. lsmod

Menampilkan jenis module/driver yang diload kernel.

```
Terminal - root@kayon-pc25: /home/kayon-pc25
File Edit View Terminal Tabs Help
dm_mirror          24576 0
dm_region_hash     20480 1 dm_mirror
dm_log             20480 2 dm_region_hash,dm_mirror
hid_generic        16384 0
usbhid             53248 0
hid               126976 2 usbhid,hid_generic
nvidia_drm         49152 3
nvidia_modeset     1110016 3 nvidia_drm
nvidia             18792448 85 nvidia_uvm,nvidia_modeset
drm_kms_helper     180224 1 nvidia_drm
syscopyarea        16384 1 drm_kms_helper
sysfillrect        16384 1 drm_kms_helper
sysimgblt          16384 1 drm_kms_helper
fb_sys_fops        16384 1 drm_kms_helper
drm                483328 6 drm_kms_helper,nvidia_drm
ipmi_devintf       20480 0
ipmi_msghandler    102400 2 ipmi_devintf,nvidia
ahci               40960 2
wmi               28672 2 asus_wmi,wmi_bmf
r8169              86016 0
libahci            32768 1 ahci
realtek            20480 0
video              49152 1 asus_wmi
```

35. ps -axu

Melihat serta menampilkan daftar proses yang dijalankan, walaupun tanpa terminal kontrol dan menampilkan nama dari user untuk setiap proses.

```
Terminal - root@kayon-pc25: /home/kayon-pc25
File Edit View Terminal Tabs Help
kayon-p+ 2031 0.0 0.0 368544 7488 ? Sl 10:32 0:00 /usr/lib/gvfs/g
kayon-p+ 2036 0.0 0.0 204984 5916 ? Ssl 10:32 0:00 /usr/lib/gvfs/g
root 2700 0.0 0.1 374160 13680 ? Ssl 10:32 0:00 /usr/lib/packag
kayon-p+ 2882 0.0 0.0 82724 6828 ? Ss 10:33 0:00 /usr/lib/blueto
root 3656 0.0 0.0 22264 2428 ? Ss 10:35 0:00 /sbin/mount.ntf
root 3817 0.0 0.0 108148 8028 ? Ss 10:37 0:00 /usr/sbin/cupsd
root 3818 0.0 0.1 303520 10912 ? Ssl 10:37 0:00 /usr/sbin/cups-
root 3881 0.0 0.0 0 0 ? I 10:42 0:00 [kworker/0:0-mm
root 3888 0.0 0.0 0 0 ? S 10:42 0:00 [scsi_eh_6]
root 3889 0.0 0.0 0 0 ? I< 10:42 0:00 [scsi_tmf_6]
root 3891 0.0 0.0 0 0 ? S 10:42 0:00 [usb-storage]
root 3897 0.0 0.0 0 0 ? I 10:42 0:00 [kworker/u8:0-f
root 3933 0.0 0.0 22372 2572 ? Ss 10:42 0:00 /sbin/mount.ntf
root 3973 0.0 0.0 0 0 ? I 10:44 0:00 [kworker/u8:1-e
kayon-p+ 4015 0.5 0.5 591452 44092 ? Sl 10:46 0:07 /usr/bin/xfce4-
kayon-p+ 4019 0.0 0.0 30032 4856 pts/0 Ss 10:46 0:00 bash
root 4028 0.0 0.0 73424 4452 pts/0 S 10:46 0:00 sudo su
root 4029 0.0 0.0 72712 3964 pts/0 S 10:46 0:00 su
root 4030 0.0 0.0 30084 5084 pts/0 S 10:46 0:00 bash
kayon-p+ 4083 0.0 0.2 528896 18816 ? SNl 10:49 0:00 /usr/lib/x86_64
root 4301 0.0 0.0 0 0 ? I 10:58 0:00 [kworker/u8:2-e
root 4402 0.0 0.0 0 0 ? I 11:05 0:00 [kworker/u8:3-e
root 4448 0.0 0.0 47236 3688 pts/0 R+ 11:08 0:00 ps -axu
```

36. lspci

Melihat spesifikasi hardware dari komputer yang sedang digunakan.

```
Terminal - root@kayon-pc25: /home/kayon-pc25
File Edit View Terminal Tabs Help
00:1a.0 USB controller: Intel Corporation 8 Series/C220 Series Chipset Family USB EHCI #2 (rev 05)
00:1b.0 Audio device: Intel Corporation 8 Series/C220 Series Chipset High Definition Audio Controller (rev 05)
00:1c.0 PCI bridge: Intel Corporation 8 Series/C220 Series Chipset Family PCI Express Root Port #1 (rev d5)
00:1c.2 PCI bridge: Intel Corporation 8 Series/C220 Series Chipset Family PCI Express Root Port #3 (rev d5)
00:1c.5 PCI bridge: Intel Corporation 82801 PCI Bridge (rev d5)
00:1d.0 USB controller: Intel Corporation 8 Series/C220 Series Chipset Family USB EHCI #1 (rev 05)
00:1f.0 ISA bridge: Intel Corporation H81 Express LPC Controller (rev 05)
00:1f.2 SATA controller: Intel Corporation 8 Series/C220 Series Chipset Family 6-port SATA Controller 1 [AHCI mode] (rev 05)
00:1f.3 SMBus: Intel Corporation 8 Series/C220 Series Chipset Family SMBus Controller (rev 05)
01:00.0 VGA compatible controller: NVIDIA Corporation GM107 [GeForce GTX 750 Ti] (rev a2)
01:00.1 Audio device: NVIDIA Corporation Device 0fbc (rev a1)
03:00.0 Ethernet controller: Realtek Semiconductor Co., Ltd. RTL8111/8168/8411 PCI Express Gigabit Ethernet Controller (rev 11)
04:00.0 PCI bridge: ASMedia Technology Inc. ASM1083/1085 PCIe to PCI Bridge (rev 04)
```

37. free

Melihat informasi pengguna memory.

```
root@kayon-pc25:/home/kayon-pc25# free
              total        used        free      shared  buff/cache   available
Mem:          8103664      436596      6542192         8572      1124876      7384152
Swap:          902668           0       902668
```

38. cat /proc/cpuinfo

Melihat proc directory yang bukan merupakan file nyata.

```
Terminal - root@kayon-pc25: /home/kayon-pc25
File Edit View Terminal Tabs Help
cpu cores      : 4
apicid         : 6
initial apicid : 6
fpu            : yes
fpu_exception  : yes
cpuid level    : 13
wp             : yes
flags          : fpu vme de pse tsc msr pae mce cx8 apic sep mtrr pge mca cmov
pat pse36 clflush dts acpi mmx fxsr sse sse2 ss ht tm pbe syscall nx pdpe1gb rdt
scp lm constant_tsc arch_perfmon pebs bts rep_good nopl xtopology nonstop_tsc cp
uid aperfmperf pni pclmulqdq dtes64 monitor ds_cpl vmx smx est tm2 ssse3 sdbg fm
a cx16 xtpr pdcm pcid sse4_1 sse4_2 x2apic movbe popcnt tsc_deadline_timer aes x
save avx f16c rdrand lahf_lm abm cpuid_fault epb invpcid_single pti ssbd ibrs ib
pb stibp tpr_shadow vnmi flexpriority ept vpid ept_ad fsgsbase tsc_adjust bmil a
vx2 smep bmi2 erms invpcid xsaveopt dtherm ida arat pln pts md_clear flush lld
bugs          : cpu_meltdown spectre_v1 spectre_v2 spec_store_bypass l1tf mds
swaps
bogomips       : 6584.62
clflush size   : 64
cache_alignment : 64
address sizes  : 39 bits physical, 48 bits virtual
power management:
```

39. finger root

Melihat informasi pada finger root.

```
root@kayon-pc25:/home/kayon-pc25# finger root
Command 'finger' not found, but can be installed with:
apt install finger

root@kayon-pc25:/home/kayon-pc25# finger root
Login: root                Name: root
Directory: /root           Shell: /bin/bash
Never logged in.
No mail.
No Plan.
root@kayon-pc25:/home/kayon-pc25#
```

40. reboot

Menghidupkan ulang atau melakukan restart sistem sebuah sistem.

41. halt

Perintah/command yang hanya bisa dijalankan oleh superuser (root). Command ini melakukan shutdown secara paksa.

TUGAS 2

1. Jelaskan distro linux yang ada saat ini (min 5).

a. **Ubuntu**

Ubuntu merupakan distro linux yang sudah sangat populer di kalangan pengguna linux. Ubuntu dibangun berdasarkan arsitektur Debian, dan Ubuntu telah berhasil menyeimbangkan stabilitas dan fitur-fitur baru seperti tidak ada distro lain didalamnya. Itu sebabnya ubuntu menjadi distro linux yang popularitas tak tertandingi.

b. **Linux Mint**

Linux Mint adalah salah satu distro Linux yang paling cepat berkembang. Dan linux mint ini terus menantang Ubuntu untuk menjadi yang terpopuler. Selain itu, Linux Mint telah memantapkan dirinya sebagai OS pengganti sempurna untuk sistem operasi Windows dengan pengalaman desktop yang hampir sempurna. Alasan lain adalah kemampuannya untuk memberikan pengalaman yang tidak biasa kepada pengguna.

c. **CentOS**

CentOS terkenal sangat stabil dengan kinerja yang bagus. Faktor-faktor lain yang penting adalah dukungan perangkat keras, keamanan, efisiensi daya, dan kinerja yang dioptimalkan. Ada banyak opsi gratis dan berbayar untuk skenario seperti itu. RHEL menikmati posisi yang sama di arena perusahaan yang dinikmati oleh Ubuntu di dunia desktop Linux. CentOS adalah cara untuk mendapatkan manfaat RHEL tanpa mengeluarkan biaya tunggal. Dengan kata lain, CentOS adalah komunitas yang didukung RHEL. Karena binernya kompatibel dengan RHEL dan repositorinya memiliki semua perangkat lunak yang sudah dicoba dan teruji.

d. **Steam OS**

Para gamer tidak banyak yang menggunakan OS Linux. Karena memang ketersediaan game tidak banyak untuk platform Linux. Namun, dalam beberapa tahun terakhir ini semakin banyak judul game yang dirilis untuk Linux. Dari

banyak distro linux, Steam OS adalah pilihan utama untuk sebagian besar gamer. Steam OS dilengkapi dengan tweak kernel Linux tambahan untuk memastikan bahwa seseorang mendapatkan kinerja gaming yang lebih baik dibandingkan dengan distro lainnya. Ini juga menyediakan dukungan luas untuk GPU, gamepads, dan perangkat keras lainnya. Steam OS dibuat oleh Valve, perusahaan di belakang platform distribusi game online Steam.

e. **Debian**

Debian memiliki banyak koleksi paket yang memiliki reputasi untuk diuji secara teratur, diperbarui, dan kokoh. Stabilitas ini memungkinkan programmer untuk berfokus hanya mengurus pengembangan program. Namun, perlu diingat bahwa Debian hanya direkomendasikan untuk programmer yang sudah memiliki pengalaman bekerja dengan Linux.