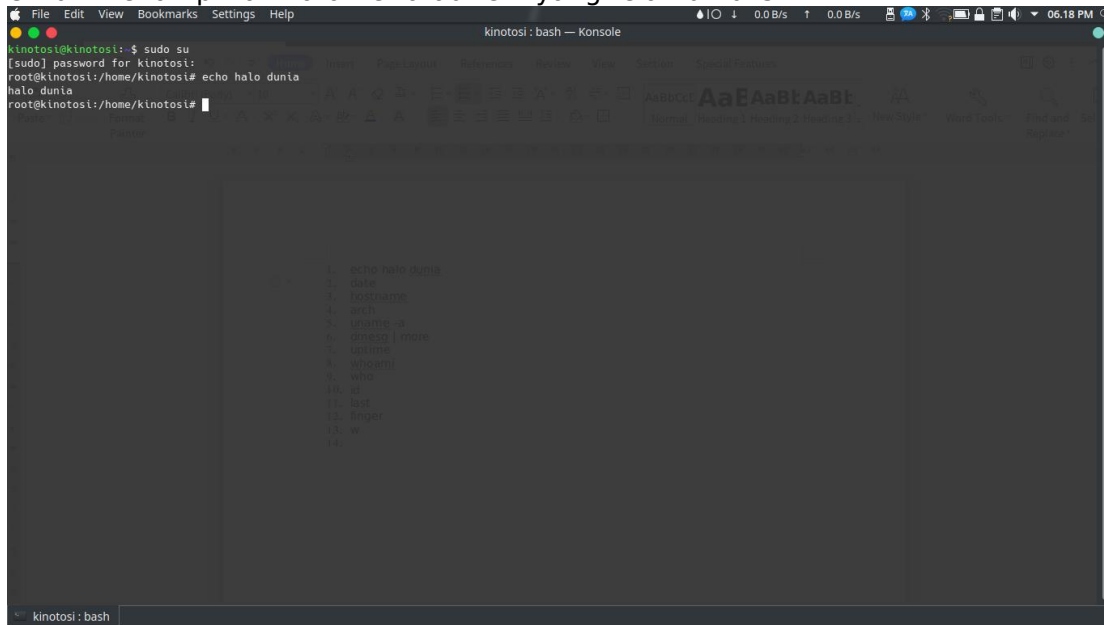


Nama : Arga Dwi Ardinata
NIM : L200180114

1. echo halo dunia

Untuk menampilkan karakter atau text yang telah di tulis

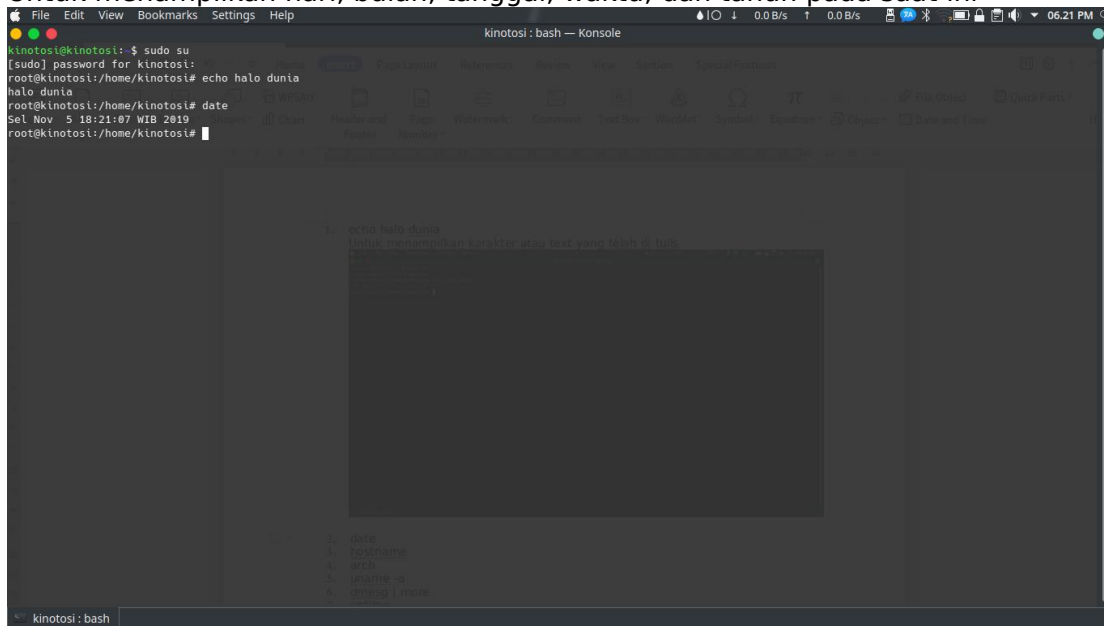


```
kinotosi@kinotosi:~$ sudo su
[sudo] password for kinotosi:
root@kinotosi:/home/kinotosi# echo halo dunia
halo dunia
root@kinotosi:/home/kinotosi#
```

The screenshot shows a terminal window titled 'kinotosi: bash — Konsole'. The user 'kinotosi' has executed 'sudo su' to become root. The root user then enters 'echo halo dunia', and the terminal outputs 'halo dunia' on the next line. The prompt returns to root@kinotosi:/home/kinotosi#.

2. date

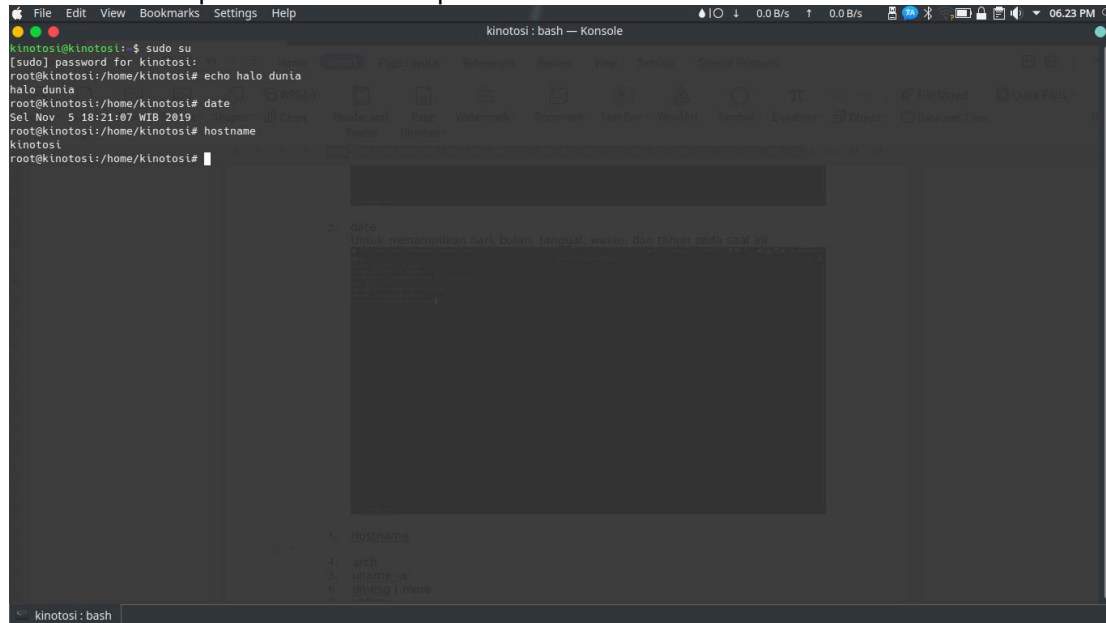
Untuk menampilkan hari, bulan, tanggal, waktu, dan tahun pada saat ini



```
kinotosi@kinotosi:~$ sudo su
[sudo] password for kinotosi:
root@kinotosi:/home/kinotosi# echo halo dunia
halo dunia
root@kinotosi:/home/kinotosi# date
Sat Nov 5 18:21:07 WIB 2019
root@kinotosi:/home/kinotosi#
```

The screenshot shows the same terminal window. After the previous command, the root user enters 'date'. The terminal outputs 'Sat Nov 5 18:21:07 WIB 2019' on the next line. The prompt returns to root@kinotosi:/home/kinotosi#.

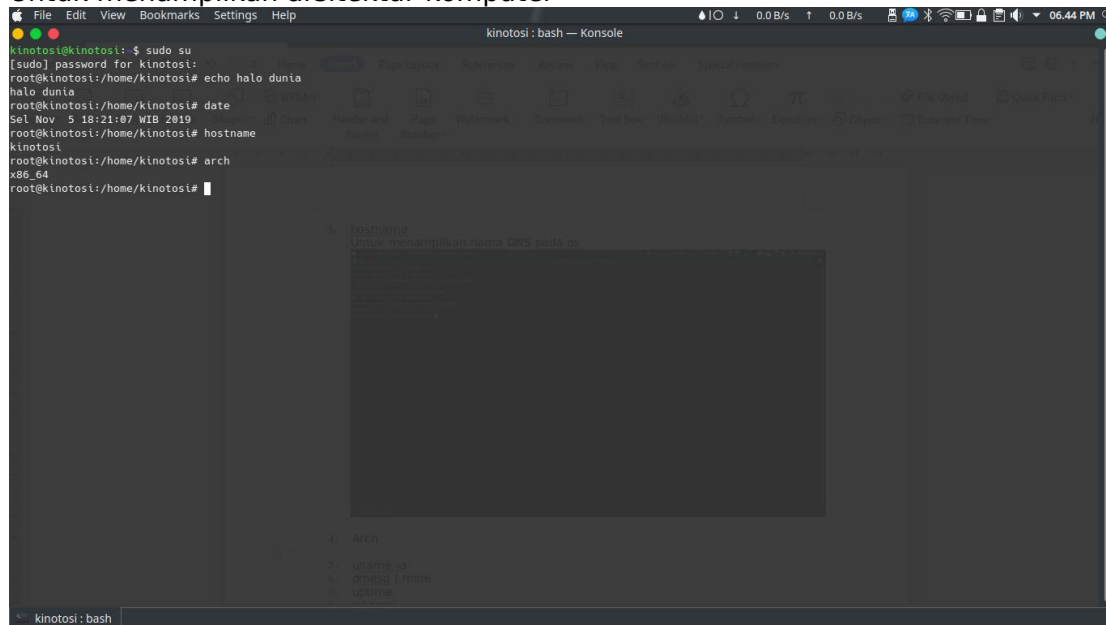
3. **hostname**
Untuk menampilkan nama DNS pada os



```
kinotosi@kinotosi:~$ sudo su
[sudo] password for kinotosi:
root@kinotosi:/home/kinotosi# echo halo dunia
halo dunia
root@kinotosi:/home/kinotosi# date
Sat Nov  5 18:21:07 WIB 2019
root@kinotosi:/home/kinotosi# hostname
kinotosi
root@kinotosi:/home/kinotosi#
```

The screenshot shows a terminal window titled 'kinotosi: bash — Konsole'. The user runs 'sudo su' and enters the password 'kinotosi'. Then, they run 'echo halo dunia', 'date', and 'hostname'. The output of 'hostname' is 'kinotosi'. A sidebar on the right lists the commands executed: 1. echo, 2. date, 3. hostname, 4. arch, 5. uname -a, 6. ping -c 1 google, 7. uptime.

4. **arch**
Untuk menampilkan arsitektur komputer



```
kinotosi@kinotosi:~$ sudo su
[sudo] password for kinotosi:
root@kinotosi:/home/kinotosi# echo halo dunia
halo dunia
root@kinotosi:/home/kinotosi# date
Sat Nov  5 18:21:07 WIB 2019
root@kinotosi:/home/kinotosi# hostname
kinotosi
root@kinotosi:/home/kinotosi# arch
x86_64
root@kinotosi:/home/kinotosi#
```

The screenshot shows the same terminal window as before. The user runs 'arch', and the output is 'x86_64'. The sidebar on the right now lists: 1. echo, 2. date, 3. hostname, 4. arch, 5. uname -a, 6. ping -c 1 google, 7. uptime.

5. `uname -a`

Menampilkan semua informasi sistem berupa : kernel name, network node hostname, kernel release date, kernel version, machine hardware name, hardware platform, operating system.

6. dmesg | more

Menampilkan pesan-pesan pada waktu proses boot dengan menampilkan perlayar

```
File Edit View Bookmarks Settings Help
kinotosi: bash — Konsole

root@kinotosi:/home/kinotosi# dmesg | more
0.000000 microcode: microcode updated early to revision 0xb4, date = 2019-04-01
0.000000 Linux version 5.0.0-32-generic (buildd@gw01-amd64-015) (gcc version 7.4.0 (Ubuntu 7.4.0-1ubuntu1~18.04.1)) #34-18.04.2-Ubuntu SMP Thu Oct 10 10:36:02 UT
C 2019 (Ubuntu 5.0.0-32.34-18.04.2-generic 5.0.21)
0.000000 Command line: BOOT_IMAGE=/boot/vmlinuz-5.0.0-32-generic root=UUID=e1e759c-ba63-4dea-a972-fa83d0c5dbab 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 registers'
0.000000 x86/fpu: Supporting XSAVE feature 0x002: 'SSE registers'
0.000000 x86/fpu: Supporting XSAVE feature 0x004: 'AVX registers'
0.000000 x86/fpu: Supporting XSAVE feature 0x008: 'MPX bounds registers'
0.000000 x86/fpu: Supporting XSAVE feature 0x010: 'MPX CSR'
0.000000 x86/fpu: xstate_offset[2]: 576, xstate_sizes[2]: 256
0.000000 x86/fpu: xstate_offset[3]: 832, xstate_sizes[3]: 64
0.000000 x86/fpu: xstate_offset[4]: 896, xstate_sizes[4]: 64
0.000000 x86/fpu: Enabled xstate features 0x1f, context size is 960 bytes, using 'compactd' format.
0.000000 BIOS-provided physical RAM map:
0.000000 BIOS-e820: [mem 0x0000000000000000-0x00000000000057fff] usable
0.000000 BIOS-e820: [mem 0x00000000000058000-0x000000000000058fff] reserved
0.000000 BIOS-e820: [mem 0x00000000000059000-0x00000000000009dfff] usable
0.000000 BIOS-e820: [mem 0x00000000000009e000-0x0000000000000fffff] reserved
0.000000 BIOS-e820: [mem 0x0000000000000fffff-0x000000000000598fff] usable
0.000000 BIOS-e820: [mem 0x000000000000599000-0x0000000000000598fff] ACPI NVS
0.000000 BIOS-e820: [mem 0x000000000000599000-0x0000000000000599afff] reserved
0.000000 BIOS-e820: [mem 0x000000000000599a000-0x00000000000005837fff] usable
0.000000 BIOS-e820: [mem 0x0000000000005838000-0x000000000000058c7fff] reserved
0.000000 BIOS-e820: [mem 0x00000000000058c8000-0x00000000000006e9dfff] usable
0.000000 BIOS-e820: [mem 0x00000000000006e9e000-0x00000000000006f9dfff] type 2
0.000000 BIOS-e820: [mem 0x00000000000006f9e000-0x00000000000006f9dfff] reserved
0.000000 BIOS-e820: [mem 0x00000000000006f9e000-0x00000000000006f7dfff] ACPI NVS
0.000000 BIOS-e820: [mem 0x00000000000006f7e000-0x00000000000006ff7dfff] ACPI data
0.000000 BIOS-e820: [mem 0x00000000000006ff7e000-0x00000000000006ff7effff] usable
0.000000 BIOS-e820: [mem 0x00000000000006ff7effff-0x00000000000007afffff] reserved
0.000000 BIOS-e820: [mem 0x00000000000007afffff-0x00000000000007fffff] reserved
0.000000 BIOS-e820: [mem 0x00000000000007fffff-0x00000000000007fffff] reserved
0.000000 BIOS-e820: [mem 0x00000000000007fffff-0x00000000000007fffff] reserved
0.000000 BIOS-e820: [mem 0x00000000000007fffff-0x00000000000007fffff] reserved
```

7. uptime
Untuk mengetahui berapa lama sistem aktif(berjalan)

Untuk mengetahui berapa lama sistem aktif(berjalan)

```
File Edit View Bookmarks Settings Help
kinotisi: bash - Konsole

2019 (Ubuntu 5.0.0-32.34~18.04.2-generic 5.0.21)
0.000000 Command line: BOOT_IMAGE=/boot/vmlinuz-5.0.0-32-generic root=UUID=c1e7559c-bae3-4dea-a972-fa8d30c5dbab ro quiet splash vt.handoff=1
0.000000 KERNEL supported cpus:
0.000000 Intel GenuineIntel
0.000000 AMD AuthenticAMD
0.000000 Hygon HygonCine
0.000000 Centaur CentaurHauls
0.000000 x86/fpu: Supporting XSAVE feature 0x001: 'X87 floating point registers'
0.000000 x86/fpu: Supporting XSAVE feature 0x002: 'SSE registers'
0.000000 x86/fpu: Supporting XSAVE feature 0x004: 'AVX registers'
0.000000 x86/fpu: Supporting XSAVE feature 0x008: 'MPX bounds registers'
0.000000 x86/fpu: Supporting XSAVE feature 0x010: 'MPX CSR'
0.000000 x86/fpu: xstate_offset[2]: 576, xstate_sizes[2]: 256
0.000000 x86/fpu: xstate_offset[3]: 832, xstate_sizes[3]: 64
0.000000 x86/fpu: xstate_offset[4]: 896, xstate_sizes[4]: 64
0.000000 x86/fpu: Enabled xstate features 0x1f, context size is 960 bytes, using 'compacted' format.
0.000000 BIOS-provided physical RAM map:
0.000000 BIOS-e820: [mem 0x0000000000000000-0x00000000000057fff] usable
0.000000 BIOS-e820: [mem 0x00000000000058000-0x0000000000005bfff] reserved
0.000000 BIOS-e820: [mem 0x0000000000005c000-0x0000000000009dfff] usable
0.000000 BIOS-e820: [mem 0x0000000000009e000-0x000000000000fffff] reserved
0.000000 BIOS-e820: [mem 0x000000000100000-0x0000000005698fff] usable
0.000000 BIOS-e820: [mem 0x0000000005699000-0x0000000005699fff] ACPI NVS
0.000000 BIOS-e820: [mem 0x000000000569a000-0x000000000569affff] reserved
0.000000 BIOS-e820: [mem 0x000000000569b000-0x000000000569bfff] usable
0.000000 BIOS-e820: [mem 0x000000000569c000-0x000000000569cffff] reserved
0.000000 BIOS-e820: [mem 0x000000000569d000-0x000000000569dfff] type 20
0.000000 BIOS-e820: [mem 0x000000000569e000-0x000000000569effff] reserved
0.000000 BIOS-e820: [mem 0x000000000569f000-0x000000000569fffff] ACPI NVS
0.000000 BIOS-e820: [mem 0x00000000056a0000-0x00000000056affdff] ACPI data
0.000000 BIOS-e820: [mem 0x00000000056ab000-0x00000000056abffff] usable
0.000000 BIOS-e820: [mem 0x00000000056ac000-0x00000000056acffff] reserved
0.000000 BIOS-e820: [mem 0x00000000056ad000-0x00000000056adffff] reserved
0.000000 BIOS-e820: [mem 0x00000000056ae000-0x00000000056aeffff] reserved
0.000000 BIOS-e820: [mem 0x00000000056af000-0x00000000056afffff] reserved
0.000000 BIOS-e820: [mem 0x00000000056b0000-0x00000000056b0ffff] reserved
0.000000 BIOS-e820: [mem 0x00000000056b1000-0x00000000056b1ffff] reserved
0.000000 BIOS-e820: [mem 0x00000000056b2000-0x00000000056b2ffff] reserved
0.000000 BIOS-e820: [mem 0x00000000056b3000-0x00000000056b3ffff] reserved
0.000000 BIOS-e820: [mem 0x00000000056b4000-0x00000000056b4ffff] reserved
0.000000 BIOS-e820: [mem 0x00000000056b5000-0x00000000056b5ffff] reserved
0.000000 BIOS-e820: [mem 0x00000000056b6000-0x00000000056b6ffff] reserved
0.000000 BIOS-e820: [mem 0x00000000056b7000-0x00000000056b7ffff] reserved
0.000000 BIOS-e820: [mem 0x00000000056b8000-0x00000000056b8ffff] reserved
0.000000 BIOS-e820: [mem 0x00000000056b9000-0x00000000056b9ffff] reserved
0.000000 BIOS-e820: [mem 0x00000000056ba000-0x00000000056baffff] reserved
0.000000 BIOS-e820: [mem 0x00000000056bb000-0x00000000056bbffff] reserved
0.000000 BIOS-e820: [mem 0x00000000056bc000-0x00000000056bcffff] reserved
0.000000 BIOS-e820: [mem 0x00000000056bd000-0x00000000056bdffff] reserved
0.000000 BIOS-e820: [mem 0x00000000056be000-0x00000000056beffff] reserved
0.000000 BIOS-e820: [mem 0x00000000056bf000-0x00000000056bfffff] reserved
0.000000 BIOS-e820: [mem 0x00000000056c0000-0x00000000056c0ffff] reserved
0.000000 BIOS-e820: [mem 0x00000000056c1000-0x00000000056c1ffff] reserved
0.000000 BIOS-e820: [mem 0x00000000056c2000-0x00000000056c2ffff] reserved
0.000000 BIOS-e820: [mem 0x00000000056c3000-0x00000000056c3ffff] reserved
0.000000 BIOS-e820: [mem 0x00000000056c4000-0x00000000056c4ffff] reserved
0.000000 BIOS-e820: [mem 0x00000000056c5000-0x00000000056c5ffff] reserved
0.000000 BIOS-e820: [mem 0x00000000056c6000-0x00000000056c6ffff] reserved
0.000000 BIOS-e820: [mem 0x00000000056c7000-0x00000000056c7ffff] reserved
0.000000 BIOS-e820: [mem 0x00000000056c8000-0x00000000056c8ffff] reserved
0.000000 BIOS-e820: [mem 0x00000000056c9000-0x00000000056c9ffff] reserved
0.000000 BIOS-e820: [mem 0x00000000056ca000-0x00000000056caffff] reserved
0.000000 BIOS-e820: [mem 0x00000000056cb000-0x00000000056cbffff] reserved
0.000000 BIOS-e820: [mem 0x00000000056cc000-0x00000000056ccffff] reserved
0.000000 BIOS-e820: [mem 0x00000000056cd000-0x00000000056cdffff] reserved
0.000000 BIOS-e820: [mem 0x00000000056ce000-0x00000000056ceffff] reserved
0.000000 BIOS-e820: [mem 0x00000000056cf000-0x00000000056cfffff] reserved
0.000000 BIOS-e820: [mem 0x00000000056d0000-0x00000000056d0ffff] reserved
0.000000 BIOS-e820: [mem 0x00000000056d1000-0x00000000056d1ffff] reserved
0.000000 BIOS-e820: [mem 0x00000000056d2000-0x00000000056d2ffff] reserved
0.000000 BIOS-e820: [mem 0x00000000056d3000-0x00000000056d3ffff] reserved
0.000000 BIOS-e820: [mem 0x00000000056d4000-0x00000000056d4ffff] reserved
0.000000 BIOS-e820: [mem 0x00000000056d5000-0x00000000056d5ffff] reserved
0.000000 BIOS-e820: [mem 0x00000000056d6000-0x00000000056d6ffff] reserved
0.000000 BIOS-e820: [mem 0x00000000056d7000-0x00000000056d7ffff] reserved
0.000000 BIOS-e820: [mem 0x00000000056d8000-0x00000000056d8ffff] reserved
0.000000 BIOS-e820: [mem 0x00000000056d9000-0x00000000056d9ffff] reserved
0.000000 BIOS-e820: [mem 0x00000000056da000-0x00000000056daffff] reserved
0.000000 BIOS-e820: [mem 0x00000000056db000-0x00000000056dbffff] reserved
0.000000 BIOS-e820: [mem 0x00000000056dc000-0x00000000056dcffff] reserved
0.000000 BIOS-e820: [mem 0x00000000056dd000-0x00000000056ddffff] reserved
0.000000 BIOS-e820: [mem 0x00000000056de000-0x00000000056deffff] reserved
0.000000 BIOS-e820: [mem 0x00000000056df0
```

8. `whoami`
Untuk mengetahui user sudah masuk root atau belum

Untuk mengetahui user sudah masuk root atau belum

```

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 registers'
0.000000] x86/fpu: Supporting XSAVE feature 0x002: 'SSE registers'
0.000000] x86/fpu: Supporting XSAVE feature 0x004: 'AVX registers'
0.000000] x86/fpu: Supporting XSAVE feature 0x008: 'MPX bounds registers'
0.000000] x86/fpu: Supporting XSAVE feature 0x010: 'MPX CSR'
0.000000] x86/fpu: xstate_offset[2]: 576, xstate_sizes[2]: 256
0.000000] x86/fpu: xstate_offset[3]: 832, xstate_sizes[3]: 64
0.000000] x86/fpu: xstate_offset[4]: 896, xstate_sizes[4]: 64
0.000000] x86/fpu: Enabled xstate features 0x1f, context size is 960 bytes, using 'compacted' format.
0.000000] BIOS-provided physical RAM map:
0.000000] BIOS-e820: [mem 0x0000000000000000-0x0000000000057fff] usable
0.000000] BIOS-e820: [mem 0x0000000000058000-0x0000000000058fff] reserved
0.000000] BIOS-e820: [mem 0x0000000000059000-0x0000000000059dff] usable
0.000000] BIOS-e820: [mem 0x000000000005a000-0x000000000005afff] reserved
0.000000] BIOS-e820: [mem 0x000000000005b000-0x000000000005bfff] usable
0.000000] BIOS-e820: [mem 0x000000000005c000-0x000000000005cfff] ACPI NVS
0.000000] BIOS-e820: [mem 0x000000000005d000-0x000000000005dfff] reserved
0.000000] BIOS-e820: [mem 0x000000000005e000-0x000000000005efff] usable
0.000000] BIOS-e820: [mem 0x000000000005f000-0x000000000005ffff] reserved
0.000000] BIOS-e820: [mem 0x0000000000060000-0x0000000000060fff] usable
0.000000] BIOS-e820: [mem 0x0000000000061000-0x0000000000061fff] type 20
0.000000] BIOS-e820: [mem 0x0000000000062000-0x0000000000062fff] reserved
0.000000] BIOS-e820: [mem 0x0000000000063000-0x0000000000063fff] ACPI NVS
0.000000] BIOS-e820: [mem 0x0000000000064000-0x0000000000064fff] ACPI data
0.000000] BIOS-e820: [mem 0x0000000000065000-0x0000000000065fff] usable
0.000000] BIOS-e820: [mem 0x0000000000066000-0x0000000000066fff] reserved
0.000000] BIOS-e820: [mem 0x0000000000067000-0x0000000000067fff] reserved
0.000000] BIOS-e820: [mem 0x0000000000068000-0x0000000000068fff] reserved
0.000000] BIOS-e820: [mem 0x0000000000069000-0x0000000000069fff] reserved
0.000000] BIOS-e820: [mem 0x000000000006a000-0x000000000006afff] reserved
0.000000] BIOS-e820: [mem 0x000000000006b000-0x000000000006bfff] reserved
0.000000] BIOS-e820: [mem 0x000000000006c000-0x000000000006cfff] reserved
0.000000] BIOS-e820: [mem 0x000000000006d000-0x000000000006dfff] reserved
0.000000] BIOS-e820: [mem 0x000000000006e000-0x000000000006efff] reserved
0.000000] BIOS-e820: [mem 0x000000000006f000-0x000000000006ffff] reserved
0.000000] BIOS-e820: [mem 0x0000000000070000-0x0000000000070fff] reserved
0.000000] BIOS-e820: [mem 0x0000000000071000-0x0000000000071fff] reserved
0.000000] BIOS-e820: [mem 0x0000000000072000-0x0000000000072fff] reserved
0.000000] BIOS-e820: [mem 0x0000000000073000-0x0000000000073fff] reserved
0.000000] BIOS-e820: [mem 0x0000000000074000-0x0000000000074fff] reserved
0.000000] BIOS-e820: [mem 0x0000000000075000-0x0000000000075fff] reserved
0.000000] BIOS-e820: [mem 0x0000000000076000-0x0000000000076fff] reserved
0.000000] BIOS-e820: [mem 0x0000000000077000-0x0000000000077fff] reserved
0.000000] BIOS-e820: [mem 0x0000000000078000-0x0000000000078fff] reserved
0.000000] BIOS-e820: [mem 0x0000000000079000-0x0000000000079fff] reserved
0.000000] BIOS-e820: [mem 0x000000000007a000-0x000000000007afff] reserved
0.000000] BIOS-e820: [mem 0x000000000007b000-0x000000000007bfff] reserved
0.000000] BIOS-e820: [mem 0x000000000007c000-0x000000000007cfff] reserved
0.000000] BIOS-e820: [mem 0x000000000007d000-0x000000000007dfff] reserved
0.000000] BIOS-e820: [mem 0x000000000007e000-0x000000000007efff] reserved
0.000000] BIOS-e820: [mem 0x000000000007f000-0x000000000007ffff] reserved
0.000000] BIOS-e820: [mem 0x0000000000080000-0x0000000000080fff] reserved
0.000000] BIOS-e820: [mem 0x0000000000081000-0x0000000000081fff] reserved
0.000000] BIOS-e820: [mem 0x0000000000082000-0x0000000000082fff] reserved
0.000000] BIOS-e820: [mem 0x0000000000083000-0x0000000000083fff] reserved
0.000000] BIOS-e820: [mem 0x0000000000084000-0x0000000000084fff] reserved
0.000000] BIOS-e820: [mem 0x0000000000085000-0x0000000000085fff] reserved
0.000000] BIOS-e820: [mem 0x0000000000086000-0x0000000000086fff] reserved
0.000000] BIOS-e820: [mem 0x0000000000087000-0x0000000000087fff] reserved
0.000000] BIOS-e820: [mem 0x0000000000088000-0x0000000000088fff] reserved
0.000000] BIOS-e820: [mem 0x0000000000089000-0x0000000000089fff] reserved
0.000000] BIOS-e820: [mem 0x000000000008a000-0x000000000008afff] reserved
0.000000] BIOS-e820: [mem 0x000000000008b000-0x000000000008bfff] reserved
0.000000] BIOS-e820: [mem 0x000000000008c000-0x000000000008cfff] reserved
0.000000] BIOS-e820: [mem 0x000000000008d000-0x000000000008dfff] reserved
0.000000] BIOS-e820: [mem 0x000000000008e000-0x000000000008efff] reserved
0.000000] BIOS-e820: [mem 0x000000000008f000-0x000000000008ffff] reserved
0.000000] BIOS-e820: [mem 0x0000000000090000-0x0000000000090fff] reserved
0.000000] BIOS-e820: [mem 0x0000000000091000-0x0000000000091fff] reserved
0.000000] BIOS-e820: [mem 0x0000000000092000-0x0000000000092fff] reserved
0.000000] BIOS-e820: [mem 0x0000000000093000-0x0000000000093fff] reserved
0.000000] BIOS-e820: [mem 0x0000000000094000-0x0000000000094fff] reserved
0.000000] BIOS-e820: [mem 0x0000000000095000-0x0000000000095fff] reserved
0.000000] BIOS-e820: [mem 0x0000000000096000-0x0000000000096fff] reserved
0.000000] BIOS-e820: [mem 0x0000000000097000-0x0000000000097fff] reserved
0.000000] BIOS-e820: [mem 0x0000000000098000-0x0000
```


11. last

Digunakan untuk menampilkan list semua user yang masuk dan keluar

```
root@kinotosi:/home/kinotosi# uptime
19:03:44 up 59 min, 3 users, load average: 1,68, 1,33, 1,22
root@kinotosi:/home/kinotosi# whoami
root
root@kinotosi:/home/kinotosi# who
kinotosi tty1      2019-11-05 18:05 (:0)
kinotosi pts/0    2019-11-05 18:06 (:0)
kinotosi pts/1    2019-11-05 18:18 (:0)
root@kinotosi:/home/kinotosi# id
uid=0(root) gid=0(root) groups=0(root),128(kvm),130(libvirt)
root@kinotosi:/home/kinotosi# last
kinotosi pts/2      :0                Tue Nov 5 19:07 - 19:07 (00:00)
kinotosi pts/1      :0                Tue Nov 5 18:18 - still logged in
kinotosi pts/1      :0                Tue Nov 5 18:18 - 18:12 (00:02)
kinotosi pts/0      :0                Tue Nov 5 18:06 - still logged in
kinotosi tty1       :0                Tue Nov 5 18:05 - still logged in
reboot system boot 5.0.0-32-generic Tue Nov 5 18:04 - still running
kinotosi pts/3      :0                Tue Nov 5 04:27 - 05:23 (00:56)
kinotosi pts/1      :0                Tue Nov 5 03:17 - 05:23 (02:05)
kinotosi pts/0      :0                Tue Nov 5 03:03 - 05:25 (02:22)
kinotosi tty1       :0                Tue Nov 5 03:02 - 05:25 (02:23)
reboot system boot 5.0.0-32-generic Tue Nov 5 03:01 - 05:26 (02:24)
kinotosi pts/1      :0                Fri Nov 1 04:24 - 05:50 (01:26)
kinotosi pts/1      :0                Fri Nov 1 03:13 - 03:16 (00:03)
kinotosi pts/1      :0                Fri Nov 1 02:57 - 02:57 (00:00)
kinotosi pts/0      :0                Fri Nov 1 02:50 - 05:52 (03:02)
kinotosi tty1       :0                Fri Nov 1 02:49 - 05:51 (03:01)

wtmp begins Fri Nov 1 02:49:43 2019
root@kinotosi:/home/kinotosi#
```

12. finger

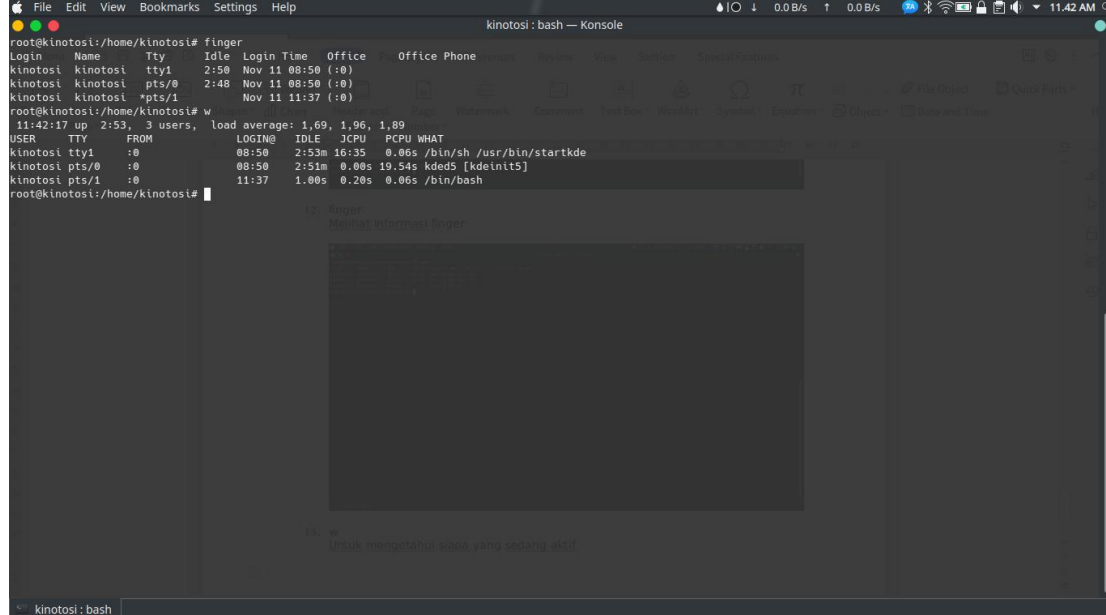
Melihat informasi finger

```
root@kinotosi:/home/kinotosi# finger
Login  Name      Tty      Idle Login Time  Office  Office Phone
kinotosi kinotosi  tty1     2:50 Nov 11 08:50 (:0)
kinotosi kinotosi  pts/0    2:48 Nov 11 08:50 (:0)
kinotosi kinotosi  *pts/1   Nov 11 11:37 (:0)
root@kinotosi:/home/kinotosi#
```

No	Perintah	Keterangan
1	echo hello dunia	Menampilkan pesan "hello dunia"
2	date	Menampilkan keterangan waktu pada saat perintah dijalankan
3	fortune	Menampilkan kata-kata bijak atau pesan-pesan yang menarik pada pc
4	arch	Menampilkan jenis arsitektur dari sebuah mesin
5	uname -a	Menampilkan informasi sistem informasi
6	df -h more	Menampilkan penggunaan pada waktu proses berjalan
7	uptime	Untuk menampilkan uptime
8	whoami	Menampilkan informasi tentang nama pengguna, lokasi, apakah sedang online atau not
9	who	Menampilkan siapa yang sedang sedang bekerja
10	id	Menampilkan detail user
11	last	Menampilkan detail login user yang ada pada sistem dengan menggunakan perintah last
12	finger	Melihat informasi finger
13	top	Untuk menampilkan siapa yang sedang aktif
14	top	Melihat semua proses yang sedang berjalan, urutan dari proses yang paling besar
15	echo \$SHELL	Perintah

13. w

Untuk mengetahui siapa yang aktif



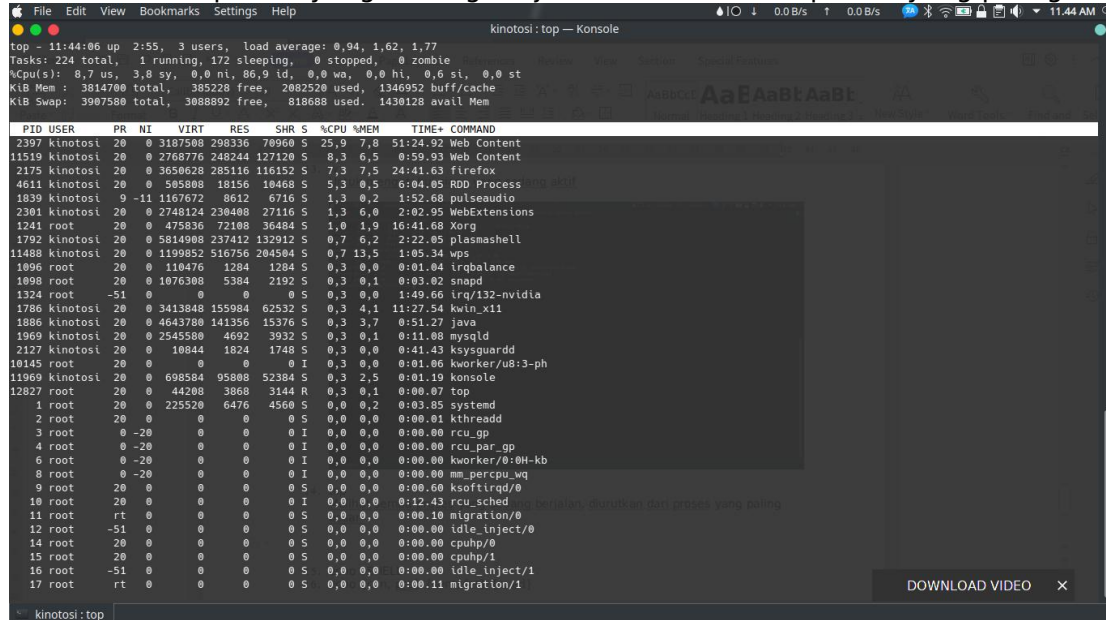
```
root@kinotosi:/home/kinotosi# finger
Login   Name      Tty      Idle  Login Time   Office Phone  Home    Mail
kinotosi kinotosi  tty1     2:50  Nov 11 08:50 (:0)
kinotosi kinotosi  pts/0    2:48  Nov 11 08:50 (:0)
kinotosi kinotosi  *pts/1   Nov 11 11:37 (:0)

root@kinotosi:/home/kinotosi# w
 11:42:17 up  2:53,  3 users,  load average: 1.69, 1.96, 1.89
USER      TTY      FROM      LOGIN@   IDLE   JCPU   PCPU  WHAT
kinotosi  tty1     :0         00:50    2:53m  16:35   0.06s /bin/sh /usr/bin/startkde
kinotosi  pts/0    :0         00:50    2:51m  0.00s  19.54s kded5 [kdeinit5]
kinotosi  pts/1    :0         11:37    1.00s  0.20s  0.06s /bin/bash

root@kinotosi:/home/kinotosi#
```

14. top

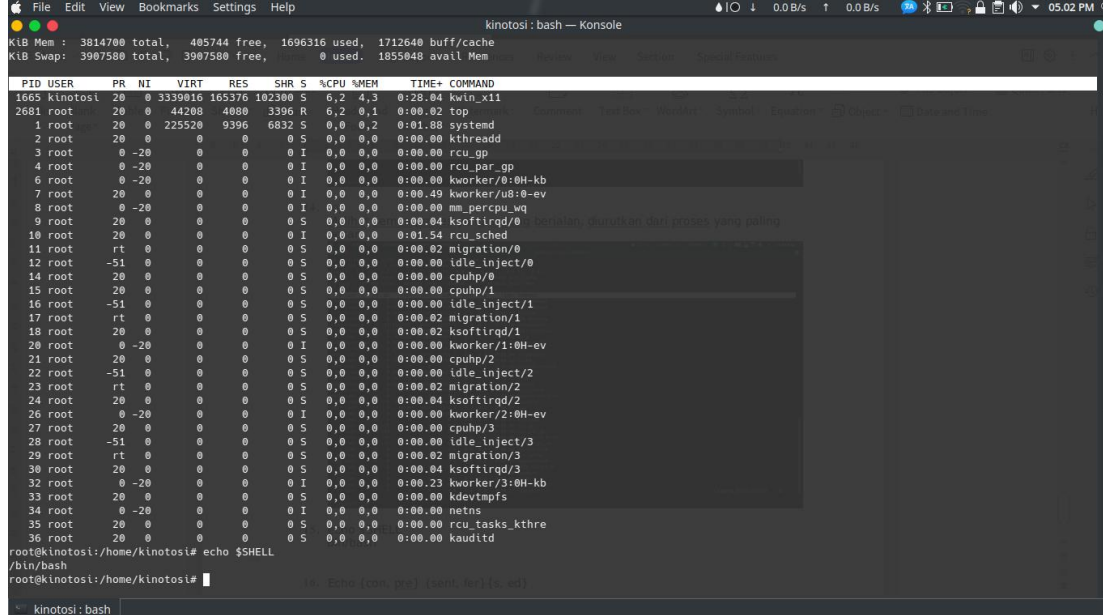
Melihat semua proses yang sedang berjalan, diurutkan dari proses yang paling besar



```
top - 11:44:06 up  2:55,  3 users,  load average: 0.94, 1.62, 1.77
Tasks: 224 total,  1 running, 172 sleeping,  0 stopped,  0 zombie
%Cpu(s):  8.7 us,  3.8 sy,  0.0 ni, 86.9 id,  0.0 wa,  0.0 hi,  0.6 si,  0.0 st
KiB Mem : 3814700 total, 385228 free, 2082520 used, 1346952 buff/cache
KiB Swap: 3907580 total, 3088892 free,  818688 used, 1430128 avail Mem

  PID USER      PR  NI   VIRT   RES   SHR  S  %CPU  %MEM     TIME+ COMMAND
2307 kinotosi  20   0 3187500 298336 70960 S 25.9  7.0 51:24.92 Web Content
11519 kinotosi 20   0 2768776 248244 127120 S  8.3  6.5  0:59.93 Web Content
2175 kinotosi 20   0 3650628 285116 116152 S  7.3  7.5 24:41.63 firefox
4611 kinotosi 20   0 5650808 18156 18468 S  5.3  0.5  6:04.05 RDP Process
1839 kinotosi  9 -11 1167672  8612  6716 S  1.3  0.2  1:52.68 pulseaudio
2381 kinotosi 20   0 2748124 230488 27116 S  1.3  0.0  2:02.95 WebExtensions
1241 root      20   0 475036  72188 36484 S  1.0  1.9 16:41.68 Xorg
1792 kinotosi 20   0 5814908 237412 132912 S  0.7  6.2  2:22.05 plasmashell
11488 kinotosi 20   0 1199852 516756 204584 S  0.7 13.5  1:05.34 wps
1096 root      20   0 110476  1284  1284 S  0.3  0.0  0:01.04 irqbalance
1098 root      20   0 1076308  5384 2192 S  0.3  0.1  0:03.02 snapd
1324 root     -51   0  0  0  0 S  0.3  0.0  1:49.66 irq/132-nvidia
1786 kinotosi 20   0 3413848 155984 62532 S  0.3  4.1 11:27.54 kwin_x11
1886 kinotosi 20   0 4643700 141356 15376 S  0.3  3.7  0:51.27 java
1969 kinotosi 20   0 2545580  4692 3932 S  0.3  0.1  0:11.08 mysqld
2127 kinotosi 20   0 10844  1824 1748 S  0.3  0.0  0:41.43 ksysguardd
10145 root      20   0  0  0  0 I  0.3  0.0  0:01.06 kworker/u8:3-ph
11969 kinotosi 20   0 698584 95808 52384 S  0.3  2.5  0:01.19 konsole
12827 root      20   0 44208  3868 3144 R  0.3  0.1  0:00.07 top
  1 root      20   0 225520  6476 4560 S  0.0  0.2  0:03.85 systemd
  2 root      20   0  0  0  0 S  0.0  0.0  0:00.01 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/0:0H-kb
  8 root      0 -20  0  0  0 I  0.0  0.0  0:00.00 mm_percpu_wq
  9 root      20   0  0  0  0 S  0.0  0.0  0:00.60 ksoftirqd/0
 10 root      20   0  0  0  0 I  0.0  0.0  0:12.43 rcu_sched
 11 root      rt  0  0  0  0  0 S  0.0  0.0  0:00.10 migration/0
 12 root     -51   0  0  0  0 S  0.0  0.0  0:00.00 idle_inject/0
 14 root      20   0  0  0  0 S  0.0  0.0  0:00.00 cpuhp/0
 15 root      20   0  0  0  0 S  0.0  0.0  0:00.00 cpuhp/1
 16 root     -51   0  0  0  0 S  0.0  0.0  0:00.00 idle_inject/1
 17 root      rt  0  0  0  0 S  0.0  0.0  0:00.11 migration/1
```

15. echo \$SHELL Bin/bash

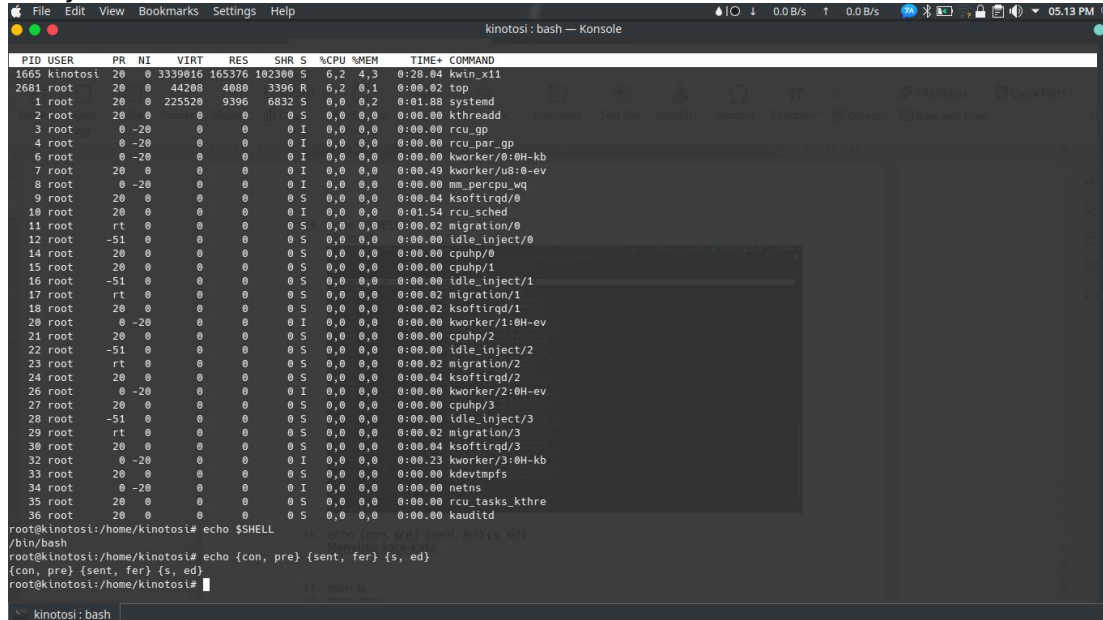


```
File Edit View Bookmarks Settings Help
kinotosi: bash — Konsole
KIB Mem : 3814700 total, 405744 free, 1696316 used, 1712640 buff/cache
KIB Swap: 3907500 total, 3907500 free, 0 used, 1055040 avail Mem

PID USER PR NI VIRT RES SHR S %CPU %MEM TIME+ COMMAND
1665 kinotosi 20 0 3339016 165376 102300 S 6,2 4,3 0:28.04 kwin_x11
2681 root 20 0 44208 4080 3396 R 6,2 0,1 0:00.02 top
1 root 20 0 225520 9396 6832 S 0,0 0,2 0:01.88 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/0:0H-kb
7 root 20 0 0 0 0 I 0,0 0,0 0:00.49 kworker/u8:0-ev
8 root 0 -20 0 0 0 I 0,0 0,0 0:00.00 mm_percpu_wq
9 root 20 0 0 0 0 S 0,0 0,0 0:00.04 ksoftirqd/0
10 root 20 0 0 0 0 I 0,0 0,0 0:01.54 rcu_sched
11 root rt 0 0 0 S 0,0 0,0 0:00.02 migration/0
12 root -51 0 0 0 0 S 0,0 0,0 0:00.00 idle_inject/0
14 root 20 0 0 0 0 S 0,0 0,0 0:00.00 cpuhp/0
15 root 20 0 0 0 0 S 0,0 0,0 0:00.00 cpuhp/1
16 root -51 0 0 0 0 S 0,0 0,0 0:00.00 idle_inject/1
17 root rt 0 0 0 S 0,0 0,0 0:00.02 migration/1
18 root 20 0 0 0 0 S 0,0 0,0 0:00.02 ksoftirqd/1
20 root 0 -20 0 0 0 I 0,0 0,0 0:00.00 kworker/1:0H-ev
21 root 20 0 0 0 0 S 0,0 0,0 0:00.00 cpuhp/2
22 root -51 0 0 0 0 S 0,0 0,0 0:00.00 idle_inject/2
23 root rt 0 0 0 S 0,0 0,0 0:00.02 migration/2
24 root 20 0 0 0 0 S 0,0 0,0 0:00.04 ksoftirqd/2
26 root 0 -20 0 0 0 I 0,0 0,0 0:00.00 kworker/2:0H-ev
27 root 20 0 0 0 0 S 0,0 0,0 0:00.00 cpuhp/3
28 root -51 0 0 0 0 S 0,0 0,0 0:00.00 idle_inject/3
29 root rt 0 0 0 S 0,0 0,0 0:00.02 migration/3
30 root 20 0 0 0 0 S 0,0 0,0 0:00.04 ksoftirqd/3
32 root 0 -20 0 0 0 I 0,0 0,0 0:00.23 kworker/3:0H-kb
33 root 20 0 0 0 0 S 0,0 0,0 0:00.00 kdevtmpfs
34 root 0 -20 0 0 0 I 0,0 0,0 0:00.00 netns
35 root 20 0 0 0 0 S 0,0 0,0 0:00.00 rcu_tasks_kthre
36 root 20 0 0 0 0 S 0,0 0,0 0:00.00 kauditd

root@kinotosi:/home/kinotosi# echo $SHELL
/bin/bash
root@kinotosi:/home/kinotosi#
```

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



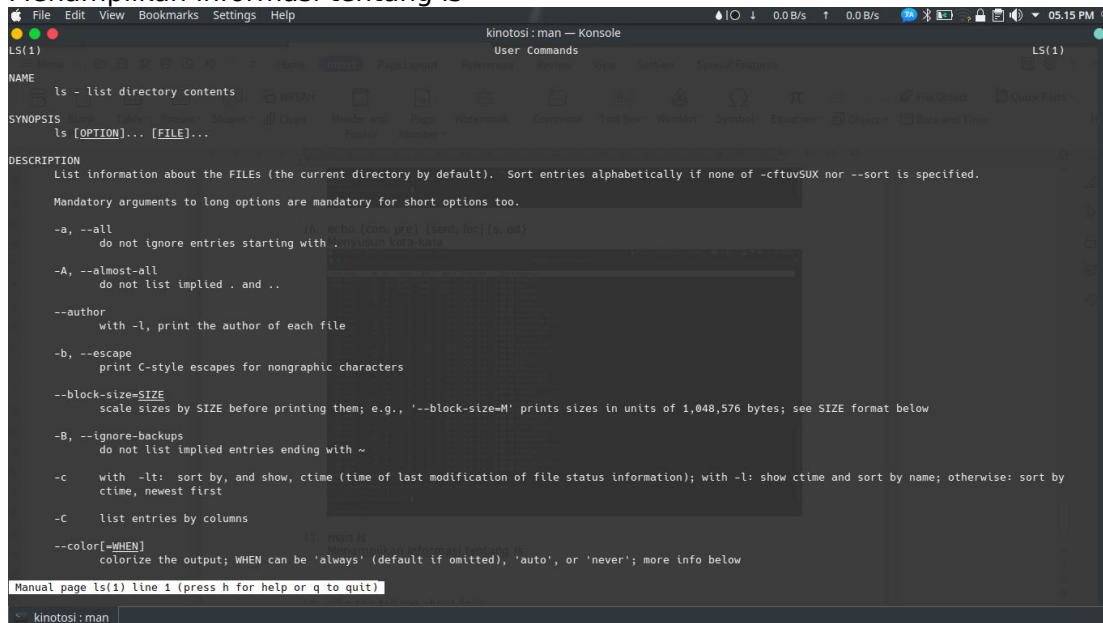
```
File Edit View Bookmarks Settings Help
kinotosi: bash — Konsole
KIB Mem : 3814700 total, 405744 free, 1696316 used, 1712640 buff/cache
KIB Swap: 3907500 total, 3907500 free, 0 used, 1055040 avail Mem

PID USER PR NI VIRT RES SHR S %CPU %MEM TIME+ COMMAND
1665 kinotosi 20 0 3339016 165376 102300 S 6,2 4,3 0:28.04 kwin_x11
2681 root 20 0 44208 4080 3396 R 6,2 0,1 0:00.02 top
1 root 20 0 225520 9396 6832 S 0,0 0,2 0:01.88 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/0:0H-kb
7 root 20 0 0 0 0 I 0,0 0,0 0:00.49 kworker/u8:0-ev
8 root 0 -20 0 0 0 I 0,0 0,0 0:00.00 mm_percpu_wq
9 root 20 0 0 0 0 S 0,0 0,0 0:00.04 ksoftirqd/0
10 root 20 0 0 0 0 I 0,0 0,0 0:01.54 rcu_sched
11 root rt 0 0 0 S 0,0 0,0 0:00.02 migration/0
12 root -51 0 0 0 0 S 0,0 0,0 0:00.00 idle_inject/0
14 root 20 0 0 0 0 S 0,0 0,0 0:00.00 cpuhp/0
15 root 20 0 0 0 0 S 0,0 0,0 0:00.00 cpuhp/1
16 root -51 0 0 0 0 S 0,0 0,0 0:00.00 idle_inject/1
17 root rt 0 0 0 S 0,0 0,0 0:00.02 migration/1
18 root 20 0 0 0 0 S 0,0 0,0 0:00.02 ksoftirqd/1
20 root 0 -20 0 0 0 I 0,0 0,0 0:00.00 kworker/1:0H-ev
21 root 20 0 0 0 0 S 0,0 0,0 0:00.00 cpuhp/2
22 root -51 0 0 0 0 S 0,0 0,0 0:00.00 idle_inject/2
23 root rt 0 0 0 S 0,0 0,0 0:00.02 migration/2
24 root 20 0 0 0 0 S 0,0 0,0 0:00.04 ksoftirqd/2
26 root 0 -20 0 0 0 I 0,0 0,0 0:00.00 kworker/2:0H-ev
27 root 20 0 0 0 0 S 0,0 0,0 0:00.00 cpuhp/3
28 root -51 0 0 0 0 S 0,0 0,0 0:00.00 idle_inject/3
29 root rt 0 0 0 S 0,0 0,0 0:00.02 migration/3
30 root 20 0 0 0 0 S 0,0 0,0 0:00.04 ksoftirqd/3
32 root 0 -20 0 0 0 I 0,0 0,0 0:00.23 kworker/3:0H-kb
33 root 20 0 0 0 0 S 0,0 0,0 0:00.00 kdevtmpfs
34 root 0 -20 0 0 0 I 0,0 0,0 0:00.00 netns
35 root 20 0 0 0 0 S 0,0 0,0 0:00.00 rcu_tasks_kthre
36 root 20 0 0 0 0 S 0,0 0,0 0:00.00 kauditd

root@kinotosi:/home/kinotosi# echo $SHELL
/bin/bash
root@kinotosi:/home/kinotosi# echo {con, pre} {sent, fer} {s, ed}
{con, pre} {sent, fer} {s, ed}
root@kinotosi:/home/kinotosi#
```


17. man ls

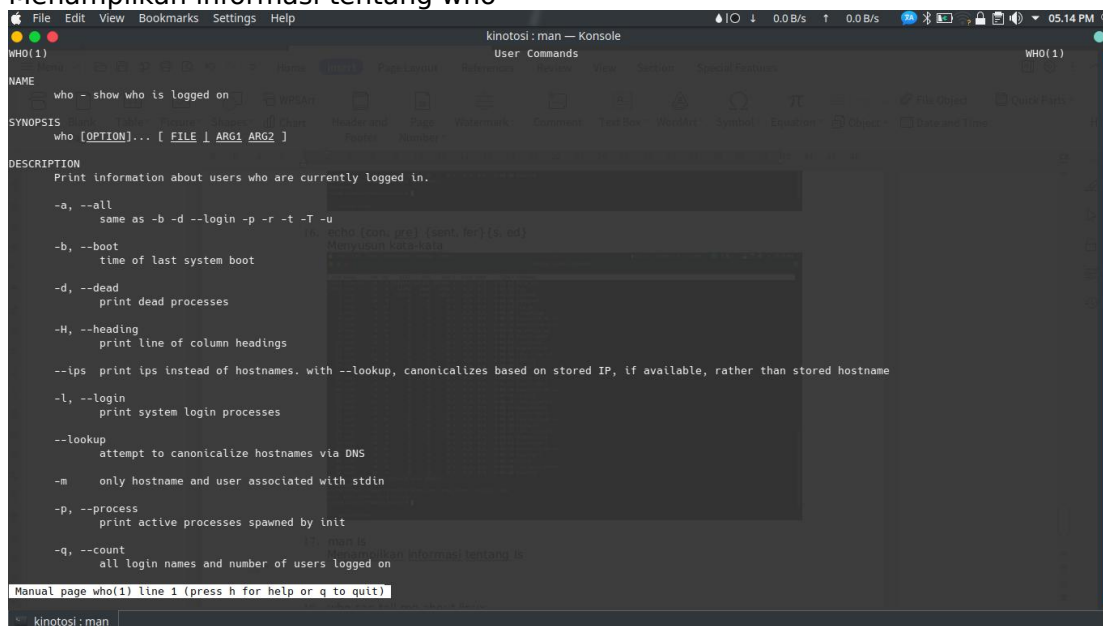
Menampilkan informasi tentang ls



```
kinotosi: man — Konsole
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 specified.
  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
    with -l, print the author of each file
  -b, --escape
    print C-style escapes for nongraphic characters
  --block-size=SIZE
    scale sizes by SIZE before printing them; e.g., '--block-size=M' prints sizes in units of 1,048,576 bytes; see SIZE format below
  -B, --ignore-backups
    do not list implied entries ending with ~
  -c
    with -lt: sort by, and show, ctime (time of last modification of file status information); with -l: show ctime and sort by name; otherwise: sort by
    ctime, newest first
  -C
    list entries by columns
  --color[=WHEN]
    colorize the output; WHEN can be 'always' (default if omitted), 'auto', or 'never'; more info below
Manual page ls(1) line 1 (press h for help or q to quit)
kinotosi: man
```

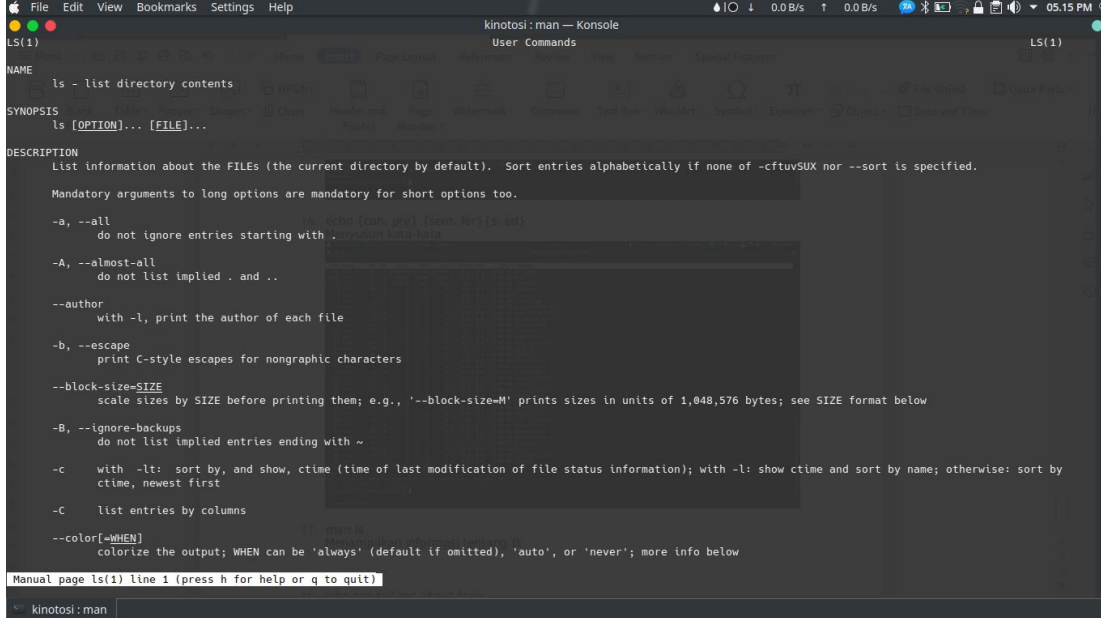
18. man who

Menampilkan informasi tentang who



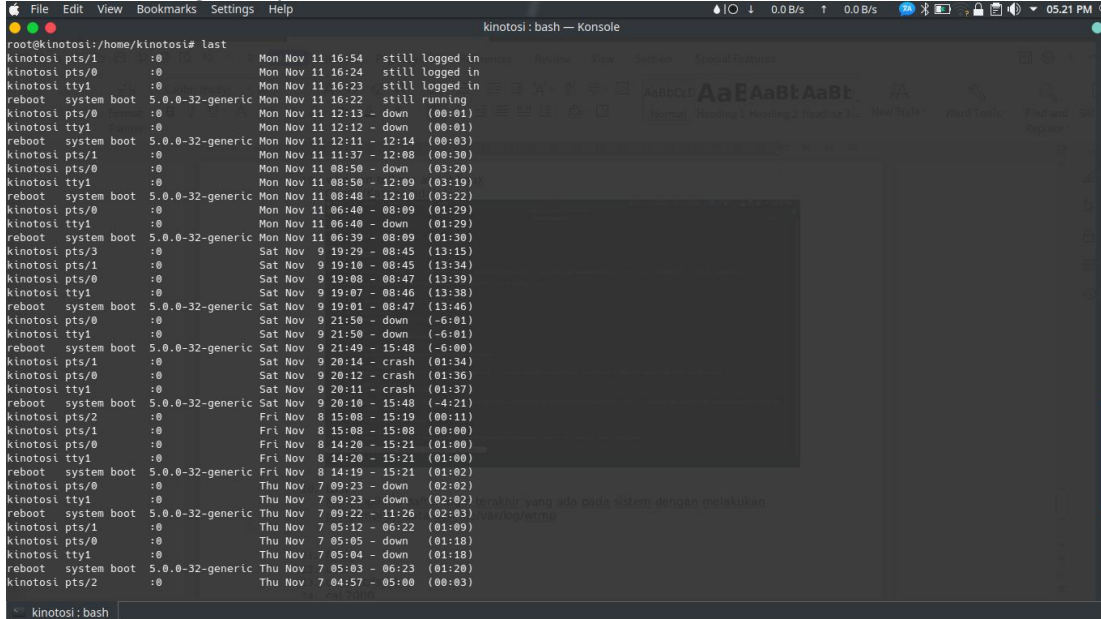
```
kinotosi: man — Konsole
WHO(1)
NAME
  who - show who is logged on
SYNOPSIS
  who [OPTION]... [ FILE | ARG1 ARG2 ]
DESCRIPTION
  Print information about users who are currently logged in.
  -a, --all
    same as -b -d --login -p -r -t -T -u
  -b, --boot
    time of last system boot
  -d, --dead
    print dead processes
  -H, --heading
    print line of column headings
  --lps
    print lps instead of hostnames. with --lookup, canonicalizes based on stored IP, if available, rather than stored hostname
  -l, --login
    print system login processes
  --lookup
    attempt to canonicalize hostnames via DNS
  -m
    only hostname and user associated with stdin
  -p, --process
    print active processes spawned by init
  -q, --count
    all login names and number of users logged on
Manual page who(1) line 1 (press h for help or q to quit)
kinotosi: man
```

19. who can tell me about linux
Gagal (Karena tidak bisa)



20. last

Menampilkn daftar login terakhir yang ada pada sistem dengan melakukan pengambilan data dari file/var/log/wtmp



21. fdisk -l

Menampilkan list partisi pada perangkat

```
root@kinotosi:/home/kinotosi# fdisk -l
Disk /dev/loop0: 89,1 MiB, 93454336 bytes, 182520 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

Disk /dev/loop1: 202,9 MiB, 212713472 bytes, 415456 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

Disk /dev/loop2: 184,8 MiB, 193806336 bytes, 378528 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

Disk /dev/loop3: 89,1 MiB, 93429760 bytes, 182480 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

Disk /dev/sda: 931,5 GiB, 1000204886016 bytes, 1953525168 sectors
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: gpt
Disk identifier: 7CB46590-CDB3-4AE9-8FBD-50E637D60ACE

Device         Start      End      Sectors  Size Type
/dev/sda1       2048      534527    532480   260M EFI System
/dev/sda2       534528    567295     32768    16M Microsoft reserved
/dev/sda3       567296    95803593  95826658  453,1G Microsoft basic data
/dev/sda4       95803520  952006655 1171456   572M Windows recovery environment
/dev/sda5       952008704 1689327615 737318912 351,6G Microsoft basic data
/dev/sda6       1689329664 1809203199 119873536 57,2G Linux filesystem
/dev/sda7       1809203200 1891231743 82028544 39,1G Linux filesystem

root@kinotosi:/home/kinotosi#
```

22. users

Menampilkan daftar user yang sedang aktif pada sebuah perangkat

```
root@kinotosi:/home/kinotosi# users
kinotosi kinotosi kinotosi
root@kinotosi:/home/kinotosi#
```

23. cat /etc/fstab Melihat file sistem yang telah disetup

```
File Edit View Bookmarks Settings Help
kinotosi: bash — Konsole

Disk /dev/sda: 931.5 GiB, 1000204806016 bytes, 1953525168 sectors
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: gpt
Disk identifier: 7CB4659D-CDB3-4AE9-8FBD-50E637D60ACE

Device      Start      End        Sectors    Size Type
/dev/sda1    2048        534527    532480     260M EFI System
/dev/sda2    534528    567295    32768      16M Microsoft reserved
/dev/sda3    567296    958833953 958266658 453.1G Microsoft basic data
/dev/sda4    958835200 952006655 1171456    572M Windows recovery environment
/dev/sda5    952008704 1689327615 737318912 351.6G Microsoft basic data
/dev/sda6    1689329664 1809283199 119953536 57.2G Linux filesystem
/dev/sda7    1809283200 1891231743 82048544   39.1G Linux filesystem
/dev/sda8    1891231744 1899046911 7815168    3.7G Linux swap
/dev/sda9    1899046912 1951475711 52428800   25G Microsoft basic data
/dev/sda10   1951475712 1953523711 2048000    1000M Windows recovery environment

root@kinotosi:/home/kinotosi# users
kinotosi kinotosi kinotosi
root@kinotosi:/home/kinotosi# 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/sda7 during installation
UUID=e1e7559c-ba63-4dea-a972-fa83d0c5dbab /      ext4    errors=remount-ro 0    1
# /boot/efi was on /dev/sda1 during installation
UUID=38B2-0520 /boot/efi vfat    umask=0077        0    1
# /home was on /dev/sda8 during installation
UUID=972ab975-e24e-4572-a5e4-b9cc0b407ac4 /home  ext4    defaults          0    2
# swap was on /dev/sda9 during installation
UUID=a4e70242-a260-4b9f-bab3-1d9286c154b2 none    swap      sw                0    0
root@kinotosi:/home/kinotosi#
```

24. cal 2000 Menampilkan kalender pada tahun 2000

```
File Edit View Bookmarks Settings Help
kinotosi: bash — Konsole

# swap was on /dev/sda9 during installation
UUID=a4e70242-a260-4b9f-bab3-1d9286c154b2 none    swap      sw                0    0
root@kinotosi:/home/kinotosi# cal 2000
      2000
January      February      Maret
Ml Se Sa Ra Ka Ju Su Ml Se Sa Ra Ka Ju Su Ml Se Sa Ra Ka Ju Su
1           1 2 3 4 5           1 2 3 4
2 3 4 5 6 7 8 6 7 8 9 10 11 12 5 6 7 8 9 10 11
9 10 11 12 13 14 15 13 14 15 16 17 18 19 12 13 14 15 16 17 18
16 17 18 19 20 21 22 20 21 22 23 24 25 26 19 20 21 22 23 24 25
23 24 25 26 27 28 29 27 28 29 26 27 28 29 30 31
30 31

April        Mei          Juni
Ml Se Sa Ra Ka Ju Su Ml Se Sa Ra Ka Ju Su Ml Se Sa Ra Ka Ju Su
1           1 2 3 4 5 6           1 2 3
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
Ml Se Sa Ra Ka Ju Su Ml Se Sa Ra Ka Ju Su Ml Se Sa Ra Ka Ju Su
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
Ml Se Sa Ra Ka Ju Su Ml Se Sa Ra Ka Ju Su Ml Se Sa Ra Ka Ju Su
1 2 3 4 5 6 7 1 2 3 4           1 2
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

root@kinotosi:/home/kinotosi#
```

25. cal 9 1975

Menampilkan kalender bulan September tahun 1975

```
File Edit View Bookmarks Settings Help
kinotosi: bash — Konsole
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
23 24 25 26 27 28 29 30 31
30 31

April Mei Juni
Mi Se Ra Ka Ju Sa Mi Se Ra Ka Ju Sa Mi Se Se Ra Ka Ju Sa
1 1 2 3 4 5 6 1 2 3
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 6 1 2 3
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
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

root@kinotosi:/home/kinotosi# cal 9 1975
September 1975
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

root@kinotosi:/home/kinotosi#
```

26. cal 10 2007

Menampilkan kalender bulan Oktober 2007

```
File Edit View Bookmarks Settings Help
kinotosi: bash — Konsole
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
23 24 25 26 27 28 29 30 31
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 2 3 4 5 6 7 1 2 3 4 1 2
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

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
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

root@kinotosi:/home/kinotosi# cal 9 1975
September 1975
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

root@kinotosi:/home/kinotosi# 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

root@kinotosi:/home/kinotosi#
```

27. bc -l Menampilkan versi bc (Bahasa kalkulator)

```
File Edit View Bookmarks Settings Help
kinotosi: bash — Konsole
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 20 29 30 31 25 26 27 28 29 30
30

    Juli      Agustus      September
Mi Se Sa Ra Ka Ju Su Mi Se Sa Ra Ka Ju Su Mi Se Sa Ra Ka Ju Su
1 2 3 4 5 6 7 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 Sa Ra Ka Ju Su Mi Se Sa Ra Ka Ju Su Mi Se Sa Ra Ka Ju Su
1 2 3 4 5 6 7 1 2 3 4 5 1 2
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

root@kinotosi:/home/kinotosi# cal 9 1975
    September 1975
Mi Se Sa Ra Ka Ju Su
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

root@kinotosi:/home/kinotosi# cal 10 2007
    Oktober 2007
Mi Se Sa Ra Ka Ju Su
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

root@kinotosi:/home/kinotosi#
```

28. echo 5+4 | bc -l Menampilkan hasil penjumlahan (9)

```
File Edit View Bookmarks Settings Help
kinotosi: bash — Konsole
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 20 29 30 31 25 26 27 28 29 30
30

    Oktober      November      Desember
Mi Se Sa Ra Ka Ju Su Mi Se Sa Ra Ka Ju Su Mi Se Sa Ra Ka Ju Su
1 2 3 4 5 6 7 1 2 3 4 5 1 2
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

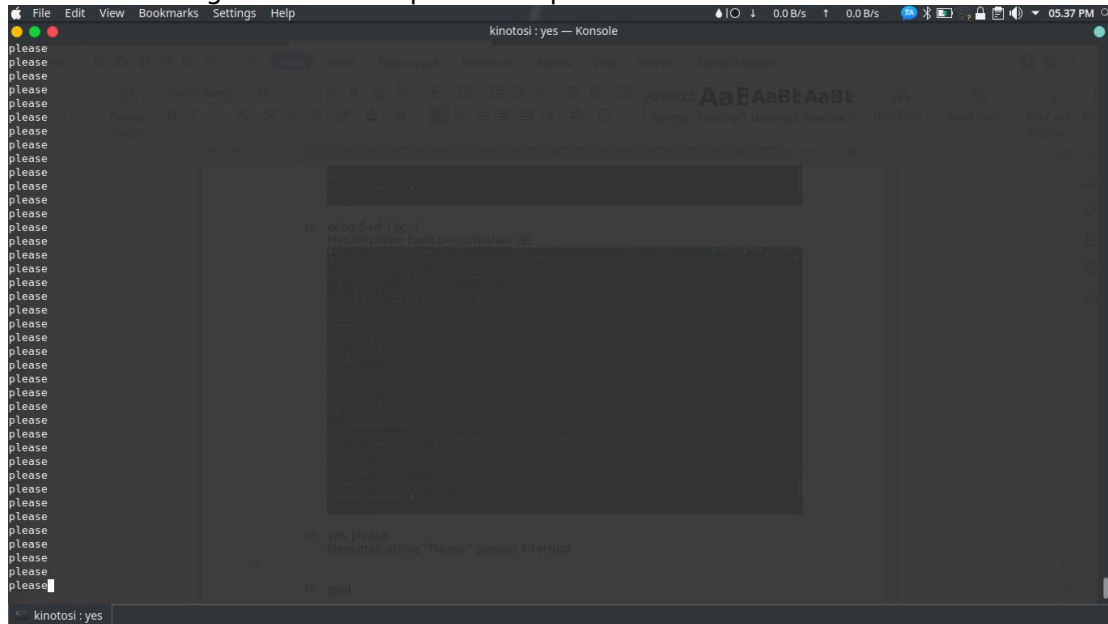
root@kinotosi:/home/kinotosi# cal 9 1975
    September 1975
Mi Se Sa Ra Ka Ju Su
1 2 3 4 5 6
7 8 9 10 11 12 13
14 15 16 17 18 19 20
21 22 23 24 25 26 27
28 29 30

root@kinotosi:/home/kinotosi# cal 10 2007
    Oktober 2007
Mi Se Sa Ra Ka Ju Su
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

root@kinotosi:/home/kinotosi# 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'.
^C
(interrupt) use quit to exit.
^C
(interrupt) use quit to exit.
quit
root@kinotosi:/home/kinotosi# echo 5+4 | bc -l
9
root@kinotosi:/home/kinotosi#
```

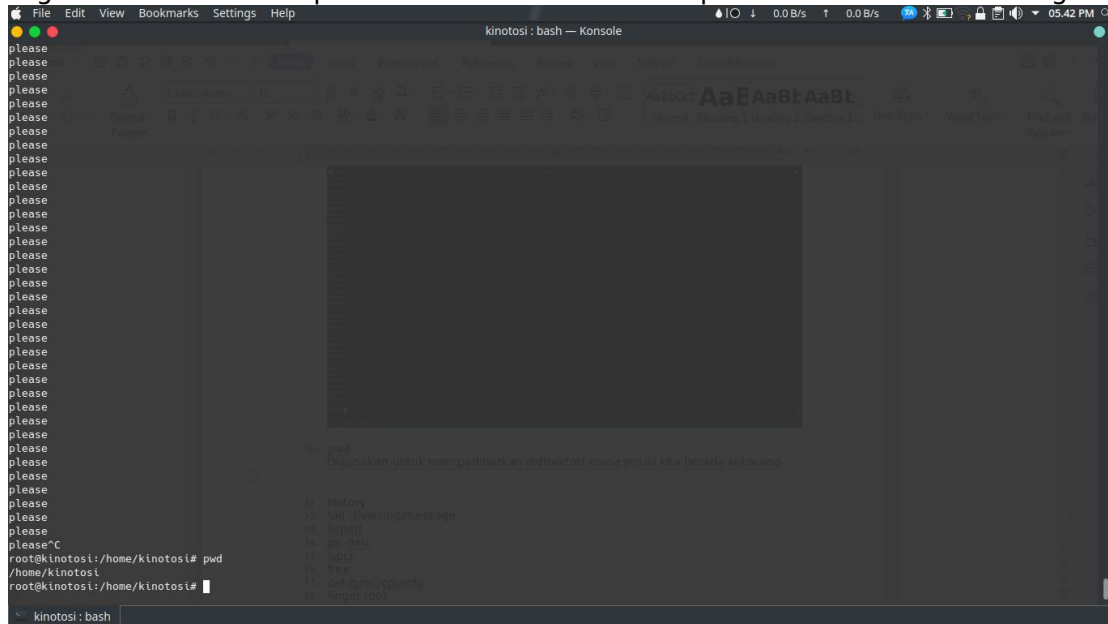

29. yes please
Mencetak string "Please" sampai interrupt

Mencetak string "Please" sampai interrupt



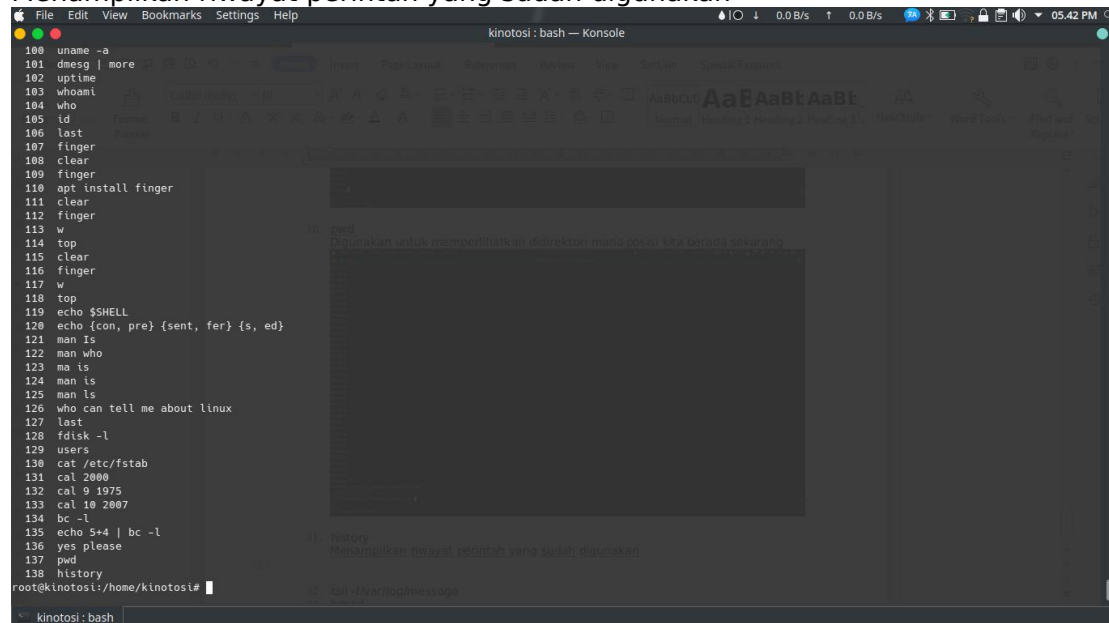
30. `pwd`
Digunakan untuk memperlihatkan didirektori mana posisi kita berada sekarang

Digunakan untuk memperlihatkan didirektori mana posisi kita berada sekarang



31. history

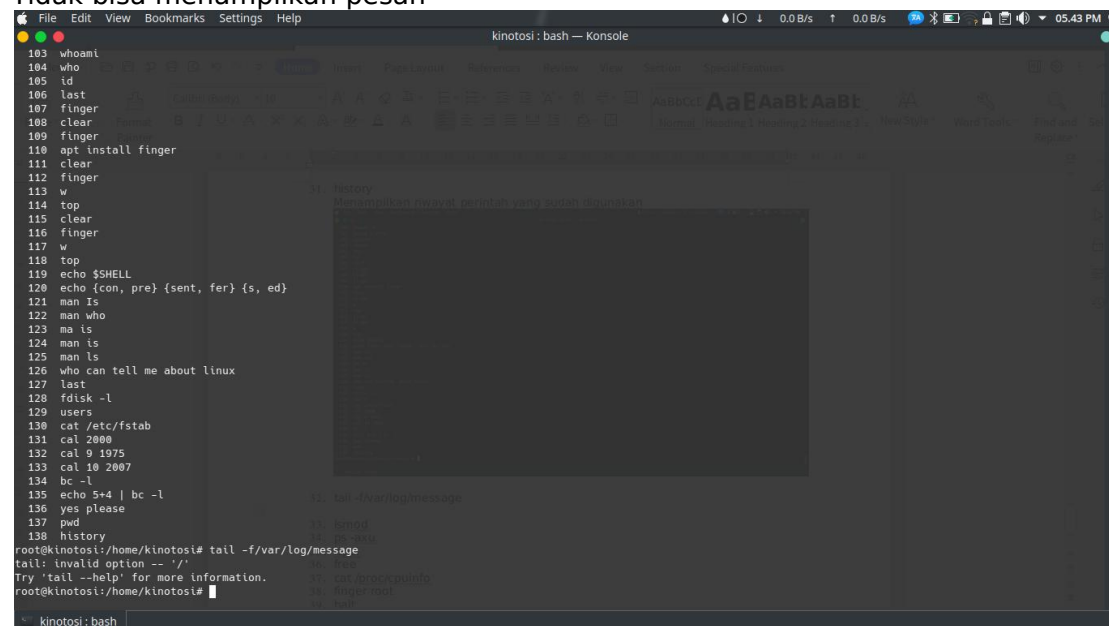
Menampilkan riwayat perintah yang sudah digunakan



```
root@kinotosi:/home/kinotosi# history
100 uname -a
101 dmesg | more
102 uptime
103 whoami
104 who
105 id
106 last
107 finger
108 clear
109 finger
110 apt install finger
111 clear
112 finger
113 w
114 top
115 clear
116 finger
117 w
118 top
119 echo $SHELL
120 echo {con, pre} {sent, fer} {s, ed}
121 man ls
122 man who
123 ma ls
124 man ls
125 man ls
126 who can tell me about linux
127 last
128 fdisk -l
129 users
130 cat /etc/fstab
131 cal 2000
132 cal 9 1975
133 cal 10 2007
134 bc -l
135 echo 5+4 | bc -l
136 yes please
137 pwd
138 history
root@kinotosi:/home/kinotosi#
```

32. tail -f/var/log/message

Tidak bisa menampilkan pesan



```
root@kinotosi:/home/kinotosi# tail -f/var/log/message
tail: invalid option -- '/'
Try 'tail --help' for more information.
root@kinotosi:/home/kinotosi#
```

33. lsmod

Menampilkan module/drive yang diload ke kernel

```
tail: invalid option -- '/'
Try 'tail --help' for more information.
root@kinotosi:/home/kinotosi# lsmod
Module                  Size  Used by
rfcomm                  77824  16
xt_CHECKSUM             16384  1
iptable_mangle          16384  1
ipt_MASQUERADE          20480  3
iptable_nat             16384  1
nf_nat_ipv4            16384  2 ipt_MASQUERADE,iptable_nat
nf_nat                 36864  1 nf_nat_ipv4
xt_contrack            16384  1
nf_contrack            135168  4 xt_contrack,nf_nat,ipt_MASQUERADE,nf_nat_ipv4
nf_defrag_ipv6         24576  1 nf_contrack
nf_defrag_ipv4         16384  1 nf_contrack
liberc2e               16384  2 nf_contrack,nf_nat
ipt_REJECT             16384  2
nf_reject_ipv4         16384  1 ipt_REJECT
xt_tcpudp              20480  6
bridge                167936  0
stp                    16384  1 bridge
llc                    16384  2 bridge,stp
devlink                65536  0
eatable_filter         16384  0
eatables               36864  1 eatable_filter
ip6table_filter        16384  0
ip6_tables             32768  1 ip6table_filter
iptable_filter         16384  1
bpf_filter             24576  0
cmae                   16384  1
pci_stub               16384  1
vboxpci                24576  0
vboxnetadp             28672  0
vboxnetflt             28672  0
vboxdrv               479232  3 vboxpci,vboxnetadp,vboxnetflt
bnep                   24576  2
nls_iso8859_1          16384  1
arc4                   16384  2
uvcvideo               94208  0
videobuf2_vmalloc     20480  1 uvcvideo
```

34. ps -axu

Melihat seluruh proses yang dijalankan, walaupun tanpa terminal control, juga ditampilkan nama dari user untuk setiap proses

```
root@kinotosi:/home/kinotosi# ps -axu
49152 2 ideapad_laptop,i915
root@kinotosi:/home/kinotosi# ps -axu
  USER      PID %CPU %MEM    VSZ   RSS TTY      STAT START   TIME COMMAND
root         1   0.0  0.2 225528 9396 ?        Ss   16:22   0:02 /sbin/init splash
root         2   0.0  0.0   0      0 ?        S    16:22   0:00 [kthreadd]
root         3   0.0  0.0   0      0 ?        I<   16:22   0:00 [rcu_gp]
root         4   0.0  0.0   0      0 ?        I<   16:22   0:00 [rcu_par_gp]
root         6   0.0  0.0   0      0 ?        I<   16:22   0:00 [kworker/0:0H-kb]
root         8   0.0  0.0   0      0 ?        I<   16:22   0:00 [mm_percpu_wq]
root         9   0.0  0.0   0      0 ?        S    16:22   0:00 [ksoftirqd/0]
root        10   0.0  0.0   0      0 ?        I<   16:22   0:04 [rcu_sched]
root        11   0.0  0.0   0      0 ?        S    16:22   0:00 [migration/0]
root        12   0.0  0.0   0      0 ?        S    16:22   0:00 [idle_inject/0]
root        14   0.0  0.0   0      0 ?        S    16:22   0:00 [cpuhp/0]
root        15   0.0  0.0   0      0 ?        S    16:22   0:00 [cpuhp/1]
root        16   0.0  0.0   0      0 ?        S    16:22   0:00 [idle_inject/1]
root        17   0.0  0.0   0      0 ?        S    16:22   0:00 [migration/1]
root        18   0.0  0.0   0      0 ?        S    16:22   0:00 [ksoftirqd/1]
root        20   0.0  0.0   0      0 ?        I<   16:22   0:00 [kworker/1:0H-ev]
root        21   0.0  0.0   0      0 ?        S    16:22   0:00 [cpuhp/2]
root        22   0.0  0.0   0      0 ?        S    16:22   0:00 [idle_inject/2]
root        23   0.0  0.0   0      0 ?        S    16:22   0:00 [migration/2]
root        24   0.0  0.0   0      0 ?        S    16:22   0:00 [ksoftirqd/2]
root        26   0.0  0.0   0      0 ?        I<   16:22   0:00 [kworker/2:0H-ev]
root        27   0.0  0.0   0      0 ?        S    16:22   0:00 [cpuhp/3]
root        28   0.0  0.0   0      0 ?        S    16:22   0:00 [idle_inject/3]
root        29   0.0  0.0   0      0 ?        S    16:22   0:00 [migration/3]
root        30   0.0  0.0   0      0 ?        S    16:22   0:00 [ksoftirqd/3]
root        32   0.0  0.0   0      0 ?        I<   16:22   0:00 [kworker/3:0H-kb]
root        33   0.0  0.0   0      0 ?        S    16:22   0:00 [kdevtmpfs]
root        34   0.0  0.0   0      0 ?        I<   16:22   0:00 [netns]
root        35   0.0  0.0   0      0 ?        S    16:22   0:00 [rcu_tasks_kthre]
root        36   0.0  0.0   0      0 ?        S    16:22   0:00 [kauditd]
root        38   0.0  0.0   0      0 ?        S    16:22   0:00 [khungtaskd]
root        39   0.0  0.0   0      0 ?        S    16:22   0:00 [oom_reaper]
root        40   0.0  0.0   0      0 ?        I<   16:22   0:00 [writeback]
root        41   0.0  0.0   0      0 ?        S    16:22   0:00 [kcompactd0]
root        42   0.0  0.0   0      0 ?        SN   16:22   0:00 [ksmd]
root        43   0.0  0.0   0      0 ?        SN   16:22   0:00 [khugepaged]
root        44   0.0  0.0   0      0 ?        I<   16:22   0:00 [crypto]
```

35. lspci

Melihat spesifikasi hardware dari computer yang sedang digunakan

```
File Edit View Bookmarks Settings Help
kinotosi: bash — Konsole
root 3131 0.2 0.0 0 0 ? I 17:27 0:02 [worker/u8-1-ph]
root 3193 0.2 0.0 0 0 ? I 17:32 0:02 [worker/u8-3-ev]
root 3204 0.0 0.0 0 0 ? I 17:34 0:00 [worker/3:1-rcu]
root 3246 0.0 0.0 0 0 ? I 17:36 0:00 [worker/1:0-eve]
root 3251 0.4 0.0 0 0 ? I 17:37 0:02 [worker/u8:2-ev]
root 3278 0.0 0.0 0 0 ? I 17:40 0:00 [worker/3:0-mm_]
root 3294 0.0 0.0 0 0 ? I 17:42 0:00 [worker/2:2]
kinotosi 3305 0.0 0.5 283784 19316 ? S 17:42 0:00 file.so [kdeinit5] file local:/run/user/1000/klauncherT31627.1.slave-socket local:/run/user/1000/plasma
kinotosi 3306 0.0 0.5 283784 19316 ? S 17:42 0:00 file.so [kdeinit5] file local:/run/user/1000/klauncherT31627.1.slave-socket local:/run/user/1000/plasma
kinotosi 3307 0.1 1.0 618944 41144 ? SL 17:42 0:00 thumbnail.so [kdeinit5] thumbnail local:/run/user/1000/klauncherT31627.1.slave-socket local:/run/user/1
kinotosi 3310 0.1 1.0 618644 40864 ? SL 17:42 0:00 thumbnail.so [kdeinit5] thumbnail local:/run/user/1000/klauncherT31627.1.slave-socket local:/run/user/1
root 3387 0.0 0.0 0 0 ? I 17:45 0:00 [worker/3:2]
root 3415 0.0 0.0 39664 3496 pts/1 R+ 17:46 0:00 ps -axu
root@kinotosi:/home/kinotosi# lspci

Command 'lspi' not found, did you mean:
  command 'lspci' from deb pciutils

Try: apt install <deb name>

root@kinotosi:/home/kinotosi# lspci
00:00.0 Host bridge: Intel Corporation Xeon E3-1200 v6/7th Gen Core Processor Host Bridge/DRAM Registers (rev 02)
00:02.0 VGA compatible controller: Intel Corporation HD Graphics 620 (rev 02)
00:14.0 USB controller: Intel Corporation Sunrise Point-LP USB 3.0 xHCI Controller (rev 21)
00:14.2 Signal processing controller: Intel Corporation Sunrise Point-LP Thermal subsystem (rev 21)
00:15.0 Signal processing controller: Intel Corporation Sunrise Point-LP Serial IO I2C Controller #0 (rev 21)
00:16.0 Communication controller: Intel Corporation Sunrise Point-LP CSME HECI #1 (rev 21)
00:17.0 RAID bus controller: Intel Corporation 82801 Mobile SATA Controller [RAID mode] (rev 21)
00:1c.0 PCI bridge: Intel Corporation Sunrise Point-LP PCI Express Root Port #1 (rev f1)
00:1c.4 PCI bridge: Intel Corporation Sunrise Point-LP PCI Express Root Port #5 (rev f1)
00:1c.5 PCI bridge: Intel Corporation Sunrise Point-LP PCI Express Root Port #6 (rev f1)
00:1f.0 ISA bridge: Intel Corporation Intel(R) 100 Series Chipset Family LPC Controller/eSPI Controller - 9D4E (rev 21)
00:1f.2 Memory controller: Intel Corporation Sunrise Point-LP PMC (rev 21)
00:1f.3 Audio device: Intel Corporation Sunrise Point-LP HD Audio (rev 21)
00:1f.4 SMBus: Intel Corporation Sunrise Point-LP SMBus (rev 21)
01:00.0 3D controller: NVIDIA Corporation GM108M [GeForce 920MX] (rev a2)
02:00.0 Ethernet controller: Realtek Semiconductor Co., Ltd. RTL8111/8168/8411 PCI Express Gigabit Ethernet Controller (rev 10)
03:00.0 Network controller: Qualcomm Atheros QCA9377 802.11ac Wireless Network Adapter (rev 31)
root@kinotosi:/home/kinotosi#
```

36. free

Melihat informasi pengguna memory

```
File Edit View Bookmarks Settings Help
kinotosi: bash — Konsole
root 3251 0.4 0.0 0 0 ? I 17:37 0:02 [worker/u8:2-ev]
root 3278 0.0 0.0 0 0 ? I 17:40 0:00 [worker/3:0-mm_]
root 3294 0.0 0.0 0 0 ? I 17:42 0:00 [worker/2:2]
kinotosi 3305 0.0 0.5 283784 19316 ? S 17:42 0:00 file.so [kdeinit5] file local:/run/user/1000/klauncherT31627.1.slave-socket local:/run/user/1000/plasma
kinotosi 3306 0.0 0.5 283784 19316 ? S 17:42 0:00 file.so [kdeinit5] file local:/run/user/1000/klauncherT31627.1.slave-socket local:/run/user/1000/plasma
kinotosi 3307 0.1 1.0 618944 41144 ? SL 17:42 0:00 thumbnail.so [kdeinit5] thumbnail local:/run/user/1000/klauncherT31627.1.slave-socket local:/run/user/1
kinotosi 3310 0.1 1.0 618644 40864 ? SL 17:42 0:00 thumbnail.so [kdeinit5] thumbnail local:/run/user/1000/klauncherT31627.1.slave-socket local:/run/user/1
root 3387 0.0 0.0 0 0 ? I 17:45 0:00 [worker/3:2]
root 3415 0.0 0.0 39664 3496 pts/1 R+ 17:46 0:00 ps -axu
root@kinotosi:/home/kinotosi# lspci

Command 'lspi' not found, did you mean:
  command 'lspci' from deb pciutils

Try: apt install <deb name>

root@kinotosi:/home/kinotosi# lspci
00:00.0 Host bridge: Intel Corporation Xeon E3-1200 v6/7th Gen Core Processor Host Bridge/DRAM Registers (rev 02)
00:02.0 VGA compatible controller: Intel Corporation HD Graphics 620 (rev 02)
00:14.0 USB controller: Intel Corporation Sunrise Point-LP USB 3.0 xHCI Controller (rev 21)
00:14.2 Signal processing controller: Intel Corporation Sunrise Point-LP Thermal subsystem (rev 21)
00:15.0 Signal processing controller: Intel Corporation Sunrise Point-LP Serial IO I2C Controller #0 (rev 21)
00:16.0 Communication controller: Intel Corporation Sunrise Point-LP CSME HECI #1 (rev 21)
00:17.0 RAID bus controller: Intel Corporation 82801 Mobile SATA Controller [RAID mode] (rev 21)
00:1c.0 PCI bridge: Intel Corporation Sunrise Point-LP PCI Express Root Port #1 (rev f1)
00:1c.4 PCI bridge: Intel Corporation Sunrise Point-LP PCI Express Root Port #5 (rev f1)
00:1c.5 PCI bridge: Intel Corporation Sunrise Point-LP PCI Express Root Port #6 (rev f1)
00:1f.0 ISA bridge: Intel Corporation Intel(R) 100 Series Chipset Family LPC Controller/eSPI Controller - 9D4E (rev 21)
00:1f.2 Memory controller: Intel Corporation Sunrise Point-LP PMC (rev 21)
00:1f.3 Audio device: Intel Corporation Sunrise Point-LP HD Audio (rev 21)
00:1f.4 SMBus: Intel Corporation Sunrise Point-LP SMBus (rev 21)
01:00.0 3D controller: NVIDIA Corporation GM108M [GeForce 920MX] (rev a2)
02:00.0 Ethernet controller: Realtek Semiconductor Co., Ltd. RTL8111/8168/8411 PCI Express Gigabit Ethernet Controller (rev 10)
03:00.0 Network controller: Qualcomm Atheros QCA9377 802.11ac Wireless Network Adapter (rev 31)
root@kinotosi:/home/kinotosi# free
              total        used        free      shared  buff/cache   available
Mem:           3814700      2070376      1296448       15892      1614676      1482756
Swap:          3907580           524        3907056
root@kinotosi:/home/kinotosi#
```

37. cat /proc/cpuinfo

Melihat pada/proc directory yang bukan merupakan file nyata

```
File Edit View Bookmarks Settings Help
kinotosi: bash — Konsole
root@kinotosi:/home/kinotosi# cat /proc/cpuinfo
processor       : 0
vendor_id      : GenuineIntel
cpu family     : 6
model          : 142
model name     : Intel(R) Core(TM) i5-7200U CPU @ 2.50GHz
stepping      : 9
microcode     : 0xb4
cpu MHz        : 2119.112
cache size     : 3072 KB
physical id    : 0
siblings      : 4
core id       : 0
cpu cores     : 2
apicid        : 0
initial apicid : 0
fpu           : yes
fpu_exception : yes
cpuid level   : 22
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 rdtscp lm c
constant_tsc art arch_perfmon pebs bts rep_good nopl xtopology nonstop_tsc cpuid aperfperf tsc_known_freq pni pclmulqdq dtes64 monitor ds_cpl vmx est tm2 sse3 sdbg fma
cx16 xtr pdc cmcid sse4_1 sse4_2 x2apic movbe popcnt tsc_deadline_timer aes xsave avx f16c rdrand lahf_lm abm 3dnowprefetch cpuid_fault invpcid_single pti ssbd lbrs i
bpb stlb tpr_shadow vnmi flexpriority ept vpid ept_ad fsgsbase tsc_adjust bmi1 avx2 smep bmi2 erms invpcid mpx rdseed adx smap clflushopt intel_pt xsaveopt xsavec xget
bv1 xsave dtherm ida arat pln pts hwp hwp_notify hwp_act_window hwp_epp md_clear flush_lid
bugs           : cpu_meltdown spectre_v1 spectre_v2 spec_store_bypass l1tf mds swapgs
bogomips      : 5424.00
clflush size   : 64
cache alignment : 64
address sizes  : 39 bits physical, 48 bits virtual
power management:

processor       : 1
vendor_id      : GenuineIntel
cpu family     : 6
model          : 142
model name     : Intel(R) Core(TM) i5-7200U CPU @ 2.50GHz
stepping      : 9
microcode     : 0xb4
```

38. finger root

Menampilkan informasi finger root

```
File Edit View Bookmarks Settings Help
kinotosi: bash — Konsole
power management:
processor       : 3
vendor_id      : GenuineIntel
cpu family     : 6
model          : 142
model name     : Intel(R) Core(TM) i5-7200U CPU @ 2.50GHz
stepping      : 9
microcode     : 0xb4
cpu MHz        : 2068.928
cache size     : 3072 KB
physical id    : 0
siblings      : 4
core id       : 1
cpu cores     : 2
apicid        : 3
initial apicid : 3
fpu           : yes
fpu_exception : yes
cpuid level   : 22
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 rdtscp lm c
constant_tsc art arch_perfmon pebs bts rep_good nopl xtopology nonstop_tsc cpuid aperfperf tsc_known_freq pni pclmulqdq dtes64 monitor ds_cpl vmx est tm2 sse3 sdbg fma
cx16 xtr pdc cmcid sse4_1 sse4_2 x2apic movbe popcnt tsc_deadline_timer aes xsave avx f16c rdrand lahf_lm abm 3dnowprefetch cpuid_fault invpcid_single pti ssbd lbrs i
bpb stlb tpr_shadow vnmi flexpriority ept vpid ept_ad fsgsbase tsc_adjust bmi1 avx2 smep bmi2 erms invpcid mpx rdseed adx smap clflushopt intel_pt xsaveopt xsavec xget
bv1 xsave dtherm ida arat pln pts hwp hwp_notify hwp_act_window hwp_epp md_clear flush_lid
bugs           : cpu_meltdown spectre_v1 spectre_v2 spec_store_bypass l1tf mds swapgs
bogomips      : 5424.00
clflush size   : 64
cache alignment : 64
address sizes  : 39 bits physical, 48 bits virtual
power management:

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

1. Jelaskan distro linux yang ada saat ini (minimal 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.

f. **Elementary OS**

Elementary OS berbasis Ubuntu adalah distro Linux yang paling indah dan dikenal karena kinerjanya yang tak tertandingi. OS open source untuk pengganti Windows dan macOS, Elementary OS ini meminjam beberapa elemen desain dari macOS. Distro ini juga tidak dibawakan banyak aplikasi default Ubuntu, karena Elementary OS bertujuan untuk memberikan pengalaman yang ringan kepada pengguna. Dengan lingkungan desktop Pantheon berbasis GNOME, Elementary OS sangat terintegrasi dengan aplikasi seperti Plank, Epiphany, dan Scratch. Secara keseluruhan, ini dapat digunakan oleh pengguna berpengalaman dan pemula untuk melakukan tugas-tugas komputasi sehari-hari.

2. **Jelaskan 20 perintah yang sama diantara masing masing distro.**

- a. **cd** = berpindah direktori
- b. **mkdir** = membuat folder baru
- c. **rmdir** = menghapus folder
- d. **exit** = keluar dari terminal
- e. **date** = melihat tanggal
- f. **cp** = mengcopy file
- g. **mv** = memindahkan/rename file
- h. **sudo su** = login pengguna root
- i. **touch** = membuat file baru
- j. **echo** = menampilkan sebuah pesan
- k. **dmesg** = melihat hardware yang sedang beraktifitas
- l. **cpuinfo** = melihat spesifikasi komputer
- m. **halt** = mematikan komputer
- n. **ipconfig** = melihat konfigurasi jaringan
- o. **df -h** = melihat sisa kapasitas harddisk
- p. **who** = melihat nama login kita
- q. **cal** = melihat kalender
- r. **hostname** = melihat nama komputer
- s. **history** = melihat perintah apa saja yang pernah diketik
- t. **tar** = mengextract file

3. **Jelaskan maksud perintah 'init 0', 'init 1', 'init 2', 'init 3', 'init 4', 'init 5', 'init 6'.**

- a) **init 0** : Digunakan untuk maintenance, diagnostic hardware, booting selain dari disk misal dari cdroom. command : init 0, shutdown -i0
- b) **init 1** : Single user mode, digunakan untuk menambahkan patches, backup/restore system. di level ini kita bisa menjalankan/access semua file tapi user lain tidak bisa login ke dalam sytem kita. command: init 1, shutdown -i1
- c) **init 2** : Multiuser mode, biasanya untuk digunakan dalam network. tapi disini tidak ada resources yang di share. command: init2, shutdown -i2
- d) **init 3** : Memperluas multiuser mode, kita bisa membuat local resources share pada network kita. sehingga kita bisa berbagi data di level ini dalam network. command: init 3, shutdown -i3
- e) **init 4** : Untuk alternative multiuser mode tetapi saat ini belum bisa digunakan. command: init4, shutdown -i4
- f) **init 5** : Untuk shutdown/ power off. command: init5, shutdown -i5
- g) **init 6** : Menstop operating system kemudian reboot dan kembali ke initdefault nya yang ada di /etc/inittab command: init 6, shutdown -i6

4. **Jelaskan maksud dari perintah 'quota'**

Quota adalah pembatasan pemakaian harddisk untuk user dan atau group. Hal ini sangat penting karena jika tidak ada pengaturan pemakaian jatah harddisk maka akan dalam waktu singkat server akan penuh dengan data pribadi. Jika data user melebihi quota yang sudah ditetapkan, maka user tersebut tidak bisa lagi menyimpan data kecuali jika dia menghapus data datanya.