

Nama : Vintan Kirana

NIM : L200180144

Modul : 5

```
root@vintan-HP-Laptop-14s-cf0xxx:/home/vintan# echo halo dunia
halo dunia
root@vintan-HP-Laptop-14s-cf0xxx:/home/vintan# date
Rab Nov 6 08:59:03 WIB 2019
root@vintan-HP-Laptop-14s-cf0xxx:/home/vintan# hostname
vintan-HP-Laptop-14s-cf0xxx
root@vintan-HP-Laptop-14s-cf0xxx:/home/vintan# arch
x86_64
root@vintan-HP-Laptop-14s-cf0xxx:/home/vintan# uname -a
Linux vintan-HP-Laptop-14s-cf0xxx 4.15.0-30-generic #32~16.04.1-Ubuntu SMP Thu Jul 26 20:25:39 UTC 2018 x86_64 x86_64 x86_64 GNU/Linux
root@vintan-HP-Laptop-14s-cf0xxx:/home/vintan# dmesg | more
[ 0.00000] Linux version 4.15.0-30-generic (buildd@lcy01-amd64-003) (gcc version 5.4.0 20160609 (Ubuntu 5.4.0-6ubuntu1~16.04.10)) #32~16.04.1-Ubu
ntu SMP Thu Jul 26 20:25:39 UTC 2018 (Ubuntu 4.15.0-38.32~16.04.1-generic 4.15.18)
[ 0.00000] Command line: BOOT_IMAGE=/boot/vmlinuz-4.15.0-30-generic root=UUID=c4962342-ce49-4346-8c61-d1a0a0dd1467 ro quiet splash vt.handoff=7
[ 0.00000] KERNEL supported cpus:
[ 0.00000]   Intel GenuineIntel
[ 0.00000]   AMD AuthenticAMD
[ 0.00000]   Centaur CentaurHauls
[ 0.00000] x86/fpu: Supporting XSAVE feature 0x001: 'x87 floating point registers'
[ 0.00000] x86/fpu: Supporting XSAVE feature 0x002: 'SSE registers'
[ 0.00000] x86/fpu: Supporting XSAVE feature 0x004: 'AVX registers'
[ 0.00000] x86/fpu: Supporting XSAVE feature 0x008: 'MPX bounds registers'
[ 0.00000] x86/fpu: Supporting XSAVE feature 0x010: 'MPX CSR'
[ 0.00000] x86/fpu: xstate_offset[2]: 576, xstate_sizes[2]: 256
[ 0.00000] x86/fpu: xstate_offset[3]: 832, xstate_sizes[3]: 64
[ 0.00000] x86/fpu: xstate_offset[4]: 896, xstate_sizes[4]: 64
[ 0.00000] x86/fpu: Enabled xstate features 0x1f, context size is 960 bytes, using 'compacted' format.
[ 0.00000] e820: BIOS-provided physical RAM map:
[ 0.00000] BIOS-e820: [mem 0x0000000000000000-0x0000000005ffff] usable
[ 0.00000] BIOS-e820: [mem 0x0000000000058000-0x000000000058ffff] reserved
[ 0.00000] BIOS-e820: [mem 0x0000000000059000-0x0000000000087ffff] usable
[ 0.00000] BIOS-e820: [mem 0x0000000000088000-0x0000000000ffff] reserved
[ 0.00000] BIOS-e820: [mem 0x0000000000100000-0x000000000720c5ffff] usable
[ 0.00000] BIOS-e820: [mem 0x0000000000720c6000-0x000000000720c6ffff] ACPI NVS
[ 0.00000] BIOS-e820: [mem 0x0000000000720c7000-0x000000000720c7ffff] reserved
[ 0.00000] BIOS-e820: [mem 0x0000000000720c8000-0x00000000089bcdffff] usable
[ 0.00000] BIOS-e820: [mem 0x000000000089bc0e000-0x00000000098edffff] type 28
[ 0.00000] BIOS-e820: [mem 0x000000000089bc0e000-0x00000000098edffff] reserved
[ 0.00000] BIOS-e820: [mem 0x00000000008a88e000-0x00000000008af7dffff] ACPI NVS
[ 0.00000] BIOS-e820: [mem 0x00000000008af7e000-0x00000000008affffff] ACPI data
[ 0.00000] BIOS-e820: [mem 0x00000000008affe000-0x00000000008affffff] usable
[ 0.00000] BIOS-e820: [mem 0x00000000008aff000-0x0000000008ffff] reserved
[ 0.00000] BIOS-e820: [mem 0x00000000e00000-0x00000000effffff] reserved
[ 0.00000] BIOS-e820: [mem 0x00000000fd00000-0x00000000fe7ffff] reserved
[ 0.00000] BIOS-e820: [mem 0x00000000fec0000-0x00000000fec0ffff] reserved
root@vintan-HP-Laptop-14s-cf0xxx:/home/vintan# uptime
00:59:45 up 1:23, 1 user, load average: 0.27, 0.12, 0.04
root@vintan-HP-Laptop-14s-cf0xxx:/home/vintan# whoami
root
root@vintan-HP-Laptop-14s-cf0xxx:/home/vintan# who
vintan  tty2          2019-11-05 23:38 (:)
root@vintan-HP-Laptop-14s-cf0xxx:/home/vintan# id
uid=0(root) gid=0(root) groups=0(root)
root@vintan-HP-Laptop-14s-cf0xxx:/home/vintan# last
vintan  tty2      :1           Tue Nov  5 23:38  still logged in
reboot  system boot  4.15.0-30-generi Tue Nov  5 23:36  still running
vintan  tty2      :1           Tue Nov  5 22:17 - down  (00:46)
vintan  tty2      :1           Tue Nov  5 22:00 - 22:15  (00:15)
reboot  system boot  4.15.0-30-generi Tue Nov  5 21:57 - 23:04  (01:07)
vintan  tty2      :1           Sat Oct 19 05:39 - down  (00:08)
reboot  system boot  4.15.0-30-generi Sat Oct 19 05:37 - 05:39  (00:01)
reboot  system boot  4.15.0-30-generi Tue Oct 15 14:42 - 05:39  (3:14:56)
reboot  system boot  4.15.0-30-generi Sun Oct 13 22:17 - 22:18  (00:01)
reboot  system boot  4.15.0-30-generi Sun Oct 13 20:06 - 20:07  (00:01)
reboot  system boot  4.15.0-30-generi Sat Oct 12 09:43 - 09:44  (00:01)
vintan  tty2      :1           Fri Oct 11 02:38 - down  (00:04)
reboot  system boot  4.15.0-30-generi Fri Oct 11 02:36 - 02:43  (00:07)
```

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root@vintan-HP-Laptop-14s-cf0xxx:/home/vintan# 
File Edit View Search Terminal Help
[ 0.00000] BIOS-e820: [mem 0x0000000000100000-0x000000000720c5ffff] usable
[ 0.00000] BIOS-e820: [mem 0x0000000000720c6000-0x000000000720c6ffff] ACPI NVS
[ 0.00000] BIOS-e820: [mem 0x0000000000720c7000-0x000000000720c7ffff] reserved
[ 0.00000] BIOS-e820: [mem 0x0000000000720c8000-0x00000000089bcdffff] usable
[ 0.00000] BIOS-e820: [mem 0x000000000089bc0e000-0x00000000098edffff] type 28
[ 0.00000] BIOS-e820: [mem 0x000000000089bc0e000-0x00000000098edffff] reserved
[ 0.00000] BIOS-e820: [mem 0x00000000008a88e000-0x00000000008af7dffff] ACPI NVS
[ 0.00000] BIOS-e820: [mem 0x00000000008af7e000-0x00000000008affffff] ACPI data
[ 0.00000] BIOS-e820: [mem 0x00000000008affe000-0x00000000008affffff] usable
[ 0.00000] BIOS-e820: [mem 0x00000000008aff000-0x0000000008ffff] reserved
[ 0.00000] BIOS-e820: [mem 0x00000000e00000-0x00000000effffff] reserved
[ 0.00000] BIOS-e820: [mem 0x00000000fd00000-0x00000000fe7ffff] reserved
[ 0.00000] BIOS-e820: [mem 0x00000000fec0000-0x00000000fec0ffff] reserved
root@vintan-HP-Laptop-14s-cf0xxx:/home/vintan# uptime
00:59:45 up 1:23, 1 user, load average: 0.27, 0.12, 0.04
root@vintan-HP-Laptop-14s-cf0xxx:/home/vintan# whoami
root
root@vintan-HP-Laptop-14s-cf0xxx:/home/vintan# who
vintan  tty2          2019-11-05 23:38 (:)
root@vintan-HP-Laptop-14s-cf0xxx:/home/vintan# id
uid=0(root) gid=0(root) groups=0(root)
root@vintan-HP-Laptop-14s-cf0xxx:/home/vintan# last
vintan  tty2      :1           Tue Nov  5 23:38  still logged in
reboot  system boot  4.15.0-30-generi Tue Nov  5 23:36  still running
vintan  tty2      :1           Tue Nov  5 22:17 - down  (00:46)
vintan  tty2      :1           Tue Nov  5 22:00 - 22:15  (00:15)
reboot  system boot  4.15.0-30-generi Tue Nov  5 21:57 - 23:04  (01:07)
vintan  tty2      :1           Sat Oct 19 05:39 - down  (00:08)
reboot  system boot  4.15.0-30-generi Sat Oct 19 05:37 - 05:39  (00:01)
reboot  system boot  4.15.0-30-generi Tue Oct 15 14:42 - 05:39  (3:14:56)
reboot  system boot  4.15.0-30-generi Sun Oct 13 22:17 - 22:18  (00:01)
reboot  system boot  4.15.0-30-generi Sun Oct 13 20:06 - 20:07  (00:01)
reboot  system boot  4.15.0-30-generi Sat Oct 12 09:43 - 09:44  (00:01)
vintan  tty2      :1           Fri Oct 11 02:38 - down  (00:04)
reboot  system boot  4.15.0-30-generi Fri Oct 11 02:36 - 02:43  (00:07)
```

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root@vintan-HP-Laptop-14s-cf0xxx: /home/vintan
File Edit View Search Terminal Help

reboot system boot 4.15.0-30-generi Fri Oct 11 02:36 - 02:43 (00:07)
vintan tty2 :1 Fri Sep 28 03:13 - down (00:04)
reboot system boot 4.15.0-30-generi Fri Sep 28 03:12 - 03:18 (00:06)
reboot system boot 4.15.0-30-generi Thu Sep 19 16:22 - 16:23 (00:00)
reboot system boot 4.15.0-30-generi Thu Sep 19 15:58 - 16:23 (00:24)
vintan tty2 :1 Thu Sep 19 11:48 - down (00:00)
reboot system boot 4.15.0-30-generi Thu Sep 19 11:47 - 11:48 (00:01)
vintan tty2 :1 Thu Sep 19 11:45 - crash (00:01)
reboot system boot 4.15.0-30-generi Thu Sep 19 11:44 - 11:48 (00:04)
vintan tty2 :1 Wed Sep 18 02:33 - down (17:14)
vintan tty2 :1 Wed Sep 18 02:15 - 02:24 (00:08)
reboot system boot 4.15.0-30-generi Wed Sep 18 02:14 - 19:47 (17:32)
vintan tty2 :1 Tue Sep 17 19:47 - 19:48 (00:00)
reboot system boot 4.15.0-30-generi Tue Sep 17 19:46 - 19:47 (1+00:00)

wtmp begins Tue Sep 17 19:46:50 2019
root@vintan-HP-Laptop-14s-cf0xxx:/home/vintan# finger
The program 'finger' is currently not installed. You can install it by typing:
apt install finger
root@vintan-HP-Laptop-14s-cf0xxx:/home/vintan# w
01:03:37 up 1:27, 1 user, load average: 0.42, 0.26, 0.11
USER    TTY      FROM             LOGIN@   IDLE   JCPU   PCPU WHAT
vintan  tty2 :1          23:38 1:27m 2:33  5.67s /usr/lib/gnome-terminal/gnome-terminal-server
root@vintan-HP-Laptop-14s-cf0xxx:/home/vintan# top

top - 01:03:58 up 1:27, 1 user, load average: 0.38, 0.26, 0.11
Tasks: 255 total, 1 running, 181 sleeping, 0 stopped, 0 zombie
%Cpu(s): 0.2 us, 0.2 sy, 0.0 ni, 99.6 id, 0.0 wa, 0.0 hi, 0.0 si, 0.0 st
KiB Mem : 3919896 total, 1770168 free, 706844 used, 1442884 buff/cache
KiB Swap: 999932 total, 999932 free, 0 used. 2676084 avail Mem

PID USER PR NI VIRT RES SHR S %CPU %MEM TIME+ COMMAND
1258 vintan 20 0 742844 104800 75828 S 1.3 5.4 0:46.71 Xorg
1427 vintan 20 0 2190116 212544 82376 S 1.0 5.4 1:25.96 gnome-shell
1374 vintan 20 0 42896 3508 3180 S 0.7 0.1 0:00.11 dbus-daemon

root@vintan-HP-Laptop-14s-cf0xxx: /home/vintan
File Edit View Search Terminal Help

Rab 01:03

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root@vintan-HP-Laptop-14s-cf0xxx: /home/vintan
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1427 vintan 20 0 2190244 212556 82380 S 1.3 5.4 1:26.95 gnome-shell
1258 vintan 20 0 742676 104698 75636 S 1.0 2.7 0:47.68 Xorg
23547 root 20 0 49084 3724 3096 R 0.7 0.1 0:00.12 top
22912 Vintan 20 0 518032 37780 27896 S 0.3 1.0 0:06.58 gnome-terminal-
  1 root 20 0 185100 5788 4052 S 0.0 0.1 0:02.17 systemd
  2 root 20 0 0 0 0 S 0.0 0.0 0:00.01 kthreadd
  4 root 0 -20 0 0 0 I 0.0 0.0 0:00.00 kworker/0:0H
  6 root 0 -20 0 0 0 I 0.0 0.0 0:00.00 mm_percpu_wq
  7 root 20 0 0 0 0 S 0.0 0.0 0:00.00 ksoftirqd/0
  8 root 20 0 0 0 0 I 0.0 0.0 0:01.50 rcu_sched
  9 root 20 0 0 0 0 I 0.0 0.0 0:00.00 rcu_bh
 10 root rt 0 0 0 0 S 0.0 0.0 0:00.00 migration/0
 11 root rt 0 0 0 0 S 0.0 0.0 0:00.01 watchdog/0
 12 root 20 0 0 0 0 S 0.0 0.0 0:00.00 cpuhp/0
 13 root 20 0 0 0 0 S 0.0 0.0 0:00.00 cpuhp/1
 14 root rt 0 0 0 0 S 0.0 0.0 0:00.01 watchdog/1
 15 root rt 0 0 0 0 S 0.0 0.0 0:00.00 migration/1
 16 root 20 0 0 0 0 S 0.0 0.0 0:00.00 ksoftirqd/1
 18 root 0 -20 0 0 0 I 0.0 0.0 0:00.00 kworker/1:0H
 19 root 20 0 0 0 0 S 0.0 0.0 0:00.00 cpuhp/2
 20 root rt 0 0 0 0 S 0.0 0.0 0:00.01 watchdog/2
 21 root rt 0 0 0 0 S 0.0 0.0 0:00.00 migration/2
 22 root 20 0 0 0 0 S 0.0 0.0 0:00.01 ksoftirqd/2
 24 root 0 -20 0 0 0 I 0.0 0.0 0:00.00 kworker/2:0H
 25 root 20 0 0 0 0 S 0.0 0.0 0:00.00 cpuhp/3
 26 root rt 0 0 0 0 S 0.0 0.0 0:00.01 watchdog/3
 27 root rt 0 0 0 0 S 0.0 0.0 0:00.00 migration/3
 28 root 20 0 0 0 0 S 0.0 0.0 0:00.00 ksoftirqd/3

root@vintan-HP-Laptop-14s-cf0xxx:/home/vintan# echo $$SHELL
/bin/bash
root@vintan-HP-Laptop-14s-cf0xxx:/home/vintan# echo {con,pre}{sent,fer}{s,ed}
consents consented confers conferred presents presented prefers preferred
root@vintan-HP-Laptop-14s-cf0xxx:/home/vintan# man is
No manual entry for is
root@vintan-HP-Laptop-14s-cf0xxx:/home/vintan# 

root@vintan-HP-Laptop-14s-cf0xxx: /home/vintan
File Edit View Search Terminal Help

Rab 01:05

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```
root@vintan-HP-Laptop-14s-cf0xxx: /home/vintan
File Edit View Search Terminal 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

    --ips  print ips 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
Manual page who(1) line 1 (press h for help or q to quit)

root@vintan-HP-Laptop-14s-cf0xxx: /home/vintan
File Edit View Search Terminal 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

    --ips  print ips 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
Manual page who(1) line 1 (press h for help or q to quit)
```

```
root@vintan-HP-Laptop-14s-cf0xxx: /home/vintan
File Edit View Search Terminal Help
WHO(1)                               User Commands                               WHO(1)
No manual entry for is
root@vintan-HP-Laptop-14s-cf0xxx:/home/vintan# man who
root@vintan-HP-Laptop-14s-cf0xxx:/home/vintan# who can tell me about linux
who: extra operand `me'
Try 'who --help' for more information.
root@vintan-HP-Laptop-14s-cf0xxx:/home/vintan# last
vintan  tty2      :1      Tue Nov  5 23:38  still logged in
reboot  system boot 4.15.0-30-generici Tue Nov  5 23:36  still running
vintan  tty2      :1      Tue Nov  5 22:17 - down  (00:46)
vintan  tty2      :1      Tue Nov  5 22:00 - 22:15  (00:15)
reboot  system boot 4.15.0-30-generici Tue Nov  5 21:57 - 23:04  (01:07)
vintan  tty2      :1      Sat Oct 19 05:39 - down  (00:00)
reboot  system boot 4.15.0-30-generici Sat Oct 19 05:37 - 05:39  (00:02)
reboot  system boot 4.15.0-30-generici Tue Oct 15 14:42 - 05:39  (3+14:56)
reboot  system boot 4.15.0-30-generici Sun Oct 13 22:17 - 22:18  (00:01)
reboot  system boot 4.15.0-30-generici Sun Oct 13 20:06 - 20:07  (00:01)
reboot  system boot 4.15.0-30-generici Sat Oct 12 09:43 - 09:44  (00:01)
vintan  tty2      :1      Fri Oct 11 02:38 - down  (00:04)
reboot  system boot 4.15.0-30-generici Fri Oct 11 02:36 - 02:43  (00:07)
vintan  tty2      :1      Fri Sep 28 03:13 - down  (00:04)
reboot  system boot 4.15.0-30-generici Fri Sep 28 03:12 - 03:18  (00:05)
reboot  system boot 4.15.0-30-generici Thu Sep 19 16:22 - 16:23  (00:00)
reboot  system boot 4.15.0-30-generici Thu Sep 19 15:58 - 16:23  (00:24)
vintan  tty2      :1      Thu Sep 19 11:48 - down  (00:00)
reboot  system boot 4.15.0-30-generici Thu Sep 19 11:47 - 11:48  (00:01)
vintan  tty2      :1      Thu Sep 19 11:45 - crash  (00:01)
reboot  system boot 4.15.0-30-generici Thu Sep 19 11:44 - 11:48  (00:04)
vintan  tty2      :1      Wed Sep 18 02:33 - down  (17:14)
vintan  tty2      :1      Wed Sep 18 02:15 - 02:24  (00:08)
reboot  system boot 4.15.0-30-generici Wed Sep 18 02:14 - 19:47  (17:32)
vintan  tty2      :1      Tue Sep 17 19:47 - 19:48  (00:00)
reboot  system boot 4.15.0-30-generici Tue Sep 17 19:46 - 19:47  (1+00:00)

wtmp begins Tue Sep 17 19:46:50 2019
root@vintan-HP-Laptop-14s-cf0xxx:/home/vintan#
```

```
root@vintan-HP-Laptop-14s-cf0xxx:/home/vintan
File Edit View Search Terminal Help

root@vintan-HP-Laptop-14s-cf0xxx:/home/vintan# fdisk -l
fdisk: invalid option -- 'l'

Usage:
fdisk [options] <disk>      change partition table
fdisk [options] -l [<disk>] list partition table(s)

Display or manipulate a disk partition table.

Options:
-B, --sector-size <size>      physical and logical sector size
-B, --protect-boot             don't erase bootbits when create a new label
-c, --compatibility[=<mode>]   mode is 'dos' or 'nondos' (default)
-L, --color[=<when>]          colorize output (auto, always or never)
-l, --list                     display partitions end exit
-o, --output <list>           output columns
-t, --type <type>             recognize specified partition table type only
-u, --units[=<unit>]          display units: 'cylinders' or 'sectors' (default)
-s, --getsz                    display device size in 512-byte sectors [DEPRECATED]
--bytes                        print SIZE in bytes rather than in human readable format

-C, --cylinders <number>       specify the number of cylinders
-H, --heads <number>           specify the number of heads
-S, --sectors <number>         specify the number of sectors per track

-h, --help          display this help and exit
-V, --version       output version information and exit

Available columns (for -o):
gpt: Device Start End Sectors Size Type UUID Attrs Name UUID
dos: Device Start End Sectors Cylinders Size Type Id Attrs Boot End-C/H/S Start-C/H/S
bsd: Slice Start End Sectors Cylinders Size Type Bsize Cpg Fsize
sgi: Device Start End Sectors Cylinders Size Type Id Attrs

root@vintan-HP-Laptop-14s-cf0xxx:/home/vintan Rab 01:07
```

```
root@vintan-HP-Laptop-14s-cf0xxx:/home/vintan
File Edit View Search Terminal Help

For more details see fdisk(8).
root@vintan-HP-Laptop-14s-cf0xxx:/home/vintan# user
No command 'user' found, did you mean:
Command 'user' from package 'user' (universe)
Command 'users' from package 'coreutils' (main)
Command 'kuser' from package 'kuser' (universe)
Command 'fuser' from package 'psmisc' (main)
user: command not found
root@vintan-HP-Laptop-14s-cf0xxx:/home/vintan# cat /etc/fstab
bash: cat:/etc/fstab: No such file or directory
root@vintan-HP-Laptop-14s-cf0xxx:/home/vintan# cal 2000
          2000
        Januari        Februari        Maret
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 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
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 3 4 5   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   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
root@vintan-HP-Laptop-14s-cf0xxx:/home/vintan Rab 01:08
```

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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
root@vintan-HP-Laptop-14s-cf0xxx:/home/vintan# 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

root@vintan-HP-Laptop-14s-cf0xxx:/home/vintan# 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@vintan-HP-Laptop-14s-cf0xxx:/home/vintan# bc -l
bc: invalid option -- '1'
usage: bc [options] [file ...]
-h --help          print this usage and exit
-i --interactive   force interactive mode
-l --mathlib        use the predefined math routines
-q --quiet         don't print initial banner
-s --standard      non-standard bc constructs are errors
-w --warn          warn about non-standard bc constructs
-v --version       print version information and exit
root@vintan-HP-Laptop-14s-cf0xxx:/home/vintan# echo 5+4 | bc -l
9
root@vintan-HP-Laptop-14s-cf0xxx:/home/vintan# 
```

```
root@vintan-HP-Laptop-14s-cf0xxx:/home/vintan# pwd
/home/vintan
root@vintan-HP-Laptop-14s-cf0xxx:/home/vintan# history
  1 nanacantik123
  2 cls
  3 clear
  4 echo halo dunia
  5 date
  6 hostname
  7 arch
  8 uname-a
  9 uname -a
 10 cls
 11 close
 12 clear
 13 echo halo dunia
 14 date
 15 hostname
 16 arch
 17 uname -a
 18 dmesg | more
 19 uptime
 20 whoami
 21 who
 22 id
 23 last
 24 finger
 25 w
 26 top
 27 echo $$SHELL
 28 echo {con,pre}{sent,fer}{s,ed}
 29 man is
 30 man who
 31 who can tell me about linux
 32 last
```

```
root@vintan-HP-Laptop-14s-cf0xxx:/home/vintan# lsof -c
File Edit View Search Terminal Help
root@vintan-HP-Laptop-14s-cf0xxx:/home/vintan# lsof -c
dm_crypt          40960  1
snd_soc_skl        90112  0
snd_soc_skl_ipc    65536  1 snd_soc_skl
snd_hda_ext_core   24576  1 snd_soc_skl
snd_soc_sst_dsp    32768  1 snd_soc_skl_ipc
snd_soc_sst_ipc    16384  1 snd_soc_skl_ipc
snd_hda_codec_hdmi  49152  1
snd_soc_acpi       16384  1 snd_soc_skl
snd_hda_codec_realtek 98304  1
uvccvideo          86016  0
wl                 6447184  0
snd_hda_codec_generic 73728  1 snd_hda_codec_realtek
videobuf2_vmalloc   16384  1 uvccvideo
videobuf2_memops   16384  1 videobuf2_vmalloc
videobuf2_v412      24576  1 uvccvideo
snd_soc_core       241664  1 snd_soc_skl
snd_compress        20480  1 snd_soc_core
ac97_bus           16384  1 snd_soc_core
snd_pcm_dmaengine  16384  1 snd_soc_core
snd_hda_intel       40960  6
snd_hda_codec      126976  4 snd_hda_intel,snd_hda_codec_hdmi,snd_hda_codec_generic,snd_hda_codec_realtek
snd_hda_core        81920  7 snd_hda_intel,snd_hda_codec,snd_hda_ext_core,snd_soc_skl,snd_hda_codec_hdmi,snd_hda_codec_generic,snd_hda_codec_realtek
ek
snd_hwdep          20480  1 snd_hda_codec
videobuf2_core      40960  2 uvccvideo,videobuf2_v412
snd_pcm             98304  8 snd_hda_intel,snd_hda_codec,snd_pcm_dmaengine,snd_hda_ext_core,snd_hda_core,snd_soc_skl,snd_hda_codec_hdmi,snd_soc_core
re
cfg80211          622592  1 wl
snd_seq_midi        16384  0
snd_seq_midi_event  16384  1 snd_seq_midi
snd_rawmidi         32768  1 snd_seq_midi
snd_seq             65536  2 snd_seq_midi_event,snd_seq_midi
intel_rapl          20480  0
x86_pkg_temp_thermal 16384  0
intel_powerclamp   16384  0
```

```
root@vintan-HP-Laptop-14s-cf0xxx:/home/vintan
File Edit View Search Terminal Help
vintan 22529 0.0 0.1 68376 5248 pts/2 S+ Nov05 0:00 /usr/lib/x86_64-linux-gnu/gconf/gconfd-2
root 22577 0.0 0.0 43600 2600 ? S Nov05 0:00 dbus-launch --autolaunch=1bdfda59f9fb4cc6ab1f9b880c37c186 --binary-syntax --close-session
root 22578 0.0 0.0 42764 2484 ? Ss Nov05 0:00 /usr/bin/dbus-daemon --fork --print-pid 5 --print-address 7 --session
root 22581 0.0 0.1 178560 4588 ? S1 Nov05 0:00 /usr/lib/dconf/dconf-service
root 22825 0.0 0.0 0 0 ? I Nov05 0:00 [kworker/5:1]
root 22893 0.0 0.7 209556 28992 ? S1 Nov05 0:02 0:00 python3 /usr/lib/software-properties/software-properties-dbus
vintan 22912 0.4 1.1 526124 43376 pts/2 Rl+ 0:02 0:17 /usr/lib/gnome-terminal/gnome-terminal-server
vintan 23034 0.0 0.1 29540 5068 pts/1 Ss 0:21 0:00 bash
root 23061 0.0 0.0 0 0 ? I 0:28 0:00 [kworker/u16:2]
root 23075 0.0 0.2 263648 7984 ? S1 0:31 0:00 gdm-session-worker [pam/gdm-password]
root 23142 0.0 0.0 0 0 ? I 0:39 0:00 [kworker/1:0]
root 23164 0.0 0.0 0 0 ? I 0:47 0:00 [kworker/u16:1]
root 23193 0.0 0.0 0 0 ? I 0:55 0:00 [kworker/u16:0]
root 23241 0.0 0.1 80324 4448 pts/1 S 0:57 0:00 sudo su
root 23242 0.0 0.1 79776 4268 pts/1 S 0:57 0:00 su
root 23243 0.0 0.0 28284 3812 pts/1 S 0:57 0:00 bash
root 23286 0.0 0.0 0 0 ? I 0:00 0:00 [kworker/7:0]
root 23287 0.0 0.0 0 0 ? I 0:00 0:00 [kworker/1:2]
root 23301 0.0 0.0 0 0 ? I 0:01 0:00 [kworker/2:0]
root 23566 0.0 0.0 0 0 ? I 0:01 0:00 [kworker/3:0]
root 23512 0.0 0.0 0 0 ? I 0:02 0:00 [kworker/4:1]
root 23536 0.0 0.0 0 0 ? I 0:03 0:00 [kworker/5:0]
root 23548 0.0 0.0 0 0 ? I 0:03 0:00 [kworker/6:1]
root 23597 0.0 0.0 0 0 ? I 0:06 0:00 [kworker/8:1]
root 23603 0.0 0.0 0 0 ? I 0:06 0:00 [kworker/7:2]
root 23666 0.0 0.0 0 0 ? I 0:07 0:00 [kworker/1:1]
root 23620 0.0 0.0 0 0 ? I 0:08 0:00 [kworker/4:0]
root 23624 0.0 0.0 0 0 ? I 0:08 0:00 [kworker/5:2]
root 23634 0.0 0.0 0 0 ? I 0:09 0:00 [kworker/6:0]
root 23645 0.5 0.0 0 0 ? I 0:09 0:00 [kworker/u16:3]
root 23647 0.7 0.0 0 0 ? I 0:09 0:00 [kworker/u16:4]
root 23648 0.4 0.0 0 0 ? I 0:09 0:00 [kworker/u16:5]
root 23673 0.0 0.0 0 0 ? I 0:11 0:00 [kworker/2:1]
root 23678 1.0 0.0 44436 3364 pts/1 R+ 0:11 0:00 ps -axu
root@vintan-HP-Laptop-14s-cf0xxx:/home/vintan#
```

```
Rab 01:11
File Edit View Search Terminal Help
root 23536 0.0 0.0 0 0 ? I 0:03 0:00 [kworker/5:0]
root 23548 0.0 0.0 0 0 ? I 0:03 0:00 [kworker/6:1]
root 23597 0.0 0.0 0 0 ? I 0:06 0:00 [kworker/8:1]
root 23663 0.0 0.0 0 0 ? I 0:06 0:00 [kworker/7:2]
root 23666 0.0 0.0 0 0 ? I 0:07 0:00 [kworker/1:1]
root 23620 0.0 0.0 0 0 ? I 0:08 0:00 [kworker/4:0]
root 23624 0.0 0.0 0 0 ? I 0:08 0:00 [kworker/5:2]
root 23634 0.0 0.0 0 0 ? I 0:09 0:00 [kworker/6:0]
root 23645 0.5 0.0 0 0 ? I 0:09 0:00 [kworker/u16:3]
root 23647 0.7 0.0 0 0 ? I 0:09 0:00 [kworker/u16:4]
root 23648 0.4 0.0 0 0 ? I 0:09 0:00 [kworker/u16:5]
root 23673 0.0 0.0 0 0 ? I 0:11 0:00 [kworker/2:1]
root 23678 1.0 0.0 44436 3364 pts/1 R+ 0:11 0:00 ps -axu
root@vintan-HP-Laptop-14s-cf0xxx:/home/vintan# lspci
00:00.0 Host bridge: Intel Corporation Device 5914 (rev 08)
00:02.0 VGA compatible controller: Intel Corporation Device 5917 (rev 07)
00:04.0 Signal processing controller: Intel Corporation Skylake Processor Thermal Subsystem (rev 08)
00:08.0 System peripheral: Intel Corporation Sky Lake Gaussian Mixture Model
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 (rev 21)
00:15.1 Signal processing controller: Intel Corporation Sunrise Point-LP Serial IO I2C Controller (rev 21)
00:16.0 Communication controller: Intel Corporation Sunrise Point-LP CSME HECI (rev 21)
00:17.0 RAID bus controller: Intel Corporation 82801 Mobile SATA Controller [RAID mode] (rev 21)
00:1e.0 PCI bridge: Intel Corporation Device 9d10 (rev f1)
00:1e.4 PCI bridge: Intel Corporation Sunrise Point-LP PCI Express Root Port (rev f1)
00:1e.5 PCI bridge: Intel Corporation Sunrise Point-LP PCI Express Root Port (rev f1)
00:1f.0 ISA bridge: Intel Corporation Device 9d4e (rev 21)
00:1f.2 Memory controller: Intel Corporation Sunrise Point-LP PMC (rev 21)
00:1f.3 Audio device: Intel Corporation Device 9d71 (rev 21)
00:1f.4 SMBus: Intel Corporation Sunrise Point-LP SMBus (rev 21)
01:00.0 Display controller: Advanced Micro Devices, Inc. [AMD/ATI] Topaz XT [Radeon R7 M260/M265] (rev c3)
02:00.0 Ethernet controller: Realtek Semiconductor Co., Ltd. RTL8111/8168/8411 PCI Express Gigabit Ethernet Controller (rev 15)
03:00.0 Network controller: Realtek Semiconductor Co., Ltd. Device d723
root@vintan-HP-Laptop-14s-cf0xxx:/home/vintan#
```

Rab 01:12

```
root@vintan-HP-Laptop-14s-cf0xxx:/home/vintan
File Edit View Search Terminal Help
root 23673 0.0 0.0 0 0 ? I 01:11 0:00 [kworker/2:1]
root 23678 1.0 0.0 44436 3364 pts/1 R+ 01:11 0:00 ps -axu
root@vintan-HP-Laptop-14s-cf0xxx:/home/vintan# lspci
00:00.0 Host bridge: Intel Corporation Device 5914 (rev 08)
00:02.0 VGA compatible controller: Intel Corporation Device 5917 (rev 07)
00:04.0 Signal processing controller: Intel Corporation Skylake Processor Thermal Subsystem (rev 08)
00:08.0 System peripheral: Intel Corporation Sky Lake Gaussian Mixture Model
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 (rev 21)
00:15.1 Signal processing controller: Intel Corporation Sunrise Point-LP Serial IO I2C Controller (rev 21)
00:16.0 Communication controller: Intel Corporation Sunrise Point-LP CSME HECI (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 Device 9d10 (rev f1)
00:1c.4 PCI bridge: Intel Corporation Sunrise Point-LP PCI Express Root Port (rev f1)
00:1c.5 PCI bridge: Intel Corporation Sunrise Point-LP PCI Express Root Port (rev f1)
00:1f.0 ISA bridge: Intel Corporation Device 9d4e (rev 21)
00:1f.2 Memory controller: Intel Corporation Sunrise Point-LP PMC (rev 21)
00:1f.3 Audio device: Intel Corporation Device 9d71 (rev 21)
00:1f.4 SMBus: Intel Corporation Sunrise Point-LP SMBus (rev 21)
01:00.0 Display controller: Advanced Micro Devices, Inc. [AMD/ATI] Topaz XT [Radeon R7 M260/M265] (rev c3)
02:00.0 Ethernet controller: Realtek Semiconductor Co., Ltd. RTL8111/8168/8411 PCI Express Gigabit Ethernet Controller (rev 15)
03:00.0 Network controller: Realtek Semiconductor Co., Ltd. Device d723
root@vintan-HP-Laptop-14s-cf0xxx:/home/vintan# free
total used free shared buff/cache available
Mem: 3919896 716164 1757468 238768 1446264 2671092
Swap: 999932 0 999932
root@vintan-HP-Laptop-14s-cf0xxx:/home/vintan# cat /proc/cpuinfo
bash: cat: No such file or directory
root@vintan-HP-Laptop-14s-cf0xxx:/home/vintan# cat /proc/cpuinfo
bash: cat /proc/cpuinfo: No such file or directory
root@vintan-HP-Laptop-14s-cf0xxx:/home/vintan# finger root
The program 'finger' is currently not installed. You can install it by typing:
apt install finger
root@vintan-HP-Laptop-14s-cf0xxx:/home/vintan# 
```



1. Distro linux yang ada saat ini (5) :

- a. Ubuntu

Ubuntu adalah salah satu distribusi Linux yang berbasiskan pada Debian. Proyek Ubuntu disponsori oleh Canonical Ltd (perusahaan milik Mark Shuttleworth). Nama Ubuntu diambil dari nama sebuah konsep ideologi di Afrika Selatan. “Ubuntu” berasal dari bahasa kuno Afrika, yang berarti “rasa perikemanusian terhadap sesama manusia”.

- b. Centos

Centos adalah sistem operasi bebas yang didasarkan pada Red Hat Enterprise Linux (RHEL). centos singkatan dari Community enterprise Operating System (Sistem Operasi Perusahaan buatan Komunitas/Masyarakat).c.

- c. Debian

Debian adalah sistem operasi berbasis kernel Linux.

Debian adalah ‘kernel independen’, yaitu sistem operasi Debian dikembangkan murni tanpa mendasarkan pada sistem operasi yang telah ada.

- d. Slackware

Slackware merupakan sistem operasi yang dibuat oleh Patrick Volkerding dari slackwarelinux, Inc. Slackware merupakan salah satu distro awal, dan merupakan yang tertua yang masih dikelola. Tujuan utama Slackware adalah stabilitas dan kemudahan desain, serta menjadi distribusilinux yang paling mirip Unix.

- e. Linux Mint

Linux Mint adalah sistem operasi berbasis Linux untuk PC. Inti dari linuxmint adalah Ubuntu, sehingga aplikasi yang dapat berjalan di Ubuntu, juga bisa berjalan pada linuxmint.2.

2. Perintah Terminal Linux

1. **Head** Menampilkan beberapa baris awal pada file teks.
2. **Nano** Mengedit isi dari suatu file teks.
3. **Vi** Teks editor yang sangat ampuh yang hampir selalu terdapat dalam setiap instalasi Linux
4. **Wc** Menghitung jumlah baris, kata atau karakter dari sebuah file teks.
5. **Man** menampilkan dokumentasi (manual pages) dari sebuah perintah.

6. **Apropos** menampilkan dokumentasi (manual pages) yang berhubungan dengan kunci yang telah diberikan
7. **Find** Memindai dan mencari pada struktur direktori dari file
8. **Tar** Perintah untuk bekerja dengan file arsip.
9. **Gzip** Melakukan kompresi pada file atau folder menjadi file dengan ekstensi.gz
10. **Date** Menampilkan jam dan tanggal waktu sekarang.
11. **Cal** Menampilkan kalender
12. **Touch** Mengubah waktu modifikasi dari sebuah file atau membuat sebuah file kosong (0 byte)
13. **Ps** Menampilkan proses yang berjalan pada sistem.
14. **Kill** Mematikan (atau memberikan sinyal lain pada) sebuah proses.
15. **Su** Super user
16. **Userdel** Menghapus user dari sistem.
17. **Passwd** Mengganti password user
18. **Ifconfig**— Mengkonfigurasi interface jaringan.
19. **Halt** Mematikan system
20. **Reboot** Me-restart system

3. Pengertian

- a) Init 0 => Digunakan utk maintenance, diagnostic hardware, booting selain dari diskmisal dari cdrom.
- b) 2. Init 1 => Single user mode, digunakan utk menambahkan patches, backup/restoresystem. Di level ini kita bisa menjalankan/access semua file tapi user lain tidak bisa login ke dalam system kita.
- c) Init 2 => multiuser mode, biasanya utk digunakan dalam network. Tapi disini tidak ada resources yang di share.
- 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.
- e) Init 4 ==> utk alternative multiuser mode tetapi saat ini belum bisa digunakan.
- f) Init 5 ==> utk shutdown/ power off.
- g) Init 6 ==> men stop operating system kemudian reboot dan kembali ke initdefault nya yang ada di /etc/inittab

4. Maksud dari perintah “quota”

Menampilkan sisa disk space, menampilkan ruang disk dan batasanya.