

Praktikum modul 5

makna response nya

- 1 sudo su = set user do superuser (atur user dan lakukan akses super user)
- 2 echo halo dunia = cout<<"halo dunia" (keluarkan output terminal)
- 3 date = time
- 4 hostname = nama komputer
- 5 arch = arsitektur os
- 6 uname -a = versi kernel
- 7 dmesg | more = seperti dump boot process
- 8 uptime = waktu nyala komputer
- 9 whoami = user terminal berjalan
- 10 who = saat ini siapa yang login
- 11 id = id user terminal berjalan
- 12 last = last login /boot
- 13 finger = status operating sis tem saat ini
- 14 w = informasi user (all yang nyala maupun tidak)
- 15 top = bukankah ini keluaran proses saat ini / task manager
- 16 echo \$SHELL = shell / terminal yang dipakai
- 18 echo {con,pre}{sent,fer}{s,ed} = combinatorial
- 19 man ls = help apa itu ls
- 20 man who = help apa itu who
- 21 who can tell me about linux =what is this it just make an error because of the arguments more than 3
- 22 last = last login /boot
- 23 clear = clear all output
- 26 fdisk -l = list all mounted device on computers
- 27 users = user login saat ini
- 28 cat /etc/fstab = lihat file /etc/fstab dan dup menuju terminal
- 29 cal 2000 = kalender <tahun>
- 30 cal 9 1752 = kalender <bulan> <tahun>
- 31 cal 10 2007 = kalender <bulan> <tahun>
- 32 bc -l = bc (basic calculator???)
- 34 echo 5+4 | bc -l = tulis 5+4 dengan diproses oleh modul bc
- 35 yes please = tulis please hingga dihentikan paksa
- 36 pwd = lokasi direktori saat ini
- 37 history = list command yang tertulis di file .bash_history [user]
.sudo_as_admin_successful [root]
- 38 tail -f /var/log/message = lihat baris terakhir dari file yang dituju
- 39 lsmod = modul yang terload saat ini
- 40 ps -axu = log semua proses penggunaan serta siapa yang memproses
- 41 lspci = list semua yg tersambung pada pci adapter
- 42 free = list memory pada komputer baik main / swap
- 43 cat /proc/cpuinfo = keluarkan isi dari /proc/cpuinfo isinya ya mirip sama specsheet processor yang digunakan
- 44 finger root = keluarkan informasi user root

papan tulis

1. ls berfungsi untuk melihat isi file dari direktori aktif
2. ls -l berfungsi untuk menampilkan semua file dalam direktori dengan format panjang
3. whatis ls berfungsi untuk menampilkan apa itu ls
4. ls/home berfungsi untuk menampilkan nama direktori home

5. mkdir informatika berfungsi untuk membuat direktori informatika
6. rmdir informatika berfungsi untuk menghapus direktori informatika
7. which mkdir berfungsi untuk menunjukan lokasi suatu perintah
8. whereis mkdir berfungsi untuk melihat lokasi pembuatan direktori
9. free berfungsi untuk melihat kapasitas free memori
10. pstree berfungsi untuk menyatakan system ditampilkan dalam bentuk hirarki parentchild
11. touch rpl.txt berfungsi untuk membuat file txt
12. rm rpl.txt berfungsi untuk menghapus file txt
13. df berfungsi untuk melaporkan penggunaan ruang dalam disk
14. du berfungsi untuk mengestimasi penggunaan data
15. ls -l/home menampilkan isi direktori home

berikut saya dumpkan semua keluaran terminalnya [setelah tugas]

Tugas

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

1) Ubuntu.

Ubuntu berasal dari bahasa Afrika yakni “Humanity to Others” yang berarti “Kemanusiaan Untuk Sesama”. Atas dasar itulah diluncurkannya Linux Ubuntu yang dirilis pada 20 Oktober 2004. Tujuannya adalah agar selalu gratis tanpa adanya biaya lisensi, dan siap untuk dipergunakan dalam kondisi yang stabil.

2) Open Suse.

Bermula pada awal tahun 1990-an dimana linux masih berukuran 50 keping dan dapat diunduh di internet. Pada 2 September 1992, SuSE GmbH mendirikan di Jerman dan mulai menjual linux.

3) 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 mengapa saya menyebutnya distro Linux terbaik untuk pengguna baru adalah kemampuannya untuk memberikan pengalaman yang tidak biasa kepada pengguna. Ini berarti Anda tidak perlu menghabiskan banyak waktu untuk menginstal distro dan paket sebelum Anda dapat menyelesaikan beberapa pekerjaan nyata.

4) Blankon.

BlankOn Linux adalah sebuah distribusi Linux berbasis Debian yang dikembangkan oleh tim pengembang BlankOn Indonesia dengan dukungan dari YPLI. YPLI merupakan pengembang BlankOn pertama tahun 2004 dengan nama kode Bianglala. BlankOn merupakan turunan dari distro Fedora Core 3, namun berakhir sampai versi 1.1 dan akhirnya mati suri. Tahun 2007 pengembang BlankOn mulai dibangkitkan lagi oleh YLPI dengan turunan dari Ubuntu versi 7.10.5) CentOS.

Merupakan singkatan dari Community Enterprise Operating System dan

merupakan salah satu contoh Distro Linux yang dikembangkan oleh The CentOS Project. Sistem operasi ini dibuat menggunakan kode sumber yang berasal dari Red Hat. Oleh karena itu, dalam hal produk CentOS ini sangatlah mirip dengan Red Hat Enterprise Linux.

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

- a. cal= menampilkan kalender
- b. cat= menampilkan isi dari sebuah file
- c. cd= mengganti atau berpindah direktori
- d. cfdisk= memanipulasi tabel partisi
- e. chgrp= mengubah kepemilikan grup dari user
- f. chmod= mengubah hak izin akses dari file/direktori
- g. chown= mengubah kepemilikan dari suatu grup
- h. clear= Membersihkan layar terminal
- i. cp= menyalin file ke lokasi lain
- j. cron= daemon yang digunakan untuk menjalankan perintah yang dijadwalkan
- k. crontab= penjadwalan perintah yang dijalankan di lain waktu
- l. cut= membagi file menjadi beberapa bagian
- m. date= menampilkan dan mengubah waktu dan tanggal
- n. echo= menampilkan tulisan dilayar
- o. exit= keluar dari shell
- p. less= menampilkan output satu layar terminal
- q. logout= keluar dari sesi login shell
- r. mkdir= mebuat direktori
- s. ping= melakukan test sambungan jaringan
- t. pwd= menampilkan lokasi kerja user pada saat itu

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

1) init 0 : Digunakan untuk maintenance, diagnostic hardware, booting selain dari disk misal dari cdroom.

command : init 0, shutdown -i02) , shutdown 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

3) init 2 : Multiuser mode, biasanya untuk digunakan dalam network. tapi disini tidak ada resources yang di share.

command: init2, shutdown -i2

4) init 3 : Memperluas multiuser mode, kita bisa membuat local resources share pada network kita. sehingga kita bisa berbagi data dilevel ini dalam network.

command: init 3, shutdown -i3

5) init 4 : Untuk alternative multiuser mode tetapi saat ini belum bisa digunakan.

command: init4, shutdown -i4

6) init 5 : Untuk shutdown/ power off.

command: init5-i

7)

init 6 : Memberhentikan operating system kemudian reebot dan kembali ke init defaultnya yang ada di etc/inittab.

command : init 6, shutdown -i6

4. Jelaskan maksud dari perintah 'quota'!

Perintah quota berfungsi untuk menampilkan statistik penggunaan disk, limit

ruang kosong yang tersedia untuk sebuah user atau group. Jika dijalankan tanpa argumen, hanya akan menampilkan kuota disk dari user.

DUMP TERMINAL

```
ubuntu@ubuntu:~$ sudo su
root@ubuntu:/home/ubuntu# echo halo dunia
halo dunia
root@ubuntu:/home/ubuntu# date
Sat Dec 28 03:00:22 UTC 2019
root@ubuntu:/home/ubuntu# hostname
ubuntu
root@ubuntu:/home/ubuntu# arch
x86_64
root@ubuntu:/home/ubuntu# uname -a
Linux ubuntu 4.4.0-31-generic #50-Ubuntu SMP Wed Jul 13 00:07:12 UTC 2016 x86_64 x86_64
x86_64 GNU/Linux
root@ubuntu:/home/ubuntu# dmesg | more
[ 0.000000] Initializing cgroup subsys cpuset
[ 0.000000] Initializing cgroup subsys cpu
[ 0.000000] Initializing cgroup subsys cpuacct
[ 0.000000] Linux version 4.4.0-31-generic (buildd@lgw01-16) (gcc version 5.3.1 20160413
(Ubuntu 5.3.1-14ubuntu2.1) ) #50-Ubuntu SMP Wed Jul 13 00:07:12 UTC 2016 (Ubuntu 4.4.0-
31.50-generic 4.4.13)
[ 0.000000] Command line: BOOT_IMAGE=/casper/vmlinuz.efi
file=/cdrom/preseed/ubuntu.seed boot=casper quiet splash ---
[ 0.000000] KERNEL supported cpus:
[ 0.000000] Intel GenuineIntel
[ 0.000000] AMD AuthenticAMD
[ 0.000000] Centaur CentaurHauls
[ 0.000000] tseg: 00cf800000
[ 0.000000] x86/fpu: xstate_offset[2]: 576, xstate_sizes[2]: 256
[ 0.000000] x86/fpu: Supporting XSAVE feature 0x01: 'x87 floating point registers'
[ 0.000000] x86/fpu: Supporting XSAVE feature 0x02: 'SSE registers'
[ 0.000000] x86/fpu: Supporting XSAVE feature 0x04: 'AVX registers'
[ 0.000000] x86/fpu: Enabled xstate features 0x7, context size is 832 bytes, using 'standard'
format.
[ 0.000000] x86/fpu: Using 'eager' FPU context switches.
[ 0.000000] e820: BIOS-provided physical RAM map:
[ 0.000000] BIOS-e820: [mem 0x0000000000000000-0x0000000000009fff] usable
[ 0.000000] BIOS-e820: [mem 0x0000000000010000-0x00000000000cc913fff] usable
[ 0.000000] BIOS-e820: [mem 0x00000000000cc914000-0x00000000000cca36fff] reserved
[ 0.000000] BIOS-e820: [mem 0x00000000000cca37000-0x00000000000ccd37fff] usable
[ 0.000000] BIOS-e820: [mem 0x00000000000ccd38000-0x00000000000cd934fff] ACPI NVS
[ 0.000000] BIOS-e820: [mem 0x00000000000cd935000-0x00000000000ce5c5fff] reserved
[ 0.000000] BIOS-e820: [mem 0x00000000000ce5c6000-0x00000000000ce62efff] type 20
[ 0.000000] BIOS-e820: [mem 0x00000000000ce62f000-0x00000000000cf7fffff] usable
[ 0.000000] BIOS-e820: [mem 0x00000000000f8000000-0x00000000000fbfffff] reserved
[ 0.000000] BIOS-e820: [mem 0x00000000000fe600000-0x00000000000fe6fffff] reserved
[ 0.000000] BIOS-e820: [mem 0x00000000000feb80000-0x00000000000fec01fff] reserved
[ 0.000000] BIOS-e820: [mem 0x00000000000fec10000-0x00000000000fec10fff] reserved
[ 0.000000] BIOS-e820: [mem 0x00000000000fed00000-0x00000000000fed00fff] reserved
```

```

[ 0.000000] BIOS-e820: [mem 0x00000000fed40000-0x00000000fed44fff] reserved
[ 0.000000] BIOS-e820: [mem 0x00000000fed80000-0x00000000fed8ffff] reserved
[ 0.000000] BIOS-e820: [mem 0x00000000fedc0000-0x00000000fedc0fff] reserved
[ 0.000000] BIOS-e820: [mem 0x00000000fedc2000-0x00000000fedc8fff] reserved
[ 0.000000] BIOS-e820: [mem 0x00000000fee00000-0x00000000feefffff] reserved
[ 0.000000] BIOS-e820: [mem 0x00000000ff000000-0x00000000ffffffff] reserved
[ 0.000000] BIOS-e820: [mem 0x0000000010000000-0x0000000010efffff] usable
[ 0.000000] NX (Execute Disable) protection: active
[ 0.000000] efi: EFI v2.40 by American Megatrends
[ 0.000000] efi: ESRT=0xce5c2218 ACPI=0xccdbc000 ACPI 2.0=0xccdbc000
SMBIOS=0xf05b0 SMBIOS 3.0=0xf05d0 MPS=0xfd750
[ 0.000000] esrt: Reserving ESRT space from 0x00000000ce5c2218 to 0x00000000ce5c2250.
[ 0.000000] SMBIOS 3.0.0 present.
[ 0.000000] e820: update [mem 0x00000000-0x00000fff] usable ==> reserved
[ 0.000000] e820: remove [mem 0x000a0000-0x000fffff] usable
[ 0.000000] e820: last_pfn = 0x10f000 max_arch_pfn = 0x400000000
[ 0.000000] MTRR default type: uncachable
[ 0.000000] MTRR fixed ranges enabled:
[ 0.000000] 00000-9FFFF write-back
[ 0.000000] A0000-BFFFF write-through
[ 0.000000] C0000-FFFFFF write-protect
[ 0.000000] MTRR variable ranges enabled:
[ 0.000000] 0 base 000000000000 mask FFFF80000000 write-back
[ 0.000000] 1 base 000080000000 mask FFFFC0000000 write-back
[ 0.000000] 2 base 0000C0000000 mask FFFFF0000000 write-back
[ 0.000000] 3 base 0000CF800000 mask FFFFFFF800000 uncachable
[ 0.000000] 4 disabled
[ 0.000000] 5 disabled
[ 0.000000] 6 disabled
[ 0.000000] 7 disabled
[ 0.000000] TOM2: 0000000012f00000 aka 4848M
root@ubuntu:/home/ubuntu# uptime
 03:01:03 up 1:40, 1 user, load average: 1.21, 1.21, 1.11
root@ubuntu:/home/ubuntu# whoami
root
root@ubuntu:/home/ubuntu# who
ubuntu tty7      2019-12-28 08:20 (:0)
root@ubuntu:/home/ubuntu# id
uid=0(root) gid=0(root) groups=0(root)
root@ubuntu:/home/ubuntu# last
ubuntu tty7      :0          Sat Dec 28 08:20   gone - no logout
reboot system boot 4.4.0-31-generic Sat Dec 28 08:20   still running

```

wtmp begins Sat Dec 28 08:20:26 2019

```
root@ubuntu:/home/ubuntu# finger
```

Login	Name	Tty	Idle	Login Time	Office	Office Phone
ubuntu	Live session user	tty7		Dec 28 08:20 (:0)		

```
root@ubuntu:/home/ubuntu# w
```

03:01:27 up 1:41, 1 user, load average: 1.15, 1.19, 1.11

USER	TTY	FROM	LOGIN@	IDLE	JCPU	PCPU	WHAT
ubuntu	tty7	:0	08:20	?	2:28	0.81s	/sbin/upstart --user

```
root@ubuntu:/home/ubuntu# top
```

```

top - 03:01:38 up 1:41, 1 user, load average: 1.11, 1.18, 1.10
Tasks: 256 total, 2 running, 253 sleeping, 0 stopped, 1 zombie
%Cpu(s): 10.6 us, 4.2 sy, 0.0 ni, 84.5 id, 0.7 wa, 0.0 hi, 0.0 si, 0.0 st
KiB Mem : 3545012 total, 767464 free, 1178968 used, 1598580 buff/cache
KiB Swap: 0 total, 0 free, 0 used. 1798436 avail Mem

```

PID	USER	PR	NI	VIRT	RES	SHR	S	%CPU	%MEM	TIME+	COMMAND
7806	ubuntu	20	0	475416	100296	48856	R	93.8	2.8	38:52.06	ubiquity
4048	root	20	0	355496	78524	53044	S	6.2	2.2	2:28.63	Xorg
16650	root	20	0	49008	3832	3104	R	6.2	0.1	0:00.02	top
1	root	20	0	185504	6196	4032	S	0.0	0.2	0:08.38	systemd
2	root	20	0	0	0	0	S	0.0	0.0	0:00.00	kthreadd
3	root	20	0	0	0	0	S	0.0	0.0	0:00.14	ksoftirqd/0
5	root	0	-20	0	0	0	S	0.0	0.0	0:00.00	kworker/0:0H
7	root	20	0	0	0	0	S	0.0	0.0	0:08.68	rcu_sched
8	root	20	0	0	0	0	S	0.0	0.0	0:00.00	rcu_bh
9	root	rt	0	0	0	0	S	0.0	0.0	0:00.04	migration/0
10	root	rt	0	0	0	0	S	0.0	0.0	0:00.02	watchdog/0
11	root	rt	0	0	0	0	S	0.0	0.0	0:00.02	watchdog/1
12	root	rt	0	0	0	0	S	0.0	0.0	0:00.03	migration/1
13	root	20	0	0	0	0	S	0.0	0.0	0:00.18	ksoftirqd/1
15	root	0	-20	0	0	0	S	0.0	0.0	0:00.00	kworker/1:0H
16	root	rt	0	0	0	0	S	0.0	0.0	0:00.42	watchdog/2
17	root	rt	0	0	0	0	S	0.0	0.0	0:00.04	migration/2
18	root	20	0	0	0	0	S	0.0	0.0	0:00.26	ksoftirqd/2
20	root	0	-20	0	0	0	S	0.0	0.0	0:00.00	kworker/2:0H
21	root	rt	0	0	0	0	S	0.0	0.0	0:00.03	watchdog/3
22	root	rt	0	0	0	0	S	0.0	0.0	0:00.04	migration/3
23	root	20	0	0	0	0	S	0.0	0.0	0:00.29	ksoftirqd/3
25	root	0	-20	0	0	0	S	0.0	0.0	0:00.00	kworker/3:0H
26	root	20	0	0	0	0	S	0.0	0.0	0:00.00	kdevtmpfs
27	root	0	-20	0	0	0	S	0.0	0.0	0:00.00	netns
28	root	0	-20	0	0	0	S	0.0	0.0	0:00.00	perf
29	root	20	0	0	0	0	S	0.0	0.0	0:00.00	khungtaskd
30	root	0	-20	0	0	0	S	0.0	0.0	0:00.00	writeback
31	root	25	5	0	0	0	S	0.0	0.0	0:00.00	ksmd
32	root	39	19	0	0	0	S	0.0	0.0	0:00.55	khugepaged
33	root	0	-20	0	0	0	S	0.0	0.0	0:00.00	crypto
34	root	0	-20	0	0	0	S	0.0	0.0	0:00.00	kintegrityd
35	root	0	-20	0	0	0	S	0.0	0.0	0:00.00	bioset
36	root	0	-20	0	0	0	S	0.0	0.0	0:00.00	kblockd
37	root	0	-20	0	0	0	S	0.0	0.0	0:00.00	ata_sff
38	root	0	-20	0	0	0	S	0.0	0.0	0:00.00	md
39	root	0	-20	0	0	0	S	0.0	0.0	0:00.00	devfreq_wq
45	root	-51	0	0	0	0	S	0.0	0.0	0:00.00	irq/24-AMD-Vi
47	root	20	0	0	0	0	S	0.0	0.0	0:00.00	kswapd0
48	root	0	-20	0	0	0	S	0.0	0.0	0:00.00	vmstat
49	root	20	0	0	0	0	S	0.0	0.0	0:00.00	fsnotify_mark
50	root	20	0	0	0	0	S	0.0	0.0	0:00.00	ecryptfs-kthrea
66	root	0	-20	0	0	0	S	0.0	0.0	0:00.00	kthrotld
67	root	0	-20	0	0	0	S	0.0	0.0	0:00.00	acpi_thermal_pm

```
68 root    0 -20    0    0    0 S  0.0 0.0  0:00.00 bioset
69 root    0 -20    0    0    0 S  0.0 0.0  0:00.00 bioset
70 root    0 -20    0    0    0 S  0.0 0.0  0:00.00 bioset
71 root    0 -20    0    0    0 S  0.0 0.0  0:00.00 bioset
72 root    0 -20    0    0    0 S  0.0 0.0  0:00.00 bioset
73 root    0 -20    0    0    0 S  0.0 0.0  0:00.00 bioset
74 root    0 -20    0    0    0 S  0.0 0.0  0:00.00 bioset
75 root    0 -20    0    0    0 S  0.0 0.0  0:00.00 bioset
76 root    0 -20    0    0    0 S  0.0 0.0  0:00.00 bioset
77 root    0 -20    0    0    0 S  0.0 0.0  0:00.00 bioset
```

```
root@ubuntu:/home/ubuntu# echo $SHELL
```

```
/bin/bash
```

```
root@ubuntu:/home/ubuntu# echo {con,pre},{sent,fer},{s,ed}
```

```
con,sent,s con,sent,ed con,fer,s con,fer,ed pre,sent,s pre,sent,ed pre,fer,s pre,fer,ed
```

```
root@ubuntu:/home/ubuntu# echo {con,pre}{sent,fer}{s,ed}
```

```
consents consented confers conferred presents presented prefers preferred
```

```
root@ubuntu:/home/ubuntu# man ls
```

```
root@ubuntu:/home/ubuntu# man who
```

```
root@ubuntu:/home/ubuntu# who can tell me about linux
```

```
who: extra operand 'me'
```

```
Try 'who --help' for more information.
```

```
root@ubuntu:/home/ubuntu# last
```

```
ubuntu  tty7      :0          Sat Dec 28 08:20   gone - no logout
```

```
reboot  system boot  4.4.0-31-generic Sat Dec 28 08:20   still running
```

```
wtmp begins Sat Dec 28 08:20:26 2019
```

```
root@ubuntu:/home/ubuntu# clear
```

```
root@ubuntu:/home/ubuntu# fdisk -l
```

```
Disk /dev/ram0: 64 MiB, 67108864 bytes, 131072 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
```

```
Disk /dev/ram1: 64 MiB, 67108864 bytes, 131072 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
```

```
Disk /dev/ram2: 64 MiB, 67108864 bytes, 131072 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
```

```
Disk /dev/ram3: 64 MiB, 67108864 bytes, 131072 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
```

Disk /dev/ram4: 64 MiB, 67108864 bytes, 131072 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

Disk /dev/ram5: 64 MiB, 67108864 bytes, 131072 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

Disk /dev/ram6: 64 MiB, 67108864 bytes, 131072 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

Disk /dev/ram7: 64 MiB, 67108864 bytes, 131072 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

Disk /dev/ram8: 64 MiB, 67108864 bytes, 131072 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

Disk /dev/ram9: 64 MiB, 67108864 bytes, 131072 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

Disk /dev/ram10: 64 MiB, 67108864 bytes, 131072 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

Disk /dev/ram11: 64 MiB, 67108864 bytes, 131072 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

Disk /dev/ram12: 64 MiB, 67108864 bytes, 131072 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

Disk /dev/ram13: 64 MiB, 67108864 bytes, 131072 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

Disk /dev/ram14: 64 MiB, 67108864 bytes, 131072 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

Disk /dev/ram15: 64 MiB, 67108864 bytes, 131072 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

Disk /dev/loop0: 1.4 GiB, 1459982336 bytes, 2851528 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: 111.8 GiB, 120034123776 bytes, 234441648 sectors

Units: sectors of 1 * 512 = 512 bytes

Sector size (logical/physical): 512 bytes / 512 bytes

I/O size (minimum/optimal): 512 bytes / 512 bytes

Disklabel type: gpt

Disk identifier: 3368EC81-6A4B-4BB7-BE0C-25D1F0B77A90

Device	Start	End	Sectors	Size	Type
/dev/sda1	2048	1023999	1021952	499M	Windows recovery environment
/dev/sda2	1024000	1228799	204800	100M	EFI System
/dev/sda3	1228800	1261567	32768	16M	Microsoft reserved
/dev/sda4	1261568	63475711	62214144	29.7G	Microsoft basic data
/dev/sda5	63475712	105418751	41943040	20G	Microsoft basic data
/dev/sda6	105420800	234438655	129017856	61.5G	Microsoft basic data

Disk /dev/sdc: 14.3 GiB, 15376318464 bytes, 30031872 sectors

Units: sectors of 1 * 512 = 512 bytes

Sector size (logical/physical): 512 bytes / 512 bytes

I/O size (minimum/optimal): 512 bytes / 512 bytes

Disklabel type: gpt

Disk identifier: A1418C96-6BF0-4765-B786-DE9B3E3F4D02

```
Device   Start   End Sectors Size Type
/dev/sdc1 2048 30031838 30029791 14.3G Microsoft basic data
root@ubuntu:/home/ubuntu# users
ubuntu
root@ubuntu:/home/ubuntu# cat /etc/fstab
overlay / overlay rw 0 0
tmpfs /tmp tmpfs nosuid,nodev 0 0
root@ubuntu:/home/ubuntu# cal 2000
```

2000

January							February							March						
Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa
			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							May							June						
Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	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																				

July							August							September						
Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa
			1			1	2	3	4	5			1	2						
2	3	4	5	6	7	8	6	7	8	9	10	11	12	3	4	5	6	7	8	9
9	10	11	12	13	14	15	13	14	15	16	17	18	19	10	11	12	13	14	15	16
16	17	18	19	20	21	22	20	21	22	23	24	25	26	17	18	19	20	21	22	23
23	24	25	26	27	28	29	27	28	29	30	31			24	25	26	27	28	29	30
30	31																			

October							November							December						
Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	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@ubuntu:/home/ubuntu# cal 9 1752
```

September 1752

Su	Mo	Tu	We	Th	Fr	Sa
	1	2	14	15	16	
17	18	19	20	21	22	23
24	25	26	27	28	29	30

```
root@ubuntu:/home/ubuntu# cal 10 2007
```

October 2007

Su Mo Tu We Th Fr 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@ubuntu:/home/ubuntu# bc -l
```

bc 1.06.95

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For details type `warranty'.

quit

```
root@ubuntu:/home/ubuntu# echo 5+4
```

 $5+4$

```
root@ubuntu:/home/ubuntu# echo 5+4 | bc -l
```

9

```
root@ubuntu:/home/ubuntu# yes please
```

please

please

please

please

please

please

please

please

please

please

please

please

please

please

please

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please

please

please

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please

```
please
please
please
please
please
please
please^C
root@ubuntu:/home/ubuntu# pwd
/home/ubuntu
root@ubuntu:/home/ubuntu# history
 1 echo halo dunia
 2 echo halo dunia
 3 date
 4 hostname
 5 arch
 6 uname -a
 7 dmesg | more
 8 uptime
 9 whoami
10 who
11 id
12 last
13 finger
14 w
15 top
16 echo $SHELL
17 echo {con,pre},{sent,fer},{s,ed}
18 echo {con,pre}{sent,fer}{s,ed}
19 man ls
20 man who
21 who can tell me about linux
22 last
23 clear
24 fdisk
25 clear
26 fdisk -l
27 users
28 cat /etc/fstab
29 cal 2000
30 cal 9 1752
31 cal 10 2007
32 bc -l
33 echo 5+4
34 echo 5+4 | bc -l
35 yes please
36 pwd
37 history
root@ubuntu:/home/ubuntu# tail -f /var/log/message
tail: cannot open '/var/log/message' for reading: No such file or directory
tail: no files remaining
root@ubuntu:/home/ubuntu# ^C
root@ubuntu:/home/ubuntu# lsmod
```

Module	Size	Used by
rndis_host	16384	0
cdc_ether	16384	1 rndis_host
usbnet	45056	2 rndis_host,cdc_ether
cdc_acm	36864	0
nls_utf8	16384	0
ufs	73728	0
qnx4	16384	0
hfsplus	106496	0
hfs	57344	0
minix	36864	0
ntfs	98304	0
msdos	20480	0
xf	970752	0
libcrc32c	16384	1 xfs
jfs	180224	0
btrfs	987136	0
xor	24576	1 btrfs
raid6_pq	102400	1 btrfs
hid_generic	16384	0
usbhid	49152	0
hid	118784	2 hid_generic,usbhid
bnep	20480	2
kvm_amd	65536	0
asus_nb_wmi	24576	0
kvm	536576	1 kvm_amd
asus_wmi	28672	1 asus_nb_wmi
sparse_keymap	16384	1 asus_wmi
irqbypass	16384	1 kvm
crct10dif_pclmul	16384	0
crc32_pclmul	16384	0
aesni_intel	167936	0
aes_x86_64	20480	1 aesni_intel
lrw	16384	1 aesni_intel
gf128mul	16384	1 lrw
glue_helper	16384	1 aesni_intel
ablk_helper	16384	1 aesni_intel
cryptd	20480	2 aesni_intel,ablk_helper
uvcvideo	90112	0
videobuf2_vmalloc	16384	1 uvcvideo
videobuf2_memops	16384	1 videobuf2_vmalloc
videobuf2_v4l2	28672	1 uvcvideo
videobuf2_core	36864	2 uvcvideo,videobuf2_v4l2
ath3k	20480	0
v4l2_common	16384	1 videobuf2_v4l2
btusb	45056	0
btrtl	16384	1 btusb
videodev	176128	4 uvcvideo,v4l2_common,videobuf2_core,videobuf2_v4l2
btbcm	16384	1 btusb
btintel	16384	1 btusb
bluetooth	520192	10 bnep,ath3k,btbcm,btrtl,btusb,btintel
input_leds	16384	0

```

media                24576 2 uvcvideo,videodev
serio_raw            16384 0
k10temp              16384 0
fam15h_power         16384 0
edac_mce_amd         24576 0
edac_core            53248 0
i2c_piix4            24576 0
arc4                  16384 2
snd_hda_codec_conexant 24576 1
snd_hda_codec_hdmi   53248 1
snd_hda_codec_generic 77824 1 snd_hda_codec_conexant
snd_hda_intel        36864 5
ath9k                143360 0
snd_hda_codec        135168 4
snd_hda_codec_hdmi,snd_hda_codec_conexant,snd_hda_codec_generic,snd_hda_intel
ath9k_common         36864 1 ath9k
snd_hda_core         73728 5
snd_hda_codec_hdmi,snd_hda_codec_conexant,snd_hda_codec_generic,snd_hda_codec,snd_hda_i
ntel
ath9k_hw             466944 2 ath9k_common,ath9k
snd_hwdep            16384 1 snd_hda_codec
snd_pcm              106496 4 snd_hda_codec_hdmi,snd_hda_codec,snd_hda_intel,snd_hda_core
ath                  32768 3 ath9k_common,ath9k,ath9k_hw
mac80211             737280 1 ath9k
snd_seq_midi         16384 0
snd_seq_midi_event   16384 1 snd_seq_midi
snd_rawmidi          32768 1 snd_seq_midi
cfg80211             565248 4 ath,ath9k_common,ath9k,mac80211
snd_seq              69632 2 snd_seq_midi_event,snd_seq_midi
tpm_crb              16384 0
mac_hid              16384 0
snd_seq_device       16384 3 snd_seq,snd_rawmidi,snd_seq_midi
i2c_designware_platform 16384 0
8250_dw              16384 0
i2c_designware_core  20480 1 i2c_designware_platform
snd_timer            32768 2 snd_pcm,snd_seq
snd                  81920 21
snd_hwdep,snd_timer,snd_hda_codec_hdmi,snd_hda_codec_conexant,snd_pcm,snd_seq,snd_rawm
idi,snd_hda_codec_generic,snd_hda_codec,snd_hda_intel,snd_seq_device
soundcore            16384 1 snd
shpchp              36864 0
parport_pc          32768 0
ppdev               20480 0
lp                  20480 0
parport             49152 3 lp,ppdev,parport_pc
autofs4             40960 2
overlay             49152 1
nls_iso8859_1       16384 1
dm_mirror            24576 0
dm_region_hash       24576 1 dm_mirror
dm_log              20480 2 dm_region_hash,dm_mirror
uas                 24576 0

```

```

usb_storage      69632 2 uas
psmouse          126976 0
amdkfd           131072 3
amd_iommu_v2      20480 1 amdkfd
radeon           1515520 1
amdgpu            987136 4
r8169             81920 0
mii               16384 2 r8169,usbnet
i2c_algo_bit     16384 2 amdgpu,radeon
ttm               94208 2 amdgpu,radeon
drm_kms_helper    147456 2 amdgpu,radeon
syscopyarea       16384 1 drm_kms_helper
sysfillrect       16384 1 drm_kms_helper
sysimgblt         16384 1 drm_kms_helper
ahci              36864 0
fb_sys_fops       16384 1 drm_kms_helper
libahci           32768 1 ahci
drm               360448 77 ttm,drm_kms_helper,amdgpu,radeon
wmi               20480 1 asus_wmi
video             40960 1 asus_wmi
fjes              28672 0

```

```
root@ubuntu:/home/ubuntu# ps -axu
```

USER	PID	%CPU	%MEM	VSZ	RSS	TTY	STAT	START	TIME	COMMAND
root	1	0.1	0.1	185504	6196	?	Ss	01:20	0:08	/sbin/init splash ---
root	2	0.0	0.0	0	0	?	S	01:20	0:00	[kthreadd]
root	3	0.0	0.0	0	0	?	S	01:20	0:00	[ksoftirqd/0]
root	5	0.0	0.0	0	0	?	S<	01:20	0:00	[kworker/0:0H]
root	7	0.1	0.0	0	0	?	S	01:20	0:09	[rcu_sched]
root	8	0.0	0.0	0	0	?	S	01:20	0:00	[rcu_bh]
root	9	0.0	0.0	0	0	?	S	01:20	0:00	[migration/0]
root	10	0.0	0.0	0	0	?	S	01:20	0:00	[watchdog/0]
root	11	0.0	0.0	0	0	?	S	01:20	0:00	[watchdog/1]
root	12	0.0	0.0	0	0	?	S	01:20	0:00	[migration/1]
root	13	0.0	0.0	0	0	?	S	01:20	0:00	[ksoftirqd/1]
root	15	0.0	0.0	0	0	?	S<	01:20	0:00	[kworker/1:0H]
root	16	0.0	0.0	0	0	?	S	01:20	0:00	[watchdog/2]
root	17	0.0	0.0	0	0	?	S	01:20	0:00	[migration/2]
root	18	0.0	0.0	0	0	?	S	01:20	0:00	[ksoftirqd/2]
root	20	0.0	0.0	0	0	?	S<	01:20	0:00	[kworker/2:0H]
root	21	0.0	0.0	0	0	?	S	01:20	0:00	[watchdog/3]
root	22	0.0	0.0	0	0	?	S	01:20	0:00	[migration/3]
root	23	0.0	0.0	0	0	?	S	01:20	0:00	[ksoftirqd/3]
root	25	0.0	0.0	0	0	?	S<	01:20	0:00	[kworker/3:0H]
root	26	0.0	0.0	0	0	?	S	01:20	0:00	[kdevtmpfs]
root	27	0.0	0.0	0	0	?	S<	01:20	0:00	[netns]
root	28	0.0	0.0	0	0	?	S<	01:20	0:00	[perf]
root	29	0.0	0.0	0	0	?	S	01:20	0:00	[khungtaskd]
root	30	0.0	0.0	0	0	?	S<	01:20	0:00	[writeback]
root	31	0.0	0.0	0	0	?	SN	01:20	0:00	[ksmd]
root	32	0.0	0.0	0	0	?	SN	01:20	0:00	[khugepaged]
root	33	0.0	0.0	0	0	?	S<	01:20	0:00	[crypto]
root	34	0.0	0.0	0	0	?	S<	01:20	0:00	[kintegrityd]

root	35	0.0	0.0	0	0 ?	S<	01:20	0:00	[bioset]
root	36	0.0	0.0	0	0 ?	S<	01:20	0:00	[kblockd]
root	37	0.0	0.0	0	0 ?	S<	01:20	0:00	[ata_sff]
root	38	0.0	0.0	0	0 ?	S<	01:20	0:00	[md]
root	39	0.0	0.0	0	0 ?	S<	01:20	0:00	[devfreq_wq]
root	45	0.0	0.0	0	0 ?	S	01:20	0:00	[irq/24-AMD-Vi]
root	47	0.0	0.0	0	0 ?	S	01:20	0:00	[kswapd0]
root	48	0.0	0.0	0	0 ?	S<	01:20	0:00	[vmstat]
root	49	0.0	0.0	0	0 ?	S	01:20	0:00	[fsnotify_mark]
root	50	0.0	0.0	0	0 ?	S	01:20	0:00	[ecryptfs-kthrea]
root	66	0.0	0.0	0	0 ?	S<	01:20	0:00	[kthrotld]
root	67	0.0	0.0	0	0 ?	S<	01:20	0:00	[acpi_thermal_pm]
root	68	0.0	0.0	0	0 ?	S<	01:20	0:00	[bioset]
root	69	0.0	0.0	0	0 ?	S<	01:20	0:00	[bioset]
root	70	0.0	0.0	0	0 ?	S<	01:20	0:00	[bioset]
root	71	0.0	0.0	0	0 ?	S<	01:20	0:00	[bioset]
root	72	0.0	0.0	0	0 ?	S<	01:20	0:00	[bioset]
root	73	0.0	0.0	0	0 ?	S<	01:20	0:00	[bioset]
root	74	0.0	0.0	0	0 ?	S<	01:20	0:00	[bioset]
root	75	0.0	0.0	0	0 ?	S<	01:20	0:00	[bioset]
root	76	0.0	0.0	0	0 ?	S<	01:20	0:00	[bioset]
root	77	0.0	0.0	0	0 ?	S<	01:20	0:00	[bioset]
root	78	0.0	0.0	0	0 ?	S<	01:20	0:00	[bioset]
root	79	0.0	0.0	0	0 ?	S<	01:20	0:00	[bioset]
root	80	0.0	0.0	0	0 ?	S<	01:20	0:00	[bioset]
root	81	0.0	0.0	0	0 ?	S<	01:20	0:00	[bioset]
root	82	0.0	0.0	0	0 ?	S<	01:20	0:00	[bioset]
root	83	0.0	0.0	0	0 ?	S<	01:20	0:00	[bioset]
root	84	0.0	0.0	0	0 ?	S<	01:20	0:00	[bioset]
root	85	0.0	0.0	0	0 ?	S<	01:20	0:00	[bioset]
root	86	0.0	0.0	0	0 ?	S<	01:20	0:00	[bioset]
root	87	0.0	0.0	0	0 ?	S<	01:20	0:00	[bioset]
root	88	0.0	0.0	0	0 ?	S<	01:20	0:00	[bioset]
root	89	0.0	0.0	0	0 ?	S<	01:20	0:00	[bioset]
root	90	0.0	0.0	0	0 ?	S<	01:20	0:00	[bioset]
root	91	0.0	0.0	0	0 ?	S<	01:20	0:00	[bioset]
root	97	0.0	0.0	0	0 ?	S<	01:20	0:00	[ipv6_addrconf]
root	110	0.0	0.0	0	0 ?	S<	01:20	0:00	[deferwq]
root	111	0.0	0.0	0	0 ?	S<	01:20	0:00	[charger_manager]
root	368	0.0	0.0	0	0 ?	S	01:20	0:00	[scsi_eh_0]
root	372	0.0	0.0	0	0 ?	S<	01:20	0:00	[scsi_tmf_0]
root	378	0.0	0.0	0	0 ?	S	01:20	0:00	[scsi_eh_1]
root	379	0.0	0.0	0	0 ?	S<	01:20	0:00	[amd_iommu_v2]
root	384	0.0	0.0	0	0 ?	S<	01:20	0:00	[kfd_process_wq]
root	385	0.0	0.0	0	0 ?	S<	01:20	0:00	[scsi_tmf_1]
root	387	0.0	0.0	0	0 ?	S<	01:20	0:00	[kpsmoused]
root	489	0.0	0.0	0	0 ?	S<	01:20	0:00	[ttm_swap]
root	687	0.0	0.0	0	0 ?	S	01:20	0:00	[scsi_eh_2]
root	688	0.0	0.0	0	0 ?	S<	01:20	0:00	[scsi_tmf_2]
root	689	0.0	0.0	0	0 ?	S	01:20	0:01	[usb-storage]
root	702	0.0	0.0	0	0 ?	S<	01:20	0:00	[amdgpu-pageflip]
root	703	0.0	0.0	0	0 ?	S<	01:20	0:00	[amdgpu-pageflip]


```

root    704 0.0 0.0    0 0 ?    S< 01:20 0:00 [amdgpu-pageflip]
root    716 0.1 0.0    0 0 ?    S  01:20 0:11 [gfx]
root    717 0.0 0.0    0 0 ?    S  01:20 0:00 [comp 1.0.0]
root    718 0.0 0.0    0 0 ?    S  01:20 0:00 [comp 1.0.1]
root    720 0.0 0.0    0 0 ?    S  01:20 0:00 [comp 1.0.2]
root    729 0.0 0.0    0 0 ?    S  01:20 0:00 [comp 1.0.3]
root    730 0.0 0.0    0 0 ?    S  01:20 0:00 [comp 1.0.4]
root    731 0.0 0.0    0 0 ?    S  01:20 0:00 [comp 1.0.5]
root    732 0.0 0.0    0 0 ?    S  01:20 0:00 [comp 1.0.6]
root    733 0.0 0.0    0 0 ?    S  01:20 0:00 [comp 1.0.7]
root    734 0.0 0.0    0 0 ?    S  01:20 0:02 [sdma0]
root    735 0.0 0.0    0 0 ?    S  01:20 0:00 [sdma1]
root    736 0.0 0.0    0 0 ?    S  01:20 0:00 [uvd]
root    737 0.0 0.0    0 0 ?    S  01:20 0:00 [vce0]
root    738 0.0 0.0    0 0 ?    S  01:20 0:00 [vce1]
root    744 0.0 0.0    0 0 ?    S< 01:20 0:00 [bioset]
root    747 0.0 0.0    0 0 ?    S< 01:20 0:00 [bioset]
root    790 0.0 0.0    0 0 ?    S< 01:20 0:00 [kworker/3:1H]
root    798 0.0 0.0    0 0 ?    S< 01:20 0:00 [kworker/1:1H]
root    808 0.0 0.0    0 0 ?    S< 01:20 0:00 [bioset]
root    969 0.0 0.0    0 0 ?    S< 01:20 0:00 [kworker/2:1H]
root   1109 0.0 0.0    0 0 ?    S< 01:20 0:01 [loop0]
root   1113 0.0 0.0    0 0 ?    S< 01:20 0:00 [kworker/0:1H]
root   2104 0.0 0.0    0 0 ?    S  01:20 0:00 [kauditd]
root   2385 0.0 0.0 31640 3308 ?    Ss 01:20 0:00 /lib/systemd/systemd-journald
root   2406 0.0 0.1 45192 4640 ?    Ss 01:20 0:01 /lib/systemd/systemd-udev
root   2416 0.0 0.0 102968 1604 ?    Ss 01:20 0:00 /sbin/lvmtools -f
root   2854 0.0 0.0    0 0 ?    S< 01:20 0:00 [cfg80211]
systemd+ 3025 0.0 0.0 102384 2576 ?    Ssl 01:20 0:00 /lib/systemd/systemd-timesyncd
root   3076 0.0 0.0    0 0 ?    S< 01:20 0:00 [edac-poller]
root   3577 0.0 0.0 28648 3228 ?    Ss 01:20 0:00 /lib/systemd/systemd-logind
root   3583 0.0 0.0 4396 1276 ?    Ss 01:20 0:00 /usr/sbin/acpid
root   3587 0.0 0.0 36076 2944 ?    Ss 01:20 0:00 /usr/sbin/cron -f
avahi   3592 0.0 0.1 44912 3556 ?    Ss 01:20 0:00 avahi-daemon: running [ubuntu.local]
root   3603 0.0 0.4 304068 15684 ?    Ssl 01:20 0:00 /usr/lib/snapd/snapd
root   3609 0.0 0.3 337396 10804 ?    Ssl 01:20 0:02 /usr/sbin/ModemManager
root   3611 0.0 0.1 282956 6412 ?    Ssl 01:20 0:00 /usr/lib/AccountsService/accounts-
daemon
whoopsie 3627 0.0 0.4 374044 14260 ?    Ssl 01:20 0:00 /usr/bin/whoopsie -f
syslog  3637 0.0 0.0 256396 3304 ?    Ssl 01:20 0:00 /usr/sbin/rsyslogd -n
message+ 3647 0.0 0.1 44296 5272 ?    Ss 01:20 0:03 /usr/bin/dbus-daemon --system
--address=systemd: --nofork --nopidfile --systemd-activation
avahi   3760 0.0 0.0 44788 344 ?    S  01:20 0:00 avahi-daemon: chroot helper
root   3830 0.0 0.4 456244 16664 ?    Ssl 01:20 0:01 /usr/sbin/NetworkManager --no-
daemon
root   3843 0.0 0.0    0 0 ?    S< 01:20 0:00 [kvm-irqfd-clean]
root   3853 0.0 0.2 274820 9220 ?    Ssl 01:20 0:00 /usr/sbin/cups-browsed
root   3882 0.0 0.0    0 0 ?    S< 01:20 0:00 [led_workqueue]
root   4009 0.0 0.2 289052 8828 ?    Ssl 01:20 0:00 /usr/lib/policykit-1/polkitd --no-debug
root   4019 0.0 0.0 19596 2372 ?    Ss 01:20 0:00 /usr/sbin/irqbalance
--pid=/var/run/irqbalance.pid
root   4021 0.0 0.1 31956 4320 ?    Ss 01:20 0:00 /usr/lib/bluetooth/bluetoothd

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root    4023 0.0 0.1 350372 6108 ?    Ssl 01:20 0:00 /usr/sbin/lightdm
root    4048 2.3 2.2 356152 78620 tty7    Ssl+ 01:20 2:36 /usr/lib/xorg/Xorg -core :0 -seat seat0
-auth /var/run/lightdm/root/:0 -nolisten tcp vt7 -novtswitch
root    4070 0.0 0.0 23008 1824 tty1    Ss+ 01:20 0:00 /sbin/agetty --noclear tty1 linux
root    4086 0.0 0.2 44116 7192 ?      Ss 01:20 0:00 /sbin/wpa_supplicant -u -s -O
/run/wpa_supplicant
root    4094 0.0 0.1 246588 6956 ?      Sl 01:20 0:00 lightdm --session-child 12 15
ubuntu  4100 0.0 0.1 45380 4856 ?      Ss 01:20 0:00 /lib/systemd/systemd --user
ubuntu  4101 0.0 0.0 82028 2432 ?      S 01:20 0:00 (sd-pam)
ubuntu  4105 0.0 0.1 53528 4696 ?      Ss 01:20 0:00 /sbin/upstart --user
ubuntu  4179 0.0 0.0 39928 2196 ?      S 01:20 0:00 upstart-udev-bridge --daemon --user
ubuntu  4192 0.0 0.1 43952 4340 ?      Ss 01:20 0:02 dbus-daemon --fork --session
--address=unix:abstract=/tmp/dbus-xxgVIGxOyI
ubuntu  4204 0.0 0.2 93416 9208 ?      Ss 01:20 0:00 /usr/lib/x86_64-linux-
gnu/hud/window-stack-bridge
ubuntu  4231 0.0 0.0 39924 1636 ?      S 01:20 0:00 upstart-dbus-bridge --daemon --session
--user --bus-name session
ubuntu  4233 0.0 0.0 39864 312 ?      S 01:20 0:00 upstart-dbus-bridge --daemon --system
--user --bus-name system
ubuntu  4235 0.0 0.0 48356 384 ?      S 01:20 0:00 upstart-file-bridge --daemon --user
ubuntu  4242 0.0 0.1 212288 6904 ?     SLl 01:20 0:00 gnome-keyring-daemon --start
--components ssh
ubuntu  4250 0.1 0.2 352636 7300 ?     Ssl 01:20 0:10 /usr/bin/ibus-daemon --daemonize
--xim
ubuntu  4269 0.0 1.4 621732 53088 ?     Ssl 01:20 0:04 /usr/lib/x86_64-linux-
gnu/bamf/bamfdaemon
ubuntu  4278 0.0 0.1 178672 5108 ?     Sl 01:20 0:00 /usr/lib/dconf/dconf-service
ubuntu  4305 0.0 0.1 337992 5964 ?     Sl 01:20 0:00 /usr/lib/at-spi2-core/at-spi-bus-
launcher
ubuntu  4310 0.0 0.1 43024 4044 ?      S 01:20 0:00 /usr/bin/dbus-daemon --config-
file=/etc/at-spi2/accessibility.conf --nofork --print-address 3
ubuntu  4313 0.0 0.1 355324 6484 ?     Sl 01:20 0:00 /usr/lib/gvfs/gvfsd
ubuntu  4315 0.0 0.1 206880 6468 ?     Sl 01:20 0:00 /usr/lib/at-spi2-core/at-spi2-registryd
--use-gnome-session
ubuntu  4322 0.0 0.2 406860 7272 ?     Sl 01:20 0:00 /usr/lib/gvfs/gvfsd-fuse
/run/user/999/gvfs -f -o big_writes
ubuntu  4344 0.0 0.1 271312 6292 ?     Sl 01:20 0:00 /usr/lib/ibus/ibus-dconf
ubuntu  4345 0.0 0.8 477336 29608 ?     Sl 01:20 0:02 /usr/lib/ibus/ibus-ui-gtk3
ubuntu  4349 0.0 0.6 427660 21348 ?     Sl 01:20 0:00 /usr/lib/ibus/ibus-x11 --kill-daemon
ubuntu  4368 0.0 0.1 195456 5476 ?     Sl 01:20 0:03 /usr/lib/ibus/ibus-engine-simple
ubuntu  4394 0.0 1.1 654084 40064 ?     Ssl 01:20 0:01 /usr/lib/x86_64-linux-gnu/hud/hud-
service
ubuntu  4396 0.0 0.9 854156 33564 ?     Ssl 01:20 0:00 /usr/lib/unity-settings-daemon/unity-
settings-daemon
ubuntu  4402 0.0 0.4 559512 15212 ?     Ssl 01:20 0:00 /usr/lib/gnome-session/gnome-
session-binary --session=ubuntu
ubuntu  4406 0.0 0.9 640588 35104 ?     Ssl 01:20 0:05 /usr/lib/x86_64-linux-gnu/unity/unity-
panel-service
ubuntu  4420 1.7 6.3 1547260 225468 ?   Ssl 01:20 1:54 compiz
root    4427 0.0 0.2 354324 10080 ?    Ssl 01:20 0:00 /usr/lib/upower/upowerd
ubuntu  4431 0.0 0.1 351584 6328 ?     Ssl 01:20 0:00 /usr/lib/x86_64-linux-gnu/indicator-
messages/indicator-messages-service

```

ubuntu	4434	0.0	0.1	414172	5760	?	Ssl	01:20	0:00	/usr/lib/x86_64-linux-gnu/indicator-bluetooth/indicator-bluetooth-service
ubuntu	4435	0.0	0.2	444680	10628	?	Ssl	01:20	0:00	/usr/lib/x86_64-linux-gnu/indicator-power/indicator-power-service
ubuntu	4437	0.0	0.5	1240008	20600	?	Ssl	01:20	0:00	/usr/lib/x86_64-linux-gnu/indicator-datetime/indicator-datetime-service
ubuntu	4438	0.0	0.8	640564	28912	?	Ssl	01:20	0:00	/usr/lib/x86_64-linux-gnu/indicator-keyboard/indicator-keyboard-service --use-gtk
ubuntu	4439	0.0	0.3	744052	12360	?	Ssl	01:20	0:00	/usr/lib/x86_64-linux-gnu/indicator-sound/indicator-sound-service
ubuntu	4441	0.0	0.6	547488	22992	?	Ssl	01:20	0:00	/usr/lib/x86_64-linux-gnu/indicator-printers/indicator-printers-service
ubuntu	4444	0.0	0.2	693120	10040	?	Ssl	01:20	0:00	/usr/lib/x86_64-linux-gnu/indicator-session/indicator-session-service
ubuntu	4468	0.0	0.3	395940	12580	?	Ssl	01:20	0:00	/usr/lib/x86_64-linux-gnu/indicator-application/indicator-application-service
ubuntu	4512	0.0	0.0	0	0	?	Z	01:20	0:00	[check_gl_textur] <defunct>
ubuntu	4523	0.0	0.3	515836	11372	?	S<l	01:20	0:00	/usr/bin/pulseaudio --start --log-target=syslog
ubuntu	4525	0.0	0.7	1185764	27660	?	Sl	01:20	0:00	/usr/lib/evolution/evolution-source-registry
rtkit	4526	0.0	0.0	183544	2940	?	SNsl	01:20	0:00	/usr/lib/rtkit/rtkit-daemon
ubuntu	4556	0.0	1.6	862612	59052	?	Sl	01:20	0:00	/usr/lib/evolution/evolution-calendar-factory
ubuntu	4563	0.0	1.4	814624	52000	?	Sl	01:20	0:00	/usr/lib/evolution/evolution-calendar-factory-subprocess --factory contacts --bus-name org.gnome.evolution.dataserver.Subprocess.Backend.Ca
ubuntu	4573	0.0	0.5	697664	20520	?	Sl	01:20	0:00	/usr/lib/evolution/evolution-addressbook-factory
ubuntu	4575	0.0	1.4	811728	51732	?	Sl	01:20	0:00	/usr/lib/evolution/evolution-calendar-factory-subprocess --factory local --bus-name org.gnome.evolution.dataserver.Subprocess.Backend.Calen
ubuntu	4582	0.0	0.4	846888	17548	?	Sl	01:20	0:00	/usr/lib/evolution/evolution-addressbook-factory-subprocess --factory local --bus-name org.gnome.evolution.dataserver.Subprocess.Backend.Ad
colord	4599	0.0	0.3	308260	13352	?	Ssl	01:20	0:00	/usr/lib/colord/colord
ubuntu	4610	0.0	0.1	193084	5524	?	Sl	01:20	0:00	/usr/lib/gvfs/gvfsd-metadata
ubuntu	4640	0.1	1.7	1100768	63288	?	Sl	01:20	0:10	nautilus -n
ubuntu	4645	0.0	1.0	671232	36728	?	Sl	01:20	0:01	nm-applet
ubuntu	4646	0.0	0.5	429268	19744	?	Sl	01:20	0:00	/usr/lib/policykit-1-gnome/polkit-gnome-authentication-agent-1
ubuntu	4657	0.0	0.6	576952	23292	?	Sl	01:20	0:00	/usr/lib/unity-settings-daemon/unity-fallback-mount-helper
ubuntu	4684	0.0	0.2	292636	8224	?	Sl	01:20	0:00	/usr/lib/gvfs/gvfs-udisks2-volume-monitor
root	4687	0.0	0.2	441908	10048	?	Ssl	01:20	0:02	/usr/lib/udisks2/udisksd --no-debug
ubuntu	4701	0.0	0.1	271128	5872	?	Sl	01:20	0:00	/usr/lib/gvfs/gvfs-mtp-volume-monitor
ubuntu	4710	0.0	0.1	278924	6284	?	Sl	01:20	0:00	/usr/lib/gvfs/gvfs-gphoto2-volume-monitor
ubuntu	4715	0.0	0.1	264604	4872	?	Sl	01:20	0:00	/usr/lib/gvfs/gvfs-goa-volume-monitor
ubuntu	4720	0.0	0.2	410676	9064	?	Sl	01:20	0:00	/usr/lib/gvfs/gvfs-afc-volume-monitor

```

ubuntu 4742 0.0 0.1 357616 6840 ? Sl 01:20 0:00 /usr/lib/gvfs/gvfsd-trash --spawner :
1.16 /org/gtk/gvfs/exec_spaw/0
ubuntu 4820 0.0 0.4 724244 16272 ? Sl 01:21 0:00 zeitgeist-datahub
ubuntu 4827 0.0 0.0 4508 712 ? S 01:21 0:00 /bin/sh -c /usr/lib/x86_64-linux-
gnu/zeitgeist/zeitgeist-maybe-vacuum; /usr/bin/zeitgeist-daemon
ubuntu 4831 0.0 0.2 410340 7600 ? Sl 01:21 0:00 /usr/bin/zeitgeist-daemon
ubuntu 4838 0.0 0.5 317316 18032 ? Sl 01:21 0:00 /usr/lib/x86_64-linux-gnu/zeitgeist-fts
ubuntu 4888 0.0 0.1 68240 5176 ? S 01:21 0:00 /usr/lib/x86_64-linux-
gnu/gconf/gconfd-2
ubuntu 4924 0.0 0.6 522744 23212 ? Sl 01:21 0:00 update-notifier
ubuntu 4936 0.0 0.2 442508 9348 ? Sl 01:22 0:00 /usr/lib/x86_64-linux-gnu/deja-
dup/deja-dup-monitor
ubuntu 4955 0.0 0.4 652128 17300 ? Sl 01:25 0:00 /usr/lib/x86_64-linux-gnu/unity-
scope-home/unity-scope-home
ubuntu 4966 0.0 0.8 657080 28928 ? Sl 01:25 0:01 /usr/bin/unity-scope-loader
applications/applications.scope applications/scopes.scope commands.scope
ubuntu 4968 0.0 0.4 1129316 16248 ? Sl 01:25 0:00 /usr/lib/x86_64-linux-gnu/unity-lens-
files/unity-files-daemon
ubuntu 5174 0.0 0.8 489180 30720 ? Sl 01:53 0:01 /usr/lib/x86_64-linux-gnu/notify-osd
nobody 5189 0.0 0.1 59936 4108 ? S 01:54 0:00 /usr/sbin/dnsmasq --no-resolv --keep-
in-foreground --no-hosts --bind-interfaces --pid-file=/var/run/NetworkManager/dnsmasq.pid
--listen-add
root 6813 0.0 0.0 0 0 ? S 02:15 0:01 [kworker/u8:3]
ubuntu 7408 0.2 3.6 1513248 128096 ? SLl 02:17 0:07 /usr/bin/gnome-software
--gapplication-service
root 7423 0.0 1.0 628984 35476 ? Sl 02:17 0:01 /usr/lib/x86_64-linux-gnu/fwupd/fwupd
ubuntu 7796 0.0 0.0 4508 712 ? S 02:20 0:00 sh -c ubiquity gtk_ui
root 7799 0.0 0.0 4508 712 ? S 02:20 0:00 /bin/sh /usr/lib/udisks2/udisks2-inhibit
/usr/lib/ubiquity/bin/ubiquity gtk_ui
ubuntu 7806 95.1 2.8 475416 100296 ? Rl 02:20 46:53 /usr/bin/python3
/usr/lib/ubiquity/bin/ubiquity gtk_ui
ubuntu 7879 0.0 0.0 2232 4 pts/1 Ss+ 02:20 0:00 /bin/busybox tail -f
/var/log/installer/debug -f /var/log/syslog -q
ubuntu 7881 0.0 0.7 620516 27664 ? Sl 02:20 0:00 a11y-profile-manager-indicator -i
ubuntu 7898 0.0 0.0 43744 2368 ? S 02:20 0:00 dbus-launch
--autolaunch=3015304413a4408bbd5d78b467fbae4c --binary-syntax --close-stderr
ubuntu 7902 0.0 0.0 42768 2616 ? Ss 02:20 0:00 /usr/bin/dbus-daemon --fork --print-pid
5 --print-address 7 --session
ubuntu 7909 0.0 0.1 178664 6988 ? Sl 02:20 0:00 /usr/lib/dconf/dconf-service
root 9126 0.0 1.1 91628 39360 ? S 02:20 0:00 /usr/bin/perl -w /usr/bin/debconf-
communicate -fnoninteractive ubiquity
root 9227 0.0 0.0 6456 796 ? S 02:21 0:00 log-output -t ubiquity --pass-stdout sh -c
/usr/share/ubiquity/activate-dmraid && /bin/partman
root 9228 0.0 0.0 4504 796 ? S 02:21 0:00 sh -c /usr/share/ubiquity/activate-dmraid
&& /bin/partman
root 9234 0.0 0.0 4640 1876 ? S 02:21 0:00 /bin/sh /bin/partman
root 9289 0.0 0.0 0 0 ? S< 02:21 0:00 [bioset]
root 9328 0.0 0.0 0 0 ? S 02:21 0:00 [jfsIO]
root 9329 0.0 0.0 0 0 ? S 02:21 0:00 [jfsCommit]
root 9330 0.0 0.0 0 0 ? S 02:21 0:00 [jfsCommit]
root 9331 0.0 0.0 0 0 ? S 02:21 0:00 [jfsCommit]
root 9332 0.0 0.0 0 0 ? S 02:21 0:00 [jfsCommit]

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root    9333 0.0 0.0    0 0 ?    S  02:21  0:00 [jfsSync]
root    9345 0.0 0.0    0 0 ?    S< 02:21  0:00 [xfsalloc]
root    9346 0.0 0.0    0 0 ?    S< 02:21  0:00 [xfs_mru_cache]
root    9401 0.0 0.1 31920 4488 ?    S  02:21  0:00 parted_server
root   10985 0.0 0.0   4640 1872 ?    S  02:21  0:00 /bin/sh
/lib/partman/display.d/10initial_auto
root   14275 0.0 0.0  43744 2372 ?    S  02:24  0:00 dbus-launch
--autolaunch=3015304413a4408bbd5d78b467fbae4c --binary-syntax --close-stderr
root   14276 0.0 0.0  42768 2612 ?    Ss 02:24  0:00 /usr/bin/dbus-daemon --fork --print-pid
5 --print-address 7 --session
root   14279 0.0 0.1 178664 4764 ?    Sl 02:24  0:00 /usr/lib/dconf/dconf-service
ubuntu 14814 0.0 0.1 359996 6900 ?    Sl 02:38  0:00 /usr/lib/gvfs/gvfsd-network
--spawner :1.16 /org/gtk/gvfs/exec_spaw/2
ubuntu 14841 0.0 0.1 368788 6908 ?    Sl 02:38  0:00 /usr/lib/gvfs/gvfsd-dnssd --spawner :
1.16 /org/gtk/gvfs/exec_spaw/6
root   15058 0.0 0.0    0 0 ?    S  02:39  0:00 [kworker/0:1]
root   15314 0.0 0.0    0 0 ?    R  02:49  0:00 [kworker/u8:0]
root   15581 0.0 0.0    0 0 ?    S  02:50  0:00 [kworker/0:4]
root   15586 0.0 0.0    0 0 ?    S  02:50  0:00 [kworker/2:3]
root   15593 0.0 0.0    0 0 ?    S  02:50  0:00 [kworker/1:3]
root   15875 0.0 0.0    0 0 ?    R  02:52  0:00 [kworker/3:1]
ubuntu 15881 0.4 0.8 474420 30416 ?    Sl 02:54  0:04 gnome-power-statistics --device
/org/freedesktop/UPower/devices/battery_BAT0
root   16550 0.0 0.0    0 0 ?    S  02:58  0:00 [kworker/1:0]
root   16593 0.0 0.0    0 0 ?    S  02:59  0:00 [kworker/3:2]
root   16594 0.0 0.0    0 0 ?    S  02:59  0:00 [kworker/2:1]
ubuntu 16606 0.6 1.1 663592 40304 ?    Rl 02:59  0:03 /usr/lib/gnome-terminal/gnome-
terminal-server
ubuntu 16613 0.0 0.1 29504 5032 pts/17 Ss 02:59  0:00 bash
root   16623 0.0 0.1 80188 4496 pts/17 S  03:00  0:00 sudo su
root   16624 0.0 0.1 79768 4212 pts/17 S  03:00  0:00 su
root   16625 0.0 0.1 28272 3908 pts/17 S  03:00  0:00 bash
root   16651 0.0 0.0    0 0 ?    S  03:02  0:00 [kworker/u8:1]
ubuntu 16703 0.9 1.1 732900 40784 ?    Sl 03:05  0:02 gedit
root   16719 0.0 0.0    0 0 ?    S  03:05  0:00 [kworker/3:0]
root   16720 0.0 0.0    0 0 ?    S  03:05  0:00 [kworker/1:1]
root   16732 0.0 0.0    0 0 ?    S  03:06  0:00 [kworker/2:0]
root   16738 0.0 0.0    0 0 ?    S  03:07  0:00 [kworker/u8:2]
root   16741 0.0 0.0  44432 3332 pts/17 R+  03:09  0:00 ps -axu
root@ubuntu:/home/ubuntu# lspci
00:00.0 Host bridge: Advanced Micro Devices, Inc. [AMD] Device 1576
00:00.2 IOMMU: Advanced Micro Devices, Inc. [AMD] Device 1577
00:01.0 VGA compatible controller: Advanced Micro Devices, Inc. [AMD/ATI] Carrizo (rev ca)
00:01.1 Audio device: Advanced Micro Devices, Inc. [AMD/ATI] Kabini HDMI/DP Audio
00:02.0 Host bridge: Advanced Micro Devices, Inc. [AMD] Device 157b
00:02.2 PCI bridge: Advanced Micro Devices, Inc. [AMD] Device 157c
00:02.3 PCI bridge: Advanced Micro Devices, Inc. [AMD] Device 157c
00:03.0 Host bridge: Advanced Micro Devices, Inc. [AMD] Device 157b
00:03.1 PCI bridge: Advanced Micro Devices, Inc. [AMD] Device 157c
00:08.0 Encryption controller: Advanced Micro Devices, Inc. [AMD] Device 1578
00:09.0 Host bridge: Advanced Micro Devices, Inc. [AMD] Device 157d
00:09.2 Audio device: Advanced Micro Devices, Inc. [AMD] Device 157a

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00:10.0 USB controller: Advanced Micro Devices, Inc. [AMD] FCH USB XHCI Controller (rev 20)
00:11.0 SATA controller: Advanced Micro Devices, Inc. [AMD] FCH SATA Controller [AHCI mode] (rev 49)
00:12.0 USB controller: Advanced Micro Devices, Inc. [AMD] FCH USB EHCI Controller (rev 49)
00:14.0 SMBus: Advanced Micro Devices, Inc. [AMD] FCH SMBus Controller (rev 4a)
00:14.3 ISA bridge: Advanced Micro Devices, Inc. [AMD] FCH LPC Bridge (rev 11)
00:18.0 Host bridge: Advanced Micro Devices, Inc. [AMD] Device 1570
00:18.1 Host bridge: Advanced Micro Devices, Inc. [AMD] Device 1571
00:18.2 Host bridge: Advanced Micro Devices, Inc. [AMD] Device 1572
00:18.3 Host bridge: Advanced Micro Devices, Inc. [AMD] Device 1573
00:18.4 Host bridge: Advanced Micro Devices, Inc. [AMD] Device 1574
00:18.5 Host bridge: Advanced Micro Devices, Inc. [AMD] Device 1575
01:00.0 Network controller: Qualcomm Atheros QCA9565 / AR9565 Wireless Network Adapter (rev 01)
02:00.0 Ethernet controller: Realtek Semiconductor Co., Ltd. RTL8111/8168/8411 PCI Express Gigabit Ethernet Controller (rev 10)
03:00.0 Display controller: Advanced Micro Devices, Inc. [AMD/ATI] Sun XT [Radeon HD 8670A/8670M/8690M / R5 M330] (rev ff)
root@ubuntu:/home/ubuntu# free
              total        used        free      shared  buff/cache   available
Mem:      3545012     1193248     744372      284280     1607392     1782988
Swap:          0          0          0
root@ubuntu:/home/ubuntu# cat /proc/cpuinfo
processor      : 0
vendor_id     : AuthenticAMD
cpu family    : 21
model         : 101
model name    : AMD A10-9600P RADEON R5, 10 COMPUTE CORES 4C+6G
stepping      : 1
microcode     : 0x600611a
cpu MHz       : 1200.000
cache size    : 1024 KB
physical id   : 0
siblings      : 4
core id       : 0
cpu cores     : 4
apicid        : 16
initial apicid : 0
fpu           : yes
fpu_exception : yes
cpuid level   : 13
wp            : yes
flags         : fpu vme de pse tsc msr pae mce cx8 apic sep mtrr pge mca cmov pat pse36 clflush
mmx fxsr sse sse2 ht syscall nx mmxext fxsr_opt pdpe1gb rdtscp lm constant_tsc rep_good nopl
nonstop_tsc extd_apicid aperfmperf eagerfpu pni pclmulqdq monitor ssse3 fma cx16 sse4_1 sse4_2
movbe popcnt aes xsave avx f16c rdrand lahf_lm cmp_legacy svm extapic cr8_legacy abm sse4a
misalignsse 3dnowprefetch osvw ibs xop skinit wdt lwp fma4 tce nodeid_msr tbm perfctr_core
perfctr_nb bpext mwaitx cpb hw_pstate vmmcall fsgsbase bmi1 avx2 smep bmi2 xsaveopt arat npt
lbrv svm_lock nrip_save tsc_scale vmcb_clean flushbyasid decodeassists pausefilter pfthreshold
bugs          : fxsave_leak sysret_ss_attrs
bogomips     : 4791.02

```

TLB size : 1536 4K pages
clflush size : 64
cache_alignment : 64
address sizes: 48 bits physical, 48 bits virtual
power management: ts ttp tm 100mhzsteps hwpstate cpb eff_freq_ro [12] [13]

processor : 1
vendor_id : AuthenticAMD
cpu family : 21
model : 101
model name : AMD A10-9600P RADEON R5, 10 COMPUTE CORES 4C+6G
stepping: 1
microcode : 0x600611a
cpu MHz : 1200.000
cache size : 1024 KB
physical id : 0
siblings : 4
core id : 1
cpu cores : 4
apicid : 17
initial apicid : 1
fpu : yes
fpu_exception : yes
cpuid level : 13
wp : yes
flags : fpu vme de pse tsc msr pae mce cx8 apic sep mtrr pge mca cmov pat pse36 clflush
mmx fxsr sse sse2 ht syscall nx mmxext fxsr_opt pdpe1gb rdtscp lm constant_tsc rep_good nopl
nonstop_tsc extd_apicid aperfmperf eagerfpu pni pclmulqdq monitor ssse3 fma cx16 sse4_1 sse4_2
movbe popcnt aes xsave avx f16c rdrand lahf_lm cmp_legacy svm extapic cr8_legacy abm sse4a
misalignsse 3dnowprefetch osvw ibs xop skinit wdt lwp fma4 tce nodeid_msr tbm perfctr_core
perfctr_nb bpext mwaitx cpb hw_pstate vmcall fsgsbase bmi1 avx2 smep bmi2 xsaveopt arat npt
lbrv svm_lock nrip_save tsc_scale vmcb_clean flushbyasid decodeassists pausefilter pfthreshold
bugs : fxsave_leak sysret_ss_attrs
bogomips : 4791.02
TLB size : 1536 4K pages
clflush size : 64
cache_alignment : 64
address sizes: 48 bits physical, 48 bits virtual
power management: ts ttp tm 100mhzsteps hwpstate cpb eff_freq_ro [12] [13]

processor : 2
vendor_id : AuthenticAMD
cpu family : 21
model : 101
model name : AMD A10-9600P RADEON R5, 10 COMPUTE CORES 4C+6G
stepping: 1
microcode : 0x600611a
cpu MHz : 1200.000
cache size : 1024 KB
physical id : 0
siblings : 4
core id : 2

cpu cores : 4
apicid : 18
initial apicid : 2
fpu : yes
fpu_exception : yes
cpuid level : 13
wp : yes
flags : fpu vme de pse tsc msr pae mce cx8 apic sep mtrr pge mca cmov pat pse36 clflush
mmx fxsr sse sse2 ht syscall nx mmxext fxsr_opt pdpe1gb rdtscp lm constant_tsc rep_good nopl
nonstop_tsc extd_apicid aperfmperf eagerfpu pni pclmulqdq monitor ssse3 fma cx16 sse4_1 sse4_2
movbe popcnt aes xsave avx f16c rdrand lahf_lm cmp_legacy svm extapic cr8_legacy abm sse4a
misalignsse 3dnowprefetch osvw ibs xop skinit wdt lwp fma4 tce nodeid_msr tbm perfctr_core
perfctr_nb bpext mwaitx cpb hw_pstate vmmcall fsgsbase bmi1 avx2 smep bmi2 xsaveopt arat npt
lbrv svm_lock nrip_save tsc_scale vmcb_clean flushbyasid decodeassists pausefilter pfthreshold
bugs : fxsave_leak sysret_ss_attrs
bogomips : 4791.02
TLB size : 1536 4K pages
clflush size : 64
cache_alignment : 64
address sizes: 48 bits physical, 48 bits virtual
power management: ts ttp tm 100mhzsteps hwpstate cpb eff_freq_ro [12] [13]

processor : 3
vendor_id : AuthenticAMD
cpu family : 21
model : 101
model name : AMD A10-9600P RADEON R5, 10 COMPUTE CORES 4C+6G
stepping: 1
microcode : 0x600611a
cpu MHz : 2400.000
cache size : 1024 KB
physical id : 0
siblings : 4
core id : 3
cpu cores : 4
apicid : 19
initial apicid : 3
fpu : yes
fpu_exception : yes
cpuid level : 13
wp : yes
flags : fpu vme de pse tsc msr pae mce cx8 apic sep mtrr pge mca cmov pat pse36 clflush
mmx fxsr sse sse2 ht syscall nx mmxext fxsr_opt pdpe1gb rdtscp lm constant_tsc rep_good nopl
nonstop_tsc extd_apicid aperfmperf eagerfpu pni pclmulqdq monitor ssse3 fma cx16 sse4_1 sse4_2
movbe popcnt aes xsave avx f16c rdrand lahf_lm cmp_legacy svm extapic cr8_legacy abm sse4a
misalignsse 3dnowprefetch osvw ibs xop skinit wdt lwp fma4 tce nodeid_msr tbm perfctr_core
perfctr_nb bpext mwaitx cpb hw_pstate vmmcall fsgsbase bmi1 avx2 smep bmi2 xsaveopt arat npt
lbrv svm_lock nrip_save tsc_scale vmcb_clean flushbyasid decodeassists pausefilter pfthreshold
bugs : fxsave_leak sysret_ss_attrs
bogomips : 4791.02
TLB size : 1536 4K pages
clflush size : 64

cache_alignment : 64
address sizes: 48 bits physical, 48 bits virtual
power management: ts ttp tm 100mhzsteps hwpstate cpb eff_freq_ro [12] [13]

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

Tugas PAPAN TULIS

```
ubuntu@ubuntu:~$ ls
Desktop  Downloads  pass 1  Public  Videos
Documents Music    Pictures Templates
ubuntu@ubuntu:~$ ls -l
total 64
drwxr-xr-x 4 ubuntu ubuntu 180 Dec 28 04:21 Desktop
drwxr-xr-x 2 ubuntu ubuntu  60 Dec 28 04:11 Documents
drwxr-xr-x 2 ubuntu ubuntu  40 Dec 28 2019 Downloads
drwxr-xr-x 2 ubuntu ubuntu  40 Dec 28 2019 Music
-rw-rw-r-- 1 ubuntu ubuntu 63630 Dec 28 03:15 pass 1
drwxr-xr-x 2 ubuntu ubuntu  40 Dec 28 2019 Pictures
drwxr-xr-x 2 ubuntu ubuntu  40 Dec 28 2019 Public
drwxr-xr-x 2 ubuntu ubuntu  40 Dec 28 2019 Templates
drwxr-xr-x 2 ubuntu ubuntu  40 Dec 28 2019 Videos
ubuntu@ubuntu:~$ ls /home
ubuntu
ubuntu@ubuntu:~$ clear
ubuntu@ubuntu:~$ ls
Desktop  Downloads  pass 1  Public  Videos
Documents Music    Pictures Templates
ubuntu@ubuntu:~$ ls -l
total 64
drwxr-xr-x 4 ubuntu ubuntu 180 Dec 28 04:21 Desktop
drwxr-xr-x 2 ubuntu ubuntu  60 Dec 28 04:11 Documents
drwxr-xr-x 2 ubuntu ubuntu  40 Dec 28 2019 Downloads
drwxr-xr-x 2 ubuntu ubuntu  40 Dec 28 2019 Music
-rw-rw-r-- 1 ubuntu ubuntu 63630 Dec 28 03:15 pass 1
drwxr-xr-x 2 ubuntu ubuntu  40 Dec 28 2019 Pictures
drwxr-xr-x 2 ubuntu ubuntu  40 Dec 28 2019 Public
drwxr-xr-x 2 ubuntu ubuntu  40 Dec 28 2019 Templates
drwxr-xr-x 2 ubuntu ubuntu  40 Dec 28 2019 Videos
ubuntu@ubuntu:~$ whatis
whatis what?
ubuntu@ubuntu:~$ whatis ls
ls (1)          - list directory contents
ubuntu@ubuntu:~$ ls /home
ubuntu
ubuntu@ubuntu:~$ mkdir informatika
ubuntu@ubuntu:~$ rmdir informatika
```

/bin/mkdir

ubuntu@ubuntu:~\$ whereis mkdir

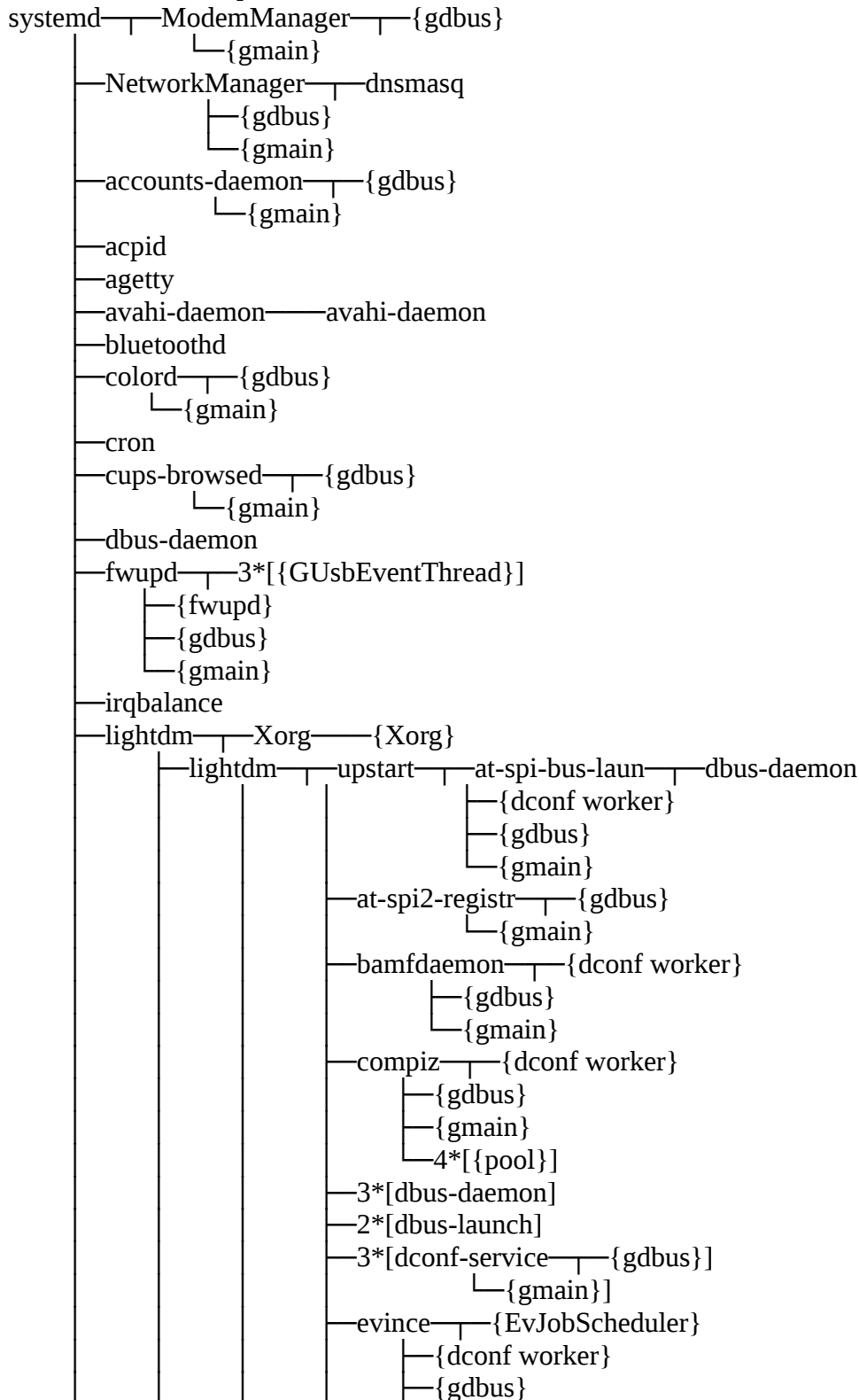
```
mkdir: /bin/mkdir /usr/share/man/man1/mkdir.1.gz /usr/share/man/man2/mkdir.2.gz
```

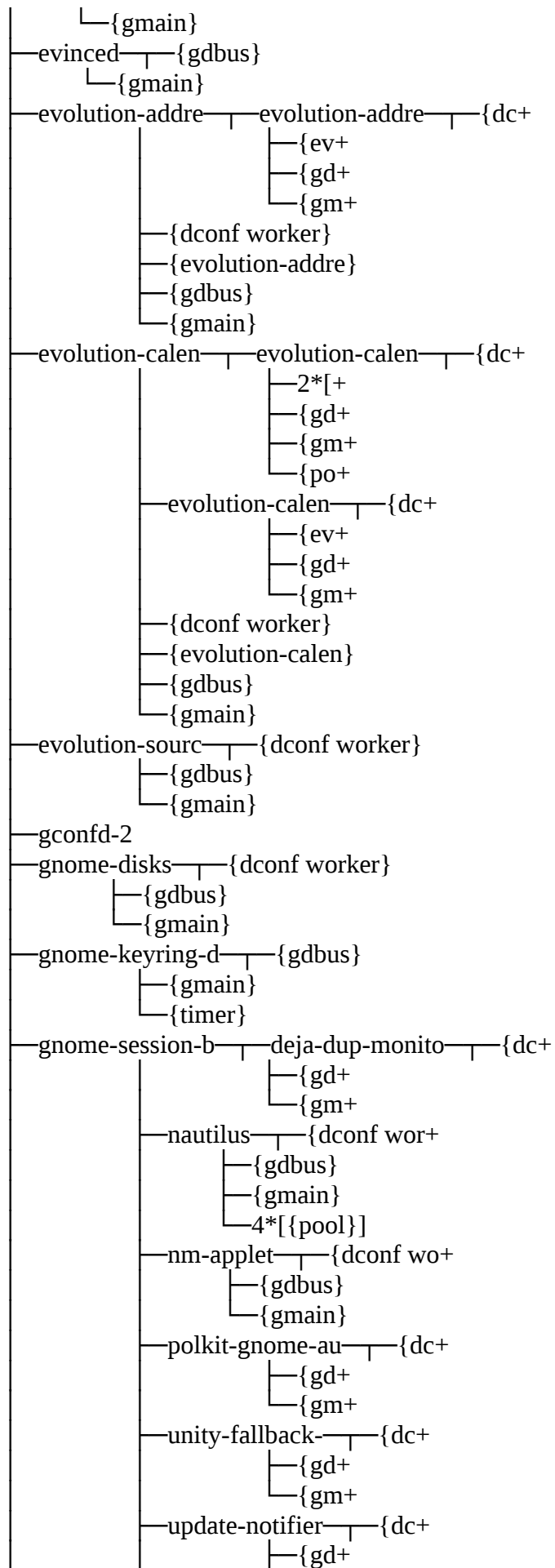
```
ubuntu@ubuntu:~$ free
```

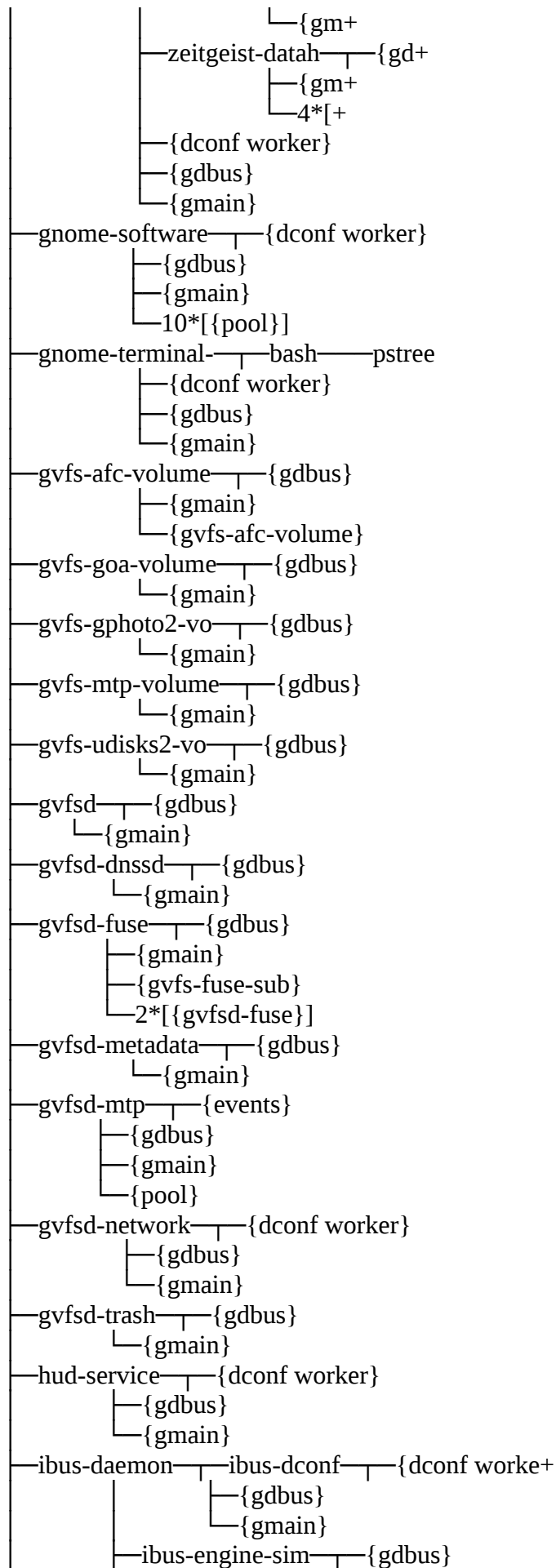
	total	used	free	shared	buff/cache	available
Mem:	3545012	1378864	228516	342528	1937632	1531340

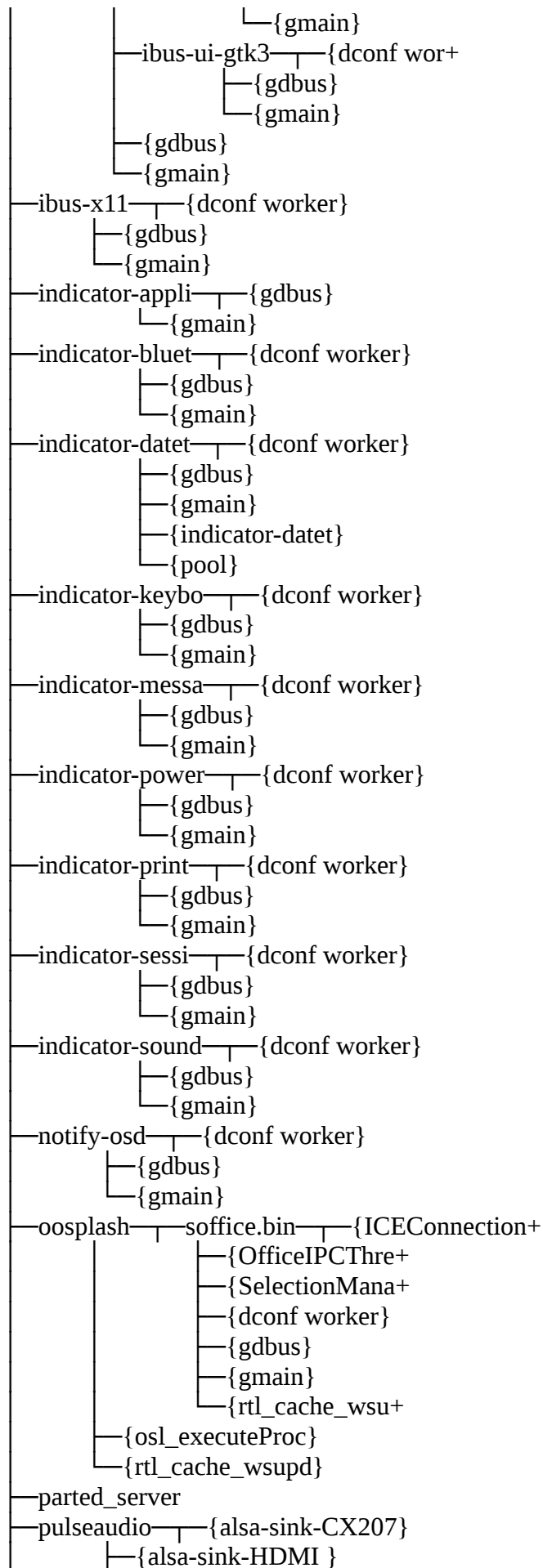
Swap: 0 0 0

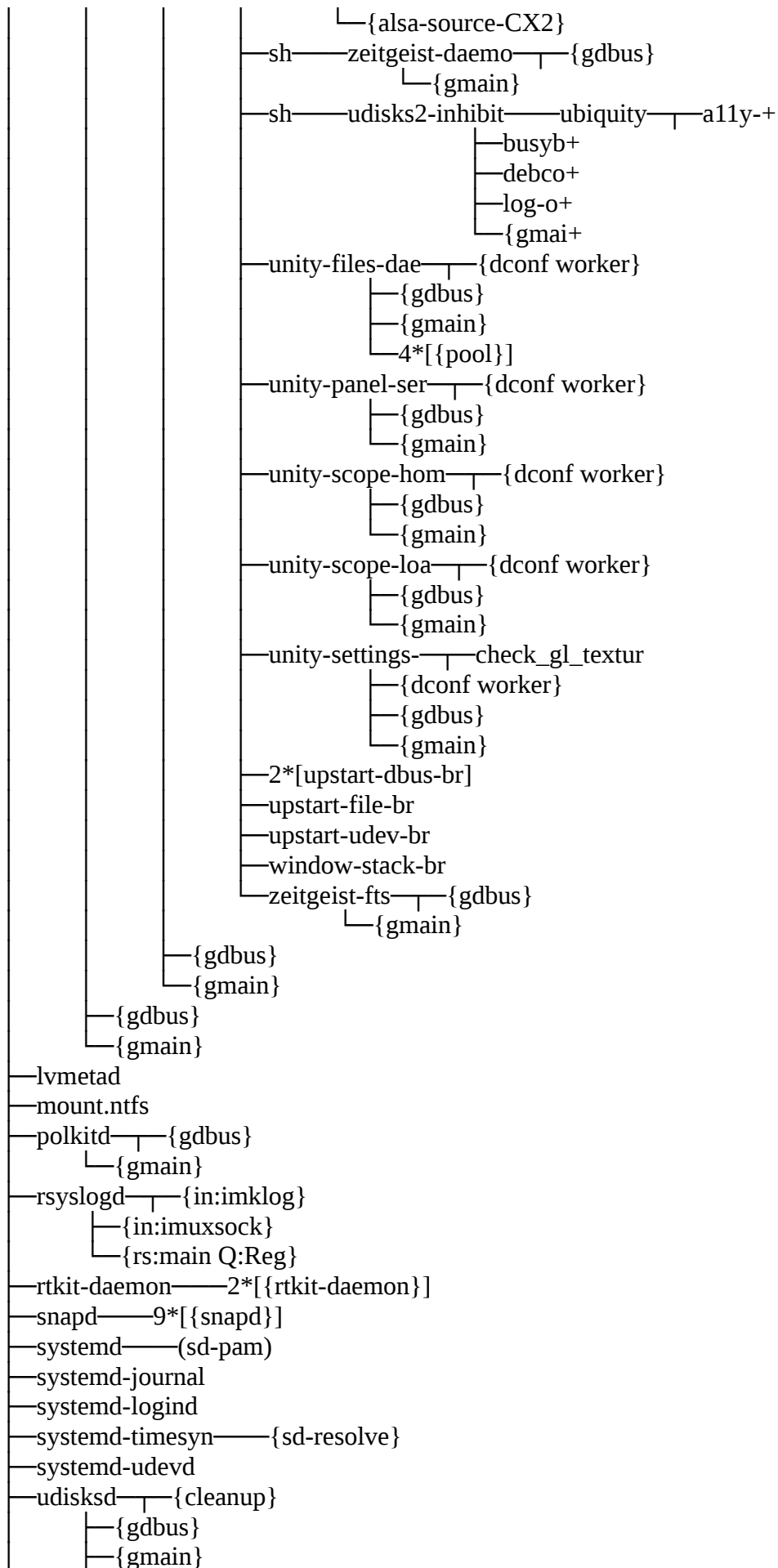
```
ubuntu@ubuntu:~$ pstree
```

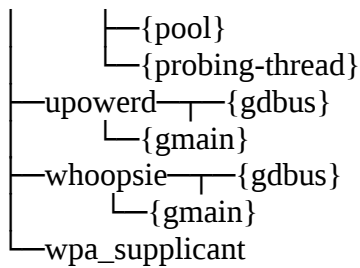












ubuntu@ubuntu:~\$ touch rpl.txt

ubuntu@ubuntu:~\$ rm rpl.txt

ubuntu@ubuntu:~\$ df

Filesystem	1K-blocks	Used	Available	Use%	Mounted on
udev	1724900	0	1724900	0%	/dev
tmpfs	354504	10420	344084	3%	/run
/dev/sdc1	14998504	1478192	13520312	10%	/cdrom
/dev/loop0	1425792	1425792	0	100%	/rofs
/cow	1772504	280492	1492012	16%	/
tmpfs	1772504	268	1772236	1%	/dev/shm
tmpfs	5120	8	5112	1%	/run/lock
tmpfs	1772504	0	1772504	0%	/sys/fs/cgroup
tmpfs	1772504	2516	1769988	1%	/tmp
tmpfs	354504	104	354400	1%	/run/user/999
/dev/sda6	64508924	59391224	5117700	93%	/mnt/1A6278D86278BA59

ubuntu@ubuntu:~\$ du

```

4  ./dbus/session-bus
4  ./dbus
0  ./mozilla/extensions
36 ./mozilla/firefox/xwj92s3x.default/saved-telemetry-pings
1348 ./mozilla/firefox/xwj92s3x.default/gmp-gmpopenh264/1.6
1348 ./mozilla/firefox/xwj92s3x.default/gmp-gmpopenh264
40 ./mozilla/firefox/xwj92s3x.default/datareporting/archived/2019-12
40 ./mozilla/firefox/xwj92s3x.default/datareporting/archived
48 ./mozilla/firefox/xwj92s3x.default/datareporting
8  ./mozilla/firefox/xwj92s3x.default/sessionstore-backups
0  ./mozilla/firefox/xwj92s3x.default/storage/temporary
0  ./mozilla/firefox/xwj92s3x.default/storage/default/https++
+www.howtogeek.com/idb/12183338011.files
44 ./mozilla/firefox/xwj92s3x.default/storage/default/https+++www.howtogeek.com/idb
48 ./mozilla/firefox/xwj92s3x.default/storage/default/https+++www.howtogeek.com
48 ./mozilla/firefox/xwj92s3x.default/storage/default
0  ./mozilla/firefox/xwj92s3x.default/storage/permanent/chrome/idb/2918063365piupsah.files
48 ./mozilla/firefox/xwj92s3x.default/storage/permanent/chrome/idb
52 ./mozilla/firefox/xwj92s3x.default/storage/permanent/chrome
52 ./mozilla/firefox/xwj92s3x.default/storage/permanent
100 ./mozilla/firefox/xwj92s3x.default/storage
4  ./mozilla/firefox/xwj92s3x.default/bookmarkbackups
4  ./mozilla/firefox/xwj92s3x.default/webapps
0  ./mozilla/firefox/xwj92s3x.default/gmp/Linux_x86_64-gcc3
0  ./mozilla/firefox/xwj92s3x.default/gmp
0  ./mozilla/firefox/xwj92s3x.default/crashes/events
4  ./mozilla/firefox/xwj92s3x.default/crashes
0  ./mozilla/firefox/xwj92s3x.default/minidumps
13356 ./mozilla/firefox/xwj92s3x.default
  
```

0 ./mozilla/firefox/Crash Reports/events
4 ./mozilla/firefox/Crash Reports
13364 ./mozilla/firefox
13364 ./mozilla
0 ./gconf
0 ./gnupg/private-keys-v1.d
0 ./gnupg
8 ./local/share/gnome-software
12 ./local/share/Trash/files
4 ./local/share/Trash/info
16 ./local/share/Trash
268 ./local/share/zeitgeist/fts.index
432 ./local/share/zeitgeist
0 ./local/share/nautilus/scripts
0 ./local/share/nautilus
0 ./local/share/unity-settings-daemon
4 ./local/share/icc
108 ./local/share/gvfs-metadata
0 ./local/share/sounds
0 ./local/share/evolution/tasks/system
0 ./local/share/evolution/tasks/trash
0 ./local/share/evolution/tasks
0 ./local/share/evolution/memos/trash
0 ./local/share/evolution/memos
0 ./local/share/evolution/mail/trash
0 ./local/share/evolution/mail
4 ./local/share/evolution/calendar/system
0 ./local/share/evolution/calendar/trash
4 ./local/share/evolution/calendar
0 ./local/share/evolution/addressbook/system/photos
24 ./local/share/evolution/addressbook/system
0 ./local/share/evolution/addressbook/trash
24 ./local/share/evolution/addressbook
28 ./local/share/evolution
0 ./local/share/applications
0 ./local/share/keyrings
616 ./local/share
616 ./local
4 ./cache/thumbnails/normal
1052 ./cache/thumbnails/large
1056 ./cache/thumbnails
8 ./cache/fontconfig
0 ./cache/dconf
0 ./cache/gnome-software/3.20/firmware
0 ./cache/gnome-software/3.20
0 ./cache/gnome-software
908 ./cache/mozilla/firefox/xwj92s3x.default/safebrowsing
1652 ./cache/mozilla/firefox/xwj92s3x.default/startupCache
60 ./cache/mozilla/firefox/xwj92s3x.default/thumbnails
0 ./cache/mozilla/firefox/xwj92s3x.default/cache2/doomed
7792 ./cache/mozilla/firefox/xwj92s3x.default/cache2/entries
7816 ./cache/mozilla/firefox/xwj92s3x.default/cache2

10444 ./cache/mozilla/firefox/xwj92s3x.default
10444 ./cache/mozilla/firefox
10444 ./cache/mozilla
4 ./cache/logrotate
728 ./cache/wallpaper
268 ./cache/gstreamer-1.0
0 ./cache/evolution/tasks/trash
0 ./cache/evolution/tasks
0 ./cache/evolution/sources/trash
0 ./cache/evolution/sources
0 ./cache/evolution/memos/trash
0 ./cache/evolution/memos
0 ./cache/evolution/mail/trash
0 ./cache/evolution/mail
0 ./cache/evolution/calendar/trash
0 ./cache/evolution/calendar
0 ./cache/evolution/addressbook/trash
0 ./cache/evolution/addressbook
0 ./cache/evolution
124 ./cache/compizconfig-1
16 ./cache/ibus/bus
16 ./cache/ibus
76 ./cache/upstart
12736 ./cache
0 ./Videos
0 ./Pictures
0 ./Music
984 ./Documents
0 ./Public
0 ./Templates
0 ./Downloads
4 ./config/eog
8 ./config/evince
4 ./config/gtk-2.0
0 ./config/libreoffice/4/cache
36 ./config/libreoffice/4/user/backup
0 ./config/libreoffice/4/user/autocorr
36 ./config/libreoffice/4/user/psprint
0 ./config/libreoffice/4/user/uno_packages/cache/uno_packages
0 ./config/libreoffice/4/user/uno_packages/cache/registry/com.sun.star.comp.deployment.bundle.
PackageRegistryBackend
0 ./config/libreoffice/4/user/uno_packages/cache/registry/com.sun.star.comp.deployment.sfwk.P
ackageRegistryBackend
0 ./config/libreoffice/4/user/uno_packages/cache/registry/com.sun.star.comp.deployment.script.P
ackageRegistryBackend
4 ./config/libreoffice/4/user/uno_packages/cache/registry/com.sun.star.comp.deployment.help.Pa
ckageRegistryBackend
0 ./config/libreoffice/4/user/uno_packages/cache/registry/com.sun.star.comp.deployment.executa
ble.PackageRegistryBackend
4 ./config/libreoffice/4/user/uno_packages/cache/registry/com.sun.star.comp.deployment.configu
ration.PackageRegistryBackend

```
0  ./config/libreoffice/4/user/uno_packages/cache/registry/com.sun.star.comp.deployment.component.PackageRegistryBackend
8  ./config/libreoffice/4/user/uno_packages/cache/registry
12 ./config/libreoffice/4/user/uno_packages/cache
12 ./config/libreoffice/4/user/uno_packages
8  ./config/libreoffice/4/user/gallery
1012 ./config/libreoffice/4/user/database/biblio
1020 ./config/libreoffice/4/user/database
12 ./config/libreoffice/4/user/basic/Standard
20 ./config/libreoffice/4/user/basic
4  ./config/libreoffice/4/user/autotext
0  ./config/libreoffice/4/user/extensions/tmp/extensions
0  ./config/libreoffice/4/user/extensions/tmp/registry/com.sun.star.comp.deployment.bundle.PackageRegistryBackend
0  ./config/libreoffice/4/user/extensions/tmp/registry/com.sun.star.comp.deployment.sfwk.PackageRegistryBackend
0  ./config/libreoffice/4/user/extensions/tmp/registry/com.sun.star.comp.deployment.script.PackageRegistryBackend
4  ./config/libreoffice/4/user/extensions/tmp/registry/com.sun.star.comp.deployment.help.PackageRegistryBackend
0  ./config/libreoffice/4/user/extensions/tmp/registry/com.sun.star.comp.deployment.executable.PackageRegistryBackend
4  ./config/libreoffice/4/user/extensions/tmp/registry/com.sun.star.comp.deployment.configuration.PackageRegistryBackend
0  ./config/libreoffice/4/user/extensions/tmp/registry/com.sun.star.comp.deployment.component.PackageRegistryBackend
8  ./config/libreoffice/4/user/extensions/tmp/registry
8  ./config/libreoffice/4/user/extensions/tmp
0  ./config/libreoffice/4/user/extensions/bundled/registry/com.sun.star.comp.deployment.bundle.PackageRegistryBackend
0  ./config/libreoffice/4/user/extensions/bundled/registry/com.sun.star.comp.deployment.sfwk.PackageRegistryBackend
0  ./config/libreoffice/4/user/extensions/bundled/registry/com.sun.star.comp.deployment.script.PackageRegistryBackend
4  ./config/libreoffice/4/user/extensions/bundled/registry/com.sun.star.comp.deployment.help.PackageRegistryBackend
0  ./config/libreoffice/4/user/extensions/bundled/registry/com.sun.star.comp.deployment.executable.PackageRegistryBackend
4  ./config/libreoffice/4/user/extensions/bundled/registry/com.sun.star.comp.deployment.configuration.PackageRegistryBackend
0  ./config/libreoffice/4/user/extensions/bundled/registry/com.sun.star.comp.deployment.component.PackageRegistryBackend
8  ./config/libreoffice/4/user/extensions/bundled/registry
12 ./config/libreoffice/4/user/extensions/bundled
0  ./config/libreoffice/4/user/extensions/shared/registry/com.sun.star.comp.deployment.bundle.PackageRegistryBackend
0  ./config/libreoffice/4/user/extensions/shared/registry/com.sun.star.comp.deployment.sfwk.PackageRegistryBackend
0  ./config/libreoffice/4/user/extensions/shared/registry/com.sun.star.comp.deployment.script.PackageRegistryBackend
4  ./config/libreoffice/4/user/extensions/shared/registry/com.sun.star.comp.deployment.help.PackageRegistryBackend
```

```
0  ./config/libreoffice/4/user/extensions/shared/registry/com.sun.star.comp.deployment.executable.PackageRegistryBackend
4  ./config/libreoffice/4/user/extensions/shared/registry/com.sun.star.comp.deployment.configuration.PackageRegistryBackend
0  ./config/libreoffice/4/user/extensions/shared/registry/com.sun.star.comp.deployment.component.PackageRegistryBackend
8  ./config/libreoffice/4/user/extensions/shared/registry
12 ./config/libreoffice/4/user/extensions/shared
36 ./config/libreoffice/4/user/extensions
0  ./config/libreoffice/4/user/config/soffice.cfg/modules/swriter/images/Bitmaps
0  ./config/libreoffice/4/user/config/soffice.cfg/modules/swriter/images
0  ./config/libreoffice/4/user/config/soffice.cfg/modules/swriter/statusbar
0  ./config/libreoffice/4/user/config/soffice.cfg/modules/swriter/toolbar
0  ./config/libreoffice/4/user/config/soffice.cfg/modules/swriter/popupmenu
0  ./config/libreoffice/4/user/config/soffice.cfg/modules/swriter/menubar
0  ./config/libreoffice/4/user/config/soffice.cfg/modules/swriter
0  ./config/libreoffice/4/user/config/soffice.cfg/modules
0  ./config/libreoffice/4/user/config/soffice.cfg
52 ./config/libreoffice/4/user/config
1492 ./config/libreoffice/4/user
1496 ./config/libreoffice/4
1496 ./config/libreoffice
4  ./config/gedit
0  ./config/update-notifier
0  ./config/unity
16 ./config/nautilus
4  ./config/gtk-3.0
48 ./config/pulse
4  ./config/evolution/sources
4  ./config/evolution
12 ./config/libaccounts-glib
0  ./config/gnome-session/saved-session
0  ./config/gnome-session
4  ./config/compiz-1/compizconfig
4  ./config/compiz-1
4  ./config/ibus/bus
4  ./config/ibus
16 ./config/dconf
0  ./config/upstart
0  ./config/ubuntu-system-settings
1632 ./config
6116 ./Desktop/prak_so2019-master (2)
3348 ./Desktop/prak_so2019-master
17468 ./Desktop
46896 .
ubuntu@ubuntu:~$ ls -l /home
total 0
drwxr-xr-x 17 ubuntu ubuntu 520 Dec 28 04:28 ubuntu
ubuntu@ubuntu:~$
```