1-

```
ubuntu@ip-172-31-57-211:~$ sudo adduser matheus
info: Adding user `matheus' ...
info: Selecting UID/GID from range 1000 to 59999 ...
info: Adding new group `matheus' (1001) ...
info: Adding new user `matheus' (1001) with group `matheus (1001)' ...
info: Creating home directory `/home/matheus' ...
info: Copying files from `/etc/skel' ...
New password:
Retype new password:
passwd: password updated successfully
Changing the user information for matheus
Enter the new value, or press ENTER for the default
        Full Name []:
        Room Number []:
        Work Phone []:
        Home Phone []:
        Other []:
Is the information correct? [Y/n] y
info: Adding new user `matheus' to supplemental / extra groups `users' ...
info: Adding user `matheus' to group `users' ...
```

2-

```
ubuntu@ip-172-31-57-211:~$ sudo passwd matheus
New password:
Retype new password:
passwd: password updated successfully
ubuntu@ip-172-31-57-211:~$
```

3-

```
ubuntu@ip-172-31-57-211:~$ su fermo
Password:
fermo@ip-172-31-57-211:/home/ubuntu$
```

4-

```
fermo@ip-172-31-57-211:/home/ubuntu$ cd ..
fermo@ip-172-31-57-211:/home$ cd /home
fermo@ip-172-31-57-211:/home$
```

5-


```
fermo@ip-172-31-57-211:/home$ top
top - 14:32:38 up 9 min,  1 user,  load average: 0.00, 0.12, 0.12
Tasks: 104 total,   1 running, 103 sleeping,   0 stopped,   0 zombie
%Cpu(s):  0.0 us,  0.0 sy,  0.0 ni, 99.7 id,  0.0 wa,  0.0 hi,  0.0 si,  0.3 st
MiB Mem :    957.4 total,    192.3 free,    356.7 used,    579.9 buff/cache
MiB Swap:      0.0 total,      0.0 free,      0.0 used.    600.7 avail Mem

    PID USER      PR  NI    VIRT    RES    SHR S  %CPU  %MEM     TIME+ COMMAND
    180 root      rt   0  288948  27136   8704 S   0.3   2.8   0:00.06 multipathd
      1 root      20   0   22504  13652   9556 S   0.0   1.4   0:05.46 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   0:00.00 pool_workqueue_release
      4 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 kworker/R-rcu_g
      5 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 kworker/R-rcu_p
      6 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 kworker/R-slub_
      7 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 kworker/R-netns
      9 root      20   0       0      0      0 I   0.0   0.0   0:00.04 kworker/0:1-cgroup_destroy
     10 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 kworker/0:0H-events_highpri
     12 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 kworker/R-mm_pe
     13 root      20   0       0      0      0 I   0.0   0.0   0:00.00 rcu_tasks_rude_kthread
     14 root      20   0       0      0      0 I   0.0   0.0   0:00.00 rcu_tasks_trace_kthread
     15 root      20   0       0      0      0 S   0.0   0.0   0:00.17 ksoftirqd/0
     16 root      20   0       0      0      0 I   0.0   0.0   0:00.18 rcu_sched
     17 root      rt   0       0      0      0 S   0.0   0.0   0:00.00 migration/0
     18 root     -51   0       0      0      0 S   0.0   0.0   0:00.00 idle_inject/0
     19 root      20   0       0      0      0 S   0.0   0.0   0:00.00 cpuhp/0
     20 root      20   0       0      0      0 S   0.0   0.0   0:00.00 kdevtmpfs
     21 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 kworker/R-inet_
     22 root       0 -20       0      0      0 I   0.0   0.0   0:00.26 kworker/u30:1-events_unbound
     23 root      20   0       0      0      0 S   0.0   0.0   0:00.00 kauditd
     24 root      20   0       0      0      0 S   0.0   0.0   0:00.00 khungtaskd
     25 root      20   0       0      0      0 S   0.0   0.0   0:00.00 oom_reaper
     26 root      20   0       0      0      0 I   0.0   0.0   0:00.01 kworker/u30:2-events_power_efficient
     27 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 kworker/R-write
     28 root      20   0       0      0      0 S   0.0   0.0   0:00.01 kcompactd0
     29 root      25   5       0      0      0 S   0.0   0.0   0:00.00 ksmd
     30 root      39  19       0      0      0 S   0.0   0.0   0:00.00 khugepaged
     31 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 kworker/R-kinte
     32 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 kworker/R-kbloc
     33 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 kworker/R-blkcg
     34 root     -51   0       0      0      0 S   0.0   0.0   0:00.00 irq/9-acpi
     35 root      20   0       0      0      0 S   0.0   0.0   0:00.00 xen-balloon
     36 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 kworker/R-tpm_d
     37 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 kworker/R-ata_s
     38 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 kworker/R-md
     39 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 kworker/R-md_bi
     40 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 kworker/R-edac-
     41 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 kworker/R-devfr
     42 root     -51   0       0      0      0 S   0.0   0.0   0:00.00 watchdogd
     43 root       0 -20       0      0      0 I   0.0   0.0   0:00.08 kworker/0:1H-kblockd
     44 root      20   0       0      0      0 S   0.0   0.0   0:00.21 kswapd0
     45 root      20   0       0      0      0 S   0.0   0.0   0:00.00 ecryptfs-kthread
     46 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 kworker/R-kthro
     47 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 kworker/R-acpi_
     48 root      20   0       0      0      0 S   0.0   0.0   0:00.00 xenbus
     49 root      20   0       0      0      0 S   0.0   0.0   0:00.05 xenwatch
     50 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 kworker/R-nvme-
     51 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 kworker/R-nvme-
```

6-


```
fermo@ip-172-31-57-211:/home$ su root
Password:
root@ip-172-31-57-211:/home# sudo adduser silva
info: Adding user `silva' ...
info: Selecting UID/GID from range 1000 to 59999 ...
info: Adding new group `silva' (1003) ...
info: Adding new user `silva' (1003) with group `silva (1003)' ...
info: Creating home directory `/home/silva' ...
info: Copying files from `/etc/skel' ...
New password:
Retype new password:
passwd: password updated successfully
Changing the user information for silva
Enter the new value, or press ENTER for the default
        Full Name []:
        Room Number []:
        Work Phone []:
        Home Phone []:
        Other []:
Is the information correct? [Y/n] y
info: Adding new user `silva' to supplemental / extra groups `users' ...
info: Adding user `silva' to group `users' ...
root@ip-172-31-57-211:/home#
```

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```
root@ip-172-31-57-211:/home# sudo passwd silva
New password:
Retype new password:
passwd: password updated successfully
```

8-


```
root@ip-172-31-57-211:/home# cd ..
root@ip-172-31-57-211:/# cd /home
root@ip-172-31-57-211:/home# cd
root@ip-172-31-57-211:~#
```

9-

```
root@ip-172-31-57-211:~# sudo apt update && sudo apt upgrade
Hit:1 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble InRelease
Hit:2 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates InRelease
Hit:3 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports InRelease
Hit:4 http://security.ubuntu.com/ubuntu noble-security InRelease
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
17 packages can be upgraded. Run 'apt list --upgradable' to see them.
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
Calculating upgrade... Done
The following upgrades have been deferred due to phasing:
  libc-bin libc6 libnetplan1 libnss-systemd libpam-systemd libsystemd-shared libsystemd0 libudev1 locales netplan-generator netplan.io python3-netplan systemd systemd-dev systemd-resolved systemd-sysv udev
0 upgraded, 0 newly installed, 0 to remove and 17 not upgraded.
root@ip-172-31-57-211:~#
```

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```
root@ip-172-31-57-211:~# pwd
/root
root@ip-172-31-57-211:~#
```

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```
root@ip-172-31-57-211:~# mkdir teste
root@ip-172-31-57-211:~#
```

12-

```
root@ip-172-31-57-211:~# rm -r teste
root@ip-172-31-57-211:~#
```

13-

```
root@ip-172-31-57-211:/home/fermo# touch teste
root@ip-172-31-57-211:/home/fermo#
```

14-

```
root@ip-172-31-57-211:/home/fermo# df -h
Filesystem      Size  Used Avail Use% Mounted on
/dev/root        19G  2.0G   17G  11% /
tmpfs           479M     0  479M   0% /dev/shm
tmpfs           192M  876K  191M   1% /run
tmpfs           5.0M     0  5.0M   0% /run/lock
/dev/xvda16     881M  133M  687M  17% /boot
/dev/xvda15     105M  6.1M   99M   6% /boot/efi
tmpfs            96M   12K   96M   1% /run/user/1000
root@ip-172-31-57-211:/home/fermo#
```

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```
root@ip-172-31-57-211:/home/fermo# du -m /home
1       /home/fermo/.config/procps
1       /home/fermo/.config
1       /home/fermo
1       /home/matheus
1       /home/ubuntu/.ssh
1       /home/ubuntu/.cache
1       /home/ubuntu
1       /home/silva
1       /home
```

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```
root@ip-172-31-57-211:/home/fermo# uname -a
Linux ip-172-31-57-211 6.8.0-1014-aws #15-Ubuntu SMP Thu Aug  8 19:13:06 UTC 2024 x86_64 x86_64 x86_64 GNU/Linux
root@ip-172-31-57-211:/home/fermo#
```

17-

```
root@ip-172-31-57-211:/home/fermo# history
    1  sudo adduser silva
    2  sudo passwd silva
    3  cd ..
    4  cd /home
    5  cd
    6  clear
    7  pwd
    8  sudo apt update && sudo apt upgrade
    9  clear
   10  mkdir teste
   11  rm teste
   12  rm -r teste
   13  exit
   14  touch teste
   15  clear
   16  df-h
   17  df -h
   18  du -m teste
   19  du -m <teste>
   20  clear
   21  du -m /home
   22  du -m /teste
   23  du -m/teste-2
   24  uname -a
   25  history
root@ip-172-31-57-211:/home/fermo#
```

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```
   25  history
root@ip-172-31-57-211:/home/fermo# history | grep teste
   10  mkdir teste
   11  rm teste
   12  rm -r teste
   14  touch teste
   18  du -m teste
   19  du -m <teste>
   22  du -m /teste
   23  du -m/teste-2
   26  history | grep teste
root@ip-172-31-57-211:/home/fermo#
```

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20-

21-

```
root@ip-172-31-57-211:/home/fermo# neofetch
            .-/+oossssoo+/-.               matheus@ip-172-31-57-211
        `:+ssssssssssssssssss+:`          ------------------------
      -+ssssssssssssssssssyyssss+-        OS: Ubuntu 24.04 LTS x86_64
    .ossssssssssssssssssdMMMNysssso.      Host: HVM domU 4.11.amazon
   /ssssssssssshdmmNNmmyNMMMMhssssss/     Kernel: 6.8.0-1014-aws
  +ssssssssshmydMMMMMMMNddddyssssssss+    Uptime: 18 mins
 /sssssssshNMMMyhhyyyyhmNMMMNhssssssss/   Packages: 762 (dpkg), 6 (snap)
.ssssssssdMMMNhsssssssssshNMMMdssssssss.  Shell: bash 5.2.21
+sssshhhyNMMNyssssssssssssyNMMMysssssss+  Terminal: /dev/pts/0
ossyNMMMNyMMhsssssssssssssshmmmhssssssso  CPU: Intel Xeon E5-2676 v3 (1) @ 2.400GHz
ossyNMMMNyMMhsssssssssssssshmmmhssssssso  GPU: 00:02.0 Cirrus Logic GD 5446
+sssshhhyNMMNyssssssssssssyNMMMysssssss+  Memory: 195MiB / 957MiB
.ssssssssdMMMNhsssssssssshNMMMdssssssss.
 /sssssssshNMMMyhhyyyyhdNMMMNhssssssss/
  +sssssssssdmydMMMMMMMMdddyssssssss+
   /ssssssssssshdmNNNNmyNMMMMhssssss/
    .ossssssssssssssssssdMMMNysssso.
      -+sssssssssssssssssyyyssss+-
        `:+ssssssssssssssssss+:`
            .-/+oossssoo+/-.

root@ip-172-31-57-211:/home/fermo#
```

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```
MAN(1)                                              Manual pager utils                                              MAN(1)

NAME
       man - an interface to the system reference manuals

SYNOPSIS
       man [man options] [[section] page ...] ...
       man -k [apropos options] regexp ...
       man -K [man options] [section] term ...
       man -f [whatis options] page ...
       man -l [man options] file ...
       man -w|-W [man options] page ...

DESCRIPTION
       man is the system's manual pager.  Each page argument given to man is normally the name of a program, utility or function.  The manual page associated with each of these arguments is then found and
       displayed.  A section, if provided, will direct man to look only in that section of the manual.  The default action is to search in all of the available sections following a pre-defined order (see
       DEFAULTS), and to show only the first page found, even if page exists in several sections.

       The table below shows the section numbers of the manual followed by the types of pages they contain.

       1   Executable programs or shell commands
       2   System calls (functions provided by the kernel)
       3   Library calls (functions within program libraries)
       4   Special files (usually found in /dev)
       5   File formats and conventions, e.g. /etc/passwd
       6   Games
       7   Miscellaneous (including macro packages and conventions), e.g. man(7), groff(7), man-pages(7)
       8   System administration commands (usually only for root)
       9   Kernel routines [Non standard]

       A manual page consists of several sections.

       Conventional section names include NAME, SYNOPSIS, CONFIGURATION, DESCRIPTION, OPTIONS, EXIT STATUS, RETURN VALUE, ERRORS, ENVIRONMENT, FILES, VERSIONS, STANDARDS, NOTES,  BUGS,  EXAMPLE,  AUTHORS,
       and SEE ALSO.

       The following conventions apply to the SYNOPSIS section and can be used as a guide in other sections.

       bold text          type exactly as shown.
       italic text        replace with appropriate argument.
       [-abc]             any or all arguments within [ ] are optional.
       -a|-b              options delimited by | cannot be used together.
       argument ...       argument is repeatable.
       [expression] ...   entire expression within [ ] is repeatable.

       Exact rendering may vary depending on the output device.  For instance, man will usually not be able to render italics when running in a terminal, and will typically use underlined or coloured text
       instead.

       The  command or function illustration is a pattern that should match all possible invocations.  In some cases it is advisable to illustrate several exclusive invocations as is shown in the SYNOPSIS
       section of this manual page.

EXAMPLES
       man ls
              Display the manual page for the item (program) ls.

       man man.7
              Display the manual page for macro package man from section 7.  (This is an alternative spelling of "man 7 man".)
 Manual page man(1) line 1 (press h for help or q to quit)
```

23-

```
root@ip-172-31-57-211:/home/fermo# lsb_release -a
No LSB modules are available.
Distributor ID: Ubuntu
Description:    Ubuntu 24.04 LTS
Release:        24.04
Codename:       noble
root@ip-172-31-57-211:/home/fermo#
```

24-

```
root@ip-172-31-57-211:/home/fermo# cat /proc/cpuinfo
processor       : 0
vendor_id       : GenuineIntel
cpu family      : 6
model           : 63
model name      : Intel(R) Xeon(R) CPU E5-2676 v3 @ 2.40GHz
stepping        : 2
microcode       : 0x49
cpu MHz         : 2400.018
cache size      : 30720 KB
physical id     : 0
siblings        : 1
core id         : 0
cpu cores       : 1
apicid          : 0
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 rdtscp lm constant_tsc rep_good nopl xtopology cpuid tsc_known_freq pni pclmulqd
q ssse3 fma cx16 pcid sse4_1 sse4_2 x2apic movbe popcnt tsc_deadline_timer aes xsave avx f16c rdrand hypervisor lahf_lm abm cpuid_fault pti fsgsbase bmi1 avx2 smep bmi2 erms invpcid xsaveopt
bugs            : cpu_meltdown spectre_v1 spectre_v2 spec_store_bypass l1tf mds swapgs itlb_multihit mmio_stale_data bhi
bogomips        : 4800.03
clflush size    : 64
cache_alignment : 64
address sizes   : 46 bits physical, 48 bits virtual
power management:

root@ip-172-31-57-211:/home/fermo#
```

```
root@ip-172-31-57-211:/home/fermo# cpuid | more
CPU 0:
   vendor_id = "GenuineIntel"
   version information (1/eax):
      processor type  = primary processor (0)
      family          = 0x6 (6)
      model           = 0xf (15)
      stepping id     = 0x2 (2)
      extended family = 0x0 (0)
      extended model  = 0x3 (3)
      (family synth)  = 0x6 (6)
      (model synth)   = 0x3f (63)
   miscellaneous (1/ebx):
      process local APIC physical ID = 0x0 (0)
      maximum IDs for CPUs in pkg    = 0x1 (1)
      CLFLUSH line size              = 0x8 (8)
      brand index                    = 0x0 (0)
   brand id = 0x00 (0): unknown
   feature information (1/edx):
      x87 FPU on chip                          = true
      VME: virtual-8086 mode enhancement       = true
      DE: debugging extensions                 = true
      PSE: page size extensions                = true
      TSC: time stamp counter                  = true
      RDMSR and WRMSR support                  = true
      PAE: physical address extensions         = true
      MCE: machine check exception             = true
      CMPXCHG8B inst.                          = true
      APIC on chip                             = true
      SYSENTER and SYSEXIT                     = true
      MTRR: memory type range registers        = true
      PTE global bit                           = true
      MCA: machine check architecture          = true
      CMOV: conditional move/compare instr     = true
      PAT: page attribute table                = true
      PSE-36: page size extension              = true
      PSN: processor serial number             = false
      CLFLUSH instruction                      = true
      DS: debug store                          = false
      ACPI: thermal monitor and clock ctrl     = false
      MMX Technology                           = true
      FXSAVE/FXRSTOR                           = true
      SSE extensions                           = true
      SSE2 extensions                          = true
      SS: self snoop                           = false
      hyper-threading / multi-core supported   = true
      TM: therm. monitor                       = false
      IA64                                     = false
      PBE: pending break event                 = false
   feature information (1/ecx):
      PNI/SSE3: Prescott New Instructions      = true
      PCLMULDQ instruction                     = true
      DTES64: 64-bit debug store               = false
      MONITOR/MWAIT                            = false
      CPL-qualified debug store                = false
      VMX: virtual machine extensions          = false
      SMX: safer mode extensions               = false
      Enhanced Intel SpeedStep Technology      = false
```

26-

```
root@ip-172-31-57-211:/home/fermo# df
Filesystem     1K-blocks     Used Available Use% Mounted on
/dev/root       19221248  2298388  16906476  12% /
tmpfs             490204        0    490204   0% /dev/shm
tmpfs             196084      892    195192   1% /run
tmpfs               5120        0      5120   0% /run/lock
/dev/xvda16       901520   135276    703116  17% /boot
/dev/xvda15       106832     6246    100586   6% /boot/efi
tmpfs              98040       12     98028   1% /run/user/1000
root@ip-172-31-57-211:/home/fermo#
```

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```
root@ip-172-31-57-211:/home/fermo# free
               total        used        free      shared  buff/cache   available
Mem:          980408      393504      164652         904      589208      586904
Swap:              0           0           0
root@ip-172-31-57-211:/home/fermo#
```

```
root@ip-172-31-57-211:/home/fermo# sudo dmidecode
# dmidecode 3.5
Getting SMBIOS data from sysfs.
SMBIOS 2.7 present.
11 structures occupying 378 bytes.
Table at 0x000EB01F.

Handle 0x0000, DMI type 0, 24 bytes
BIOS Information
        Vendor: Xen
        Version: 4.11.amazon
        Release Date: 08/24/2006
        Address: 0xE8000
        Runtime Size: 96 kB
        ROM Size: 64 kB
        Characteristics:
                PCI is supported
                EDD is supported
                Targeted content distribution is supported
        BIOS Revision: 4.11

Handle 0x0100, DMI type 1, 27 bytes
System Information
        Manufacturer: Xen
        Product Name: HVM domU
        Version: 4.11.amazon
        Serial Number: ec2e6a92-74a9-f8ad-0f6f-75c09bfefc0c
        UUID: ec2e6a92-74a9-f8ad-0f6f-75c09bfefc0c
        Wake-up Type: Power Switch
        SKU Number: Not Specified
        Family: Not Specified

Handle 0x0300, DMI type 3, 21 bytes
Chassis Information
        Manufacturer: Xen
        Type: Other
        Lock: Not Present
        Version: Not Specified
        Serial Number: Not Specified
        Asset Tag: Not Specified
        Boot-up State: Safe
        Power Supply State: Safe
        Thermal State: Safe
        Security Status: Unknown
        OEM Information: 0x00000000
        Height: Unspecified
        Number Of Power Cords: Unspecified
        Contained Elements: 0

Handle 0x0401, DMI type 4, 35 bytes
Processor Information
        Socket Designation: CPU 1
        Type: Central Processor
        Family: Other
        Manufacturer: Intel
        ID: F2 06 03 00 FF FB 8B 17
        Version: Not Specified
        Voltage: Unknown
```

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```
root@ip-172-31-57-211:/home/fermo# hardinfo
Computer
 Summary
 Operating System
 Kernel Modules
 Boots
 Languages
 Filesystems
 Display
 Environment Variables
 Development
 Users
 Groups
Devices
 Processor
 Memory
 PCI Devices
 USB Devices
 Printers
 Battery
 Sensors
 Input Devices
 Storage
 DMI
 Memory SPD
 Resources
Network
 Interfaces
 IP Connections
 Routing Table
 ARP Table
 DNS Servers
 Statistics
 Shared Directories
Benchmarks
 CPU Blowfish
 Performing Blowfish benchmark...
[CPU Blowfish]
4_11_amazon___HVM_domU_(Xen);Intel(R)_Xeon(R)_CPU_E5_2676_v3___2_40GHz;2400_02=12.630523; 12.630523; 1|1|4.11.amazon / HVM domU (Xen)|Intel(R) Xeon(R) CPU E5-2676 v3 @ 2.40GHz|1 physical processor; 1 core; 1 th
read|1x 2400.02 MHz|980408|1|1|1|(Unknown)
 CPU CryptoHash
[CPU CryptoHash]ash benchmark...
4_11_amazon___HVM_domU_(Xen);Intel(R)_Xeon(R)_CPU_E5_2676_v3___2_40GHz;2400_02=147.535518; 2.114745; 1|1|4.11.amazon / HVM domU (Xen)|Intel(R) Xeon(R) CPU E5-2676 v3 @ 2.40GHz|1 physical processor; 1 core; 1 th
read|1x 2400.02 MHz|980408|1|1|1|(Unknown)
 CPU Fibonacci
[CPU Fibonacci]e 42nd Fibonacci number...
4_11_amazon___HVM_domU_(Xen);Intel(R)_Xeon(R)_CPU_E5_2676_v3___2_40GHz;2400_02=0.389872; 0.389872; 1|1|4.11.amazon / HVM domU (Xen)|Intel(R) Xeon(R) CPU E5-2676 v3 @ 2.40GHz|1 physical processor; 1 core; 1 thre
ad|1x 2400.02 MHz|980408|1|1|1|(Unknown)
 CPU N-Queens
[CPU N-Queens]ens benchmark...
4_11_amazon___HVM_domU_(Xen);Intel(R)_Xeon(R)_CPU_E5_2676_v3___2_40GHz;2400_02=2.826222; 2.826222; 1|1|4.11.amazon / HVM domU (Xen)|Intel(R) Xeon(R) CPU E5-2676 v3 @ 2.40GHz|1 physical processor; 1 core; 1 thre
ad|1x 2400.02 MHz|980408|1|1|1|(Unknown)
 CPU Zlib
[CPU Zlib]lib benchmark...
4_11_amazon___HVM_domU_(Xen);Intel(R)_Xeon(R)_CPU_E5_2676_v3___2_40GHz;2400_02=0.205555; 18.973003; 1|1|4.11.amazon / HVM domU (Xen)|Intel(R) Xeon(R) CPU E5-2676 v3 @ 2.40GHz|1 physical processor; 1 core; 1 thr
ead|1x 2400.02 MHz|980408|1|1|1|(Unknown)
 FPU FFT
[FPU FFT]FFT benchmark...
```

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```
root@ip-172-31-57-211:/home/fermo# inxi -C
CPU:
   Info: single core model: Intel Xeon E5-2676 v3 bits: 64 cache: L2: 256 KiB
   Speed (MHz): 2400 min/max: N/A core: 1: 2400
root@ip-172-31-57-211:/home/fermo#
```

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```
root@ip-172-31-57-211:/home/fermo# likwid-topology
--------------------------------------------------------------------------------
CPU name:       Intel(R) Xeon(R) CPU E5-2676 v3 @ 2.40GHz
CPU type:       Intel Xeon Haswell EN/EP/EX processor
CPU stepping:   2
********************************************************************************
Hardware Thread Topology
********************************************************************************
Sockets:                1
Cores per socket:       1
Threads per core:       1
--------------------------------------------------------------------------------
HWThread        Thread          Core            Die             Socket          Available
0               0               0               0               0               *
--------------------------------------------------------------------------------
Socket 0:               ( 0 )
--------------------------------------------------------------------------------
********************************************************************************
Cache Topology
********************************************************************************
Level:                  1
Size:                   32 kB
Cache groups:           ( 0 )
--------------------------------------------------------------------------------
Level:                  2
Size:                   256 kB
Cache groups:           ( 0 )
--------------------------------------------------------------------------------
Level:                  3
Size:                   30 MB
Cache groups:           ( 0 )
--------------------------------------------------------------------------------
********************************************************************************
NUMA Topology
********************************************************************************
NUMA domains:           1
--------------------------------------------------------------------------------
Domain:                 0
Processors:             ( 0 )
Distances:              10
Free memory:            182.613 MB
Total memory:           957.43 MB
--------------------------------------------------------------------------------
root@ip-172-31-57-211:/home/fermo#
```

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```
root@ip-172-31-57-211:/home/fermo# lscpu
Architecture:          x86_64
  CPU op-mode(s):      32-bit, 64-bit
  Address sizes:       46 bits physical, 48 bits virtual
  Byte Order:          Little Endian
CPU(s):                1
  On-line CPU(s) list: 0
Vendor ID:             GenuineIntel
  BIOS Vendor ID:      Intel
  Model name:          Intel(R) Xeon(R) CPU E5-2676 v3 @ 2.40GHz
    BIOS Model name:      CPU @ 2.4GHz
    BIOS CPU family:   1
    CPU family:        6
    Model:             63
    Thread(s) per core: 1
    Core(s) per socket: 1
    Socket(s):         1
    Stepping:          2
    BogoMIPS:          4800.03
    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 rdtscp lm constant_tsc rep_good nopl xtopology cpuid tsc_known_freq pni
                       pclmulqdq ssse3 fma cx16 pcid sse4_1 sse4_2 x2apic movbe popcnt tsc_deadline_timer aes xsave avx f16c rdrand hypervisor lahf_lm abm cpuid_fault pti fsgsbase bmi1 avx2 smep bmi2 erms in
                       vpcid xsaveopt
Virtualization features:
  Hypervisor vendor:   Xen
  Virtualization type: full
Caches (sum of all):
  L1d:                 32 KiB (1 instance)
  L1i:                 32 KiB (1 instance)
  L2:                  256 KiB (1 instance)
  L3:                  30 MiB (1 instance)
NUMA:
  NUMA node(s):        1
  NUMA node0 CPU(s):   0
Vulnerabilities:
  Gather data sampling: Not affected
  Itlb multihit:       KVM: Mitigation: VMX unsupported
  L1tf:                Mitigation: PTE Inversion
  Mds:                 Vulnerable: Clear CPU buffers attempted, no microcode; SMT Host state unknown
  Meltdown:            Mitigation: PTI
  Mmio stale data:     Vulnerable: Clear CPU buffers attempted, no microcode; SMT Host state unknown
  Reg file data sampling: Not affected
  Retbleed:            Not affected
  Spec rstack overflow: Not affected
  Spec store bypass:   Vulnerable
  Spectre v1:          Mitigation; usercopy/swapgs barriers and __user pointer sanitization
  Spectre v2:          Mitigation; Retpolines; STIBP disabled; RSB filling; PBRSB-eIBRS Not affected; BHI Retpoline
  Srbds:               Not affected
  Tsx async abort:     Not affected
root@ip-172-31-57-211:/home/fermo#
```

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```
root@ip-172-31-57-211:/home/fermo# lshw
ip-172-31-57-211
    description: Computer
    product: HVM domU
    vendor: Xen
    version: 4.11.amazon
    serial: ec2e6a92-74a9-f8ad-0f6f-75c09bfefc0c
    width: 64 bits
    capabilities: smbios-2.7 dmi-2.7 vsyscall32
    configuration: boot=normal uuid=ec2e6a92-74a9-f8ad-0f6f-75c09bfefc0c
  *-core
       description: Motherboard
       physical id: 0
     *-firmware
          description: BIOS
          vendor: Xen
          physical id: 0
          version: 4.11.amazon
          date: 08/24/2006
          size: 96KiB
          capabilities: pci edd
     *-cpu
          description: CPU
          product: Intel(R) Xeon(R) CPU E5-2676 v3 @ 2.40GHz
          vendor: Intel Corp.
          physical id: 401
          bus info: cpu@0
          version: 6.63.2
          slot: CPU 1
          size: 2400MHz
          capacity: 2400MHz
          width: 64 bits
          capabilities: fpu fpu_exception wp vme de pse tsc msr pae mce cx8 apic sep mtrr pge mca cmov pat pse36 clflush mmx fxsr sse sse2 ht syscall nx rdtscp x86-64 constant_tsc rep_good nopl xtopology cpuid
tsc_known_freq pni pclmulqdq ssse3 fma cx16 pcid sse4_1 sse4_2 x2apic movbe popcnt tsc_deadline_timer aes xsave avx f16c rdrand hypervisor lahf_lm abm cpuid_fault pti fsgsbase bmi1 avx2 smep bmi2 erms invpcid x
saveopt
          configuration: microcode=73
     *-memory
          description: System Memory
          physical id: 1000
          size: 1GiB
          capacity: 1GiB
          capabilities: ecc
          configuration: errordetection=multi-bit-ecc
        *-bank
             description: DIMM RAM
             physical id: 0
             slot: DIMM 0
             size: 1GiB
             width: 64 bits
     *-pci
          description: Host bridge
          product: 440FX - 82441FX PMC [Natoma]
          vendor: Intel Corporation
          physical id: 100
          bus info: pci@0000:00:00.0
          version: 02
          width: 32 bits
          clock: 33MHz
```

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```
root@ip-172-31-57-211:/home/fermo# lstopo
Machine (957MB total)
  Package L#0
    NUMANode L#0 (P#0 957MB)
    L3 L#0 (30MB) + L2 L#0 (256KB) + L1d L#0 (32KB) + L1i L#0 (32KB) + Core L#0 + PU L#0 (P#0)
  HostBridge
    PCI 00:01.1 (IDE)
    PCI 00:02.0 (VGA)
  Block "xvda"
  Net "enX0"
root@ip-172-31-57-211:/home/fermo#
```