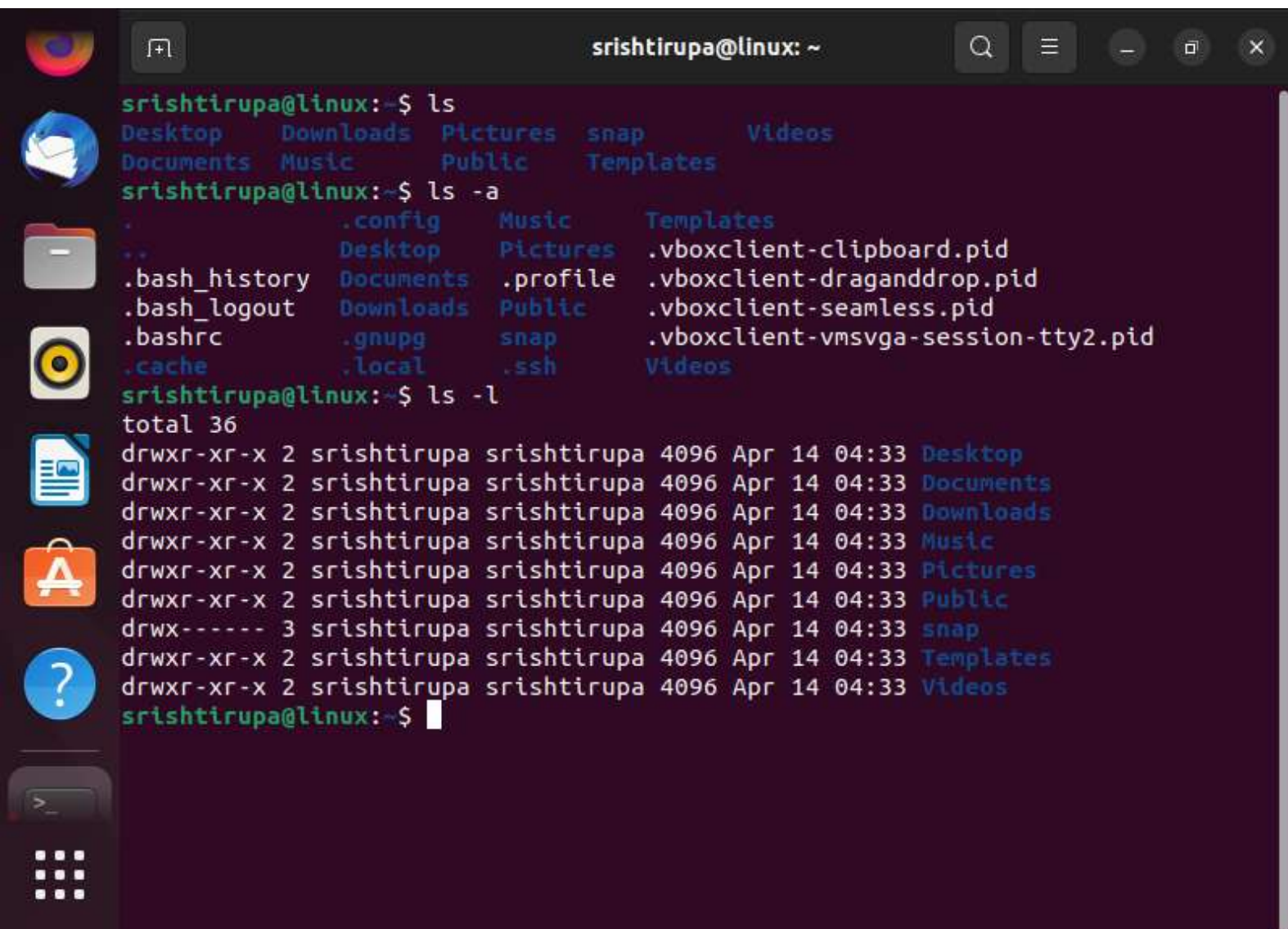


```

Architecture: x86-64
Hardware Vendor: innotek GmbH
Hardware Model: VirtualBox
srishtirupa@linux:~$ ls
Desktop  Downloads  Music      Public      snap      Test1  test3
Documents FirstDir   Pictures  secondDir,hello Templates test2  Videos
srishtirupa@linux:~$ cd FirstDir
srishtirupa@linux:~/FirstDir$ cd..
cd.: command not found
srishtirupa@linux:~/FirstDir$ cd ..
srishtirupa@linux:~$ cp Test1 /FirstDir
cp: cannot create regular file '/FirstDir': Permission denied
srishtirupa@linux:~$ cp Test1 demo1
srishtirupa@linux:~$ ls
demo1  Desktop  Documents FirstDir  Pictures  secondDir,hello  Templates  test2  Videos
srishtirupa@linux:~$ echo "hey.."
hey..
srishtirupa@linux:~$ cat Test1
srishtirupa@linux:~$ cat test2
Hello,Welcome to infobell
srishtirupa@linux:~$ cat test2 | grep infobell
Hello,Welcome to infobell
srishtirupa@linux:~$ rm Test1
srishtirupa@linux:~$ em -rvf FirstDir
em: command not found
srishtirupa@linux:~$ rm -rvf FirstDir
removed directory 'FirstDir'
srishtirupa@linux:~$ mv test2 igTest
srishtirupa@linux:~$ ls
demo1 Desktop Documents Downloads igTest Music Pictures Public secondDir,hello snap Templates test3 Videos
srishtirupa@linux:~$ cat BigData
cat: BigData: No such file or directory
srishtirupa@linux:~$ cat > BigData
1
2
3
4
5
6
7
8
9
0
1
2
3

```



```
srishtirupa@linux:~$ ls
Desktop  Downloads  Pictures  snap      Videos
Documents Music      Public    Templates

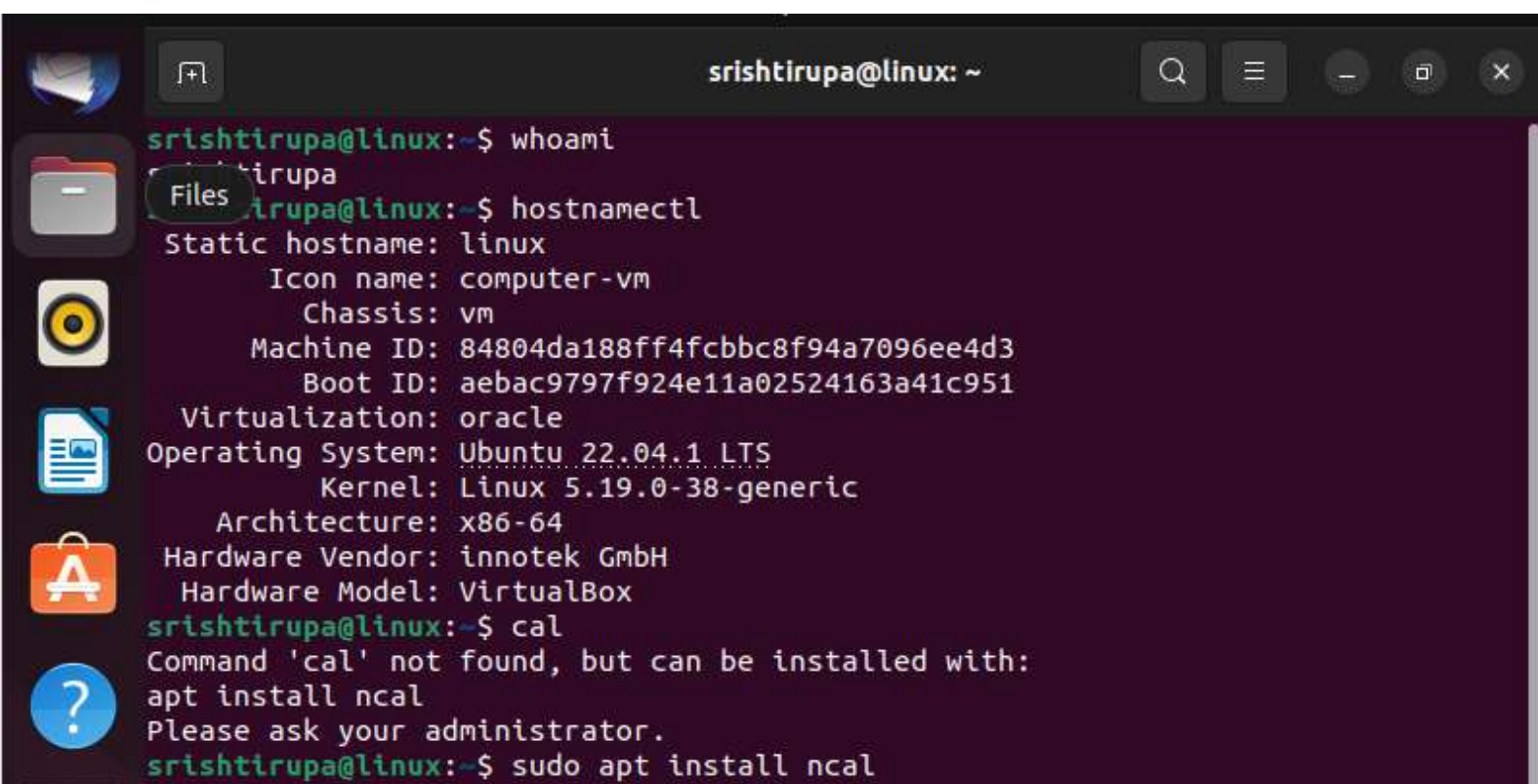
srishtirupa@linux:~$ ls -a
.          .config  Music    Templates
..         Desktop  Pictures .vboxclient-clipboard.pid
.bash_history Documents .profile .vboxclient-draganddrop.pid
.bash_logout Downloads Public    .vboxclient-seamless.pid
.bashrc    .gnupg   snap     .vboxclient-vmsvga-session-tty2.pid
.cache     .local   .ssh     Videos

srishtirupa@linux:~$ ls -l
total 36
drwxr-xr-x 2 srishtirupa srishtirupa 4096 Apr 14 04:33 Desktop
drwxr-xr-x 2 srishtirupa srishtirupa 4096 Apr 14 04:33 Documents
drwxr-xr-x 2 srishtirupa srishtirupa 4096 Apr 14 04:33 Downloads
drwxr-xr-x 2 srishtirupa srishtirupa 4096 Apr 14 04:33 Music
drwxr-xr-x 2 srishtirupa srishtirupa 4096 Apr 14 04:33 Pictures
drwxr-xr-x 2 srishtirupa srishtirupa 4096 Apr 14 04:33 Public
drwx----- 3 srishtirupa srishtirupa 4096 Apr 14 04:33 snap
drwxr-xr-x 2 srishtirupa srishtirupa 4096 Apr 14 04:33 Templates
drwxr-xr-x 2 srishtirupa srishtirupa 4096 Apr 14 04:33 Videos
srishtirupa@linux:~$
```

```
srishtirupa@linux:~$ pwd
/home/srishtirupa
srishtirupa@linux:~$ mkdir FirstDir
srishtirupa@linux:~$ ls
Desktop    Downloads  Music      Public     Templates
Documents  FirstDir   Pictures   snap       Videos
srishtirupa@linux:~$ mkdir secondDir,hello
srishtirupa@linux:~$ lf
lf: command not found
srishtirupa@linux:~$ ls -r
Videos     snap              Public      Music      Downloads  Desktop
Templates secondDir,hello  Pictures    FirstDir   Documents
srishtirupa@linux:~$ Touch Test1
Command 'Touch' not found, did you mean:
  command 'touch' from deb coreutils (8.32-4.1ubuntu1)
Try: apt install <deb name>
srishtirupa@linux:~$ touch Test1
srishtirupa@linux:~$ ls
Desktop    Downloads  Music      Public      snap        Test1
Documents  FirstDir   Pictures   secondDir,hello  Templates  Videos
srishtirupa@linux:~$ cat test2
cat: test2: No such file or directory
srishtirupa@linux:~$ cat > test2
Hello,Welcome to infobell
```



```
srishtirupa@linux: ~  
srishtirupa@linux:~$ ls  
Desktop Downloads Music Public snap Test1 Videos  
Documents FirstDir Pictures secondDir,hello Templates test2  
srishtirupa@linux:~$ cat test2  
Hello,Welcome to infobell  
srishtirupa@linux:~$ cat Test1 test2 > test3  
srishtirupa@linux:~$ ls  
Desktop Downloads Music Public snap Test1 test3  
Documents FirstDir Pictures secondDir,hello Templates test2 Videos  
srishtirupa@linux:~$ vat test3  
Command 'vat' not found, did you mean:  
command 'vht' from snap vht (0.4.3)  
command 'vt' from deb vt (0.57721+ds-3)  
command 'iat' from deb iat (0.1.3-7build1)  
command 'vit' from deb vit (2.1.0-2)  
command 'vax' from deb simh (3.8.1-6.1)  
command 'at' from deb at (3.2.5-1ubuntu1)  
command 'cat' from deb coreutils (8.32-4.1ubuntu1)  
command 'pat' from deb dist (1:3.5-236-1)  
command 'dat' from deb liballegro4-dev (2:4.4.3.1-2)  
command 'vam' from deb vim-addon-manager (0.5.10)  
command 'vcap' from deb atfs (1.4pl6-15)  
See 'snap info <snapname>' for additional versions.  
srishtirupa@linux:~$ cat test3  
Hello,Welcome to infobell  
srishtirupa@linux:~$
```



A terminal window titled "srishtirupa@linux: ~" with a dark background. The window has a sidebar on the left with icons for a file manager, a folder named "Files", a music player, a document, an application store, and a help icon. The terminal output shows the user "srishtirupa" running the command "whoami", which returns "srishtirupa". Then, the user runs "hostnamectl", which displays system information: Static hostname: linux, Icon name: computer-vm, Chassis: vm, Machine ID: 84804da188ff4fcbbc8f94a7096ee4d3, Boot ID: aebac9797f924e11a02524163a41c951, Virtualization: oracle, Operating System: Ubuntu 22.04.1 LTS, Kernel: Linux 5.19.0-38-generic, Architecture: x86-64, Hardware Vendor: innotek GmbH, and Hardware Model: VirtualBox. Next, the user runs "cal", which returns an error message: "Command 'cal' not found, but can be installed with: apt install ncal. Please ask your administrator." Finally, the user runs "sudo apt install ncal".

```
srishtirupa@linux:~$ whoami
srishtirupa
srishtirupa@linux:~$ hostnamectl
Static hostname: linux
          Icon name: computer-vm
          Chassis: vm
    Machine ID: 84804da188ff4fcbbc8f94a7096ee4d3
       Boot ID: aebac9797f924e11a02524163a41c951
  Virtualization: oracle
Operating System: Ubuntu 22.04.1 LTS
         Kernel: Linux 5.19.0-38-generic
   Architecture: x86-64
    Hardware Vendor: innotek GmbH
    Hardware Model: VirtualBox
srishtirupa@linux:~$ cal
Command 'cal' not found, but can be installed with:
apt install ncal
Please ask your administrator.
srishtirupa@linux:~$ sudo apt install ncal
```

```
BigData Desktop Downloads Music Public snap test3  
demo1 Documents igTest Pictures secondDir,hello Templates Videos  
srishtirupa@linux:~$ cat BigData
```

```
1  
2  
3  
4  
5  
6  
7  
8  
9  
0  
1  
2  
3  
srishtirupa@linux:~$ head BigData
```

```
1  
2  
3  
4  
5  
6  
7  
8  
9  
0  
srishtirupa@linux:~$ tail BigData
```

```
4  
5  
6  
7  
8  
9  
0  
1  
2  
3  
srishtirupa@linux:~$ head -n 3 BigData
```

```
1  
2  
3
```

```
srishtirupa@linux:~$ ls
BigData  demo1  Desktop  Documents  Downloads  igTest  Music  Pictures  Public  secondDir,hello  snap  Templates  test3  Videos
srishtirupa@linux:~$ touch T1.txt
srishtirupa@linux:~$ ls
BigData  demo1  Desktop  Documents  Downloads  igTest  Music  Pictures  Public  secondDir,hello  snap  T1.txt  Templates  test3  Videos
srishtirupa@linux:~$ find . -name "*.txt"
./T1.txt
./.cache/tracker3/files/last-crawl.txt
./.cache/tracker3/files/locale-for-miner-apps.txt
./.cache/tracker3/files/first-index.txt
srishtirupa@linux:~$ cat > class.txt
Sam cs
Daniel cs
John IT
Arya IT
Mike ECE
Helena ECE
```

```
srishtirupa@linux:~$ echo class7
class7
srishtirupa@linux:~$ echo class7 | sed 's/class/jpt/'
jpt7
srishtirupa@linux:~$ echo class20 | sed 's/20/300/'
class300
srishtirupa@linux:~$ cat msg.txt
learn linux,learn fast
linux is very easy to study
srishtirupa@linux:~$ cat msg.txt | sed 's/learn/study/'
study linux,learn fast
linux is very easy to study
srishtirupa@linux:~$ echo class7 class9 | sed 's/class/jpt/'
jpt7 class9
srishtirupa@linux:~$ echo class7 class9 | sed 's/class/jpt/g'
jpt7 jpt9
srishtirupa@linux:~$ cat msg.txt | sed 's/learn/study/g'
study linux,study fast
linux is very easy to study
srishtirupa@linux:~$ cat msg.txt | sed 's/linux/python/g'
learn python,learn fast
python is very easy to study
srishtirupa@linux:~$ cat msg.txt | sed 's/linux/python/'
learn python,learn fast
python is very easy to study
srishtirupa@linux:~$ cat msg.txt
learn linux,learn fast
linux is very easy to study
srishtirupa@linux:~$ cat > msg.txt
this is new file
welcome to new file
learn linux
linux is very easy
it's interesting^Z
[1]+  Stopped                  cat > msg.txt
srishtirupa@linux:~$ cat msg.txt
this is new file
welcome to new file
learn linux
linux is very easy
srishtirupa@linux:~$ cat msg.txt | sed '/file/d'
learn linux
linux is very easy
srishtirupa@linux:~$
```



```
srishtirupa@linux:~$ du
4      ./Videos
4      ./Documents
4      ./Public
4      ./secondDir,hello
4      ./Pictures
4      ./ssh
12     ./config/ibus/bus
16     ./config/ibus
16     ./config/evolution/sources
20     ./config/evolution
4      ./config/nautilus
84     ./config/pulse
4      ./config/update-notifier
4      ./config/goa-1.0
4      ./config/gnome-session/saved-session
8      ./config/gnome-session
8      ./config/gtk-3.0
8      ./config/dconf
172    ./config
4      ./Desktop
4      ./Downloads
4      ./Music
192    ./cache/ibus/bus
196    ./cache/ibus
4      ./cache/evolution/sources/trash
8      ./cache/evolution/sources
4      ./cache/evolution/memos/trash
8      ./cache/evolution/memos
4      ./cache/evolution/mail/trash
8      ./cache/evolution/mail
4      ./cache/evolution/addressbook/trash
8      ./cache/evolution/addressbook
4      ./cache/evolution/tasks/trash
8      ./cache/evolution/tasks
4      ./cache/evolution/calendar/trash
8      ./cache/evolution/calendar
52     ./cache/evolution
4      ./cache/tracker3/files/errors
17628  ./cache/tracker3/files
17632  ./cache/tracker3
8      ./cache/ubuntu-report
12     ./cache/mesa_shader_cache/d8
12     ./cache/mesa_shader_cache/b0
8      ./cache/mesa_shader_cache/fe
8      ./cache/mesa_shader_cache/05
8      ./cache/mesa_shader_cache/91
8      ./cache/mesa_shader_cache/51
12     ./cache/mesa_shader_cache/13
```

```
4 ./snap/snapd-desktop-integration/14/Pictures
4 ./snap/snapd-desktop-integration/14/.config/ibus
4 ./snap/snapd-desktop-integration/14/.config/gtk-2.0
4 ./snap/snapd-desktop-integration/14/.config/gtk-3.0
8 ./snap/snapd-desktop-integration/14/.config/fontconfig
4 ./snap/snapd-desktop-integration/14/.config/dconf
44 ./snap/snapd-desktop-integration/14/.config
4 ./snap/snapd-desktop-integration/14/Desktop
4 ./snap/snapd-desktop-integration/14/Downloads
4 ./snap/snapd-desktop-integration/14/Music
4 ./snap/snapd-desktop-integration/14/Templates
4 ./snap/snapd-desktop-integration/14/.local/share/glib-2.0/schemas
8 ./snap/snapd-desktop-integration/14/.local/share/glib-2.0
4 ./snap/snapd-desktop-integration/14/.local/share/icons
16 ./snap/snapd-desktop-integration/14/.local/share
20 ./snap/snapd-desktop-integration/14/.local
104 ./snap/snapd-desktop-integration/14
4 ./snap/snapd-desktop-integration/57/Videos
4 ./snap/snapd-desktop-integration/57/Documents
4 ./snap/snapd-desktop-integration/57/Public
4 ./snap/snapd-desktop-integration/57/Pictures
4 ./snap/snapd-desktop-integration/57/.config/ibus
4 ./snap/snapd-desktop-integration/57/.config/gtk-2.0
4 ./snap/snapd-desktop-integration/57/.config/gtk-3.0
8 ./snap/snapd-desktop-integration/57/.config/fontconfig
4 ./snap/snapd-desktop-integration/57/.config/dconf
44 ./snap/snapd-desktop-integration/57/.config
4 ./snap/snapd-desktop-integration/57/Desktop
4 ./snap/snapd-desktop-integration/57/Downloads
4 ./snap/snapd-desktop-integration/57/Music
4 ./snap/snapd-desktop-integration/57/Templates
4 ./snap/snapd-desktop-integration/57/.local/share/glib-2.0/schemas
8 ./snap/snapd-desktop-integration/57/.local/share/glib-2.0
4 ./snap/snapd-desktop-integration/57/.local/share/icons
16 ./snap/snapd-desktop-integration/57/.local/share
20 ./snap/snapd-desktop-integration/57/.local
104 ./snap/snapd-desktop-integration/57
28 ./snap/snapd-desktop-integration/common/.cache/gio-modules
72 ./snap/snapd-desktop-integration/common/.cache/immodules
108 ./snap/snapd-desktop-integration/common/.cache
112 ./snap/snapd-desktop-integration/common
324 ./snap/snapd-desktop-integration
328 ./snap
12 ./gnupg
20508 .
srishtirupa@linux:~$ du -s
20508 .
srishtirupa@linux:~$
```

```
srishtirupa@linux:~$ du -h
4.0K    ./Videos
4.0K    ./Documents
4.0K    ./Public
4.0K    ./secondDir,hello
4.0K    ./Pictures
4.0K    ./ssh
12K     ./config/ibus/bus
16K     ./config/ibus
16K     ./config/evolution/sources
20K     ./config/evolution
4.0K    ./config/nautilus
84K     ./config/pulse
4.0K    ./config/update-notifier
4.0K    ./config/goa-1.0
4.0K    ./config/gnome-session/saved-session
8.0K    ./config/gnome-session
8.0K    ./config/gtk-3.0
8.0K    ./config/dconf
172K    ./config
4.0K    ./Desktop
4.0K    ./Downloads
4.0K    ./Music
192K    ./cache/ibus/bus
196K    ./cache/ibus
4.0K    ./cache/evolution/sources/trash
8.0K    ./cache/evolution/sources
4.0K    ./cache/evolution/memos/trash
8.0K    ./cache/evolution/memos
4.0K    ./cache/evolution/mail/trash
8.0K    ./cache/evolution/mail
4.0K    ./cache/evolution/addressbook/trash
8.0K    ./cache/evolution/addressbook
4.0K    ./cache/evolution/tasks/trash
8.0K    ./cache/evolution/tasks
4.0K    ./cache/evolution/calendar/trash
8.0K    ./cache/evolution/calendar
```



```

104K  ./snap/snapd-desktop-integration/57
28K   ./snap/snapd-desktop-integration/common/.cache/gio-modules
72K   ./snap/snapd-desktop-integration/common/.cache/immodules
108K  ./snap/snapd-desktop-integration/common/.cache
112K  ./snap/snapd-desktop-integration/common
324K  ./snap/snapd-desktop-integration
328K  ./snap
12K   ./gnupg
21M   .

srishtirupa@linux:~$ du --time
4      2023-04-14 04:33      ./Videos
4      2023-04-14 04:33      ./Documents
4      2023-04-14 04:33      ./Public
4      2023-04-14 09:57      ./secondDir,hello
4      2023-04-14 04:33      ./Pictures
4      2023-04-14 04:36      ./ssh
12     2023-04-17 12:33      ./config/ibus/bus
16     2023-04-17 12:33      ./config/ibus
16     2023-04-14 04:36      ./config/evolution/sources
20     2023-04-14 04:36      ./config/evolution
4      2023-04-14 04:34      ./config/nautilus
84     2023-04-17 12:33      ./config/pulse
4      2023-04-14 04:35      ./config/update-notifier
4      2023-04-14 04:34      ./config/goa-1.0
4      2023-04-14 04:39      ./config/gnome-session/saved-session
8      2023-04-14 04:39      ./config/gnome-session
8      2023-04-17 12:33      ./config/gtk-3.0
8      2023-04-14 13:04      ./config/dconf
172    2023-04-17 12:33      ./config
4      2023-04-14 04:33      ./Desktop
4      2023-04-14 04:33      ./Downloads
4      2023-04-14 04:33      ./Music
192    2023-04-14 04:34      ./cache/ibus/bus
196    2023-04-14 04:34      ./cache/ibus
4      2023-04-14 04:34      ./cache/evolution/sources/trash
8      2023-04-14 04:34      ./cache/evolution/sources
4      2023-04-14 04:34      ./cache/evolution/memos/trash
8      2023-04-14 04:34      ./cache/evolution/memos
4      2023-04-14 04:34      ./cache/evolution/mail/trash
8      2023-04-14 04:34      ./cache/evolution/mail
4      2023-04-14 04:34      ./cache/evolution/addressbook/trash
8      2023-04-14 04:34      ./cache/evolution/addressbook

```

```
srishtirupa@linux:~$ systemctl suspend
srishtirupa@linux:~$ hostnamectl status
Static hostname: linux
        Icon name: computer-vm
        Chassis: vm
        Machine ID: 84804da188ff4fcbbc8f94a7096ee4d3
        Boot ID: da35ac7e6f7143ce972373900a5e9f09
        Virtualization: oracle
Operating System: Ubuntu 22.04.1 LTS
        Kernel: Linux 5.19.0-38-generic
        Architecture: x86-64
        Hardware Vendor: innotek GmbH
        Hardware Model: VirtualBox
srishtirupa@linux:~$ hostnamectl
Static hostname: linux
        Icon name: computer-vm
        Chassis: vm
        Machine ID: 84804da188ff4fcbbc8f94a7096ee4d3
        Boot ID: da35ac7e6f7143ce972373900a5e9f09
        Virtualization: oracle
Operating System: Ubuntu 22.04.1 LTS
        Kernel: Linux 5.19.0-38-generic
        Architecture: x86-64
        Hardware Vendor: innotek GmbH
        Hardware Model: VirtualBox
srishtirupa@linux:~$ hostname -i
127.0.1.1
srishtirupa@linux:~$ hostname -a
linux
srishtirupa@linux:~$ dmidecode
# dmidecode 3.3
/sys/firmware/dmi/tables/smbios_entry_point: Permission denied
Scanning /dev/mem for entry point.
/dev/mem: Permission denied
srishtirupa@linux:~$ sudo demidecode -t bios
[sudo] password for srishtirupa:
srishtirupa is not in the sudoers file. This incident will be reported.
```


NAME	MAJ:MIN	RM	SIZE	RO	TYPE	MOUNTPOINTS
loop0	7:0	0	64970752	1	loop	/snap/core20/1587
loop1	7:1	0	4096	1	loop	/snap/bare/5
loop2	7:2	0	66392064	1	loop	/snap/core20/1852
loop3	7:3	0	76537856	1	loop	/snap/core22/607
loop4	7:4	0	171225088	1	loop	/snap/firefox/1635
loop5	7:5	0	420265984	1	loop	/snap/gnome-3-38-2004/112
loop6	7:6	0	366673920	1	loop	/snap/gnome-3-38-2004/137
loop7	7:7	0	482750464	1	loop	/snap/gnome-42-2204/68
loop8	7:8	0	96141312	1	loop	/snap/gtk-common-themes/1535
loop9	7:9	0	48091136	1	loop	/snap/snap-store/582
loop10	7:10	0	48160768	1	loop	/snap/snap-store/638
loop11	7:11	0	52260864	1	loop	/snap/snapd/18596
loop12	7:12	0	290816	1	loop	/snap/snapd-desktop-integration/14
loop13	7:13	0	438272	1	loop	/snap/snapd-desktop-integration/57
loop14	7:14	0	253673472	1	loop	/snap/firefox/2559
loop15	7:15	0	482947072	1	loop	/snap/gnome-42-2204/87
sda	8:0	0	55361994752	0	disk	
└sda1	8:1	0	1048576	0	part	
└sda2	8:2	0	537919488	0	part	/boot/efi
└sda3	8:3	0	54821650432	0	part	/var/snap/firefox/common/host-hunspell
						/
sr0	11:0	1	1073741312	0	rom	

srishtirupa@linux:~\$ lsblk -a

NAME	MAJ:MIN	RM	SIZE	RO	TYPE	MOUNTPOINTS
loop0	7:0	0	62M	1	loop	/snap/core20/1587
loop1	7:1	0	4K	1	loop	/snap/bare/5
loop2	7:2	0	63.3M	1	loop	/snap/core20/1852
loop3	7:3	0	73M	1	loop	/snap/core22/607
loop4	7:4	0	163.3M	1	loop	/snap/firefox/1635
loop5	7:5	0	400.8M	1	loop	/snap/gnome-3-38-2004/112
loop6	7:6	0	349.7M	1	loop	/snap/gnome-3-38-2004/137
loop7	7:7	0	460.4M	1	loop	/snap/gnome-42-2204/68
loop8	7:8	0	91.7M	1	loop	/snap/gtk-common-themes/1535
loop9	7:9	0	45.9M	1	loop	/snap/snap-store/582
loop10	7:10	0	45.9M	1	loop	/snap/snap-store/638
loop11	7:11	0	49.8M	1	loop	/snap/snapd/18596
loop12	7:12	0	284K	1	loop	/snap/snapd-desktop-integration/14
loop13	7:13	0	428K	1	loop	/snap/snapd-desktop-integration/57
loop14	7:14	0	241.9M	1	loop	/snap/firefox/2559
loop15	7:15	0	460.6M	1	loop	/snap/gnome-42-2204/87
sda	8:0	0	51.6G	0	disk	
└sda1	8:1	0	1M	0	part	
└sda2	8:2	0	513M	0	part	/boot/efi
└sda3	8:3	0	51.1G	0	part	/var/snap/firefox/common/host-hunspell
						/
sr0	11:0	1	1024M	0	rom	