



```
sotiriseco@ubuntu:~$ sudo ls /dev/sd*
```

```
[sudo] password for sotiriseco:
```

```
/dev/sda /dev/sda1 /dev/sda2
```

```
sotiriseco@ubuntu:~$ sudo fdisk -l
```

```
Disk /dev/loop0: 4 KiB, 4096 bytes, 8 sectors
```

```
Units: sectors of 1 * 512 = 512 bytes
```

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

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

```
Disk /dev/loop1: 74.27 MiB, 77881344 bytes, 152112 sectors
```

```
Units: sectors of 1 * 512 = 512 bytes
```

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

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

```
Disk /dev/loop2: 73.89 MiB, 77479936 bytes, 151328 sectors
```

```
Units: sectors of 1 * 512 = 512 bytes
```

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

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

```
Disk /dev/loop3: 269.77 MiB, 282873856 bytes, 552488 sectors
```

```
Units: sectors of 1 * 512 = 512 bytes
```

```
sotiriseco@ubuntu:~$ sudo parted -l
```

```
Model: ATA VBOX HARDDISK (scsi)
```

```
Disk /dev/sda: 26.8GB
```

```
Sector size (logical/physical): 512B/512B
```

```
Partition Table: gpt
```

```
Disk Flags:
```

Number	Start	End	Size	File system	Name	Flags
1	1049kB	2097kB	1049kB			bios_grub
2	2097kB	26.8GB	26.8GB	ext4		

```
sotiriseco@ubuntu:~$ █
```

Basic Expert

General

System

Display

Storage

Audio

Network

USB

Shared Folders

Storage

Devices

- Controller: IDE
 - Empty
- Controller: SATA
 - ubuntu.vdi
 - secon001.vdi



Attributes

- Hard Disk: SATA Port 1
- Solid-state Drive
 - Hot-pluggable

Information

- Type (Format): Normal (VDI)
Virtual size: 200.00 MB
Actual size: 2.00 MB
Storage details: Dynamically allocated stor...
Location: C:\Users\NEW\VirtualBox ...
Attached to: --
Encryption key: --

Audio

OK

Cancel

Help



```
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sudo fdisk -l
sudo parted -l
[sudo] password for sotiriseco:
/dev/sda /dev/sda1 /dev/sda2 /dev/sdb
Disk /dev/loop0: 4 KiB, 4096 bytes, 8 sectors
Units: sectors of 1 * 512 = 512 bytes
Sector size (logical/physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes

Disk /dev/loop1: 74.27 MiB, 77881344 bytes, 152112 sectors
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Disk /dev/loop2: 73.89 MiB, 77479936 bytes, 151328 sectors
Units: sectors of 1 * 512 = 512 bytes
Sector size (logical/physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes

Disk /dev/loop3: 269.77 MiB, 282873856 bytes, 552488 sectors
Units: sectors of 1 * 512 = 512 bytes
Sector size (logical/physical): 512 bytes / 512 bytes
```

```
sotiriseco@ubuntu:~$ sudo fdisk /dev/sdb
```

```
Welcome to fdisk (util-linux 2.39.3).
```

```
Changes will remain in memory only, until you decide to write them.
```

```
Be careful before using the write command.
```

```
Device does not contain a recognized partition table.
```

```
Created a new DOS (MBR) disklabel with disk identifier 0xf90d821c.
```

Trash

```
Command (m for help): n
```

```
Partition type
```

```
  p   primary (0 primary, 0 extended, 4 free)
```

```
  e   extended (container for logical partitions)
```

```
Select (default p): p
```

```
Partition number (1-4, default 1): 1
```

```
First sector (2048-409599, default 2048): 2048
```

```
Last sector, +/-sectors or +/-size{K,M,G,T,P} (2048-409599, default 409599): 409599
```

```
Created a new partition 1 of type 'Linux' and of size 199 MiB.
```

```
Command (m for help): w
```

```
The partition table has been altered.
```

```
Calling ioctl() to re-read partition table.
```

```
Syncing disks.
```

```
sotiriseco@ubuntu:~$ sudo mkfs.ext4 /dev/sdb1
```

```
mke2fs 1.47.0 (5-Feb-2023)
```

```
Creating filesystem with 50944 4k blocks and 50944 inodes
```

```
Filesystem UUID: a9225336-6f5f-4dc9-9c89-7d83c21c759d
```

```
Superblock backups stored on blocks:
```

```
    32768
```

```
Allocating group tables: done
```

```
Writing inode tables: done
```

```
Creating journal (4096 blocks): done
```

```
Writing superblocks and filesystem accounting information: done
```

```
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sudo parted -l
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```
sotiriseco@ubuntu:~$ sudo mkdir /cyse
sudo mount /dev/sdb1 /cyse
sotiriseco@ubuntu:~$ df -h
Filesystem      Size  Used Avail Use% Mounted on
tmpfs           392M  1.6M  390M   1% /run
/dev/sda2       25G   7.3G   16G  32% /
tmpfs           2.0G   0    2.0G   0% /dev/shm
tmpfs           5.0M   8.0K  5.0M   1% /run/lock
tmpfs           392M  116K  392M   1% /run/user/1000
/dev/sdb1       171M   24K  157M   1% /cyse
sotiriseco@ubuntu:~$ echo "Sotiris Economos" | sudo tee /cyse/secon001.txt
Sotiris Economos
sotiriseco@ubuntu:~$ cat /cyse/secon001.txt
Sotiris Economos
sotiriseco@ubuntu:~$ sudo umount /cyse
umount: /cyse: target is busy.
sotiriseco@ubuntu:~$ sudo umount /cyse
sotiriseco@ubuntu:~$ ls -l /cyse
total 0
sotiriseco@ubuntu:~$
```

Step 8 Check the contents in /cyse directory. What do you find?