

- Using the command “**sudo parted -l**”

```
korakoch@korakoch-20-04:~$ sudo parted -l
Model: ATA VBOX HARDDISK (scsi)
Disk /dev/sda: 53.7GB
Sector size (logical/physical): 512B/512B
Partition Table: msdos
Disk Flags:
```

Number	Start	End	Size	Type	File system	Flags
1	1049kB	538MB	537MB	primary	fat32	boot
2	539MB	53.7GB	53.1GB	extended		
5	539MB	53.7GB	53.1GB	logical	ext4	

```
Error: /dev/sdb: unrecognised disk label
```

```
Model: ATA VBOX HARDDISK (scsi)
Disk /dev/sdb: 2147MB
Sector size (logical/physical): 512B/512B
Partition Table: unknown
Disk Flags:
```

- How many partitions does sda have?

- What's wrong with the sdb?

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How many partitions does sda have?

1 1049kB 10.7GB 10.7GB ext4 primary

What's wrong with the sdb?

Unrecognised disk label

```
babyearn@babyearn:~$ sudo parted -l
Warning: Unable to open /dev/sda read-write (Read-only file system). /dev/sda
has been opened read-only.
Model: QEMU QEMU HARDDISK (scsi)
Disk /dev/sda: 10.7GB
Sector size (logical/physical): 512B/512B
Partition Table: gpt
Disk Flags:
```

Number	Start	End	Size	File system	Name	Flags
1	1049kB	10.7GB	10.7GB	ext4	primary	

```
Model: Linux device-mapper (linear) (dm)
Disk /dev/mapper/ubuntu--vg-ubuntu--lv: 32.7GB
Sector size (logical/physical): 512B/512B
Partition Table: loop
Disk Flags:
```

Number	Start	End	Size	File system	Flags
1	0.00B	32.7GB	32.7GB	ext4	

```
Model: Virtio Block Device (virtblk)
Disk /dev/vda: 68.7GB
Sector size (logical/physical): 512B/512B
Partition Table: gpt
Disk Flags:
```

Number	Start	End	Size	File system	Name	Flags
1	1049kB	1128MB	1127MB	fat32		boot, esp
2	1128MB	3276MB	2147MB	ext4		
3	3276MB	68.7GB	65.4GB			

```

babyearn@babyearn: ~/Desktop
babyearn@babyearn:~/Desktop$ lsblk
NAME        MAJ:MIN RM  SIZE RO TYPE MOUNTPOINTS
loop0        7:0      0    4K  1 loop /snap/bare/5
loop1        7:1      0   69.2M 1 loop /snap/core22/1590
loop2        7:2      0   69.2M 1 loop /snap/core22/1614
loop3        7:3      0  247.4M 1 loop /snap/firefox/4792
loop4        7:4      0  247.7M 1 loop /snap/firefox/4845
loop5        7:5      0  483.3M 1 loop /snap/gnome-42-2204/178
loop6        7:6      0   91.7M 1 loop /snap/gtk-common-themes/1535
loop7        7:7      0   33.7M 1 loop /snap/snapd/21761
loop8        7:8      0  133.5M 1 loop /snap/thunderbird/491
sda          8:0      0   10G   0 disk
├─sda1        8:1      0   10G   0 part
├─sr0        11:0     1  1024M   0 rom
├─vda        253:0     0    64G   0 disk
│ ├─vda1      253:1     0     1G   0 part /boot/efi
│ ├─vda2      253:2     0     2G   0 part /boot
│ └─vda3      253:3     0   60.9G   0 part
│   └─ubuntu--vg-ubuntu--lv 252:0     0   30.5G   0 lvm /
babyearn@babyearn:~/Desktop$ lsblk -f | grep sd
sda
├─sda1      ext4      1.0      776982c0-87cf-406b-ac58-b74c3323238d
babyearn@babyearn:~/Desktop$ lsblk -f | grep vd
vda
├─vda1      vfat      FAT32      AE63-3AA8      1G      1% /boot/efi
├─vda2      ext4      1.0      43b16935-4548-430d-b9fd-05b0d9992d1a      1.6G     10% /boot
└─vda3      LVM2_member LVM2 001      aeJG2V-d6rP-RyEr-07Uq-2ofR-87dc-Sc1PYZ
babyearn@babyearn:~/Desktop$ lsblk
NAME        MAJ:MIN RM  SIZE RO TYPE MOUNTPOINTS
loop0        7:0      0    4K  1 loop /snap/bare/5
loop1        7:1      0   69.2M 1 loop /snap/core22/1590
loop2        7:2      0   69.2M 1 loop /snap/core22/1614
loop3        7:3      0  247.4M 1 loop /snap/firefox/4792
loop4        7:4      0  247.7M 1 loop /snap/firefox/4845
loop5        7:5      0  483.3M 1 loop /snap/gnome-42-2204/178
loop6        7:6      0   91.7M 1 loop /snap/gtk-common-themes/1535
loop7        7:7      0   33.7M 1 loop /snap/snapd/21761
loop8        7:8      0  133.5M 1 loop /snap/thunderbird/491
sda          8:0      0   10G   0 disk

GNU Parted 3.6
Using /dev/sda
Welcome to GNU Parted! Type 'help' to view a list of commands.
(parted) mklabel msdos
parted: invalid token: msdos

New disk label type? quite
parted: invalid token: quite
New disk label type? quit
parted: invalid token: quit
New disk label type? ^C
Error: Expecting a disk label type.
(parted) mklabel msdos
parted: invalid token: msdos

New disk label type? msdos
Warning: The existing disk label on /dev/sda will be destroyed and all data on this disk will be lost. Do you want to continue?
Yes/No? Y
(parted) mkpart primary ext4 0 1024
Warning: The resulting partition is not properly aligned for best performance: 1s % 2048s != 0s
Ignore/Cancel? I
(parted) print
Model: QEMU QEMU HARDDISK (scsi)
Disk /dev/sda: 10.7GB
Sector size (logical/physical): 512B/512B
Partition Table: msdos
Disk Flags:

Number  Start  End    Size  Type    File system  Flags
1       512B   1024MB 1024MB primary ext4

```

## Mounting a New File System

- Using the command “**sudo blkid /dev/sdb1**” to get its UUID

```
korakoch@korakoch-20-04:~$ sudo blkid /dev/sdb1
/dev/sdb1: UUID="a510ea07-0463-4d66-a2dd-dc878c91e41e" TYPE="ext4"
PARTUUID="52650c92-01"
```

- Repeat the same command **but** change the storage device to **sdb2**
- **Capture the result screen!**
- **What is UUID? How is it used in mounting devices?**  
**Find the answer from google ;)**

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```
babyearn@babyearn:~/Desktop$ sudo blkid /dev/sda1
/dev/sda1: UUID="776982c0-87cf-406b-ac58-b74c3323238d" BLOCK_SIZE="4096" TYPE="ext4" PARTLABEL="primary" PARTUUID="69e7a
cb8-2c90-40d2-988b-1fd219b544c0"
babyearn@babyearn:~/Desktop$
```