

Part 1

Steps 1-3

```
(sade Faulks09@kali)-[~]
└─$ sudo ls /dev/sd*
[sudo] password for sade Faulks09:
/dev/sda /dev/sda1 /dev/sda2 /dev/sda3 /dev/sda4

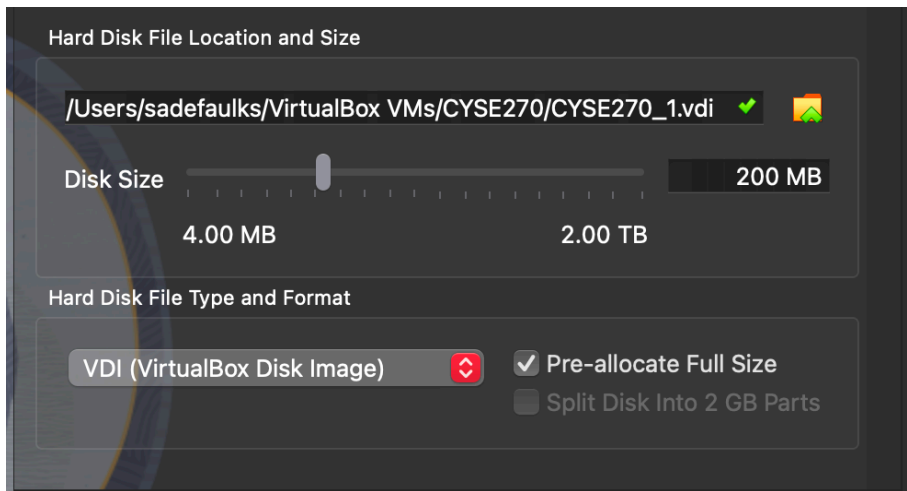
(sade Faulks09@kali)-[~]
└─$ sudo fdisk -l
Disk /dev/sda: 25 GiB, 26843545600 bytes, 52428800 sectors
Disk model: HARDDISK
Units: sectors of 1 * 512 = 512 bytes
Sector size (logical/physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes
Disklabel type: gpt
Disk identifier: 5E613512-8F75-4D16-B300-12B11BB2E929

Device            Start      End  Sectors  Size Type
/dev/sda1          2048     34815    32768   16M Linux filesystem
/dev/sda2          34816   2035711  2000896   977M EFI System
/dev/sda3         2035712  49709055 47673344 22.7G Linux filesystem
/dev/sda4         49709056 52426751  2717696   1.3G Linux swap

(sade Faulks09@kali)-[~]
└─$ sudo parted -l
Model: VBOX HARDDISK (scsi)
Disk /dev/sda: 26.8GB
Sector size (logical/physical): 512B/512B
Partition Table: gpt
Disk Flags:
```

Part 2

Step 1



Steps 2-3

```
(sadefaultks09@kali)~  
└─$ sudo ls /dev/sd*  
[sudo] password for sadefaultks09:  
/dev/sda /dev/sda1 /dev/sda2 /dev/sda3 /dev/sda4 /dev/sdb  
  
(sadefaultks09@kali)~  
└─$ sudo fdisk -l  
Disk /dev/sda: 25 GiB, 26843545600 bytes, 52428800 sectors  
Disk model: HARDDISK  
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  
I/O size (minimum/optimal): 512 bytes / 512 bytes  
  
(sadefaultks09@kali)~  
└─$ sudo parted -l  
Model: 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
```

Differences: `/dev/sdb` is now there

Part 3

Step 1

```
(sade Faulks09@kali)-[~]
└─$ sudo fdisk /dev/sdb
[sudo] password for sade Faulks09:

Welcome to fdisk (util-linux 2.41).
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 0x787753c9.

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

Step 2

```
(sade Faulks09@kali)-[~]
└─$ sudo mkfs.ext4 /dev/sdb1
mke2fs 1.47.2 (1-Jan-2025)
Creating filesystem with 203776 1k blocks and 51000 inodes
Filesystem UUID: 41320c5e-6769-4ab8-8ef9-1cf33bd925a3
Superblock backups stored on blocks:
    8193, 24577, 40961, 57345, 73729

Allocating group tables: done
Writing inode tables: done
Creating journal (4096 blocks): done
Writing superblocks and filesystem accounting information: done
```

Step 3

```
(sade Faulks09@kali)-[~]
└─$ sudo ls /dev/sd*
/dev/sda /dev/sda1 /dev/sda2 /dev/sda3 /dev/sda4 /dev/sdb /dev/sdb1

(sade Faulks09@kali)-[~]
└─$ sudo fdisk -l
Disk /dev/sda: 25 GiB, 26843545600 bytes, 52428800 sectors
Disk model: HARDDISK
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
```

```
(sade Faulks09@kali)-[~]
└─$ sudo parted -l
Model: VBOX HARDDISK (scsi)
Disk /dev/sda: 26.8GB
Sector size (logical/physical): 512B/512B
Partition Table: gpt
Disk Flags:
```

Differences: /dev/sdb1 now exists

Steps 4 and 5

```
(sade Faulks09@kali)-[~]
└─$ sudo mkdir /cyse

(sade Faulks09@kali)-[~]
└─$ sudo mount /dev/sdb1 /cyse

(sade Faulks09@kali)-[~]
└─$ df -h
Filesystem      Size  Used Avail Use% Mounted on
udev            895M     0 895M   0% /dev
tmpfs           197M  960K 196M   1% /run
/dev/sda3       23G   13G  8.4G  61% /
tmpfs           983M   4.0K 983M   1% /dev/shm
efivarfs       256K   27K  230K  11% /sys/firmware/efi/efivars
tmpfs           5.0M     0  5.0M   0% /run/lock
tmpfs           1.0M     0  1.0M   0% /run/credentials/systemd-journald.service
tmpfs           983M   8.0K 983M   1% /tmp
/dev/sda2       977M  192K 977M   1% /boot/efi
tmpfs           1.0M     0  1.0M   0% /run/credentials/getty@tty1.service
tmpfs           197M  116K 197M   1% /run/user/1000
/dev/sdb1       181M   63K 167M   1% /cyse
```

Steps 6-8

```
(sade Faulks09@kali)-[~]
└─$ echo "Sade Faulks" | sudo tee /cyse/sfaul001.txt
Sade Faulks

(sade Faulks09@kali)-[~]
└─$ cat /cyse/sfaul001.txt
Sade Faulks

(sade Faulks09@kali)-[~]
└─$ sudo umount /cyse

(sade Faulks09@kali)-[~]
└─$ ls /cyse

(sade Faulks09@kali)-[~]
└─$
```

Found nothing in the /cyse directory because it is no longer mounted.