Part 1:

Step 1: sudo ls /dev/sd*

```
┌──(savi㉿vbox)-[~]
└─$ sudo ls /dev/sd*
[sudo] password for savi:
Sorry, try again.
[sudo] password for savi:
/dev/sda  /dev/sda1  /dev/sda2  /dev/sda5
```

Step 2: sudo fdisk -l

```
┌──(savi㉿vbox)-[~]
└─$ sudo fdisk -l
Disk /dev/sda: 25 GiB, 26843545600 bytes, 52428800 sectors
Disk model: VBOX 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: dos
Disk identifier: 0xd9449332

Device     Boot    Start      End  Sectors  Size Id Type
/dev/sda1  *        2048 49641471 49639424 23.7G 83 Linux
/dev/sda2       49643518 52426751  2783234  1.3G  f W95 Ext'd (LBA)
/dev/sda5       49643520 52426751  2783232  1.3G 82 Linux swap / Solaris
```

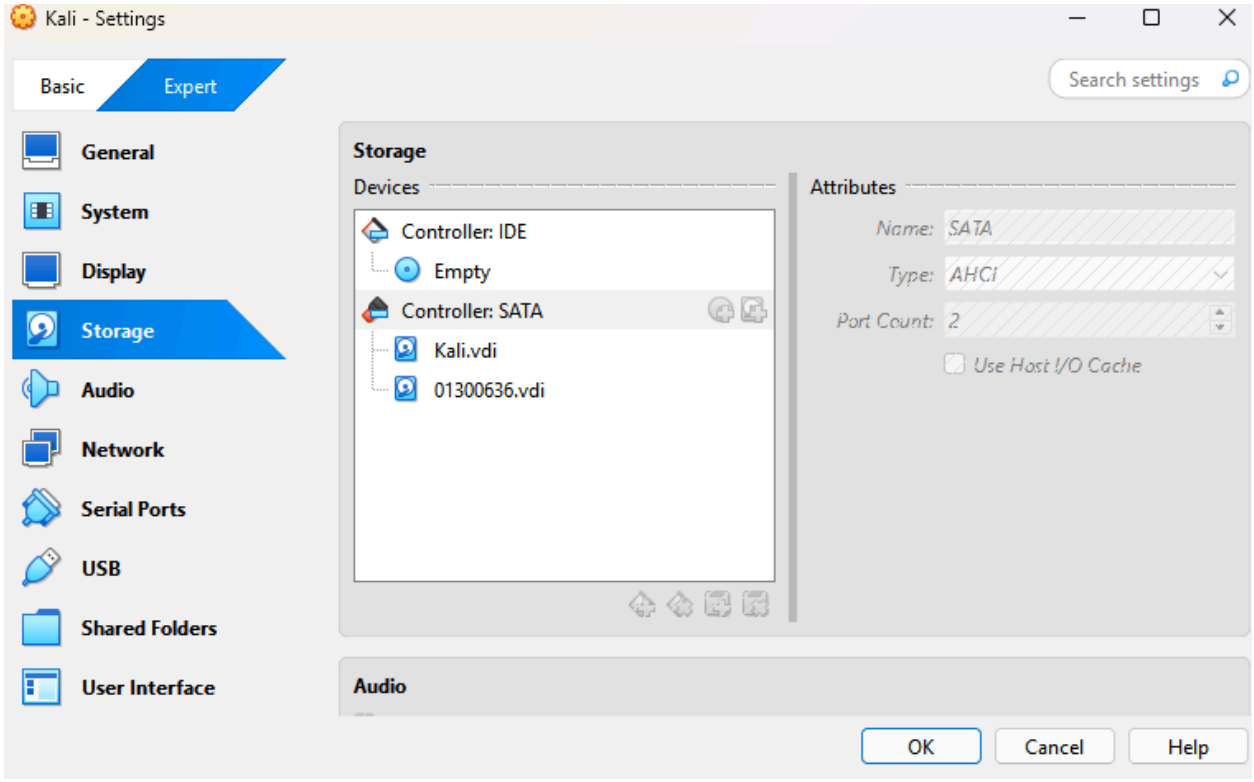
Step 3: sudo parted -l

```
┌──(savi㉿vbox)-[~]
└─$ sudo parted -l
Model: ATA VBOX HARDDISK (scsi)
Disk /dev/sda: 26.8GB
Sector size (logical/physical): 512B/512B
Partition Table: msdos
Disk Flags:

Number  Start   End     Size    Type      File system     Flags
 1      1049kB  25.4GB  25.4GB  primary   ext4            boot
 2      25.4GB  26.8GB  1425MB  extended                  lba
 5      25.4GB  26.8GB  1425MB  logical   linux-swap(v1)  swap
```

Part 2:

Step 1:



Step 2 - 3:

```
┌──(savi㉿vbox)-[~]
└─$ sudo ls /dev/sd*
[sudo] password for savi:
/dev/sda  /dev/sda1  /dev/sda2  /dev/sda5  /dev/sdb
```

```
┌──(savi㉿vbox)-[~]
└─$ sudo fdisk -l
Disk /dev/sda: 25 GiB, 26843545600 bytes, 52428800 sectors
Disk model: VBOX 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: dos
Disk identifier: 0×d9449332

Device     Boot    Start      End  Sectors  Size Id Type
/dev/sda1  *        2048 49641471 49639424 23.7G 83 Linux
/dev/sda2       49643518 52426751  2783234  1.3G  f W95 Ext'd (LBA)
/dev/sda5       49643520 52426751  2783232  1.3G 82 Linux swap / Solaris


Disk /dev/sdb: 200 MiB, 209715200 bytes, 409600 sectors
Disk model: VBOX HARDDISK
Units: sectors of 1 * 512 = 512 bytes
```

```
┌──(savi㉿vbox)-[~]
└─$ sudo parted -l
Model: ATA VBOX HARDDISK (scsi)
Disk /dev/sda: 26.8GB
Sector size (logical/physical): 512B/512B
Partition Table: msdos
Disk Flags:

Number  Start   End     Size    Type      File system     Flags
 1      1049kB  25.4GB  25.4GB  primary   ext4            boot
 2      25.4GB  26.8GB  1425MB  extended                  lba
 5      25.4GB  26.8GB  1425MB  logical   linux-swap(v1)  swap


Error: /dev/sdb: unrecognised disk label
Model: ATA VBOX HARDDISK (scsi)
Disk /dev/sdb: 210MB
Sector size (logical/physical): 512B/512B
Partition Table: unknown
Disk Flags:
```

Part 3:

Step 1:

```
┌──(savi㉿vbox)-[~]
└─$ sudo fdisk /dev/sdb

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 0×a35b8d58.

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): w
Value out of range.
Partition number (1-4, default 1): 1
First sector (2048-409599, default 2048): sudo mkfs.ext4 /dev/sdb1
Value out of range.
First sector (2048-409599, default 2048): 2480
Last sector, +/-sectors or +/-size{K,M,G,T,P} (2480-409599, default 409599):
409599

Created a new partition 1 of type 'Linux' and of size 198.8 MiB.
```

```
Command (m for help): w
The partition table has been altered.
Calling ioctl() to re-read partition table.
Syncing disks.
```

Step 2:

```
┌──(savi㉿vbox)-[~]
└─$ sudo mkfs.ext4 /dev/sdb1
mke2fs 1.47.2 (1-Jan-2025)
Found a sun partition table in /dev/sdb1
Proceed anyway? (y,N) y
Creating filesystem with 152616 1k blocks and 38152 inodes
Filesystem UUID: b34ae8e8-92c1-4568-b5d5-937360563197
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:

```
┌──(savi㉿vbox)-[~]
└─$ sudo ls /dev/sd*
/dev/sda   /dev/sda2  /dev/sdb   /dev/sdb2
/dev/sda1  /dev/sda5  /dev/sdb1  /dev/sdb3
```

```
┌──(savi㉿vbox)-[~]
└─$ sudo fdisk -l
Disk /dev/sda: 25 GiB, 26843545600 bytes, 52428800 sectors
Disk model: VBOX 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: dos
Disk identifier: 0xd9449332

Device     Boot    Start      End  Sectors  Size Id Type
/dev/sda1  *        2048 49641471 49639424 23.7G 83 Linux
/dev/sda2       49643518 52426751  2783234  1.3G  f W95 Ext'd (LBA)
/dev/sda5       49643520 52426751  2783232  1.3G 82 Linux swap / Solaris


Disk /dev/sdb: 200 MiB, 209715200 bytes, 409600 sectors
Disk model: VBOX 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
```

```
┌──(savi㉿vbox)-[~]
└─$ sudo parted -l
Model: ATA VBOX HARDDISK (scsi)
Disk /dev/sda: 26.8GB
Sector size (logical/physical): 512B/512B
Partition Table: msdos
Disk Flags:

Number  Start   End     Size    Type      File system     Flags
 1      1049kB  25.4GB  25.4GB  primary   ext4            boot
 2      25.4GB  26.8GB  1425MB  extended                  lba
 5      25.4GB  26.8GB  1425MB  logical   linux-swap(v1)  swap


Model: ATA VBOX HARDDISK (scsi)
Disk /dev/sdb: 210MB
Sector size (logical/physical): 512B/512B
Partition Table: loop
Disk Flags:

Number  Start  End    Size   File system  Flags
 1      0.00B  210MB  210MB  ext4
```

Step 4:

```
┌──(savi㉿vbox)-[~]
└─$ sudo mkdir /cyse

┌──(savi㉿vbox)-[~]
└─$ sudo mount /dev/sdb1 /cyse
```

Step 5:

```
┌──(savi㉿vbox)-[~]
└─$ df -h
Filesystem      Size  Used Avail Use% Mounted on
udev            5.4G     0  5.4G   0% /dev
tmpfs           1.1G  1.1M  1.1G   1% /run
/dev/sda1        24G   15G  8.0G  64% /
tmpfs           5.4G  4.0K  5.4G   1% /dev/shm
tmpfs           5.0M     0  5.0M   0% /run/lock
tmpfs           1.0M     0  1.0M   0% /run/credentials/systemd-journald.servi
ce
tmpfs           5.4G  108K  5.4G   1% /tmp
tmpfs           1.0M     0  1.0M   0% /run/credentials/getty@tty1.service
tmpfs           1.1G  116K  1.1G   1% /run/user/1000
/dev/sdb1       135M   51K  124M   1% /cyse
```

Step 6:

```
┌──(savi㉿vbox)-[~]
└─$ echo "Xavier Carter" | sudo tee /cyse/01300636.txt
Xavier Carter
```

Step 7:

```
┌──(savi㉿vbox)-[~]
└─$ sudo umount /cyse
```

Step 8:

```
┌──(savi㉿vbox)-[~]
└─$ ls /cyse
```

This is what i found:

