

You can open the terminal using (Ctrl+Alt+t).

There are many commands to partition a disk/USB like cfdisk, fdisk, partx, lsblk, wipefs. Parted is most popular because of its advanced functionalities. You can take the help by looking its manual **\$man lsblk**. This will display all the functionalities of lsblk

When you plugin a pendrive it will automatically mount. Login as a administrator/superuser using **\$sudo su**

```
$ fdisk -l
```

This will display your system and mount locations of disk/USB. The bottom line display mount location of your USB drive i.e. /dev/sdxx. Here xx vary according to systems so you can replace with your system's value. For example the xx value is b1 so my device location is /dev/sdb1.

You may also get the device location with **\$ df -h**. In the bottom line you will get your usb device location /dev/sdxx

```
sonal@sonal-hp:~$ umount /dev/sdb1
```

Before starting any operation on USB you have to unmount the USB. This command will unmount your USB.

Parted is pre-installed in many ubuntu versions. If it is not installed then you can install it
sonal@sonal-hp:~\$ **sudo apt-get install parted**

```
sonal@sonal-hp:~$ sudo parted /dev/sdb1
```

```
GNU Parted 3.2
```

```
Using /dev/sdb1
```

```
Welcome to GNU Parted! Type 'help' to view a list of commands.
```

```
(parted) print
```

```
Model: Unknown (unknown)
```

```
Disk /dev/sdb1: 8004MB
```

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

```
Partition Table: loop
```

```
Disk Flags:
```

```
Number Start End Size File system Flags
```

```
1 0.00B 8004MB 8004MB fat32
```

print command display the usb information. This usb have single parition, partition start and end, size of the usb and its file system.

Create a Partition Table

If you are happy with your existing partition table, you can skip the part create partition table. If you want to change your partition table type, you have to follow the commands of create partition table. In previous section your can see USB partition table type is loop.

```
(parted) mklabel
```

```
New disk label type? gpt
```

```
Warning: The existing disk label on /dev/sdb1 will be destroyed and all data on this disk will be lost. Do you want to continue?
```

```
Yes/No? Yes
```

Error: Partition(s) 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64 on /dev/sdb1 have been written, but we have been unable to inform the kernel of the change, probably because it/they are in use. As a result, the old partition(s) will remain in use. You should reboot now before making further changes.
Ignore/Cancel? **Ignore**
(parted)

The possible options with maklabel like gpt, msdos, loop etc. can be seen with man parted
Note: if you mklable the partition and plug out the pendrive and reinsert it then parted will give some error on performing other operations. Since your mount location may change with reinsertion. May be new location is /dev/sdc1 that is different then your previous location /dev/sdb1. So you need to start again with parted.

```
sonal@sonal-hp:~$ sudo mkfs.vfat /dev/sdb1
sonal@sonal-hp:~$ sudo parted /dev/sdb1
GNU Parted 3.2
Using /dev/sdb1
Welcome to GNU Parted! Type 'help' to view a list of commands.
(parted) print
Model: Unknown (unknown)
Disk /dev/sdb1: 8004MB
Sector size (logical/physical): 512B/512B
Partition Table: loop
Disk Flags:
```

```
Number Start End   Size  File system  Flags
 1    0.00B 8004MB 8004MB fat32
```

```
mklable label-type
    Create a new disklabel (partition table) of label-type.
    label-type should be one of "aix", "amiga", "bsd", "dvh",
    "gpt", "loop", "mac", "msdos", "pc98", or "sun".
mkpart part-type [fs-type] start end
    Make a part-type partition for filesystem fs-type (if
    specified), beginning at start and ending at end (by
    default in megabytes). part-type should be one of "pri-
    mary", "logical", or "extended".
```

(parted) **help mklable**

```
sonal@sonal-hp:~$ sudo parted /dev/sdc1
[sudo] password for sonal:
GNU Parted 3.2
Using /dev/sdc1
Welcome to GNU Parted! Type 'help' to view a list of commands.
(parted) print
Model: Unknown (unknown)
Disk /dev/sdc1: 8004MB
Sector size (logical/physical): 512B/512B
```

Partition Table: gpt
Disk Flags:

Number Start End Size File system Name Flags

Now you can see that we have only partition table. No partitions are created on disk. So there is no other information display about the USB partitions.

Create Single Partitions

(parted) **mkpart**

Partition name? []? **primary**

File system type? [ext2]? **ext2**

Start? **0%**

End? **-1s**

Warning: You requested a partition from 0.00B to 8004MB (sectors 0..15633344).
The closest location we can manage is 17.4kB to 8004MB (sectors 34..15633311).

Is this still acceptable to you?

Yes/No? **Yes**

Warning: The resulting partition is not properly aligned for best performance.

Ignore/Cancel? **Ignore**

Error: Partition(s) 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17,
18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37,
38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57,
58, 59, 60, 61, 62, 63, 64 on /dev/sdc1 have been written, but we have been
unable to inform the kernel of the change, probably because it/they are in use.
As a result, the old partition(s) will remain in use. You should reboot now
before making further changes.

Ignore/Cancel? **Ignore**

(parted) **print**

Model: Unknown (unknown)

Disk /dev/sdc1: 8004MB

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

Partition Table: gpt

Disk Flags:

Number Start End Size File system Name Flags
1 17.4kB 8004MB 8004MB ext2 primary

select device

Choose device as the current device to edit. device should usually be a Linux hard disk device, but it can be a partition, software raid device, or an LVM logical volume if necessary.

set partition flag state

Change the state of the flag on partition to state. Supported flags are: "boot", "root", "swap", "hidden", "raid", "lvm", "lba", "legacy_boot", "irst", "esp" and "palo". state should be either "on" or "off".

Resize Partitions

(parted) **resizepart**

Partition number? **1**

End? [8004MB]? **4002**

Warning: Shrinking a partition can cause data loss, are you sure you want to continue?

Yes/No? **Yes**

Error: Partition(s) 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64 on /dev/sdc1 have been written, but we have been unable to inform the kernel of the change, probably because it/they are in use. As a result, the old partition(s) will remain in use. You should reboot now before making further changes.

Ignore/Cancel? Ignore

(parted) print

Model: Unknown (unknown)

Disk /dev/sdc1: 8004MB

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

Partition Table: gpt

Disk Flags:

Number	Start	End	Size	File system	Name	Flags
1	17.4kB	4002MB	4002MB	ext2	primary	

Create Multiple Partitions

(parted) mkpart

Partition name? []? extended

File system type? [ext2]? ext3

Start? 4003

End? 8004

Error: Partition(s) 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64 on /dev/sdc1 have been written, but we have been unable to inform the kernel of the change, probably because it/they are in use. As a result, the old partition(s) will remain in use. You should reboot now before making further changes.

Ignore/Cancel? Ignore

(parted) print

Model: Unknown (unknown)

Disk /dev/sdc1: 8004MB

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

Partition Table: gpt

Disk Flags:

Number	Start	End	Size	File system	Name	Flags
1	17.4kB	4002MB	4002MB	ext2	primary	
2	4003MB	8004MB	4000MB	ext3	extended	

Remove Partitions

(parted) rm 2

Error: Partition(s) 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57,

58, 59, 60, 61, 62, 63, 64 on /dev/sdc1 have been written, but we have been unable to inform the kernel of the change, probably because it/they are in use. As a result, the old partition(s) will remain in use. You should reboot now before making further changes.

Ignore/Cancel? Ignore

(parted) print

Model: Unknown (unknown)

Disk /dev/sdc1: 8004MB

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

Partition Table: gpt

Disk Flags:

Number	Start	End	Size	File system	Name	Flags
1	17.4kB	4002MB	4002MB	ext2	primary	

(parted) **quit**

[sonal@sonal-hp:~\\$](#)

quit command exit you from the parted.

References:

1. Parted Basic Tutorial: <https://www.youtube.com/watch?>

2. Using Parted Command in Linux: <https://www.youtube.com/watch?>