

Format hard disk in linux using fdisk

Written by sdx

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new disk using fdisk command

Following command will list all detected hard disks:

```
# fdisk -l | grep '^Disk'
```

Output:

```
Disk /dev/sda: 251.0 GB, 251000193024 bytes
```

```
Disk /dev/sdb: 251.0 GB, 251000193024 bytes
```

A device name refers to the entire hard disk. For more information see [Linux partition naming convention](#) and [IDE drive mappings](#).

To partition the disk - /dev/sdb, enter:

```
# fdisk /dev/sdb
```

The basic fdisk commands you need are:

- * m - print help
- * p - print the partition table
- * n - create a new partition
- * d - delete a partition
- * q - quit without saving changes
- * w - write the new partition table and exit

Step#2 : Format the new disk using mkfs.ext3 command

To format Linux partitions using ext2fs on the new disk:

```
# mkfs.ext3 /dev/sdb1
```

Step#3 : Mount the new disk using mount command

First create a mount point /disk1 and use mount command to mount /dev/sdb1, enter:

```
# mkdir /disk1
```

```
# mount /dev/sdb1 /disk1
```

```
# df -H
```

Step#4 : Update /etc/fstab file

Open /etc/fstab file, enter:

```
# vi /etc/fstab
```

Append as follows:

```
/dev/sdb1          /disk1          ext3  defaults    1 2
```

Save and close the file.

Task: Label the partition

You can label the partition using e2label. For example, if you want to label the new partition

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/backup, enter

```
# e2label /dev/sdb1 /backup
```

You can use label name insted of partition name to mount disk using /etc/fstab:

```
LABEL=/backup /disk1 ext3 defaults 1 2
```