

## 1. Create a New Partition with ext3 Filesystem

```
root@fedora:~# fdisk /dev/nvme0n1

Welcome to fdisk (util-linux 2.40-rc1).
Changes will remain in memory only, until you decide to write them.
Be careful before using the write command.

This disk is currently in use - repartitioning is probably a bad idea.
It's recommended to umount all file systems, and swapoff all swap
partitions on this disk.

Command (m for help): n

All primary partitions are in use.
Adding logical partition 5
First sector (2101248-10487807, default 2101248):
Last sector, +/-sectors or +/-size{K,M,G,T,P} (2101248-10487807, default 10487807): +250M

Created a new partition 5 of type 'Linux' and of size 250 MiB.

Command (m for help): p
Disk /dev/nvme0n1: 20 GiB, 21474836480 bytes, 41943040 sectors
Disk model: VMware Virtual NVMe Disk
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: 0x94ce0f1b

Device            Boot    Start        End    Sectors    Size Id Type
/dev/nvme0n1p1                2048    2099199    2097152     1G 83 Linux
/dev/nvme0n1p2 *    10487808    12584959    2097152     1G 83 Linux
/dev/nvme0n1p3        12584960    41943039    29358080    14G 83 Linux
/dev/nvme0n1p4        2099200    10487807     8388608     4G  5 Extended
/dev/nvme0n1p5        2101248    2613247     512000     250M 83 Linux

root@fedora:~# mkfs -t ext3 /dev/nvme0n1p5
mke2fs 1.47.0 (5-Feb-2023)
Creating filesystem with 256000 1k blocks and 64000 inodes
Filesystem UUID: f36cbfaf-e649-4ba2-a93b-66eddcdbdafd6
Superblock backups stored on blocks:
    8193, 24577, 40961, 57345, 73729, 204801, 221185

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

root@fedora:~#
```

## 2. Mount the Partition to /mnt/mypartition

```
root@fedora:~# mount /dev/nvme0n1p5 /mnt/mypartition/
root@fedora:~# df -h
Filesystem      Size  Used Avail Use% Mounted on
/dev/nvme0n1p3  14G   3.5G   11G   25% /
devtmpfs        4.0M    0   4.0M    0% /dev
tmpfs           963M    0   963M    0% /dev/shm
tmpfs           386M   1.6M   384M    1% /run
tmpfs           963M   16K   963M    1% /tmp
/dev/nvme0n1p2  974M  259M   649M   29% /boot
/dev/nvme0n1p3  14G   3.5G   11G   25% /home
tmpfs           193M  148K   193M    1% /run/user/1000
/dev/sr0        2.2G   2.2G    0 100% /run/media/abel/Fedora-WS-Live-40-1-14
/dev/nvme0n1p5  229M   31K   216M    1% /mnt/mypartition
root@fedora:~#
```

## 3. Create a File with a Fake Address

```
root@fedora:~# cd /mnt/mypartition/
root@fedora:/mnt/mypartition# vim address
root@fedora:/mnt/mypartition# cat address
Mr. Jonathan D. Merriweather
Apt. 5B, West Wing
Greenstone Heights
Building No. 1147
root@fedora:/mnt/mypartition# ll
total 13
-rw-r--r--. 1 root root    85 Aug  4 19:12 address
drwx----- 2 root root 12288 Aug  4 18:29 lost+found
root@fedora:/mnt/mypartition#
```

## 4. Ensure Persistence After Reboot

```
#
# /etc/fstab
# Created by anaconda on Mon Aug  4 14:17:46 2025
#
# Accessible filesystems, by reference, are maintained under '/dev/disk/'.
# See man pages fstab(5), findfs(8), mount(8) and/or blkid(8) for more info.
#
# After editing this file, run 'systemctl daemon-reload' to update systemd
# units generated from this file.
#
UUID=04c80987-d875-48e3-8720-705a9cf6042d / btrfs subvol=root,compress=zstd:1 0 0
UUID=2345cfe5-150d-44fa-97b2-dab2dd94b745 /boot ext4 defaults 1 2
UUID=04c80987-d875-48e3-8720-705a9cf6042d /home btrfs subvol=home,compress=zstd:1 0 0
/dev/nvme0n1p5 /mnt/mypartition ext3
```

```
abel@fedora:~$ ls /mnt/mypartition/  
address  lost+found  
abel@fedora:~$ sudo blkid /dev/nvme0n1p5  
[sudo] password for abel:  
/dev/nvme0n1p5: UUID="f36cbfaf-e649-4ba2-a93b-66eddcbdafd6" BLOCK_SIZE="1024" TY  
PE="ext3" PARTUUID="94ce0f1b-05"  
abel@fedora:~$
```