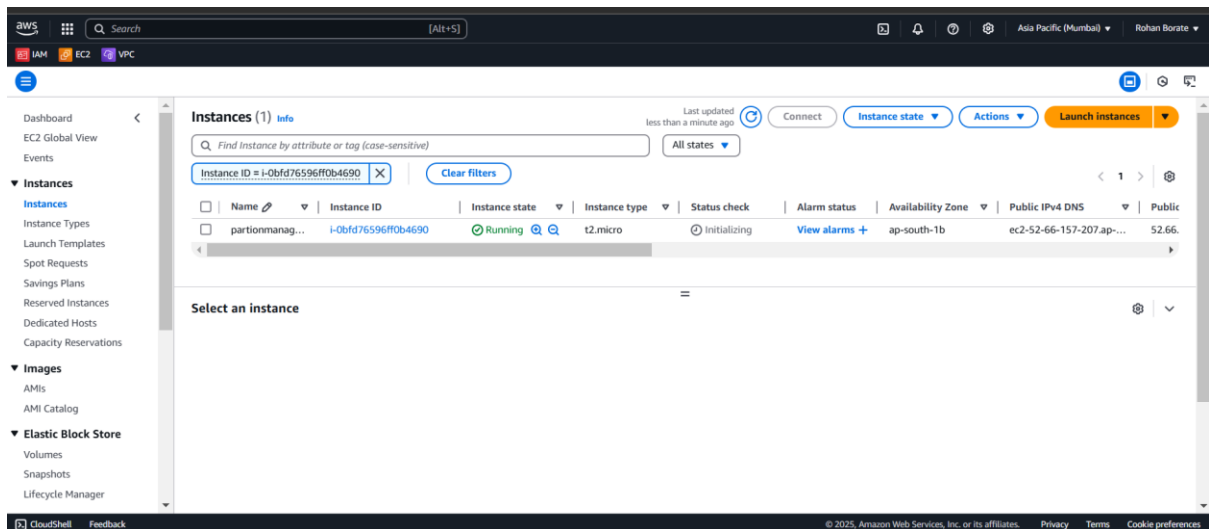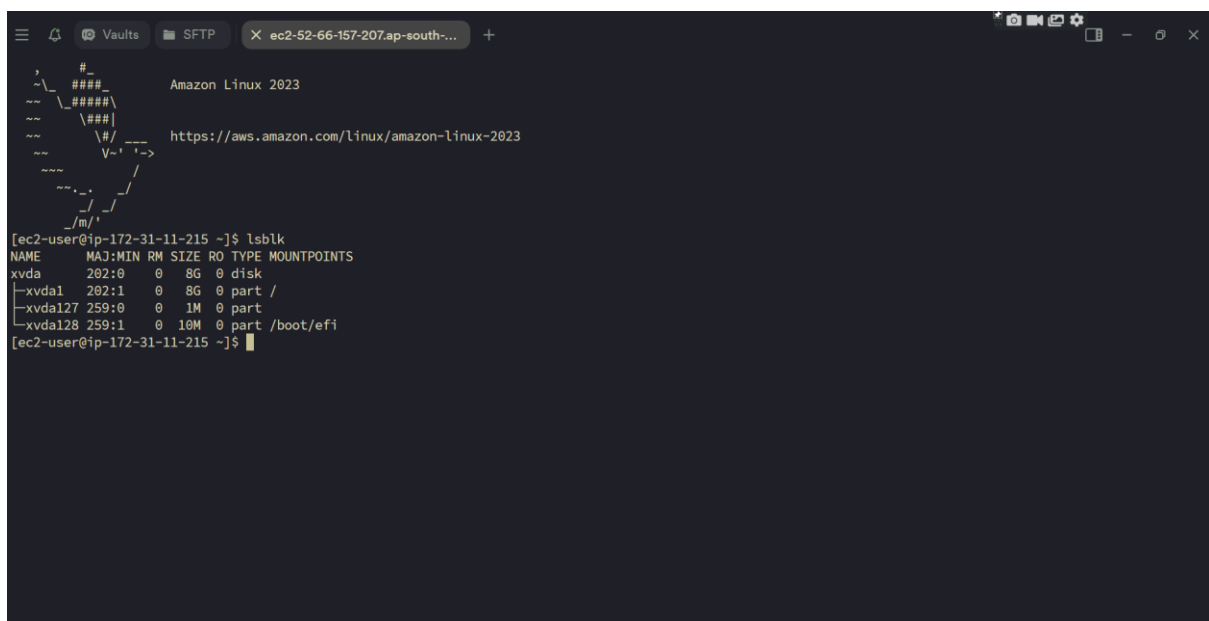Temporary Partition management

Create an EC2 instance →



Login to this instance and check available volumes and partitions

Command #lsblk

Crete new volume and attach this volume to our created instance



Volume is created



Attach volume to the EC2 instance
click on volume → action→ attach volume

Check in instance details ,volume is attached or not
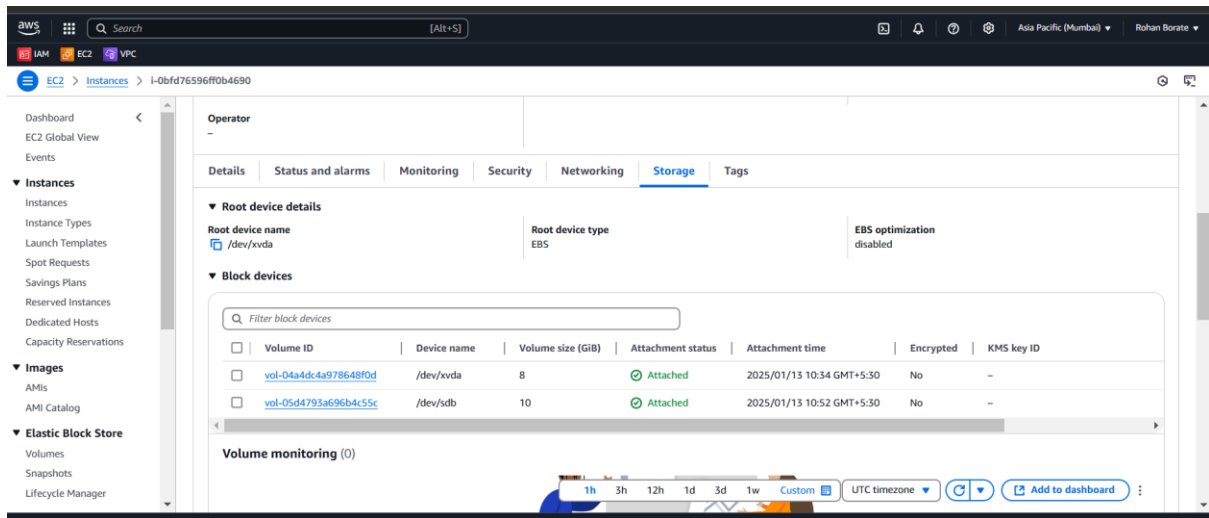


Go to instance login and check available volumes  #lsblk
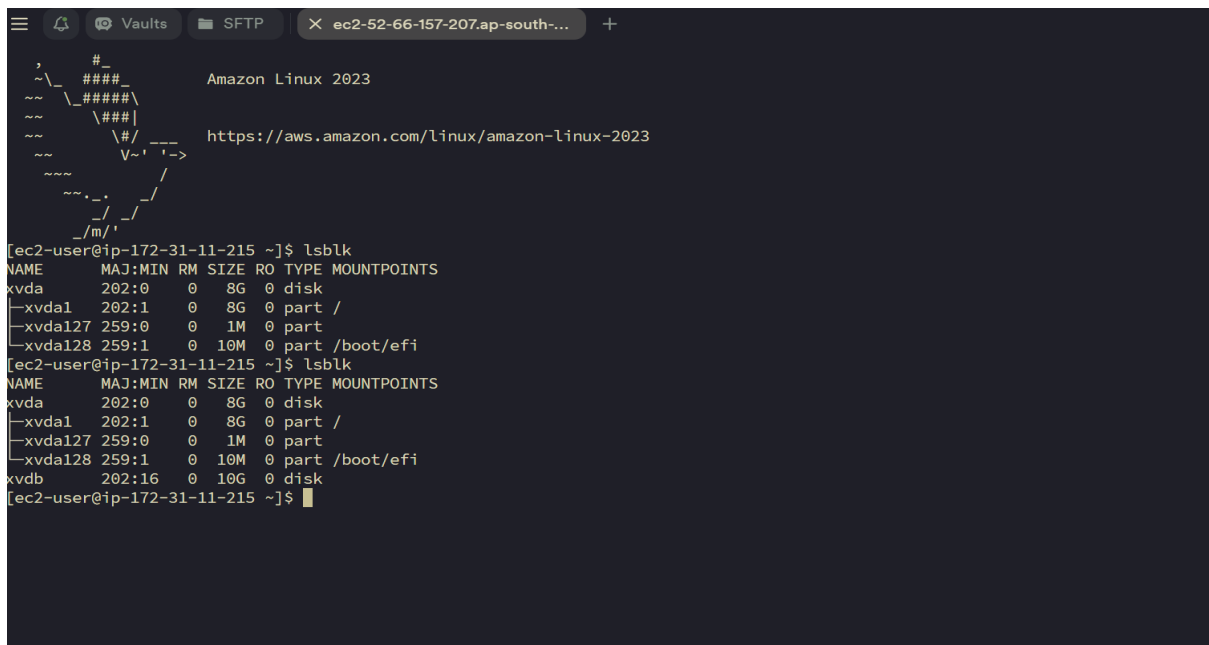


Xvdb , 10 gb new volume is available , now make the partition of that volume

Usning #fdisk command
fdisk /dev/xvdb

```
[ec2-user@ip-172-31-11-215 ~]$ sudo -i
[root@ip-172-31-11-215 ~]# lsblk
NAME        MAJ:MIN RM SIZE RO TYPE MOUNTPOINTS
xvda        202:0    0   8G  0 disk
├─xvda1     202:1    0   8G  0 part /
├─xvda127   259:0    0   1M  0 part
└─xvda128   259:1    0  10M  0 part /boot/efi
xvdb        202:16   0  10G  0 disk
[root@ip-172-31-11-215 ~]# fdisk /dev/xvdb^C
[root@ip-172-31-11-215 ~]# fdisk /dev/xvdb

Welcome to fdisk (util-linux 2.37.4).
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 disklabel with disk identifier 0xc06999e7.

Command (m for help): m

Help:

  DOS (MBR)
   a   toggle a bootable flag
   b   edit nested BSD disklabel
   c   toggle the dos compatibility flag

  Generic
   d   delete a partition
   F   list free unpartitioned space
   l   list known partition types
   n   add a new partition
   p   print the partition table
```

Press n for new partition



```
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 (2048-20971519, default 2048):
Last sector, +/-sectors or +/-size{K,M,G,T,P} (2048-20971519, default 20971519): +5G

Created a new partition 1 of type 'Linux' and of size 5 GiB.

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

Check with lsblk that partion is visible



```
[root@ip-172-31-11-215 ~]# lsblk
NAME        MAJ:MIN RM SIZE RO TYPE MOUNTPOINTS
xvda        202:0    0   8G  0 disk
├─xvda1     202:1    0   8G  0 part /
├─xvda127   259:0    0   1M  0 part
└─xvda128   259:1    0  10M  0 part /boot/efi
xvdb        202:16   0  10G  0 disk
└─xvdb1     202:17   0   5G  0 part
[root@ip-172-31-11-215 ~]#
```

Now attach the file system to partition

#mkfs.ext4 /dev/xvdb1

```
[root@ip-172-31-11-215 ~]# lsblk
NAME        MAJ:MIN RM  SIZE RO TYPE MOUNTPOINTS
xvda        202:0    0    8G  0 disk
├─xvda1     202:1    0    8G  0 part /
├─xvda127   259:0    0    1M  0 part
└─xvda128   259:1    0   10M  0 part /boot/efi
xvdb        202:16   0   10G  0 disk
└─xvdb1     202:17   0    5G  0 part
[root@ip-172-31-11-215 ~]# mkfs.ext4 /dev/xvdb1
mke2fs 1.46.5 (30-Dec-2021)
Creating filesystem with 1310720 4k blocks and 327680 inodes
Filesystem UUID: 3aebfcf5-a0b2-46be-856c-ee3c0d7154b4
Superblock backups stored on blocks:
        32768, 98304, 163840, 229376, 294912, 819200, 884736

Allocating group tables: done
Writing inode tables: done
Creating journal (16384 blocks): done
Writing superblocks and filesystem accounting information: done

[root@ip-172-31-11-215 ~]#
```

Mount the partition to a temporary directory

Create a directory ->mkdir /mnt/temp

mount  /dev/xvdb1 /mnt/temp
mount (source) (destination)

```
≡  ♧  ◉ Vaults   ▤ SFTP      ✕ ec2-52-66-157-207.ap-south-...   +

[root@ip-172-31-11-215 ~]# mkdir /mnt/temp
[root@ip-172-31-11-215 ~]# mount /dev/xvdb1 /mnt/temp
[root@ip-172-31-11-215 ~]# partprobe
[root@ip-172-31-11-215 ~]# lsblk
NAME        MAJ:MIN RM  SIZE RO TYPE MOUNTPOINTS
xvda        202:0    0    8G  0 disk
├─xvda1     202:1    0    8G  0 part /
├─xvda127   259:0    0    1M  0 part
└─xvda128   259:1    0   10M  0 part /boot/efi
xvdb        202:16   0   10G  0 disk
└─xvdb1     202:17   0    5G  0 part /mnt/temp
[root@ip-172-31-11-215 ~]# df -h
Filesystem      Size  Used Avail Use% Mounted on
devtmpfs        4.0M     0  4.0M   0% /dev
tmpfs           475M     0  475M   0% /dev/shm
tmpfs           190M  456K  190M   1% /run
/dev/xvda1      8.0G  1.6G  6.4G  20% /
tmpfs           475M     0  475M   0% /tmp
/dev/xvda128     10M  1.3M  8.7M  13% /boot/efi
tmpfs            95M     0   95M   0% /run/user/1000
/dev/xvdb1      4.9G   24K  4.6G   1% /mnt/temp
[root@ip-172-31-11-215 ~]#
```

volume is mounted , but it is temporary mount so after restart of instance , it is not available

Command to unmount partition → #umount /mnt/temp

# Make Partition using parted command

Commands

#parted   /dev/xvdb
mklabel gpt

mkpart primary ext4 6GiB 9GiB

quit


**Command Breakdown**

1.  **mklabel gpt**

    o  This initializes the disk with a **GPT (GUID Partition Table)**.

    o  GPT supports larger disks and more partitions than the older MBR (Master Boot Record).

    o  **Effect:** All existing data on the disk will be lost.

2.  **mkpart primary ext4** 6GiB 9GiB

    o  Creates a new partition with the following parameters:

        ▪  **Type:** Primary.

        ▪  **Filesystem:** ext4 (the filesystem type is a hint; the partition itself is unformatted at this point).

        ▪  **Start:** 6GiB (partition begins at  6 GiB from the start of the disk).

        ▪  **End:** 9GiB (partition ends at 9 GiB from the start of the disk).

3.  **quit**

    o  Exits the parted utility and saves the changes to the disk.

```
[root@ip-172-31-11-215 ~]# lsblk
NAME       MAJ:MIN RM  SIZE RO TYPE MOUNTPOINTS
xvda       202:0    0    8G  0 disk
├─xvda1    202:1    0    8G  0 part /
├─xvda127  259:0    0    1M  0 part
└─xvda128  259:1    0   10M  0 part /boot/efi
xvdb       202:16   0   10G  0 disk
└─xvdb1    202:17   0    5G  0 part /mnt/temp
[root@ip-172-31-11-215 ~]# parted /dev/xvdb
GNU Parted 3.4
Using /dev/xvdb
Welcome to GNU Parted! Type 'help' to view a list of commands.
(parted) help
  align-check TYPE N                     check partition N for TYPE(min|opt) alignment
  help [COMMAND]                         print general help, or help on COMMAND
  mklabel,mktable LABEL-TYPE             create a new disklabel (partition table)
  mkpart PART-TYPE [FS-TYPE] START END   make a partition
  name NUMBER NAME                       name partition NUMBER as NAME
  print [devices|free|list,all|NUMBER]   display the partition table, available devices, free space, all found partitions, or a particular partition
  quit                                   exit program
  rescue START END                       rescue a lost partition near START and END
  resizepart NUMBER END                  resize partition NUMBER
  rm NUMBER                              delete partition NUMBER
  select DEVICE                          choose the device to edit
  disk_set FLAG STATE                    change the FLAG on selected device
  disk_toggle [FLAG]                     toggle the state of FLAG on selected device
  set NUMBER FLAG STATE                  change the FLAG on partition NUMBER
  toggle [NUMBER [FLAG]]                 toggle the state of FLAG on partition NUMBER
  unit UNIT                              set the default unit to UNIT
  version                                display the version number and copyright information of GNU Parted
(parted)
```

```
[root@ip-172-31-11-215 ~]#
[root@ip-172-31-11-215 ~]#
[root@ip-172-31-11-215 ~]# parted /dev/xvdb
GNU Parted 3.4
Using /dev/xvdb
Welcome to GNU Parted! Type 'help' to view a list of commands.
(parted) mklabel gpt
Warning: The existing disk label on /dev/xvdb will be destroyed and all data on this disk will be lost. Do you want to continue?
Yes/No? yes
(parted) mkpart primary ext4 6GiB 10GiB
Error: The location 10GiB is outside of the device /dev/xvdb.
(parted) mkpart primary ext4 6GiB 9GiB
(parted) quit
Information: You may need to update /etc/fstab.

[root@ip-172-31-11-215 ~]#
```

Now partition is done ,

```
[root@ip-172-31-11-215 ~]#
[root@ip-172-31-11-215 ~]#
[root@ip-172-31-11-215 ~]# parted /dev/xvdb
GNU Parted 3.4
Using /dev/xvdb
Welcome to GNU Parted! Type 'help' to view a list of commands.
(parted) mklabel gpt
Warning: The existing disk label on /dev/xvdb will be destroyed and all data on this disk will be lost. Do you want to continue?
Yes/No? yes
(parted) mkpart primary ext4 6GiB 10GiB
Error: The location 10GiB is outside of the device /dev/xvdb.
(parted) mkpart primary ext4 6GiB 9GiB
(parted) quit
Information: You may need to update /etc/fstab.

[root@ip-172-31-11-215 ~]# lsblk
NAME       MAJ:MIN RM  SIZE RO TYPE MOUNTPOINTS
xvda       202:0    0    8G  0 disk
├─xvda1    202:1    0    8G  0 part /
├─xvda127  259:0    0    1M  0 part
└─xvda128  259:1    0   10M  0 part /boot/efi
xvdb       202:16   0   10G  0 disk
└─xvdb1    202:17   0    3G  0 part
[root@ip-172-31-11-215 ~]#
```

on the similar like above you just have to mount that partition with #mount command