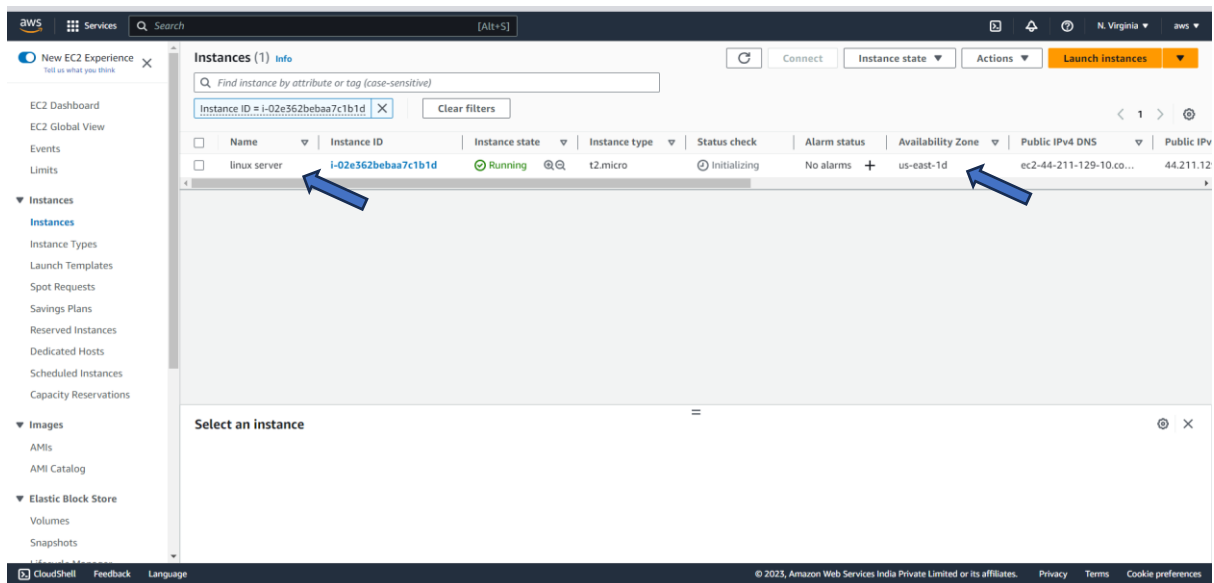
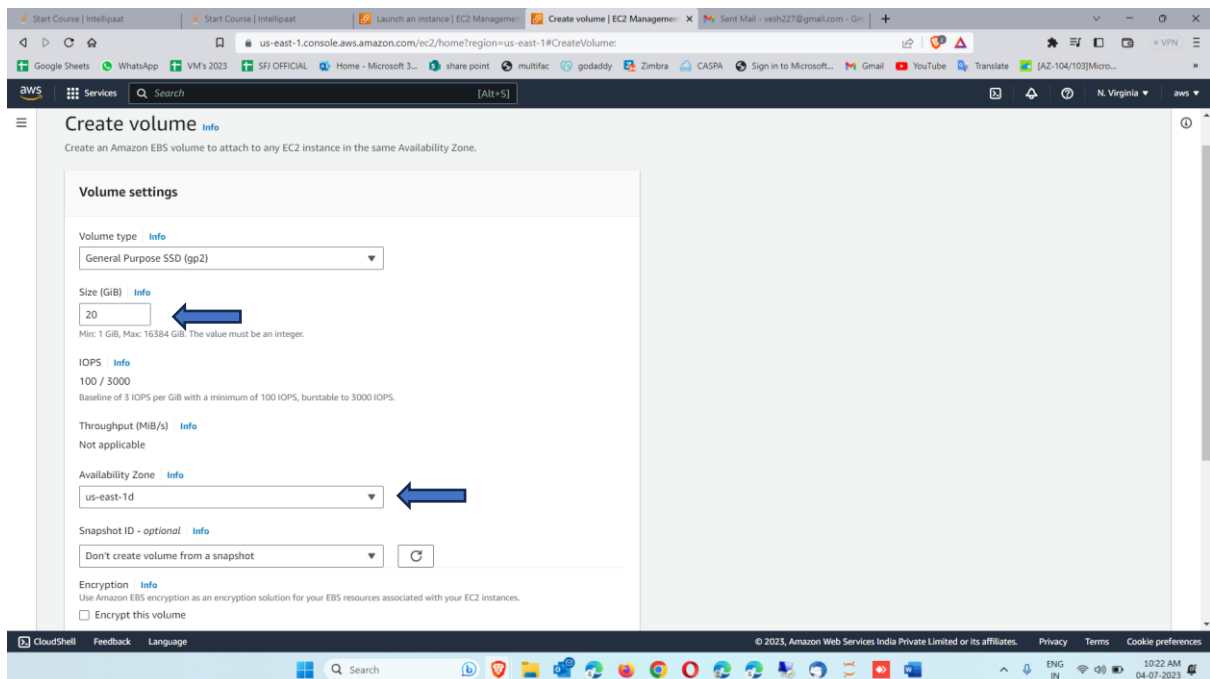


Module 2: EBS Assignment

1. I launched a Linux EC2 instance. (AZ= us-east-1d)

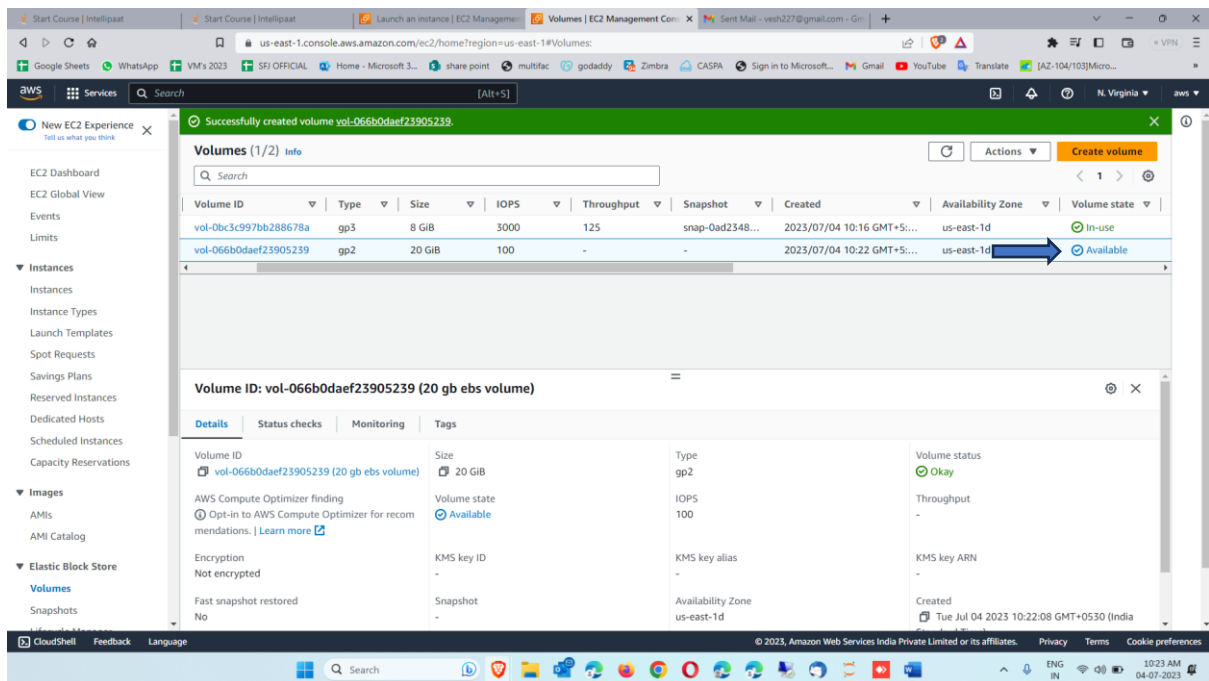


2. Which region and AZ I have launched my Linux EC2 instance the same AZ I am creating 20 GB EBS volume

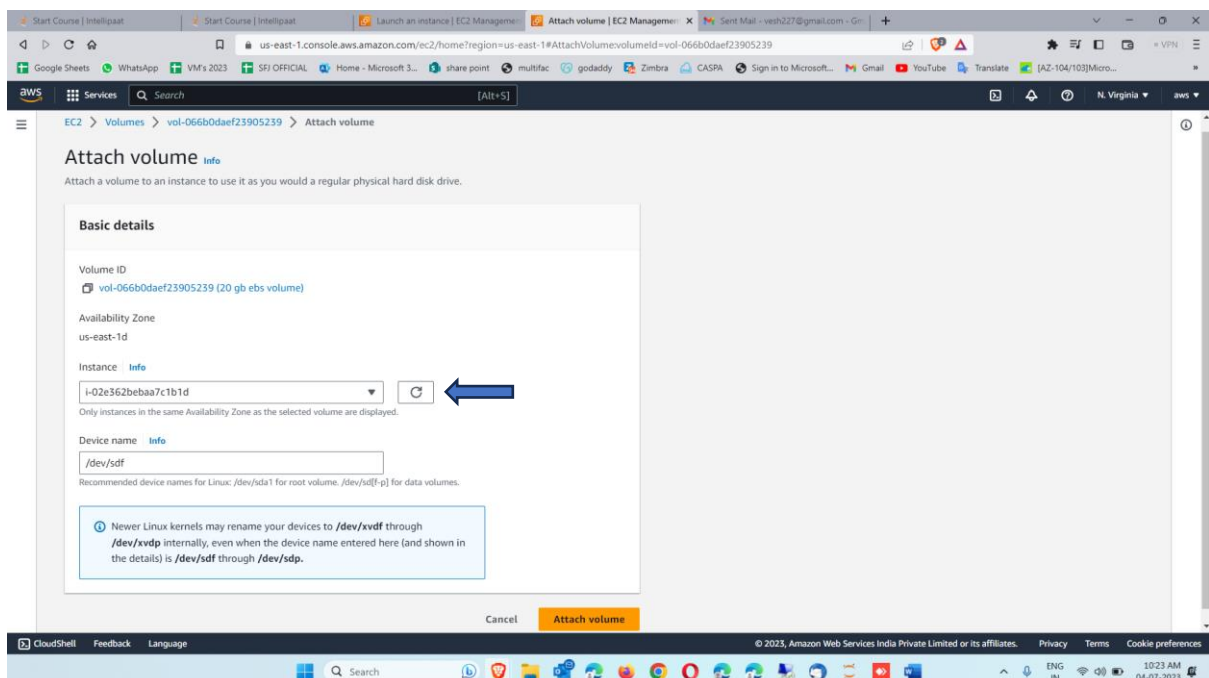


Module 2: EBS Assignment

3. volume has been created. Volume state it shows available.

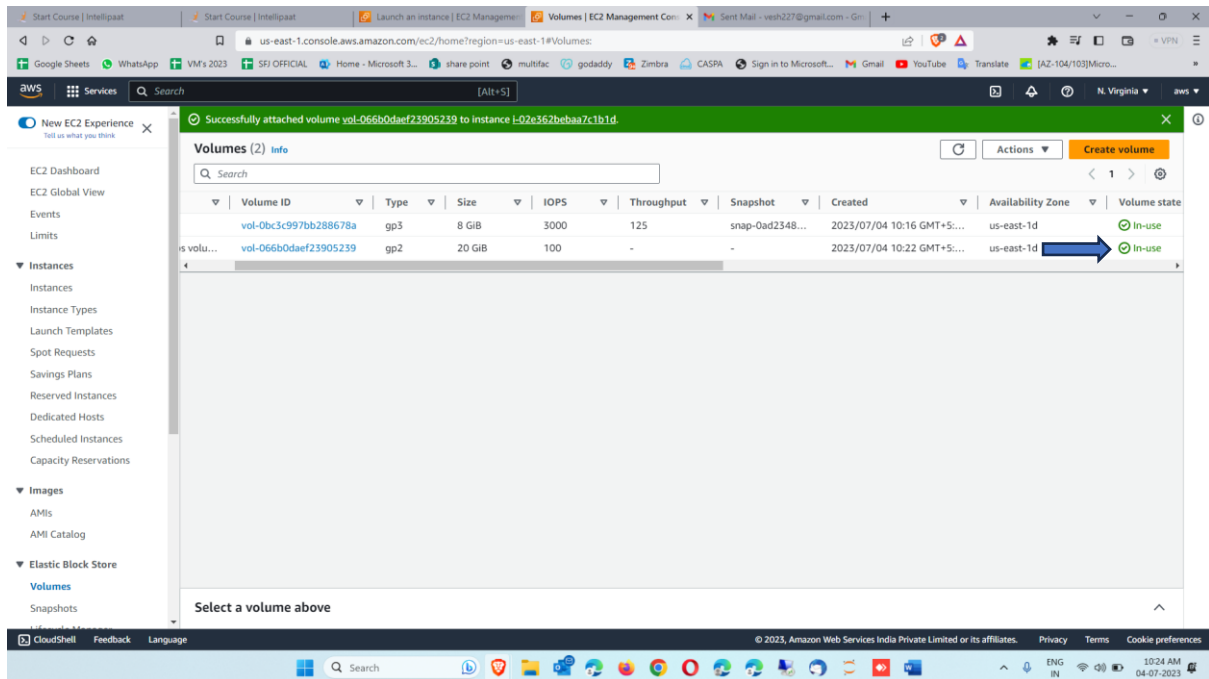


4. attaching the volume to Linux server instance.

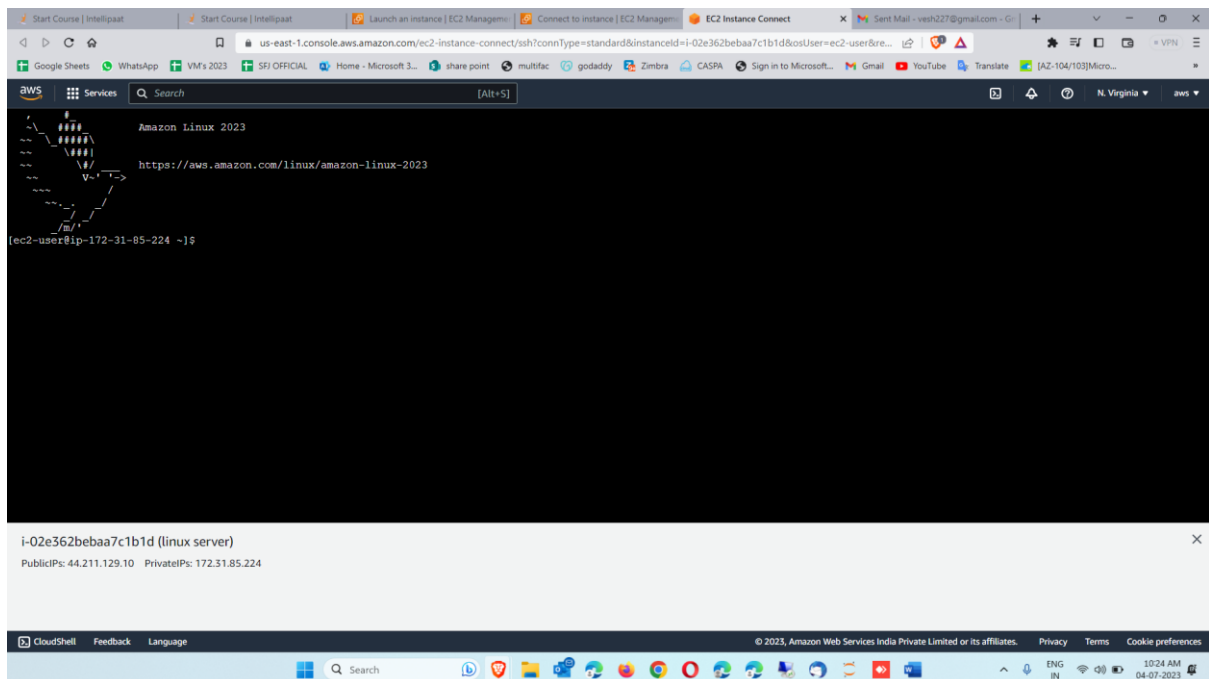


Module 2: EBS Assignment

5. Volume has been attached. Volume state it showing **in-use**

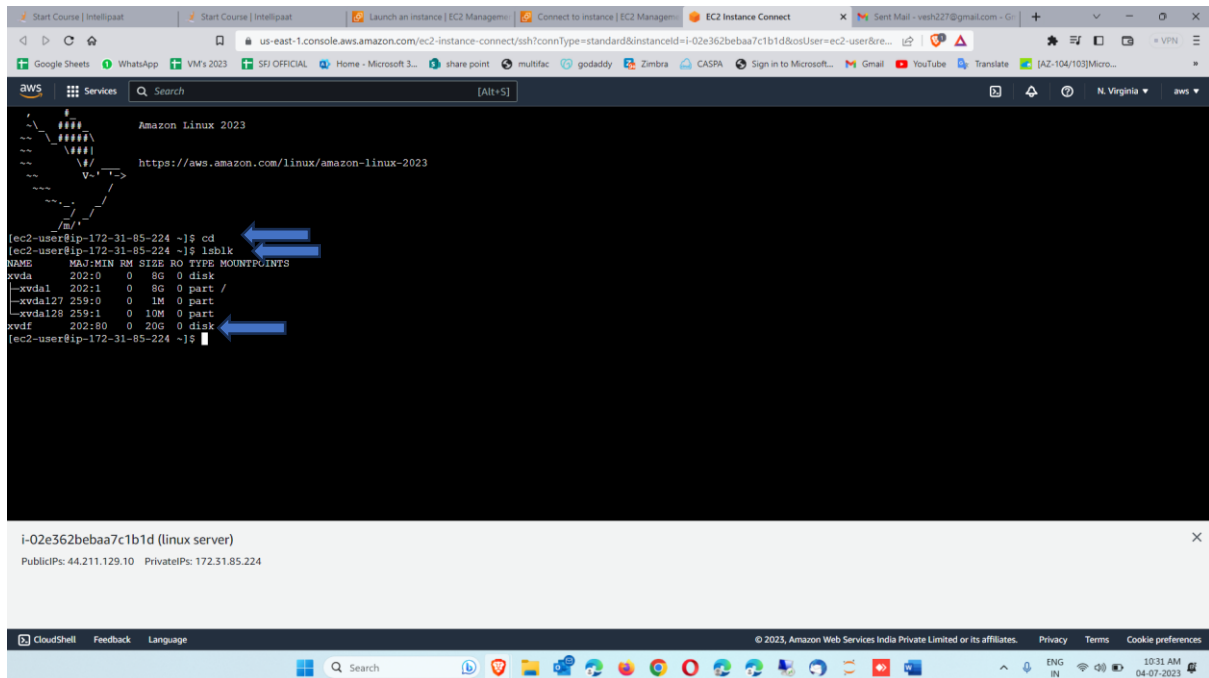


6. connected the Linux server via **aws** console.



Module 2: EBS Assignment

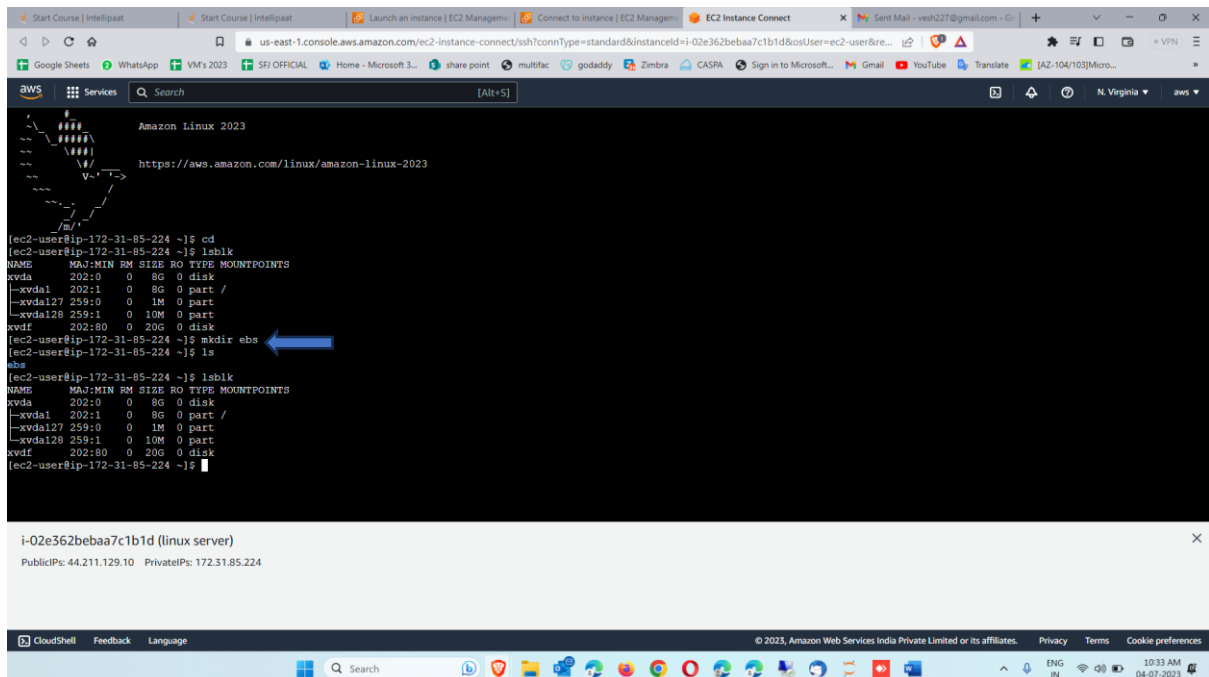
7. list block cmd I have entered over here(lsbblk). 20 GB xvdf disk it showing below.



```
Amazon Linux 2023
https://aws.amazon.com/linux/amazon-linux-2023

(ec2-user@ip-172-31-85-224 ~)$ cd
(ec2-user@ip-172-31-85-224 ~)$ 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
└─xvdf      202:80    0   20G  0 disk
(ec2-user@ip-172-31-85-224 ~)$
```

8. created ebs directory.



```
Amazon Linux 2023
https://aws.amazon.com/linux/amazon-linux-2023

(ec2-user@ip-172-31-85-224 ~)$ cd
(ec2-user@ip-172-31-85-224 ~)$ 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
└─xvdf      202:80    0   20G  0 disk
(ec2-user@ip-172-31-85-224 ~)$ mkdir ebs
(ec2-user@ip-172-31-85-224 ~)$ ls
ebs
(ec2-user@ip-172-31-85-224 ~)$ 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
└─xvdf      202:80    0   20G  0 disk
(ec2-user@ip-172-31-85-224 ~)$
```

Module 2: EBS Assignment

9. Created file system. (**sudo mkfs -t ext4 /dev/xvdf**).

```
Start Course | Intellipaat | Start Course | Intellipaat | Launch an instance | EC2 Manager | Connect to instance | EC2 Manager | EC2 Instance Connect | x | Sent Mail - ven227@gmail.com : G | + | N. Virginia | aws
```

```
aws Services Search [Alt+F5]
```

```
nvda 202:0 0 8G 0 disk
|--vdal 202:1 0 8G 0 part /
|--vdal27 259:0 0 1M 0 part
|--vdal28 259:1 0 10M 0 part
xvdf 202:80 0 20G 0 disk
[ec2-user@ip-172-31-85-224 ~]$ pwd
/home/ec2-user
[ec2-user@ip-172-31-85-224 ~]$ sudo mount dev/xvdfc
[ec2-user@ip-172-31-85-224 ~]$ sudo mount /dev/xvdf /home/ec2-user/eb
mount: /home/ec2-user/eb: special device /dev/xvdf does not exist.
[ec2-user@ip-172-31-85-224 ~]$ sudo mount /dev/xvdf /home/ec2-user/eb
mount: /home/ec2-user/eb: wrong fs type, bad option, bad superblock on /dev/xvdf, missing codepage or helper program, or other error.
[ec2-user@ip-172-31-85-224 ~]$ sudo mkfs -t ext4 /dev/xvdf
mkfs: 1.14.5 (30-Dec-2021)
Creating filesystem with 5242880 4k blocks and 1310720 inodes
Filesystem UUID: 87f92b1e-7128-4db1-836f-c3ff6a4564f1
Superblock backups stored on blocks:
32768, 98304, 163840, 229376, 294912, 819200, 884736, 1605632, 2654208,
4096000
Allocating group tables: done
Writing inode tables: done
Creating journal (32768 blocks): done
Writing superblocks and filesystem accounting information: done

[ec2-user@ip-172-31-85-224 ~]$ lsblk
NAME MAJ:MIN RM SIZE RO TYPE MOUNTPOINTS
nvda 202:0 0 8G 0 disk
|--vdal 202:1 0 8G 0 part /
|--vdal27 259:0 0 1M 0 part
|--vdal28 259:1 0 10M 0 part
xvdf 202:80 0 20G 0 disk
[ec2-user@ip-172-31-85-224 ~]$
```

i-02e362bebaa7c1b1d (linux server)

PublicIP: 44.211.129.10 PrivateIP: 172.31.85.224

10. mounted the disk. The mount cmd is (**sudo mount /dev/xvdf /home/ec2-user/ebs**). Disk has been mounted.

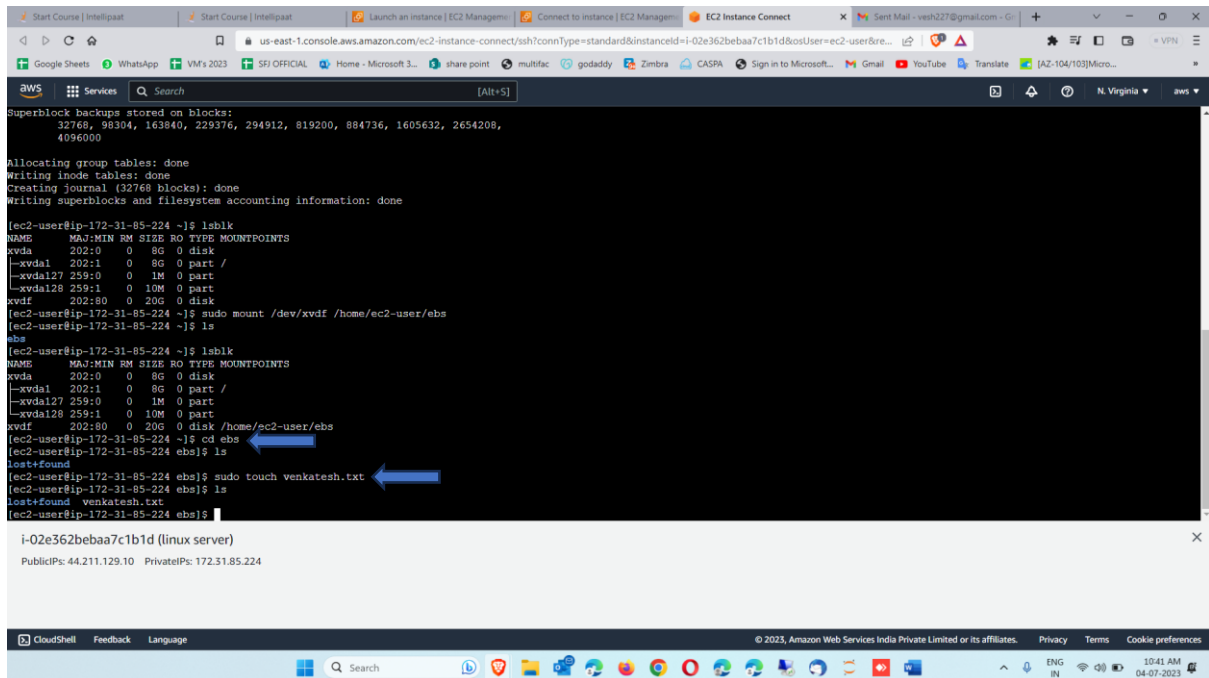
The screenshot shows a terminal window titled "Start Console | Intellipoint". The browser address bar indicates the URL: us-east-1.console.aws.amazon.com/ec2-instance-connect/shh?connectType=standard&instanceId=i-02e362bebaa7c1b1d&osUser=ec2-user&re... . The terminal output shows the following commands and results:

```
[ec2-user@ip-172-31-85-224 ~]$ sudo mount /dev/xvdf /home/ec2-user/ehs
mount: /home/ec2-user/ehs: wrong fs type, bad option, bad superblock on /dev/xvdf, missing codepage or helper program, or other error.
[ec2-user@ip-172-31-85-224 ~]$ sudo mkfs -t ext4 /dev/xvdf
mkfs.zfs 1.46.5 (30-Dec-2021)
Creating filesystem with 5242880 4k blocks and 1310720 inodes
filesystem UUID: 67f92b16-7128-4db1-936f-c3ff6a4564f1
Superblock backups stored on blocks:
    32768, 98304, 163840, 229376, 294912, 819200, 884736, 1605632, 2654208,
    4096000
Allocating group tables: done
Writing inode tables: done
Creating journal (32768 blocks): done
Writing superblocks and filesystem accounting information: done

[ec2-user@ip-172-31-85-224 ~]$ 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 
└─xvdf      202:80   0  20G  0 disk 
[ec2-user@ip-172-31-85-224 ~]$ sudo mount /dev/xvdf /home/ec2-user/ehs
[ec2-user@ip-172-31-85-224 ~]$ ls
ehs
[ec2-user@ip-172-31-85-224 ~]$ 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 
└─xvdf      202:80   0  20G  0 disk /home/ec2-user/ehs
[ec2-user@ip-172-31-85-224 ~]$
```

Module 2: EBS Assignment

11. changed directory to ebs. And created a text file. Find the below



The screenshot shows a terminal window in AWS CloudShell. The user has successfully attached an EBS volume to an EC2 instance. The terminal output shows the following commands and results:

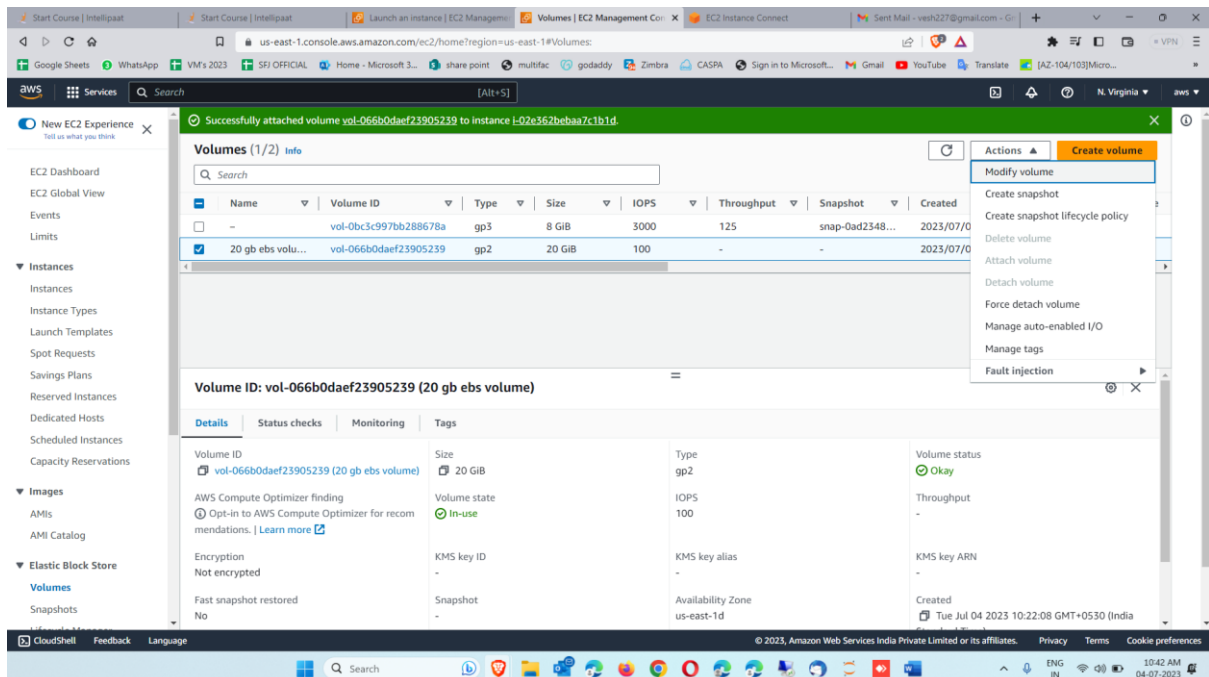
```
Superblock backups stored on blocks:
32768, 98304, 163840, 229376, 294912, 819200, 884736, 1605632, 2654208,
4096000

Allocating group tables: done
Writing inode tables: done
Creating journal (32768 blocks): done
Writing superblocks and filesystem accounting information: done

[ec2-user@ip-172-31-85-224 ~]$ 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 
└─xvdf      202:80   0 20G  0 disk 
[ec2-user@ip-172-31-85-224 ~]$ sudo mount /dev/xvdf /home/ec2-user/ebs
[ec2-user@ip-172-31-85-224 ~]$ ls
ebs
[ec2-user@ip-172-31-85-224 ~]$ 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 
└─xvdf      202:80   0 20G  0 disk /home/ec2-user/ebs
[ec2-user@ip-172-31-85-224 ~]$ cd ebs
[ec2-user@ip-172-31-85-224 ebs]$ ls
lost+found
[ec2-user@ip-172-31-85-224 ebs]$ sudo touch venkatesh.txt
[ec2-user@ip-172-31-85-224 ebs]$ ls
lost+found  venkatesh.txt
[ec2-user@ip-172-31-85-224 ebs]$
```

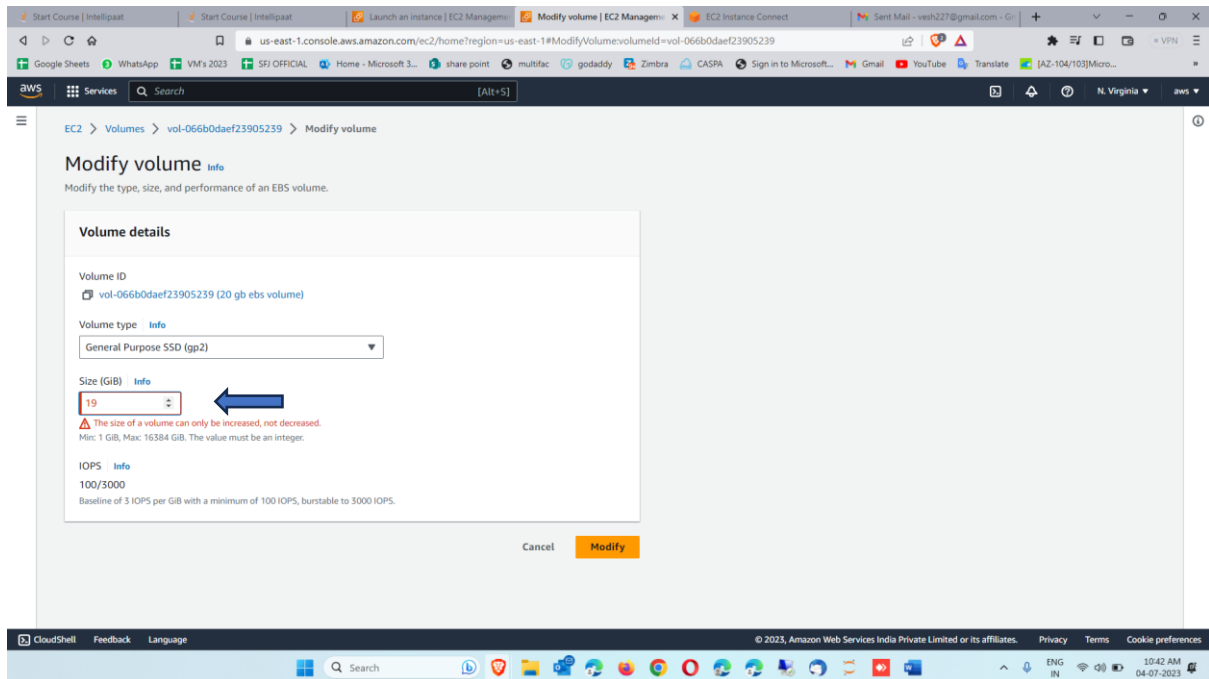
The terminal output also shows the instance details for i-02e362bebaa7c1b1d (linux server) with PublicIPs: 44.211.129.10 and PrivateIPs: 172.31.85.224.

12. go back to console. Under EC2 go to volume. Select the volume and click modify volume.

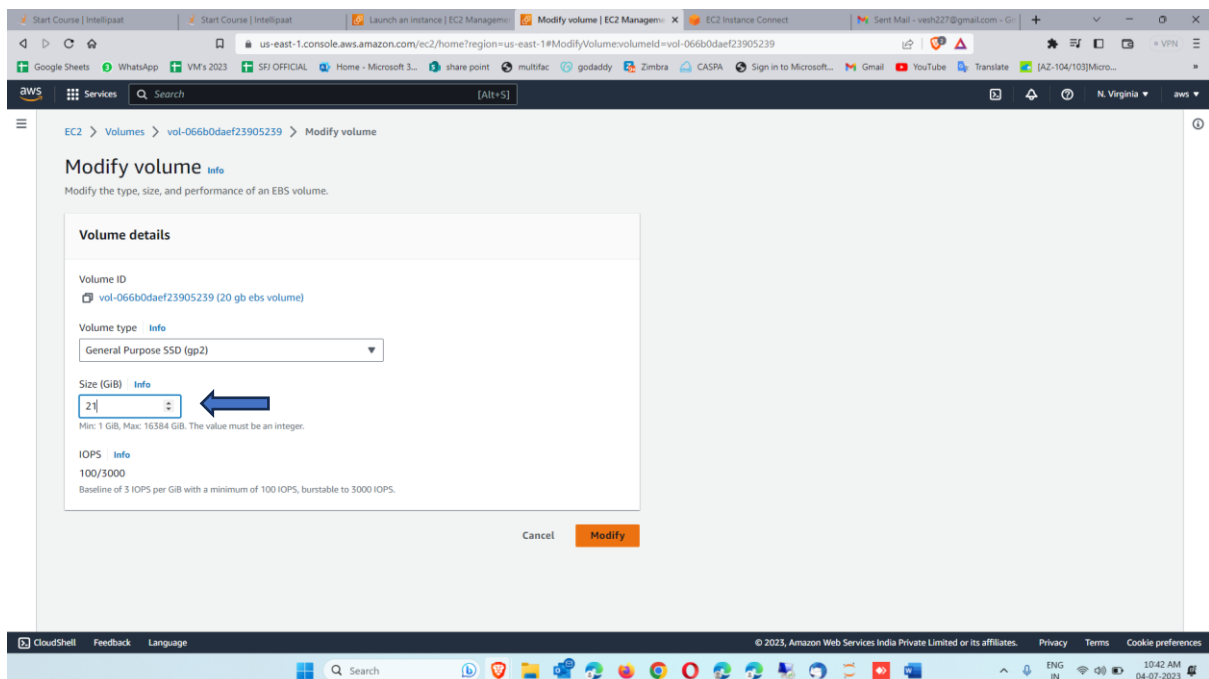


Module 2: EBS Assignment

13. The volume size can't be decrease.

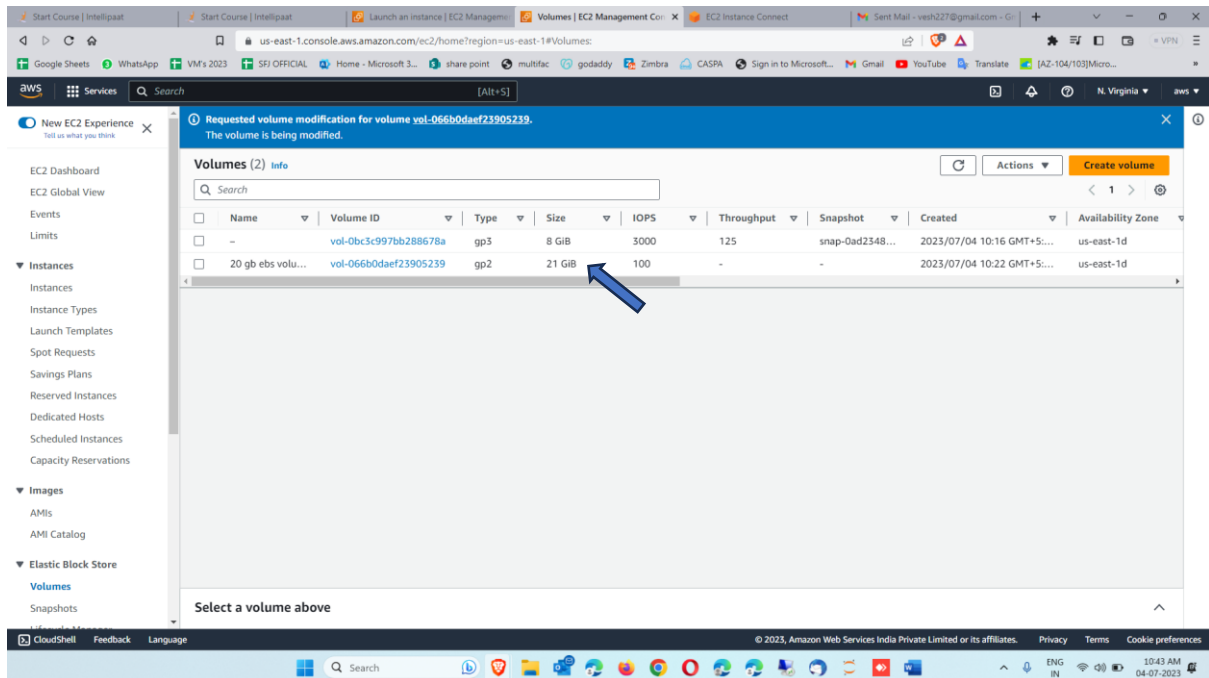


14. Only can able to increase the size of a volume. Increased the size 20 GB to 21 GB.

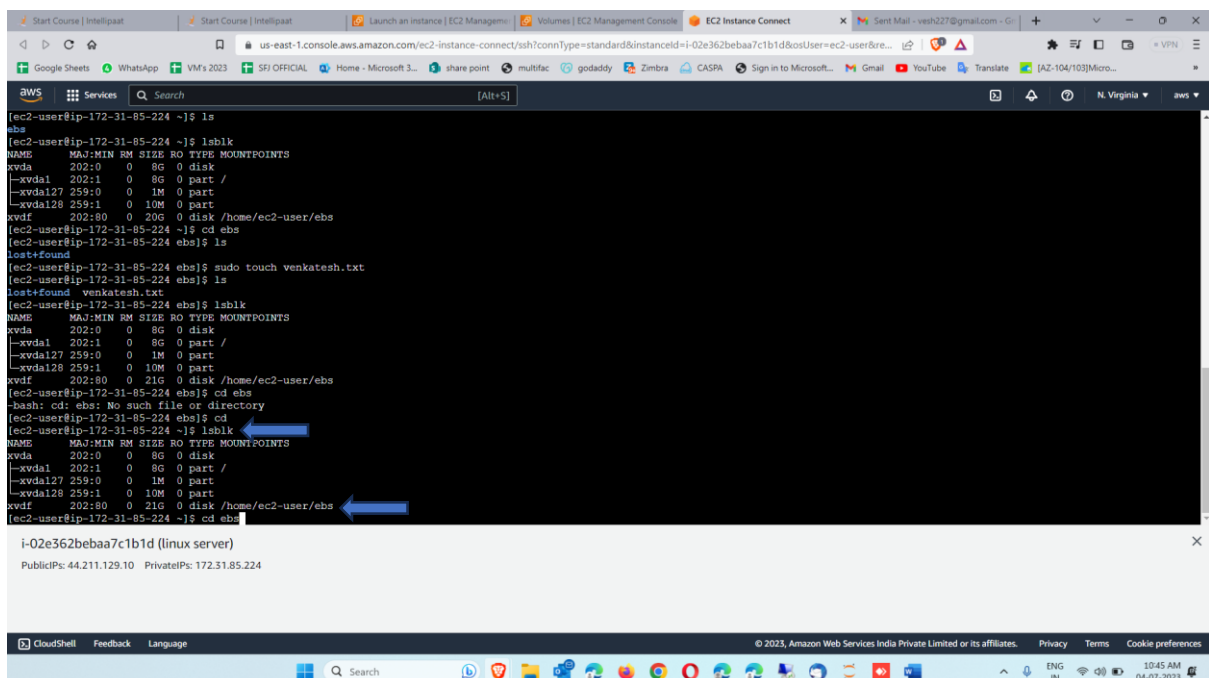


Module 2: EBS Assignment

15. resize has been done.

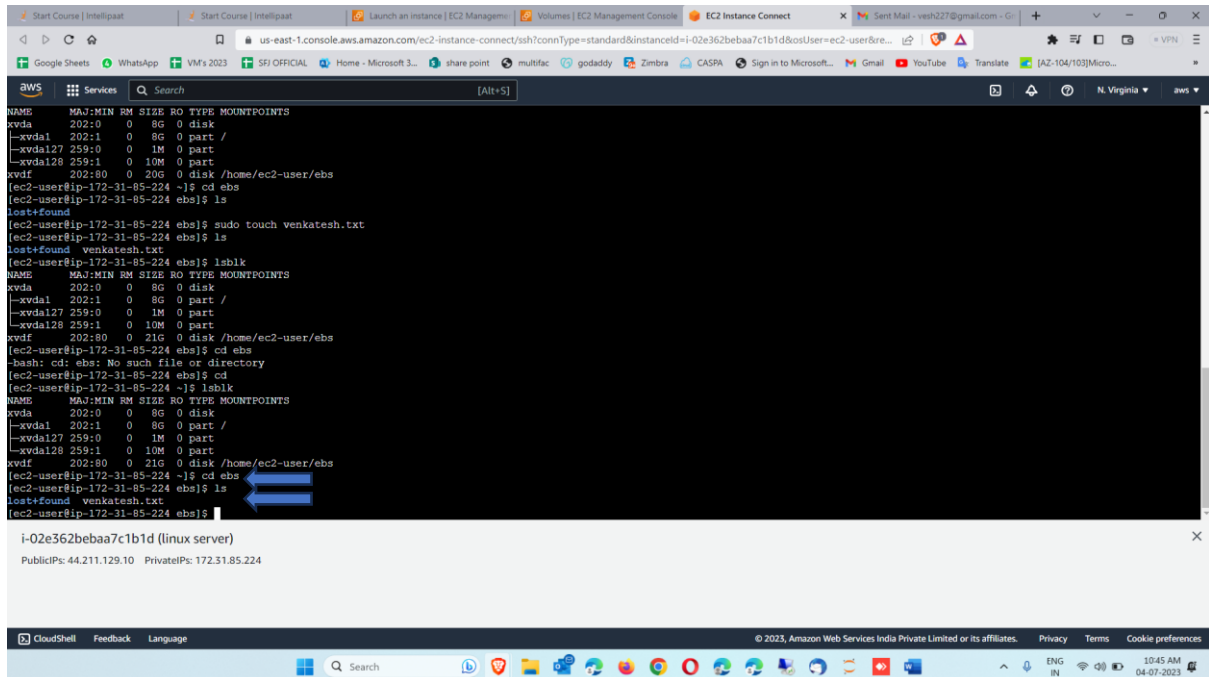


16. go to Linux server. Type **lsblk**. Find the below resized ebs.



Module 2: EBS Assignment

17. go to ebs. which I have created the file before resizing everything will be there.



The screenshot shows a terminal window connected to an EC2 instance. The user runs several commands to check disk space, create a file, and resize the disk. The output shows the disk size increasing from 200GB to 216GB. The user also creates a file named 'venkatesh.txt' in the '/home/ec2-user/ebs' directory. The terminal output is as follows:

```
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
xvdf 202:80 0 20G 0 disk /home/ec2-user/ebs
(ec2-user@ip-172-31-85-224 ~)$ cd ebs
(ec2-user@ip-172-31-85-224 ebs)$ ls
lost+found
(ec2-user@ip-172-31-85-224 ebs)$ sudo touch venkatesh.txt
(ec2-user@ip-172-31-85-224 ebs)$ ls
lost+found venkatesh.txt
(ec2-user@ip-172-31-85-224 ebs)$ 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
xvdf 202:80 0 21G 0 disk /home/ec2-user/ebs
(ec2-user@ip-172-31-85-224 ebs)$ cd ebs
-bash: cd: ebs: No such file or directory
(ec2-user@ip-172-31-85-224 ebs)$ cd
(ec2-user@ip-172-31-85-224 ~)$ 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
xvdf 202:80 0 21G 0 disk /home/ec2-user/ebs
(ec2-user@ip-172-31-85-224 ~)$ cd ebs
(ec2-user@ip-172-31-85-224 ebs)$ ls
lost+found venkatesh.txt
(ec2-user@ip-172-31-85-224 ebs)$
```

Below the terminal output, the instance details are shown:

```
i-02e362bebaa7c1b1d (linux server)
PublicIPs: 44.211.129.10 PrivateIPs: 172.31.85.224
```