

**Made By**

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**013 Practical - Add Block Storage to EC2 Linux Instance - 17 Feb 2022**

The screenshot shows the AWS EC2 Management Console interface. The left sidebar menu includes 'EC2 Dashboard', 'Events', 'Tags', 'Limits', 'Instances' (selected), 'Instance Types', 'Launch Templates', 'Spot Requests', 'Savings Plans', 'Reserved Instances', 'Dedicated Hosts', and 'Capacity Reservations'. The main content area displays a table titled 'Instances (2) Info' with columns: Name, Instance ID, Instance state, Instance type, Status check, Alarm status, and Availability Zone. Two instances are listed: '17-feb' (i-05b674efc1b1ca77c, Running, t2.micro, 2/2 checks passed, No alarms, ap-south-1a) and '17-feb-second-instance' (i-008ea243e1b6e8..., Running, t2.micro, 2/2 checks passed, No alarms, ap-south-1a). A modal window titled 'Select an instance' is open at the bottom center. The footer contains links for 'Feedback', 'English (US)', 'Privacy', 'Terms', and 'Cookie preferences', along with system status icons.

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone
17-feb	i-05b674efc1b1ca77c	Running	t2.micro	2/2 checks passed	No alarms	ap-south-1a
17-feb-second-instance	i-008ea243e1b6e8...	Running	t2.micro	2/2 checks passed	No alarms	ap-south-1a

- Here we have created two instances in one availability zone

The screenshot shows the AWS EC2 Management Console interface. On the left, a navigation sidebar lists various services: Images, AMIs, AMI Catalog, Elastic Block Store (with Volumes highlighted), Snapshots, Lifecycle Manager, Network & Security, Security Groups, Elastic IPs, Placement Groups, Key Pairs, Network Interfaces, Load Balancing, Load Balancers, Target Groups, Auto Scaling, Launch Configurations, and Auto Scaling Groups. The main content area displays two tabs: 'Instances (2)' and 'Info'. The 'Instances' tab shows a table with two rows of data:

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone
17-feb	i-05b674efc1b1ca77c	Running	t2.micro	2/2 checks passed	No alarms	ap-south-1a
17-feb-second-instance	i-008ea243e1b6e8...	Running	t2.micro	2/2 checks passed	No alarms	ap-south-1a

A modal window titled 'Select an instance' is open in the foreground, indicating that an instance needs to be chosen for further action. The browser's address bar shows the URL: <https://ap-south-1.console.aws.amazon.com/ec2/v2/home?region=ap-south-1#Volumes>.

- Now go to volumes

The screenshot shows the AWS EC2 Management Console Volumes page. The left sidebar is collapsed, showing the 'New EC2 Experience' toggle (which is turned on) and a list of services: EC2 Dashboard, EC2 Global View, Events, Tags, Limits, Instances (with sub-options like Instances, Instance Types, Launch Templates, Spot Requests, Savings Plans, Reserved Instances, Dedicated Hosts, Capacity Reservations), Images (with sub-options like AMIs, AMI Catalog), and Elastic Block Store. The main content area displays a table titled 'Volumes (2)' with columns: Name, Volume ID, Type, Size, IOPS, Throughput, Snapshot, Created, and Available. Two volumes are listed: 'valentine-day...' (Volume ID: vol-0fe78248e14cc1fad, gp2, 8 GiB, 100 IOPS, - Throughput, snap-0d2b184..., 2022/02/14 10:00 GMT+5:..., ap-sout) and '17-feb-second...' (Volume ID: vol-0b5ead6f06cd4bc6e, gp2, 8 GiB, 100 IOPS, - Throughput, snap-0d2b184..., 2022/02/17 11:46 GMT+5:..., ap-sout). Below the table, a message says 'Select a volume above'. At the top right, there are 'Actions' and 'Create volume' buttons. The bottom navigation bar includes links for Feedback, English (US), Privacy, Terms, and Cookie preferences, along with system status icons for ENG IN, 12:36 PM, and 2/17/2022.

Name	Volume ID	Type	Size	IOPS	Throughput	Snapshot	Created	Available
valentine-day...	vol-0fe78248e14cc1fad	gp2	8 GiB	100	-	snap-0d2b184...	2022/02/14 10:00 GMT+5:...	ap-sout
17-feb-second...	vol-0b5ead6f06cd4bc6e	gp2	8 GiB	100	-	snap-0d2b184...	2022/02/17 11:46 GMT+5:...	ap-sout

- Click on create volume

Create an Amazon EBS volume to attach to any EC2 instance in the same Availability Zone.

**Volume settings**

Volume type [Info](#)  
General Purpose SSD (gp2)

Size (GiB) [Info](#)  
5  
Min: 1 GiB, Max: 16384 GiB. The value must be an integer.

IOPS [Info](#)  
100 / 3000  
Baseline of 3 IOPS per GiB with a minimum of 100 IOPS, burstable to 3000 IOPS.

Throughput (MiB/s) [Info](#)  
Not applicable

Availability Zone [Info](#)  
ap-south-1a

Snapshot ID - optional [Info](#)  
Don't create volume from a snapshot

Feedback English (US) © 2022, Amazon Internet Services Private Ltd. or its affiliates. Privacy Terms Cookie preferences ENG IN 12:36 PM 2/17/2022

- Select size as 5GB
- Also select particular zone

The screenshot shows the AWS EC2 Management Console with the 'Create volume' wizard open. The browser tab bar includes 'Instances | EC2 Management Con...', 'EC2 Management Console', and 'Create volume | EC2 Management...'. The search bar at the top says 'Search for services, features, blogs, docs, and more [Alt+S]'. The main form fields are:

- Throughput (MiB/s)**: Info, Not applicable.
- Availability Zone**: Info, ap-south-1a.
- Snapshot ID - optional**: Info, Don't create volume from a snapshot.
- Encryption**: Info, Use Amazon EBS encryption as an encryption solution for your EBS resources associated with your EC2 instances.  Encrypt this volume.

**Tags - optional**: Info, A tag is a label that you assign to an AWS resource. Each tag consists of a key and an optional value. You can use tags to search and filter your resources or track your AWS costs.

No tags associated with the resource. **Add tag**. You can add 50 more tags.

At the bottom are 'Cancel' and 'Create volume' buttons. The footer includes links for Feedback, English (US), © 2022, Amazon Internet Services Private Ltd. or its affiliates., Privacy, Terms, Cookie preferences, and system status icons.

- Click on attach volume

The screenshot shows the AWS EC2 Management Console interface. The top navigation bar includes tabs for Instances, EC2 Management Console, and Volumes, all under the region ap-south-1. The main search bar says "Search for services, features, blogs, docs, and more". On the left, a sidebar lists services like EC2 Dashboard, Events, Tags, Limits, Instances (with Instances selected), Images, and Elastic Block Store. The main content area displays a table of volumes with columns: Name, Volume ID, Type, Size, IOPS, Throughput, Snapshot, Created, and Available. Two volumes are listed: "valentine-day..." and "17-feb-second...". A modal window is open over the second volume, titled "Edit Name", showing the current value "gp2" and a new value "5gb-Extra" in a text input field. A red box highlights this modal. Above the table, a green banner message says "Successfully created volume vol-01682168a77ad66ab." Another red box highlights this message. At the bottom of the page, there are links for Details, Status checks, Monitoring, and Tags, along with footer information about the copyright year 2022 and various system icons.

- We will give name to that instance

The screenshot shows the AWS EC2 Management Console with the 'Volumes' tab selected. The left sidebar shows navigation options like EC2 Dashboard, Events, Tags, Limits, Instances, Images, and Elastic Block Store. The main area displays a table of volumes with columns for Name, Volume ID, Type, Size, IOPS, Throughput, Availability Zone, and Volume state. The '5gb-Extra' volume is selected, indicated by a red box around its row. The 'Actions' dropdown menu is also highlighted with a red box. The 'Available' status for this volume is shown in a red box.

Name	Volume ID	Type	Size	IOPS	Throughput	Availability Zone	Volume state
17-feb	vol-0fe78248e14cc1fad	gp2	8 GiB	100	-	ap-south-1a	In-use
17-feb-second-instance	vol-0b5ead6f06cd4bc6e	gp2	8 GiB	100	-	ap-south-1a	In-use
<b>5gb-Extra</b>	<b>vol-01682168a77ad66ab</b>	<b>gp2</b>	<b>5 GiB</b>	<b>100</b>	<b>-</b>	<b>ap-south-1a</b>	<b>Available</b>

- Here we can see that our instance and volume are in same zone
- Click on actions

The screenshot shows the AWS EC2 Management Console with the 'Volumes' tab selected. The left sidebar includes links for Instances, Images, and Elastic Block Store. The main table displays three volumes:

Name	Volume ID	Type	Size	IOPS	Throughput
17-feb	vol-0fe78248e14cc1fad	gp2	8 GiB	100	-
17-feb-second-instance	vol-0b5ead6f06cd4bc6e	gp2	8 GiB	100	-
5gb-Extra	vol-01682168a77ad66ab	gp2	5 GiB	100	-

A context menu is open over the '5gb-Extra' volume, showing the following options:

- Modify volume
- Create snapshot
- Create snapshot lifecycle policy
- Delete volume
- Attach volume
- Detach volume
- Force detach volume
- Manage auto-enabled I/O
- Manage tags

The 'Volume state' section indicates that the volume is currently **In-use**.

- Click on attach volume

The screenshot shows the AWS EC2 Management Console with the URL [ap-south-1.console.aws.amazon.com/ec2/v2/home?region=ap-south-1#AttachVolume:volumeld=vol-01682168a77ad66ab](https://ap-south-1.console.aws.amazon.com/ec2/v2/home?region=ap-south-1#AttachVolume:volumeld=vol-01682168a77ad66ab). The page title is "Attach volume | EC2 Management Console". The navigation path is EC2 > Volumes > vol-01682168a77ad66ab > Attach volume.

**Basic details**

Volume ID: vol-01682168a77ad66ab (5gb-Extra)

Availability Zone: ap-south-1a

**Instance Info** (highlighted with a red box):  
Only instances in the same Availability Zone as the selected volume are displayed.

Device name: [empty input field]

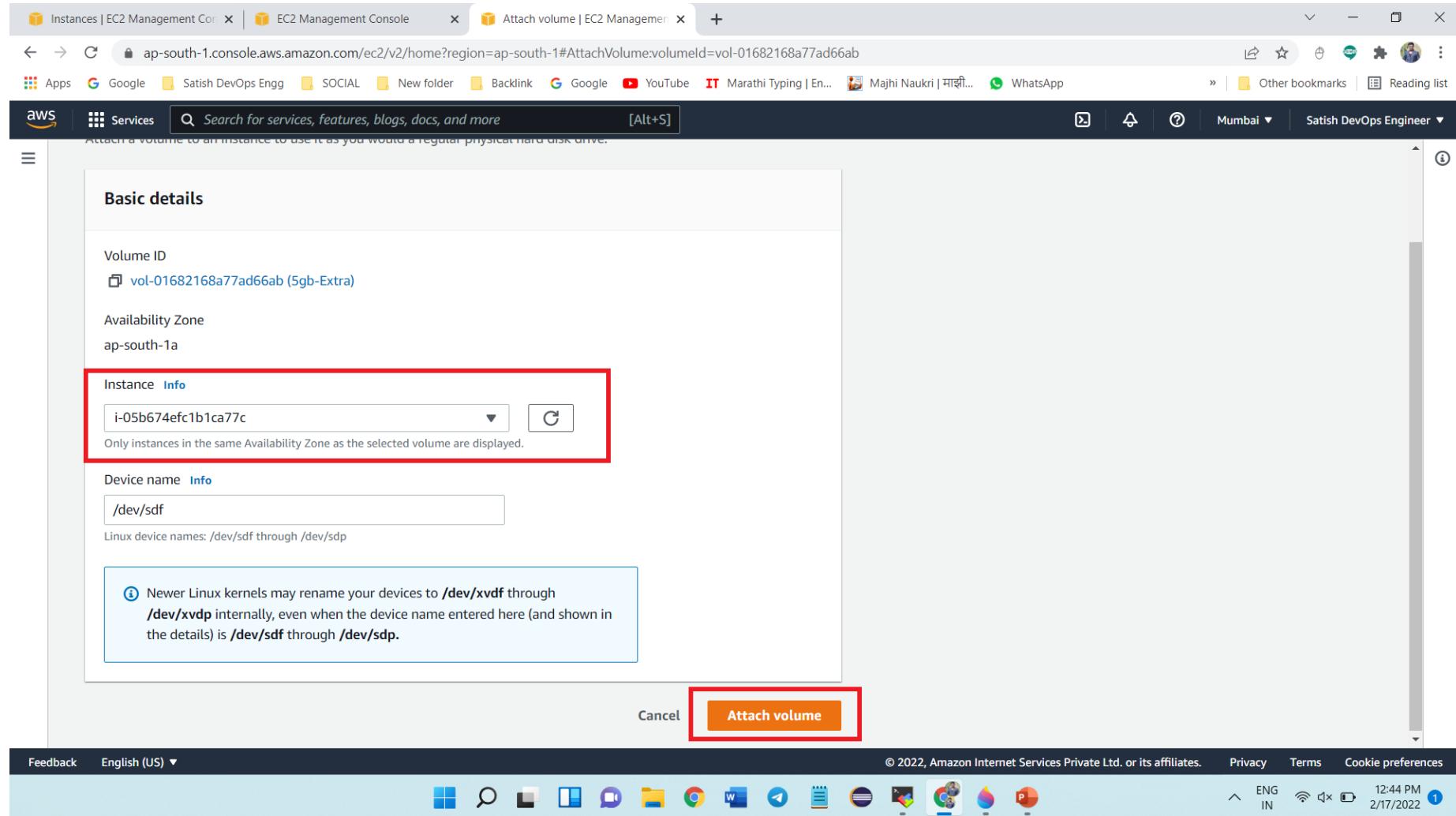
Buttons: Cancel, Attach volume

Page footer: Feedback English (US) © 2022, Amazon Internet Services Private Ltd. or its affiliates. Privacy Terms Cookie preferences ENG IN 12:42 PM 2/17/2022

- Select instance

The screenshot shows the AWS EC2 Management Console with the URL [ap-south-1.console.aws.amazon.com/ec2/v2/home?region=ap-south-1#AttachVolume:volumId=vol-01682168a77ad66ab](https://ap-south-1.console.aws.amazon.com/ec2/v2/home?region=ap-south-1#AttachVolume:volumId=vol-01682168a77ad66ab). The page title is "Attach volume | EC2 Management Console". The search bar contains "Search for services, features, blogs, docs, and more [Alt+S]". The top navigation bar includes links for "AWS", "Services", and a user profile for "Satish DevOps Engineer". The main content area shows the "Attach volume" step for volume `vol-01682168a77ad66ab`. The "Basic details" section displays the volume ID `vol-01682168a77ad66ab (5gb-Extra)` and the availability zone `ap-south-1a`. Below this, the "Instance Info" section lists two instances: `i-05b674efc1b1ca77c (17-feb) (running)` and `i-008ea243e1b6e8615 (17-feb-second-instance) (running)`. The first instance is highlighted with a red box. At the bottom, there are "Cancel" and "Attach volume" buttons.

- Select first instance



- Click on attach volume

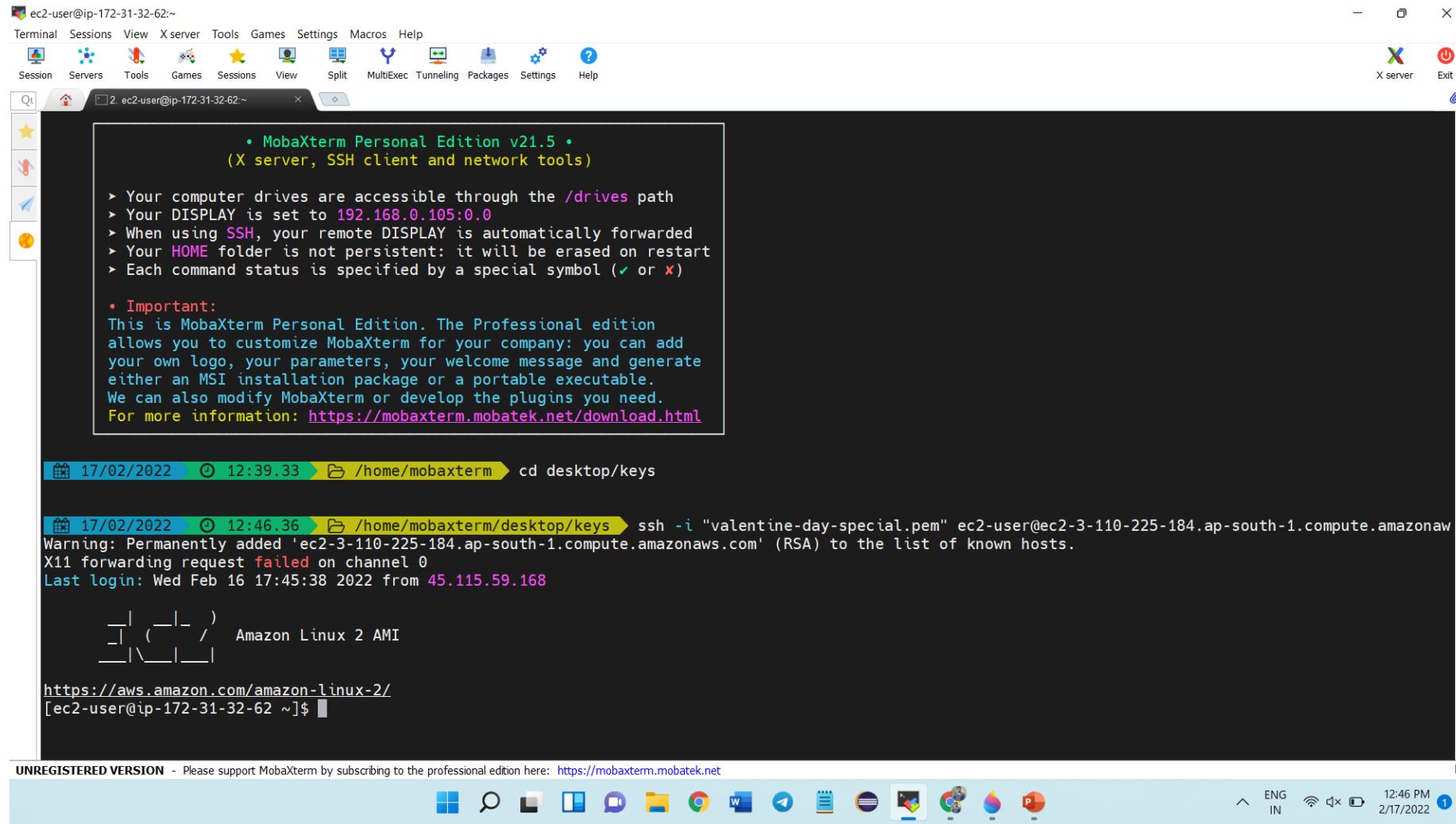
The screenshot shows the AWS EC2 Management Console with the 'Volumes' tab selected. A success message at the top states: 'Successfully attached volume vol-01682168a77ad66ab to instance i-05b674efc1b1ca77c.' Below this, a table lists three volumes:

Name	Volume ID	Type	Size	IOPS	Throughput	Availability Zone	Volume state
17-feb	vol-0fe78248e14cc1fad	gp2	8 GiB	100	-	ap-south-1a	In-use
17-feb-second-instance	vol-0b5ead6f06cd4bc6e	gp2	8 GiB	100	-	ap-south-1a	In-use
5gb-Extra	vol-01682168a77ad66ab	gp2	5 GiB	100	-	ap-south-1a	In-use

The third volume, '5gb-Extra', is highlighted with a red box. At the bottom of the page, there is a note: 'Select a volume above' followed by a list of icons for various AWS services.

- Here volume is attached to the 1<sup>st</sup> volume

Now login to your instance using mobaxterm



root@ip-172-31-32-62:/

Terminal Sessions View Xserver Tools Games Settings Macros Help

Session Servers Tools Games Sessions View Split MultiExec Tunneling Packages Settings Help

X server Exit

2. root@ip-172-31-32-62 /

When using SSH, your remote DISPLAY is automatically forwarded  
Your HOME folder is not persistent: it will be erased on restart  
Each command status is specified by a special symbol (✓ or ✗)

• Important:  
This is MobaXterm Personal Edition. The Professional edition allows you to customize MobaXterm for your company: you can add your own logo, your parameters, your welcome message and generate either an MSI installation package or a portable executable. We can also modify MobaXterm or develop the plugins you need.  
For more information: <https://mobaxterm.mobatek.net/download.html>

17/02/2022 12:39.33 /home/mobaxterm cd desktop/keys

17/02/2022 12:46.36 /home/mobaxterm/desktop/keys ssh -i "valentine-day-special.pem" ec2-user@ec2-3-110-225-184.ap-sou

Warning: Permanently added 'ec2-3-110-225-184.ap-south-1.compute.amazonaws.com' (RSA) to the list of known hosts.

X11 forwarding request failed on channel 0

Last login: Wed Feb 16 17:45:38 2022 from 45.115.59.168

Amazon Linux 2 AMI

https://aws.amazon.com/amazon-linux-2/

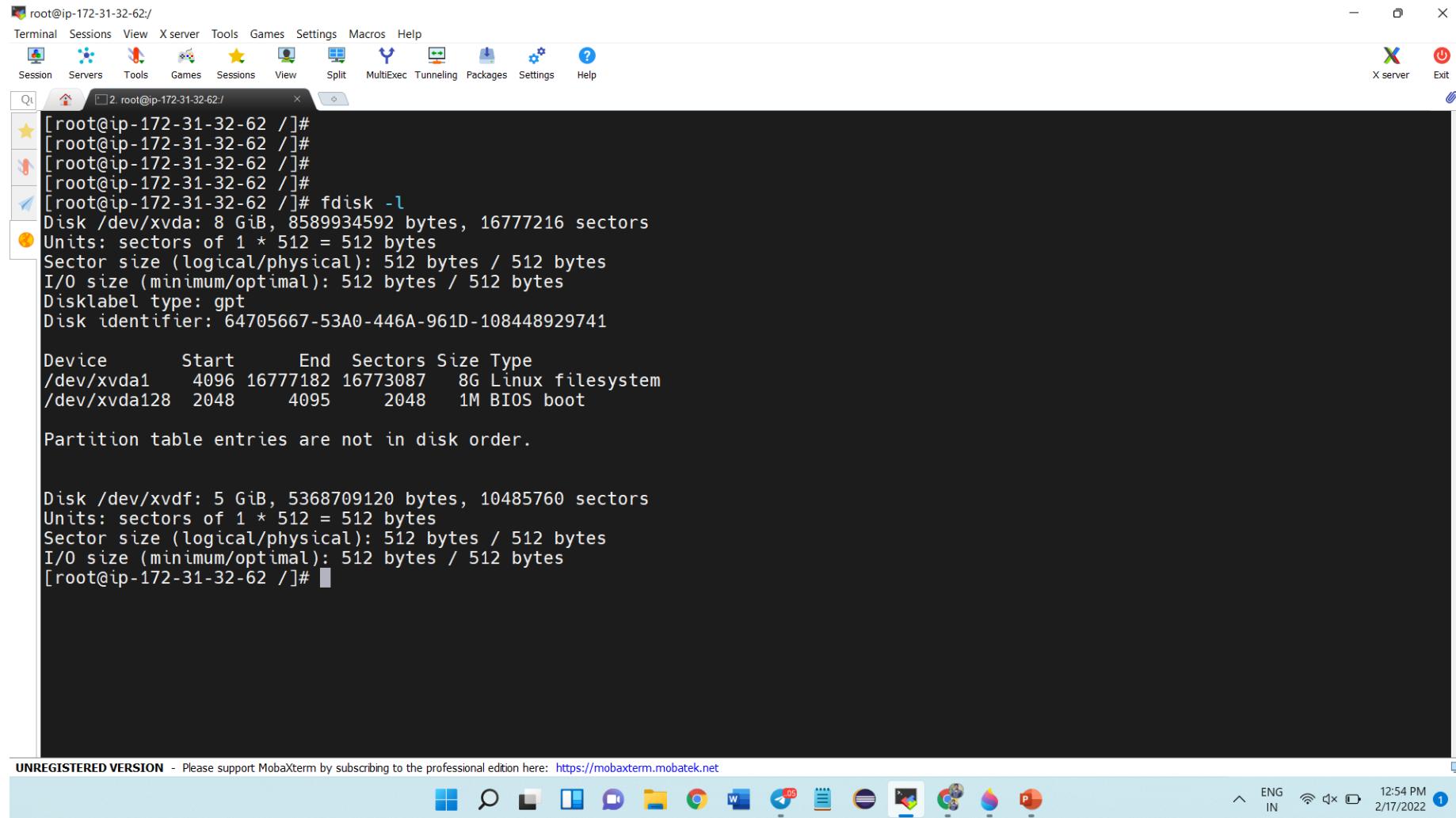
[ec2-user@ip-172-31-32-62 ~]\$  
[ec2-user@ip-172-31-32-62 ~]\$  
[ec2-user@ip-172-31-32-62 ~]\$ sudo su -  
Last login: Wed Feb 16 17:45:42 UTC 2022 on pts/1  
[root@ip-172-31-32-62 ~]# cd /  
[root@ip-172-31-32-62 /]#

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**sudo su -**

**cd /**



root@ip-172-31-32-62:/

Terminal Sessions View Xserver Tools Games Settings Macros Help

Session Servers Tools Games Sessions View Split MultiExec Tunneling Packages Settings Help

X server Exit

[root@ip-172-31-32-62 ~]# [root@ip-172-31-32-62 ~]# [root@ip-172-31-32-62 ~]# [root@ip-172-31-32-62 ~]# [root@ip-172-31-32-62 ~]# fdisk -l

Disk /dev/xvda: 8 GiB, 8589934592 bytes, 16777216 sectors

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: gpt

Disk identifier: 64705667-53A0-446A-961D-108448929741

Device	Start	End	Sectors	Size	Type
/dev/xvda1	4096	16777182	16773087	8G	Linux filesystem
/dev/xvda128	2048	4095	2048	1M	BIOS boot

Partition table entries are not in disk order.

Disk /dev/xvdf: 5 GiB, 5368709120 bytes, 10485760 sectors

Units: sectors of 1 \* 512 = 512 bytes

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

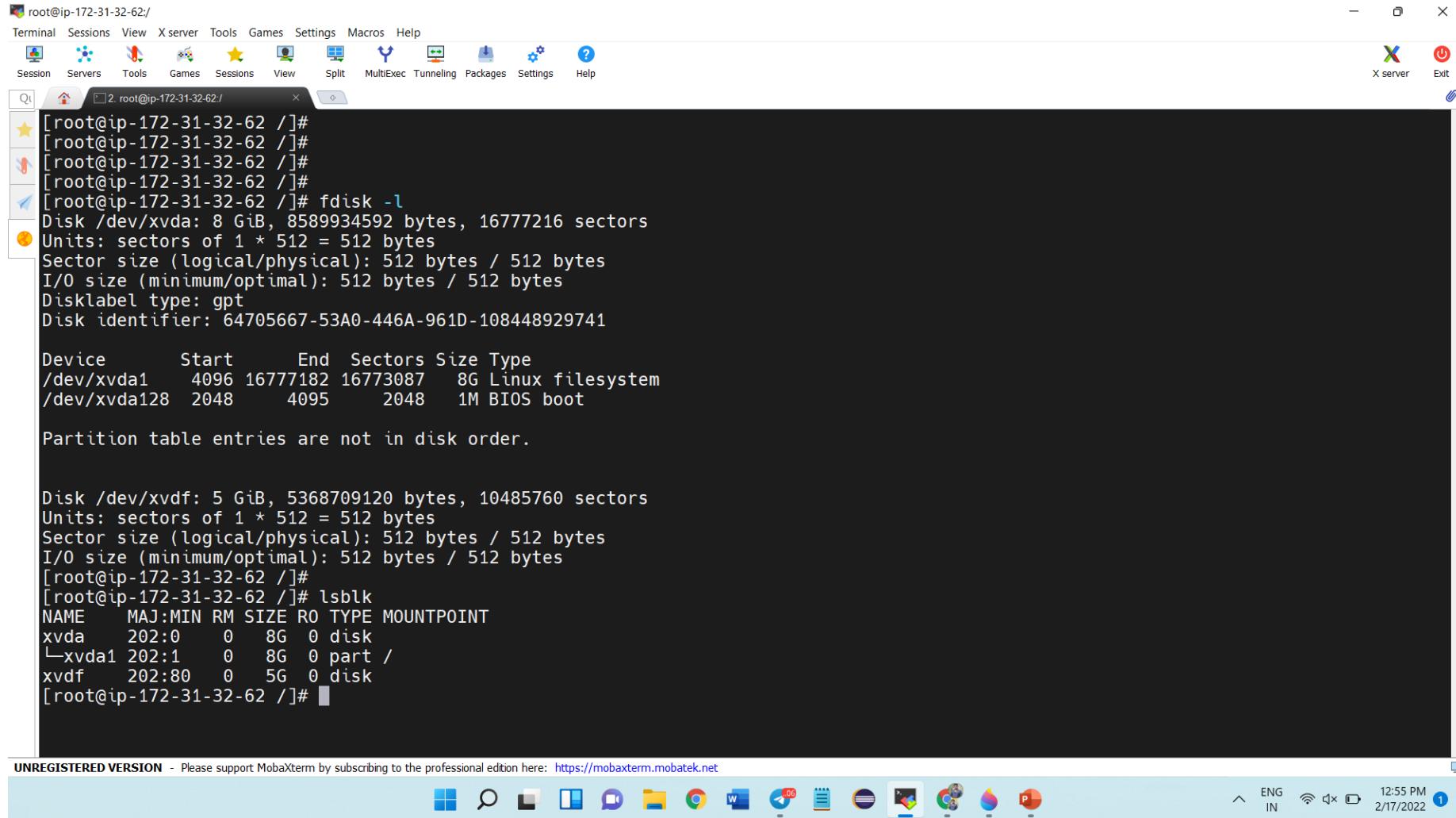
I/O size (minimum/optimal): 512 bytes / 512 bytes

[root@ip-172-31-32-62 ~]# █

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12:54 PM 2/17/2022

- Use **fdisk -l** and press enter



The screenshot shows a terminal window in MobaXterm with the following session path: root@ip-172-31-32-62/. The terminal displays the output of several commands:

```
[root@ip-172-31-32-62 /]# fdisk -l
Disk /dev/xvda: 8 GiB, 8589934592 bytes, 16777216 sectors
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: gpt
Disk identifier: 64705667-53A0-446A-961D-108448929741

Device      Start      End  Sectors Size Type
/dev/xvda1    4096  16777182 16773087   8G Linux filesystem
/dev/xvda128  2048      4095     2048   1M BIOS boot

Partition table entries are not in disk order.

Disk /dev/xvdf: 5 GiB, 5368709120 bytes, 10485760 sectors
Units: sectors of 1 * 512 = 512 bytes
Sector size (logical/physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes
[root@ip-172-31-32-62 /]#
[root@ip-172-31-32-62 /]# lsblk
NAME   MAJ:MIN RM SIZE RO TYPE MOUNTPOINT
xvda    202:0    0  8G  0 disk
└─xvda1 202:1    0  8G  0 part /
xvdf    202:80   0  5G  0 disk
[root@ip-172-31-32-62 /]#
```

At the bottom of the terminal window, there is a watermark: "UNREGISTERED VERSION - Please support MobaXterm by subscribing to the professional edition here: <https://mobaxterm.mobatek.net>".

- Use **lsblk** and press enter

The screenshot shows a terminal session in MobaXterm. The terminal window title is "root@ip-172-31-32-62:~". The terminal content displays the output of several commands:

```
I/O size (minimum/optimal): 512 bytes / 512 bytes
Disklabel type: gpt
Disk identifier: 64705667-53A0-446A-961D-108448929741

Device Start End Sectors Size Type
/dev/xvda1 4096 16777182 16773087 8G Linux filesystem
/dev/xvda128 2048 4095 2048 1M BIOS boot

Partition table entries are not in disk order.

Disk /dev/xvdf: 5 GiB, 5368709120 bytes, 10485760 sectors
Units: sectors of 1 * 512 = 512 bytes
Sector size (logical/physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes
[root@ip-172-31-32-62 ~]#
[root@ip-172-31-32-62 ~]# lsblk
NAME MAJ:MIN RM SIZE RO TYPE MOUNTPOINT
xvda 202:0 0 8G 0 disk
└─xvda1 202:1 0 8G 0 part /
xvdf 202:80 0 5G 0 disk
[root@ip-172-31-32-62 ~]#
[root@ip-172-31-32-62 ~]#
[root@ip-172-31-32-62 ~]# df -h
Filesystem Size Used Avail Use% Mounted on
devtmpfs 475M 0 475M 0% /dev
tmpfs 483M 0 483M 0% /dev/shm
tmpfs 483M 436K 483M 1% /run
tmpfs 483M 0 483M 0% /sys/fs/cgroup
/dev/xvda1 8.0G 1.6G 6.5G 20% /
tmpfs 97M 0 97M 0% /run/user/1000
[root@ip-172-31-32-62 ~]#
```

A red box highlights the command `df -h`. The status bar at the bottom of the terminal window shows "UNREGISTERED VERSION - Please support MobaXterm by subscribing to the professional edition here: <https://mobaxterm.mobatek.net>". The system tray icons include ENG IN, WiFi signal, battery level, and the date/time 12:56 PM 2/17/2022.

- Use **df -h** and press enter

The screenshot shows a terminal session in MobaXterm with root privileges on a Linux system. The user has run several commands to check disk usage and inspect disk partitions.

```
[root@ip-172-31-32-62 ~]# df -h
Filesystem      Size  Used Avail Use% Mounted on
devtmpfs        475M    0  475M  0% /dev
tmpfs          483M    0  483M  0% /dev/shm
tmpfs          483M  436K 483M  1% /run
tmpfs          483M    0  483M  0% /sys/fs/cgroup
/dev/xvda1       8.0G  1.6G  6.5G 20% /
tmpfs          97M    0   97M  0% /run/user/1000
[root@ip-172-31-32-62 ~]# fdisk -l
Disk /dev/xvda: 8 GiB, 8589934592 bytes, 16777216 sectors
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: gpt
Disk identifier: 64705667-53A0-446A-961D-108448929741

Device        Start      End  Sectors  Size Type
/dev/xvda1     4096 16777182 16773087  8G Linux filesystem
/dev/xvda128   2048      4095     2048  1M BIOS boot

Partition table entries are not in disk order.

Disk /dev/xvdf: 5 GiB, 5368709120 bytes, 10485760 sectors
Units: sectors of 1 * 512 = 512 bytes
Sector size (logical/physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes
[root@ip-172-31-32-62 ~]#
[root@ip-172-31-32-62 ~]#
[root@ip-172-31-32-62 ~]#
[root@ip-172-31-32-62 ~]# mkfs -v -t ext4 /dev/xvdf
```

At the bottom of the terminal window, there is a watermark: "UNREGISTERED VERSION - Please support MobaXterm by subscribing to the professional edition here: <https://mobaxterm.mobatek.net>".

- Use **mkfs -v -t ext4 /dev/xvdf** and press Enter

The screenshot shows a MobaXterm window titled 'root@ip-172-31-32-62:~'. The terminal session is running as root. The user has entered the command 'df -h' which displays the following disk usage information:

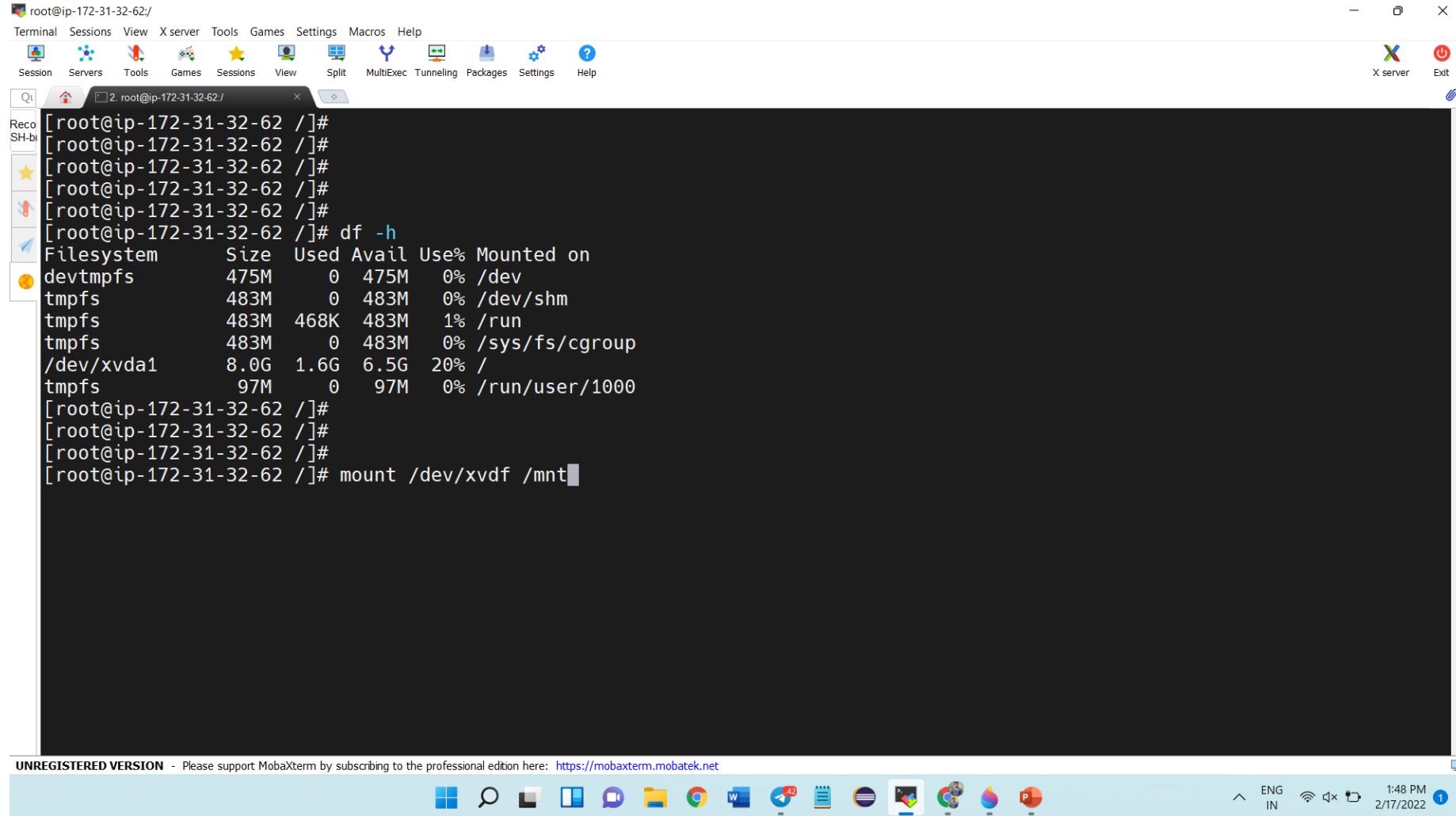
Filesystem	Size	Used	Avail	Use%	Mounted on
devtmpfs	475M	0	475M	0%	/dev
tmpfs	483M	0	483M	0%	/dev/shm
tmpfs	483M	468K	483M	1%	/run
tmpfs	483M	0	483M	0%	/sys/fs/cgroup
/dev/xvda1	8.0G	1.6G	6.5G	20%	/
tmpfs	97M	0	97M	0%	/run/user/1000

The command 'df -h' is highlighted with a red box.

At the bottom of the terminal window, there is a message: 'UNREGISTERED VERSION - Please support MobaXterm by subscribing to the professional edition here: <https://mobaxterm.mobatek.net>'.

The taskbar at the bottom of the screen includes icons for various applications like File Explorer, Task View, Search, Edge, and others. The system tray shows the date and time as '1:44 PM 2/17/2022'.

- Use **df -f** and press enter



```
[root@ip-172-31-32-62 ~]# df -h
Filesystem      Size  Used Avail Use% Mounted on
devtmpfs        475M    0  475M   0% /dev
tmpfs          483M    0  483M   0% /dev/shm
tmpfs          483M  468K 483M   1% /run
tmpfs          483M    0  483M   0% /sys/fs/cgroup
/dev/xvda1     8.0G  1.6G  6.5G  20% /
tmpfs          97M    0   97M   0% /run/user/1000
[root@ip-172-31-32-62 ~]#
[root@ip-172-31-32-62 ~]#
[root@ip-172-31-32-62 ~]#
[root@ip-172-31-32-62 ~]# mount /dev/xvdf /mnt
```

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ENG IN 1:48 PM 2/17/2022

- Use **mount /dev/xvdf /mnt** and press Enter

The screenshot shows a terminal window in MobaXterm with the following command history:

```
[root@ip-172-31-32-62 ~]#  
[root@ip-172-31-32-62 ~]#  
[root@ip-172-31-32-62 ~]#  
[root@ip-172-31-32-62 ~]#  
[root@ip-172-31-32-62 ~]#  
[root@ip-172-31-32-62 ~]# cd /mnt  
[root@ip-172-31-32-62 mnt]#  
[root@ip-172-31-32-62 mnt]#  
[root@ip-172-31-32-62 mnt]# df -h .  
Filesystem      Size  Used Avail Use% Mounted on  
/dev/xvdf     4.8G  20M  4.6G  1% /mnt  
[root@ip-172-31-32-62 mnt]#
```

The commands `cd /mnt` and `df -h .` are highlighted with red boxes.

At the bottom of the terminal window, there is a message: **UNREGISTERED VERSION** - Please support MobaXterm by subscribing to the professional edition here: <https://mobaxterm.mobatek.net>

The taskbar at the bottom of the screen includes icons for various applications like File Explorer, Task View, and Edge, along with system status indicators for battery, signal, and date/time (1:52 PM, 2/17/2022).

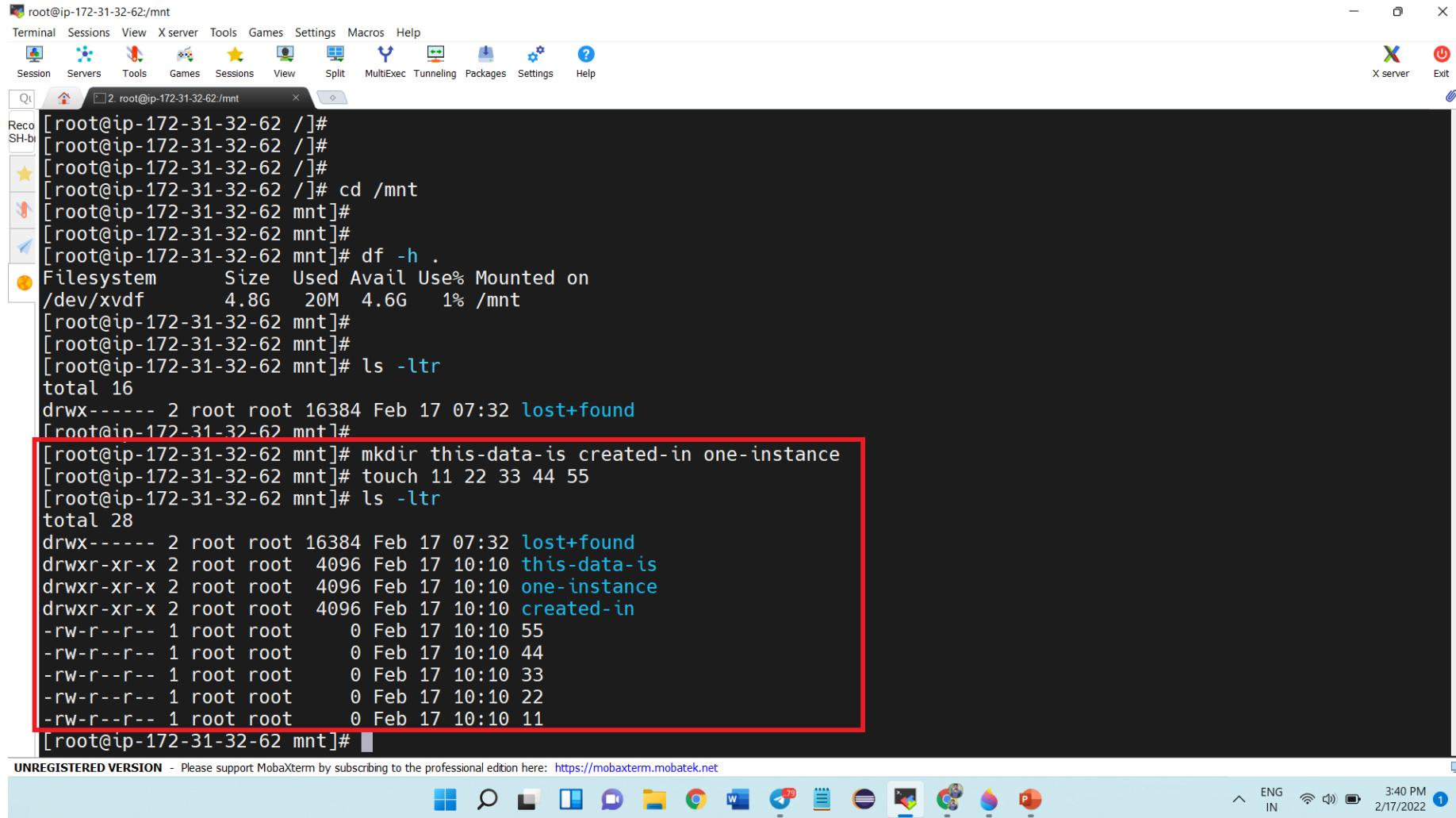
- Use **cd /mnt** to change directory
- Then use **df -h .** and press enter

```
[root@ip-172-31-32-62 /]#
[root@ip-172-31-32-62 /]#
[root@ip-172-31-32-62 /]#
[root@ip-172-31-32-62 /]#
[root@ip-172-31-32-62 /]#
[root@ip-172-31-32-62 /]# cd /mnt
[root@ip-172-31-32-62 mnt]#
[root@ip-172-31-32-62 mnt]#
[root@ip-172-31-32-62 mnt]# df -h .
Filesystem      Size  Used Avail Use% Mounted on
/dev/xvdf       4.8G  20M  4.6G   1% /mnt
[root@ip-172-31-32-62 mnt]#
[root@ip-172-31-32-62 mnt]#
[root@ip-172-31-32-62 mnt]# ls -ltr
total 16
drwx----- 2 root root 16384 Feb 17 07:32 lost+found
[root@ip-172-31-32-62 mnt]#
```

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ENG IN 1:54 PM 2/17/2022 1

- By using **ls -ltr** we can list out all the files in that attached volume which is in mnt directory
- Our volume of 5GB is attached in this instance and now it can be usable.



The screenshot shows a terminal window in MobaXterm with the following session path: root@ip-172-31-32-62:/mnt. The terminal window has a red border around the command and its output. The command entered was:

```
[root@ip-172-31-32-62 mnt]# mkdir this-data-is-created-in-one-instance
```

After running the command, the terminal displays the contents of the directory with the command:

```
[root@ip-172-31-32-62 mnt]# ls -ltr
```

The output shows the following files and directories:

File/Directory	Type	Owner	Group	Size	Last Modified	Permissions
lost+found	drwx-----	root	root	16384	Feb 17 07:32	-rwx----
this-data-is-created-in-one-instance	drwxr-xr-x	root	root	4096	Feb 17 10:10	-rwxr--r--
one-instance	drwxr-xr-x	root	root	4096	Feb 17 10:10	-rwxr--r--
created-in	drwxr-xr-x	root	root	4096	Feb 17 10:10	-rwxr--r--
11	-rw-r--r--	root	root	0	Feb 17 10:10	-rwxr--r--
22	-rw-r--r--	root	root	0	Feb 17 10:10	-rwxr--r--
33	-rw-r--r--	root	root	0	Feb 17 10:10	-rwxr--r--
44	-rw-r--r--	root	root	0	Feb 17 10:10	-rwxr--r--
55	-rw-r--r--	root	root	0	Feb 17 10:10	-rwxr--r--

- Now we will make some content in that directory in which our 5GB volume is attached
- As you can see in the above picture.

Now we have to check that data after attaching the same volume to different instance.

But please make sure that your both instances created in same availability zone.

So please follow next steps.

The screenshot shows a MobaXterm window with a terminal session running as root on a host with IP 172.31.32.62. The terminal window has a title bar with tabs for 'root@ip-172-31-32-62' and 'File Explorer'. The menu bar includes 'Terminal', 'Sessions', 'View', 'Xserver', 'Tools', 'Games', 'Settings', 'Macros', and 'Help'. The toolbar contains icons for 'Session', 'Servers', 'Tools', 'Games', 'Sessions', 'View', 'Split', 'MultiExec', 'Tunneling', 'Packages', 'Settings', and 'Help'. The status bar at the bottom shows 'UNREGISTERED VERSION - Please support MobaXterm by subscribing to the professional edition here: https://mobaxterm.mobatek.net', language settings ('ENG IN'), network status, battery level ('3:46 PM 2/17/2022'), and a notification icon.

```
[root@ip-172-31-32-62 mnt]#
[root@ip-172-31-32-62 mnt]#
[root@ip-172-31-32-62 mnt]#
[root@ip-172-31-32-62 mnt]#
[root@ip-172-31-32-62 mnt]# cd /
[root@ip-172-31-32-62 /]#
[root@ip-172-31-32-62 /]#
[root@ip-172-31-32-62 /]#
[root@ip-172-31-32-62 /]# umount /dev/xvdf
[root@ip-172-31-32-62 /]#
[root@ip-172-31-32-62 /]#
[root@ip-172-31-32-62 /]#
[root@ip-172-31-32-62 /]# df -h
Filesystem      Size   Used  Avail Use% Mounted on
devtmpfs        475M     0  475M   0% /dev
tmpfs          483M     0  483M   0% /dev/shm
tmpfs          483M  404K  483M   1% /run
tmpfs          483M     0  483M   0% /sys/fs/cgroup
/dev/xvda1       8.0G  1.6G  6.5G  20% /
tmpfs          97M     0   97M   0% /run/user/1000
[root@ip-172-31-32-62 /]#
```

- So first use **umount /dev/xvdf** to unmount our 5GB volume
- Use **df -h** to check that volume, so here we are not able to 5GB volume.

The screenshot shows the AWS EC2 Volumes page. The left sidebar lists various services like EC2 Dashboard, Instances, Images, and Elastic Block Store. The main content area displays a table of volumes with columns for Name, Volume ID, Type, Size, IOPS, Throughput, Availability Zone, and Volume state. Three volumes are listed: 17-feb, 17-feb-second-instance, and 5gb-Extra, all in the ap-south-1a availability zone and marked as In-use.

Name	Volume ID	Type	Size	IOPS	Throughput	Availability Zone	Volume state
17-feb	vol-0fe78248e14cc1fad	gp2	8 GiB	100	-	ap-south-1a	In-use
17-feb-second-instance	vol-0b5ead6f06cd4bc6e	gp2	8 GiB	100	-	ap-south-1a	In-use
5gb-Extra	vol-01682168a77ad66ab	gp2	5 GiB	100	-	ap-south-1a	In-use

- Go to volumes in AWS console

The screenshot shows the AWS EC2 Volumes page. On the left, there's a sidebar with links for Instances, Images, and Elastic Block Store. The main area displays a table of volumes with the following data:

Name	Volume ID	Type	Size	IOPS	Throughput	Availability Zone	Volume state
17-feb	vol-0fe78248e14cc1fad	gp2	8 GiB	100	-	s... ap-south-1a	In-use
17-feb-second-instance	vol-0b5ead6f06cd4bc6e	gp2	8 GiB	100	-	s... ap-south-1a	In-use
5gb-Extra	vol-01682168a77ad66ab	gp2	5 GiB	100	-	- ap-south-1a	In-use

At the bottom, there's a details panel for the selected volume:

Volume ID: vol-01682168a77ad66ab (5gb-Extra)

Details Status checks Monitoring Tags

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ENG IN 3:50 PM 2/17/2022

- Select 5GB volume
- Click on actions

The screenshot shows the AWS EC2 Volumes page. On the left, there's a navigation sidebar with sections like EC2 Dashboard, Events, Tags, Limits, Instances, Images, and Elastic Block Store. The main area displays a table titled "Volumes (1/3)" with three rows. The first two rows have empty checkboxes, while the third row, named "5gb-Extra", has a checked checkbox and is highlighted with a blue border. To the right of the table is a context menu with the following options: Actions (with a dropdown arrow), Create volume, Modify volume, Create snapshot, Create snapshot lifecycle policy, Delete volume, Attach volume, Detach volume, Force detach volume, Manage auto-enabled I/O, and Manage tags. The "Actions" dropdown is currently open. At the bottom of the page, there's a Volume ID: vol-01682168a77ad66ab (5gb-Extra) section with tabs for Details, Status checks, Monitoring, and Tags. The Details tab is selected. The footer includes links for Feedback, English (US), Privacy, Terms, and Cookie preferences, along with system status icons.

Name	Volume ID	Type	Size	IOPS	Throughput
17-feb	vol-0fe78248e14cc1fad	gp2	8 GiB	100	-
17-feb-second-instance	vol-0b5ead6f06cd4bc6e	gp2	8 GiB	100	-
5gb-Extra	vol-01682168a77ad66ab	gp2	5 GiB	100	-

Volume ID: vol-01682168a77ad66ab (5gb-Extra)

Details Status checks Monitoring Tags

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- Click on detach volume

The screenshot shows the AWS EC2 Volumes page. In the center, a modal dialog box titled "Detach vol-01682168a77ad66ab?" is displayed. The dialog contains a message: "After you detach a volume, you might still be charged for volume storage. If you no longer need the volume, delete it to stop incurring charges." Below the message is a question: "Are you sure that you want to detach volume vol-01682168a77ad66ab?". At the bottom right of the dialog are two buttons: "Cancel" and "Detach", with "Detach" being highlighted in orange.

Instances | EC2 Manager | Volumes | EC2 Manager | Connect to instance | Connect to instance | WhatsApp | World's 1st exabyte st | umount command - C | + | - | X

← → ⌂ 🔒 ap-south-1.console.aws.amazon.com/ec2/v2/home?region=ap-south-1#Volumes:

Apps Google SOCIAL New folder Backlink Google YouTube Marathi Typing | En... Majhi Naukri | माझी... WhatsApp Other bookmarks Reading list

aws Services Search for services, features, blogs, docs, and more [Alt+S]

New EC2 Experience Tell us what you think

EC2 Dashboard

EC2 Global View

Events

Tags

Limits

Instances

Instances New

Instance Types

Launch Templates

Spot Requests

Savings Plans

Reserved Instances New

Dedicated Hosts

Capacity Reservations

Images

AMIs New

AMI Catalog

Elastic Block Store

Feedback English (US) ▾

Volumes (1/3)

Filter volumes

Name	Volume ID	Type	Size	IOPS	Through...	Availability Zone	Volume state
17-feb	vol-0fe78248e14cc1fad	gp2	8 GiB	100	-	ap-south-1a	In-use
17-feb-second-instance	vol-0b5ead6f06cd4bc6e	gp2	8 GiB	100	-	ap-south-1a	In-use
5gb-Extra	vol-01682168a77ad66ab	gp2	5 GiB	100	-	ap-south-1a	In-use

Detach vol-01682168a77ad66ab?

After you detach a volume, you might still be charged for volume storage. If you no longer need the volume, delete it to stop incurring charges.

Are you sure that you want to detach volume vol-01682168a77ad66ab?

Cancel Detach

Volume ID: vol-01682168a77ad66ab (5gb-Extra)

Details Status checks Monitoring Tags

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Feedback English (US) ▾

ENG IN 3:51 PM 2/17/2022 1

- Click on Detach

The screenshot shows the AWS EC2 Volumes page. A prominent green success message at the top center reads "Successfully detached volume." Below this, the "Volumes (3)" table is displayed. The table has columns for Name, Volume ID, Type, Size, IOPS, Throughput, Availability Zone, and Volume state. The three volumes listed are:

Name	Volume ID	Type	Size	IOPS	Throughput	Availability Zone	Volume state
17-feb	vol-0fe78248e14cc1fad	gp2	8 GiB	100	-	s... ap-south-1a	In-use
17-feb-second-instance	vol-0b5ead6f06cd4bc6e	gp2	8 GiB	100	-	s... ap-south-1a	In-use
5gb-Extra	vol-01682168a77ad66ab	gp2	5 GiB	100	-	s... ap-south-1a	In-use

Below the table, there is a message "Select a volume above" followed by three small square icons. The left sidebar contains navigation links for EC2 Dashboard, Events, Tags, Limits, Instances (with sub-links for Instances, Instance Types, Launch Templates, Spot Requests, Savings Plans, Reserved Instances, Dedicated Hosts, Capacity Reservations), Images (with sub-links for AMIs and AMI Catalog), and Elastic Block Store.

- It is detached successfully.

The screenshot shows the AWS EC2 Volumes page. On the left, there's a sidebar with links for Instances, Images, and Elastic Block Store. The main area displays a table titled "Volumes (1/3)" with three rows. The first two rows have empty checkboxes. The third row has a checked checkbox and is highlighted with a red box. The table columns include Name, Volume ID, Type, Size, IOPS, Throughput, Availability Zone, and Volume state. The "Actions" button in the top right corner is also highlighted with a red box.

Name	Volume ID	Type	Size	IOPS	Throughput	Availability Zone	Volume state
17-feb	vol-0fe78248e14cc1fad	gp2	8 GiB	100	-	s... ap-south-1a	In-use
17-feb-second-instance	vol-0b5ead6f06cd4bc6e	gp2	8 GiB	100	-	s... ap-south-1a	In-use
5gb-Extra	vol-01682168a77ad66ab	gp2	5 GiB	100	-	ap-south-1a	In-use

- Select 5GB volume
- Click on actions

The screenshot shows the AWS EC2 Volumes page. On the left, there's a navigation sidebar with sections like EC2 Dashboard, Events, Tags, Limits, Instances, Images, and Elastic Block Store. The main area displays a table titled "Volumes (1/3)" with three rows. The first two rows have empty checkboxes, while the third row, named "5gb-Extra", has a checked checkbox and is highlighted with a blue border. To the right of the table is a context menu with the following options: Modify volume, Create snapshot, Create snapshot lifecycle policy, Delete volume, Attach volume (which is highlighted with a gray background), Detach volume, Force detach volume, Manage auto-enabled I/O, and Manage tags. The "Attach volume" option is currently selected. At the bottom of the page, there's a Volume ID: vol-01682168a77ad66ab (5gb-Extra) and tabs for Details, Status checks, Monitoring, and Tags. The status bar at the bottom shows the date (2/17/2022), time (3:53 PM), and battery level (1).

Name	Volume ID	Type	Size	IOPS	Throughput
17-feb	vol-0fe78248e14cc1fad	gp2	8 GiB	100	-
17-feb-second-instance	vol-0b5ead6f06cd4bc6e	gp2	8 GiB	100	-
5gb-Extra	vol-01682168a77ad66ab	gp2	5 GiB	100	-

- Click on attach volume

The screenshot shows the AWS EC2 Attach volume dialog box. At the top, the URL is [ap-south-1.console.aws.amazon.com/ec2/v2/home?region=ap-south-1#AttachVolume:volumeld=vol-01682168a77ad66ab](https://ap-south-1.console.aws.amazon.com/ec2/v2/home?region=ap-south-1#AttachVolume:volumeld=vol-01682168a77ad66ab). The search bar contains "Search for services, features, blogs, docs, and more [Alt+S]". The main content area is titled "Attach volume" with an "Info" link. It says "Attach a volume to an instance to use it as you would a regular physical hard disk drive." Below this is a "Basic details" section. Under "Volume ID", it shows "vol-01682168a77ad66ab (5gb-Extra)". Under "Availability Zone", it shows "ap-south-1a". Under "Instance Info", there is a dropdown menu with two entries: "i-05b674efc1b1ca77c (17-feb) (running)" and "i-008ea243e1b6e8615 (17-feb-second-instance) (running)". The second entry is highlighted with a red box. At the bottom right are "Cancel" and "Attach volume" buttons. The footer includes links for Feedback, English (US), Privacy, Terms, and Cookie preferences, along with system status icons.

- I am going to select second instance

The screenshot shows the AWS EC2 Attach Volume interface. At the top, there are several tabs: Instances | EC2 Manager, Attach volume | EC2 M..., Connect to instance | x, Connect to instance | x, WhatsApp, World's 1st exabyte st, umount command - C, and a few others. Below the tabs is a toolbar with icons for Apps, Google, Satish DevOps Engg, SOCIAL, New folder, Backlink, Google, YouTube, Marathi Typing | En..., Majhi Naukri | माझी..., and WhatsApp.

The main content area has a dark header bar with the AWS logo, Services, a search bar, and navigation icons. The search bar contains the placeholder "Search for services, features, blogs, docs, and more" and the keyboard shortcut "[Alt+S]".

The main form is titled "Basic details" and contains the following fields:

- Volume ID: vol-01682168a77ad66ab (5gb-Extra)
- Availability Zone: ap-south-1a
- Instance Info: A dropdown menu showing "i-008ea243e1b6e8615" and a clear button.
- Device name Info: A text input field containing "/dev/sdf". Below it, a note says "Linux device names: /dev/sdf through /dev/sdp".

A callout box provides a warning: "Newer Linux kernels may rename your devices to /dev/xvdf through /dev/xvdp internally, even when the device name entered here (and shown in the details) is /dev/sdf through /dev/sdp."

At the bottom of the form are two buttons: "Cancel" and "Attach volume".

The footer of the browser window includes links for Feedback, English (US), Privacy, Terms, and Cookie preferences. It also shows the copyright notice "© 2022, Amazon Internet Services Private Ltd. or its affiliates.", the date "2/17/2022", and the time "3:56 PM".

- Click on attach volume

Instances | EC2 Manager | Volumes | EC2 Manager | Connect to instance | Connect to instance | WhatsApp | World's 1st exabyte st | umount command - | + | - | X

← → ⌂ ap-south-1.console.aws.amazon.com/ec2/v2/home?region=ap-south-1#Volumes:

Apps Google SOCIAL New folder Backlink Google YouTube Marathi Typing | En... Majhi Naukri | माझी... WhatsApp Other bookmarks Reading list

aws Services Search for services, features, blogs, docs, and more [Alt+S]

New EC2 Experience Tell us what you think

EC2 Dashboard

EC2 Global View

Events

Tags

Limits

Instances

- Instances New
- Instance Types
- Launch Templates
- Spot Requests
- Savings Plans
- Reserved Instances New
- Dedicated Hosts
- Capacity Reservations

Images

- AMIs New
- AMI Catalog

Elastic Block Store

C Actions Create volume

Filter volumes

Successfully attached volume vol-01682168a77ad66ab to instance i-008ea243e1b6e8615.

Name	Volume ID	Type	Size	IOPS	Throughput	Availability Zone	Volume state
17-feb	vol-0fe78248e14cc1fad	gp2	8 GiB	100	-	ap-south-1a	In-use
17-feb-second-instance	vol-0b5ead6f06cd4bc6e	gp2	8 GiB	100	-	ap-south-1a	In-use
5gb-Extra	vol-01682168a77ad66ab	gp2	5 GiB	100	-	ap-south-1a	In-use

Select a volume above

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ENG IN 3:57 PM 2/17/2022

- Volume is attached successfully to second instance

ec2-user@ip-172-31-35-46:~

Terminal Sessions View Xserver Tools Games Settings Macros Help

Session Servers Tools Games Sessions View Split MultiExec Tunneling Packages Settings Help

X server Exit

2. root@ip-172-31-32-62:/ 3. ec2-user@ip-172-31-35-46:-

> When using SSH, your remote DISPLAY is automatically forwarded  
> Your HOME folder is not persistent: it will be erased on restart  
> Each command status is specified by a special symbol (✓ or ✗)

- Important:  
This is MobaXterm Personal Edition. The Professional edition allows you to customize MobaXterm for your company: you can add your own logo, your parameters, your welcome message and generate either an MSI installation package or a portable executable.  
We can also modify MobaXterm or develop the plugins you need.  
For more information: <https://mobaxterm.mobatek.net/download.html>

17/02/2022 15:58.09 /home/mobaxterm cd desktop/keys

17/02/2022 15:58.19 /home/mobaxterm/desktop/keys ssh -i "valentine-day-special.pem" ec2-user@ec2-13-233-149.uth-1.compute.amazonaws.com  
Warning: Permanently added 'ec2-13-233-149-95.ap-south-1.compute.amazonaws.com' (RSA) to the list of known hosts.  
X11 forwarding request failed on channel 0

Amazon Linux 2 AMI

<https://aws.amazon.com/amazon-linux-2/>  
3 package(s) needed for security, out of 6 available  
Run "sudo yum update" to apply all updates.

[ec2-user@ip-172-31-35-46 ~]\$

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ENG IN 3:58 PM 2/17/2022

- Now login to our second instance

The screenshot shows a MobaXterm window with three sessions open:

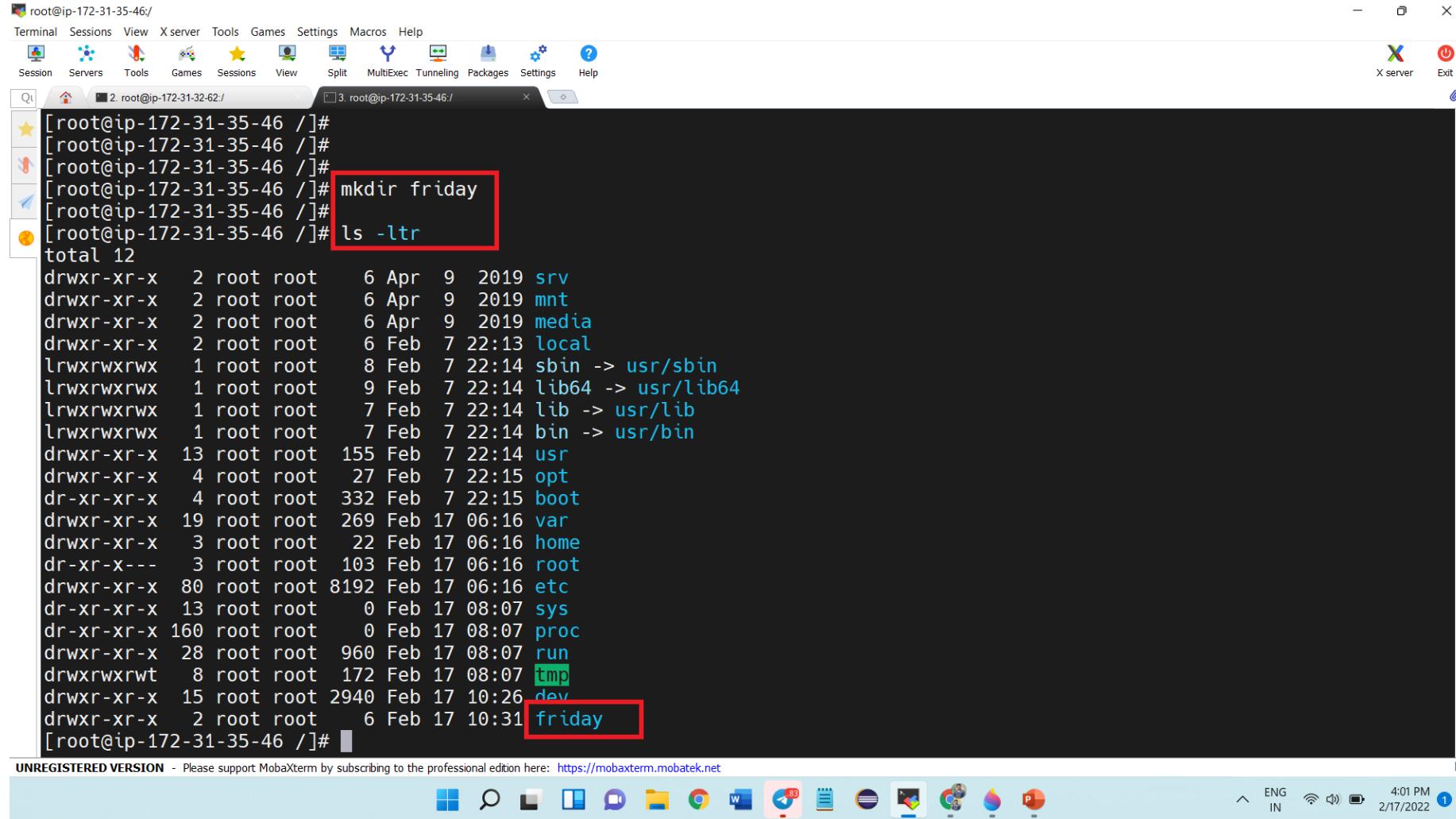
- Session 2: root@ip-172-31-32-62/: Displays a shell prompt as a regular user.
- Session 3: root@ip-172-31-35-46/: Displays a shell prompt as root.
- Session 1: root@ip-172-31-35-46/: Displays a shell prompt as root, identical to Session 3.

The terminal window for Session 3 shows the following command history and output:

```
[ec2-user@ip-172-31-35-46 /]$  
[ec2-user@ip-172-31-35-46 /]$  
[ec2-user@ip-172-31-35-46 /]$ sudo su -  
[root@ip-172-31-35-46 ~]# cd /  
[root@ip-172-31-35-46 /]# ls -ltr  
total 12  
drwxr-xr-x  2 root root    6 Apr  9  2019 srv  
drwxr-xr-x  2 root root    6 Apr  9  2019 mnt  
drwxr-xr-x  2 root root    6 Apr  9  2019 media  
drwxr-xr-x  2 root root   6 Feb  7 22:13 local  
lrwxrwxrwx  1 root root   8 Feb  7 22:14 sbin -> usr/sbin  
lrwxrwxrwx  1 root root   9 Feb  7 22:14 lib64 -> usr/lib64  
lrwxrwxrwx  1 root root   7 Feb  7 22:14 lib -> usr/lib  
lrwxrwxrwx  1 root root   7 Feb  7 22:14 bin -> usr/bin  
drwxr-xr-x 13 root root  155 Feb  7 22:14 usr  
drwxr-xr-x  4 root root  27 Feb  7 22:15 opt  
dr-xr-xr-x  4 root root 332 Feb  7 22:15 boot  
drwxr-xr-x 19 root root 269 Feb 17 06:16 var  
drwxr-xr-x  3 root root 22 Feb 17 06:16 home  
dr-xr-x---  3 root root 103 Feb 17 06:16 root  
drwxr-xr-x 80 root root 8192 Feb 17 06:16 etc  
dr-xr-xr-x 13 root root  0 Feb 17 08:07 sys  
dr-xr-xr-x 160 root root  0 Feb 17 08:07 proc  
drwxr-xr-x 28 root root 960 Feb 17 08:07 run  
drwxrwxrwt  8 root root 172 Feb 17 08:07 tmp  
drwxr-xr-x 15 root root 2940 Feb 17 10:26 dev  
[root@ip-172-31-35-46 /]#  
[root@ip-172-31-35-46 /]#  
[root@ip-172-31-35-46 /]#
```

The status bar at the bottom indicates "UNREGISTERED VERSION - Please support MobaXterm by subscribing to the professional edition here: <https://mobaxterm.mobatek.net>".

- Here we can see that all the content in new instance.



```
[root@ip-172-31-35-46 ~]# mkdir friday
[root@ip-172-31-35-46 ~]# ls -ltr
total 12
drwxr-xr-x  2 root root   6 Apr  9  2019 srv
drwxr-xr-x  2 root root   6 Apr  9  2019 mnt
drwxr-xr-x  2 root root   6 Apr  9  2019 media
drwxr-xr-x  2 root root  6 Feb  7 22:13 local
lrwxrwxrwx  1 root root   8 Feb  7 22:14 sbin -> usr/sbin
lrwxrwxrwx  1 root root   9 Feb  7 22:14 lib64 -> usr/lib64
lrwxrwxrwx  1 root root   7 Feb  7 22:14 lib -> usr/lib
lrwxrwxrwx  1 root root   7 Feb  7 22:14 bin -> usr/bin
drwxr-xr-x 13 root root  155 Feb  7 22:14 usr
drwxr-xr-x  4 root root  27 Feb  7 22:15 opt
dr-xr-xr-x  4 root root 332 Feb  7 22:15 boot
drwxr-xr-x 19 root root 269 Feb 17 06:16 var
drwxr-xr-x  3 root root 22 Feb 17 06:16 home
dr-xr-x---  3 root root 103 Feb 17 06:16 root
drwxr-xr-x 80 root root 8192 Feb 17 06:16 etc
dr-xr-xr-x 13 root root  0 Feb 17 08:07 sys
dr-xr-xr-x 160 root root  0 Feb 17 08:07 proc
drwxr-xr-x 28 root root  960 Feb 17 08:07 run
drwxrwxrwt  8 root root 172 Feb 17 08:07 tmp
drwxr-xr-x 15 root root 2940 Feb 17 10:26 dev
drwxr-xr-x  2 root root   6 Feb 17 10:31 friday
[root@ip-172-31-35-46 ~]#
```

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- I made one directory using **mkdir friday**
- Here we can see that directory

```
[root@ip-172-31-35-46 ~]# [root@ip-172-31-35-46 ~]# [root@ip-172-31-35-46 ~]# [root@ip-172-31-35-46 ~]# cd friday [root@ip-172-31-35-46 friday]# ls -ltr total 0 [root@ip-172-31-35-46 friday]#
```

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- Here we can see that there is no content in this directory
- Now we are going to mount that 5GB volume and checked our content which was created in our first instance.

The screenshot shows a MobaXterm window with three tabs open. The active tab (tab 2) displays a terminal session with root privileges on a Linux system. The user has run the command `fdisk -l`, which outputs information about the disk partitions. The output includes details for the `/dev/xvda` disk and the `/dev/xvdf` disk.

```
[root@ip-172-31-35-46 ~]# [root@ip-172-31-35-46 ~]# [root@ip-172-31-35-46 ~]# [root@ip-172-31-35-46 ~]# cd / [root@ip-172-31-35-46 ~]# [root@ip-172-31-35-46 ~]# [root@ip-172-31-35-46 ~]# fdisk -l Disk /dev/xvda: 8 GiB, 8589934592 bytes, 16777216 sectors 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: gpt Disk identifier: 64705667-53A0-446A-961D-108448929741 Device Start End Sectors Size Type /dev/xvda1 4096 16777182 16773087 8G Linux filesystem /dev/xvda128 2048 4095 2048 1M BIOS boot Partition table entries are not in disk order.
```

Disk `/dev/xvdf`: 5 GiB, 5368709120 bytes, 10485760 sectors  
Units: sectors of 1 \* 512 = 512 bytes  
Sector size (logical/physical): 512 bytes / 512 bytes  
I/O size (minimum/optimal): 512 bytes / 512 bytes

[root@ip-172-31-35-46 ~]#

At the bottom of the window, there is a message: "UNREGISTERED VERSION - Please support MobaXterm by subscribing to the professional edition here: <https://mobaxterm.mobatek.net>". The status bar at the bottom right shows the date and time as "2/17/2022 4:06 PM".

- Use `fdisk -l`

The screenshot shows a MobaXterm window with three tabs open. The active tab, labeled '2. /home/mobaxterm/Desktop/keys', displays a terminal session with root privileges. The user has run the command 'lsblk' to list disk blocks, which shows the following output:

```
[root@ip-172-31-35-46 ~]# lsblk
NAME   MAJ:MIN RM SIZE RO TYPE MOUNTPOINT
xvda    202:0    0  8G  0 disk 
└─xvda1 202:1    0  8G  0 part /
xvdf    202:80   0  5G  0 disk
```

The status bar at the bottom of the window indicates it is an 'UNREGISTERED VERSION'. It also shows system information like network interface (ENG IN), battery level (4:09 PM), and date (2/17/2022).

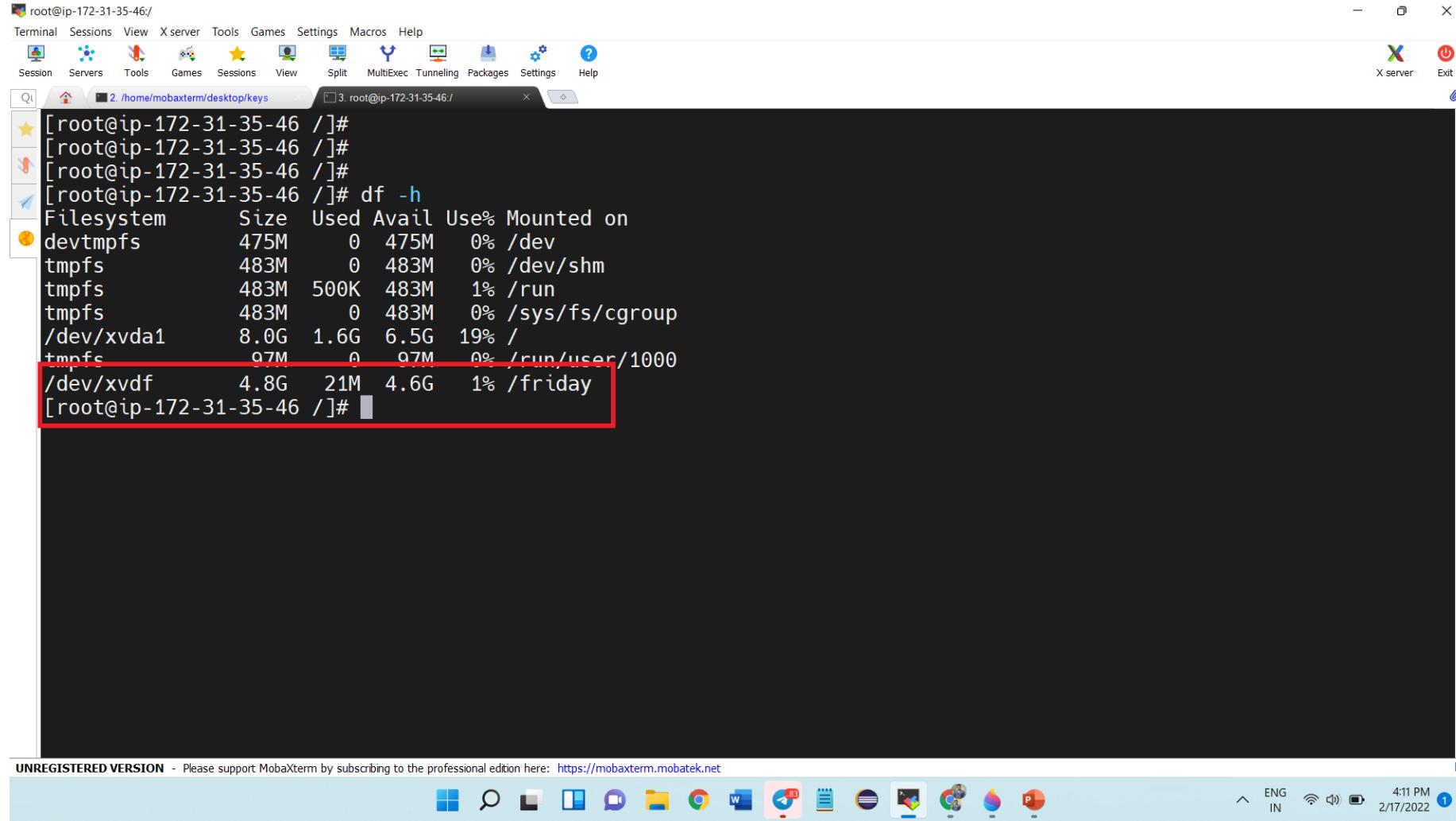
- Use **lsblk**

The screenshot shows a MobaXterm window with three tabs open. The active tab, labeled '2. /home/mobaxterm/Desktop/keys', displays a terminal session with the following command history:

```
[root@ip-172-31-35-46 ~]#  
[root@ip-172-31-35-46 ~]#  
[root@ip-172-31-35-46 ~]#  
[root@ip-172-31-35-46 ~]#  
[root@ip-172-31-35-46 ~]#  
[root@ip-172-31-35-46 ~]# mount /dev/xvdf /friday  
[root@ip-172-31-35-46 ~]#
```

The window has a dark theme and includes a sidebar with icons for Session, Servers, Tools, Games, Sessions, View, Split, MultiExec, Tunneling, Packages, Settings, and Help. The status bar at the bottom indicates an unregistered version and shows system information like ENG IN, 4:10 PM, 2/17/2022, and a battery icon.

- Use **mount /dev/xvdf /friday**



```
[root@ip-172-31-35-46 ~]# df -h
Filesystem      Size  Used Avail Use% Mounted on
/devtmpfs        475M    0  475M   0% /dev
tmpfs           483M    0  483M   0% /dev/shm
tmpfs           483M  500K 483M   1% /run
tmpfs           483M    0  483M   0% /sys/fs/cgroup
/dev/xvda1       8.0G  1.6G  6.5G  19% /
tmpfs           97M    0   97M   0% /run/user/1000
/dev/xvdf       4.8G  21M  4.6G   1% /friday
[root@ip-172-31-35-46 ~]#
```

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4:11 PM 2/17/2022

- Here we can see that our volume is mounted in **Friday** directory

The screenshot shows a MobaXterm window with three tabs. Tab 2 shows the output of the command `df -h`, listing various filesystems with their sizes, used space, available space, usage percentage, and mount points. Tab 3 shows the root shell prompt. The user then enters `cd /friday`, which changes the directory to `/friday`. Finally, the user runs `ls -ltr` to list the contents of the `/friday` directory, which contains several files and subdirectories. A red box highlights the `cd /friday` and `ls -ltr` commands.

```
[root@ip-172-31-35-46 /]# df -h
Filesystem      Size  Used Avail Use% Mounted on
devtmpfs        475M    0  475M   0% /dev
tmpfs          483M    0  483M   0% /dev/shm
tmpfs          483M  500K 483M   1% /run
tmpfs          483M    0  483M   0% /sys/fs/cgroup
/dev/xvda1       8.0G  1.6G  6.5G  19% /
tmpfs          97M    0   97M   0% /run/user/1000
/dev/xvdf       4.8G   21M  4.6G   1% /friday
[root@ip-172-31-35-46 /]#
[root@ip-172-31-35-46 /]#
[root@ip-172-31-35-46 /]#
[root@ip-172-31-35-46 /]# cd /friday
[root@ip-172-31-35-46 friday]#
[root@ip-172-31-35-46 friday]#
[root@ip-172-31-35-46 friday]#
[root@ip-172-31-35-46 friday]# ls -ltr
total 28
drwx----- 2 root root 16384 Feb 17 07:32 lost+found
drwxr-xr-x  2 root root  4096 Feb 17 10:10 this-data-is
drwxr-xr-x  2 root root  4096 Feb 17 10:10 one-instance
drwxr-xr-x  2 root root  4096 Feb 17 10:10 created-in
-rw-r--r--  1 root root     0 Feb 17 10:10 55
-rw-r--r--  1 root root     0 Feb 17 10:10 44
-rw-r--r--  1 root root     0 Feb 17 10:10 33
-rw-r--r--  1 root root     0 Feb 17 10:10 22
-rw-r--r--  1 root root     0 Feb 17 10:10 11
[root@ip-172-31-35-46 friday]#
```

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- Use `cd /friday` to change directory
- And then `ls -litr` to check our content

The screenshot shows a terminal window in MobaXterm with three tabs. Tab 2 shows a directory listing with files like 'lost+found', 'this-data-is', 'one-instance', and several log files. Tab 3 shows the root prompt. The user runs 'umount /dev/xvdf' and then 'df -h' to verify the volume is unmounted. A red box highlights the 'umount' command and the 'df -h' output, which shows the volume is now unmounted.

```
total 28
drwx----- 2 root root 16384 Feb 17 07:32 lost+found
drwxr-xr-x 2 root root 4096 Feb 17 10:10 this-data-is
drwxr-xr-x 2 root root 4096 Feb 17 10:10 one-instance
drwxr-xr-x 2 root root 4096 Feb 17 10:10 created-in
-rw-r--r-- 1 root root 0 Feb 17 10:10 55
-rw-r--r-- 1 root root 0 Feb 17 10:10 44
-rw-r--r-- 1 root root 0 Feb 17 10:10 33
-rw-r--r-- 1 root root 0 Feb 17 10:10 22
-rw-r--r-- 1 root root 0 Feb 17 10:10 11
[root@ip-172-31-35-46 friday]#
[root@ip-172-31-35-46 friday]#
[root@ip-172-31-35-46 friday]#
[root@ip-172-31-35-46 friday]# cd /
[root@ip-172-31-35-46 /]#
[root@ip-172-31-35-46 /]#
[root@ip-172-31-35-46 /]# umount /dev/xvdf
[root@ip-172-31-35-46 /]#
[root@ip-172-31-35-46 /]# df -h
Filesystem      Size  Used Avail Use% Mounted on
/devtmpfs        475M    0  475M  0% /dev
tmpfs           483M    0  483M  0% /dev/shm
tmpfs           483M  500K  483M  1% /run
tmpfs           483M    0  483M  0% /sys/fs/cgroup
/dev/xvda1       8.0G  1.6G  6.5G 19% /
tmpfs           97M    0   97M  0% /run/user/1000
[root@ip-172-31-35-46 /]#
```

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ENG IN 4:14 PM 2/17/2022

- Use **umount /dev/xvdf** to unmount our volume
- Here we can see that our volume is unmounted.
- After performing please delete instances and volume also.

**Thanks for doing practical with us**