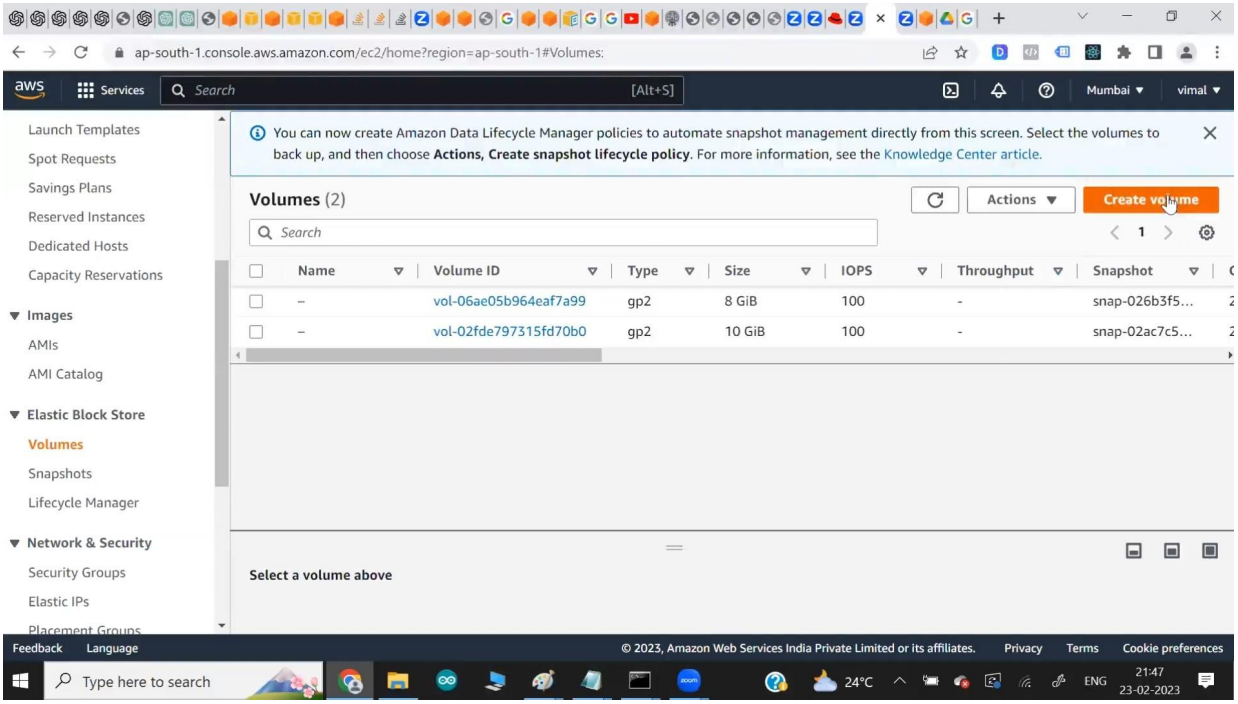
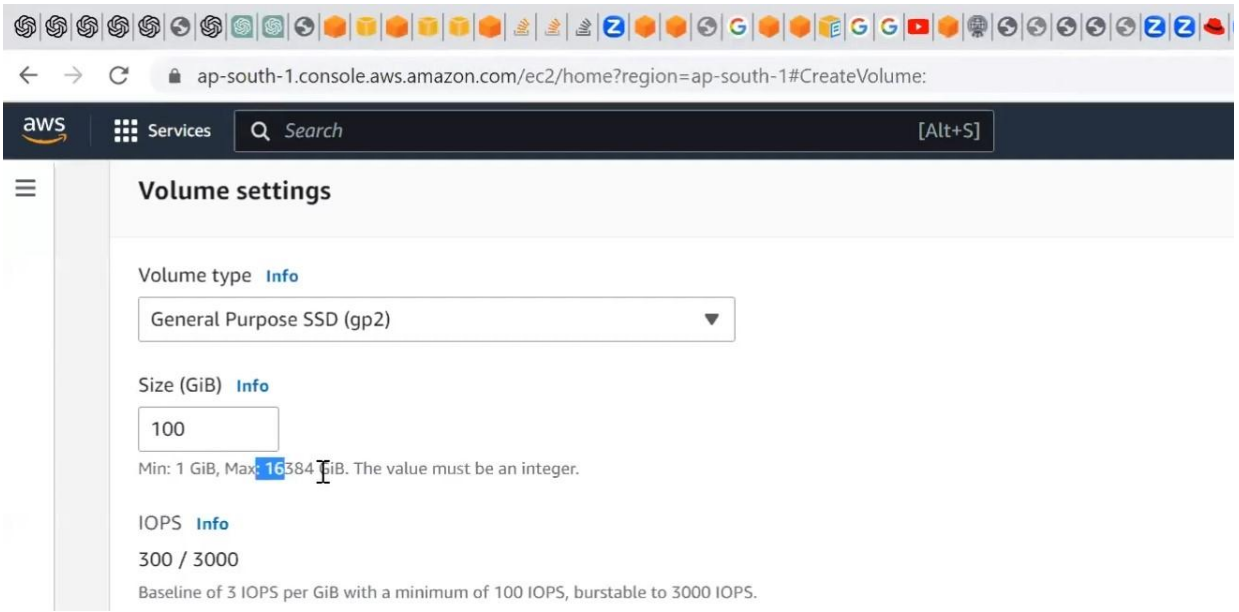
AWS Session 5
Summary – 23-02-2023

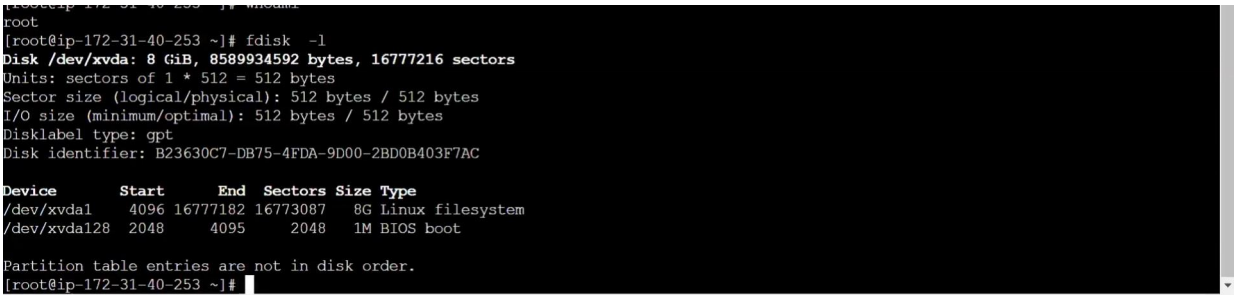
- Data that we need to keep permanent in our device for that we need HARD DISK or PENDRIVES. We can't keep data permanent on top of RAM.
- If you want to keep Data permanent in Cloud then the cloud is giving you services for Storage known as **STAAS(Storage as a service).**
- There are three storage types available in the market:
    - BLOCK STORAGE
    - FILE STORAGE
    - OBJECT STORAGE
- We can't store data directly on the hard disk to store the data we need to create a file, To create a file we need to create a folder without creating a folder it is impossible to create the file. For making the folder first we need to create a partition, format the partition and then create a drive of it or we can also say it is an amount point.
- Google has given a service known as google cloud in which you don't need to manage the storage you just need to upload and download the file from the storage with the protocol HTTPS here the file is known as an object and this way of providing the service in the storage world is known as **Object Storage.** Example:- **Google Drive**
- AWS cloud also provides object storage known as **S3.**
- When we Launch an instance with Amazon Linux then it gives us the facility to connect through the browser directly.
- If you want to install any OS on your system you need **RAW HARD DISK**.
  You can't install OS on google drive because they have given you pre-created partitions. For installing the OS minimum requirement is we need RAW HARD DISK also known as **BLOCK STORAGE**. Here the service is known as **BLOCK STORAGE AS SERVICE**.
- AWS has a block storage named **EBS(Elastic Block Storage)**. This Service will give you a raw hard disk.
- AWS provides a file Storage service known as **EFS(ELASTIC FILE STORAGE SERVIECE).**
- EBS is a sub-service of the Ec2 instance.
- To create EBS, Click on volume:-
- Click on Create Volume:-



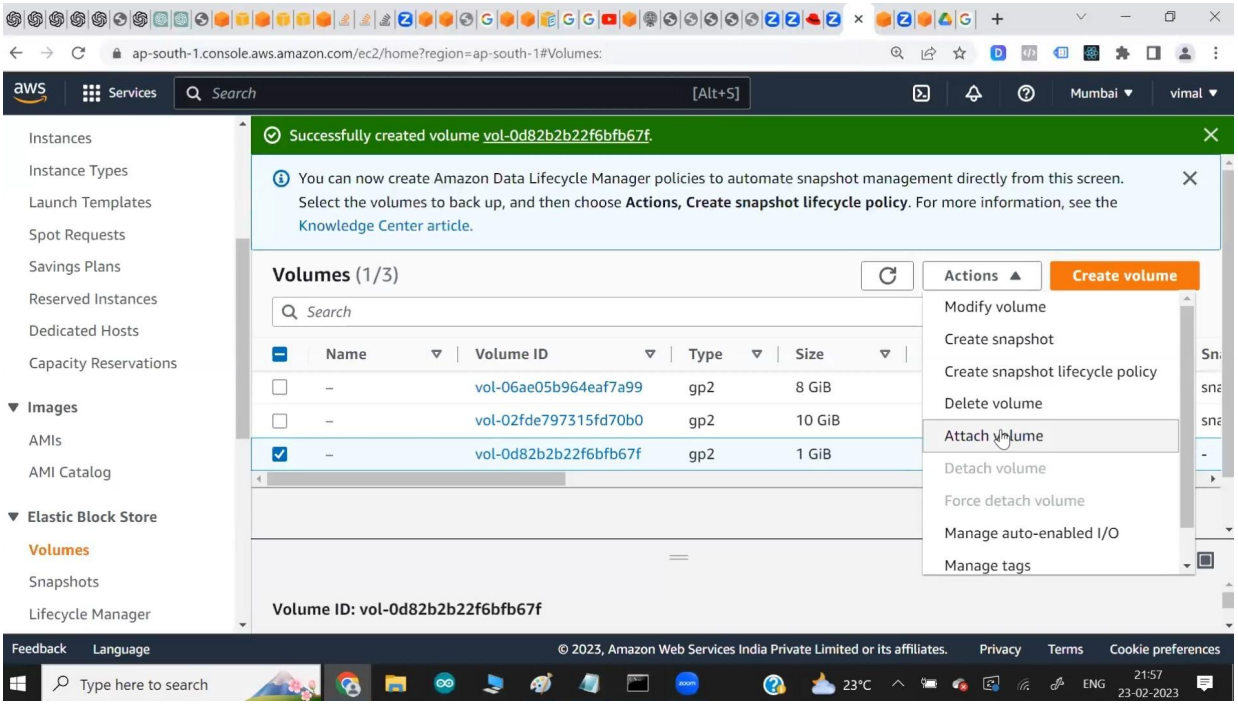
- Enter the size you want(Minimum size 1 GiB and MAximum is 16384Gib). AWS will charge you per your Gib.



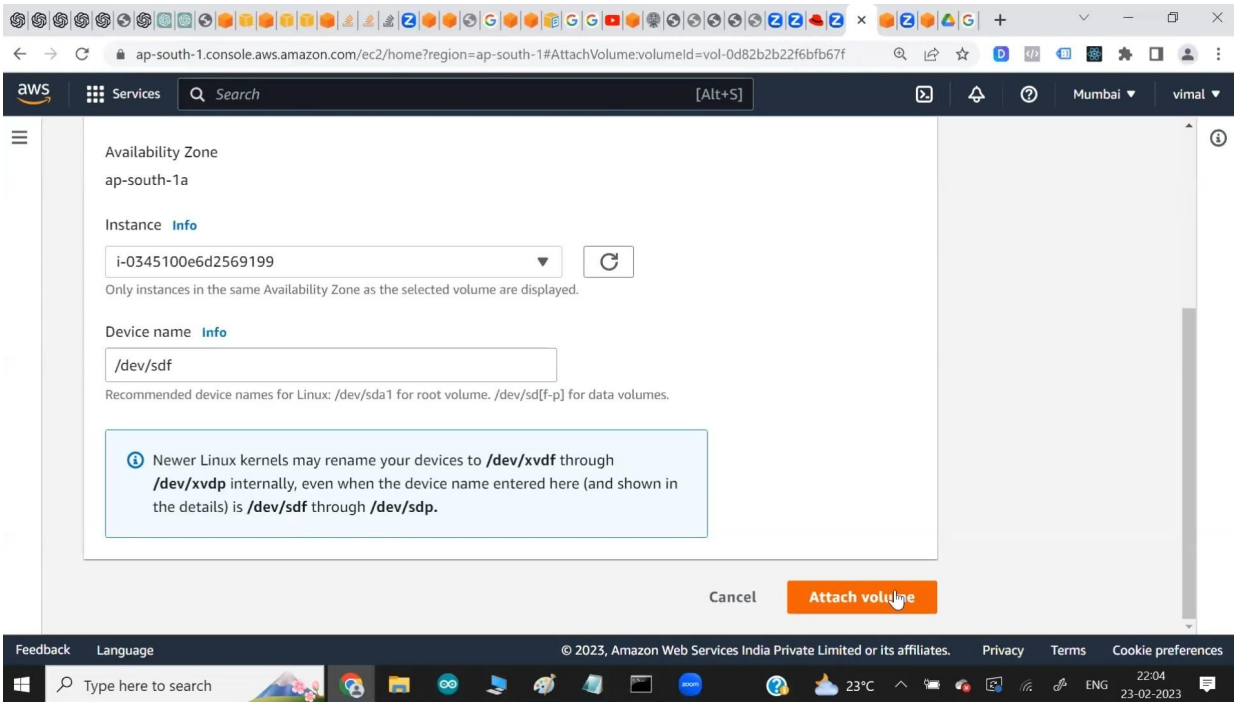
- To use this hard disk you need to connect to the OS. Whenever you launch OS by default in AWS hard disk is created.
- fdisk -l this command will list the number of hard disks attached to the OS.



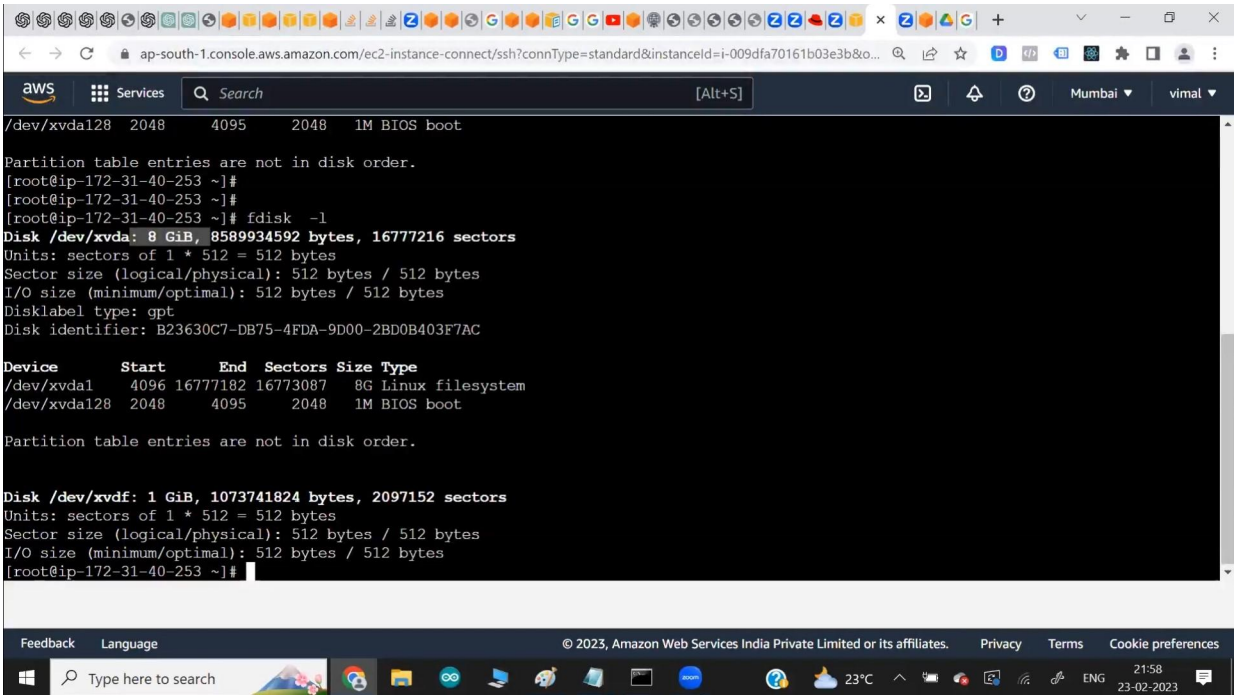
- Click on Attach volume



- Select the OS

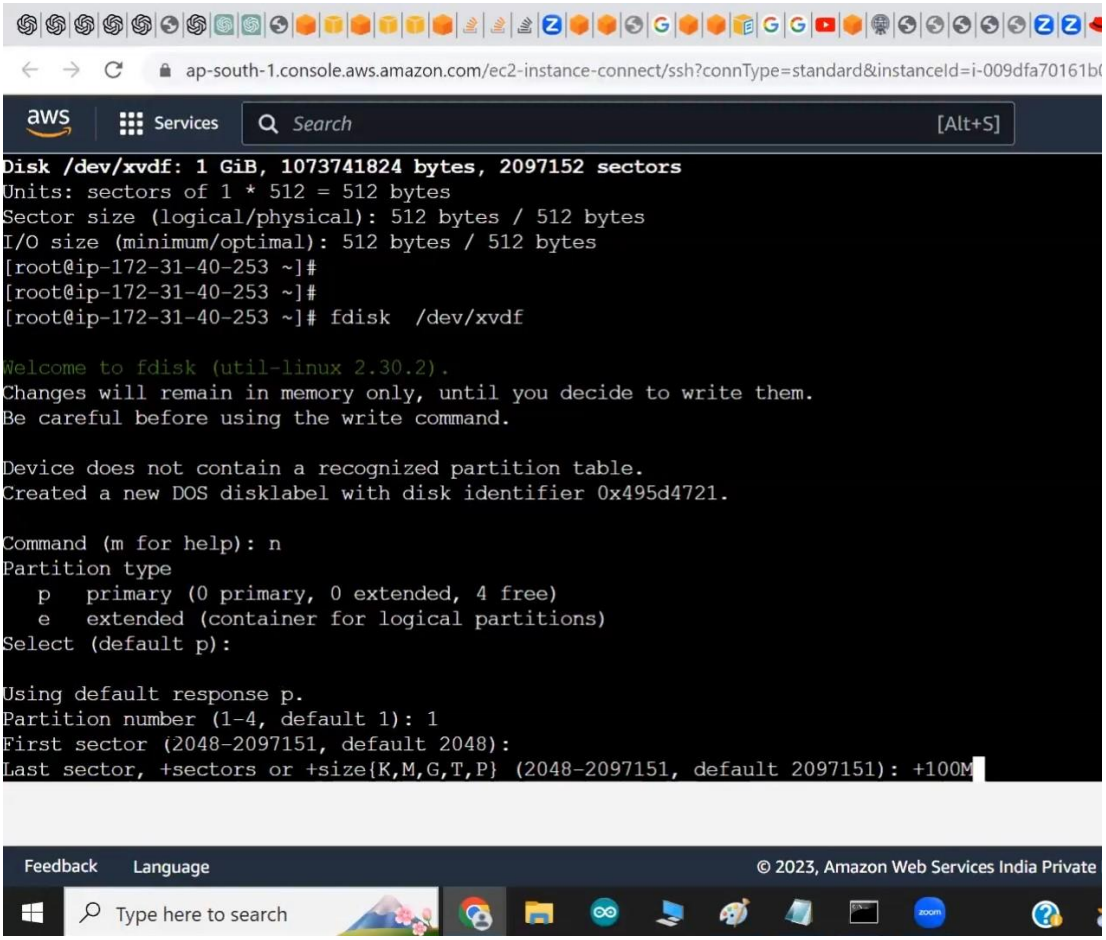


- You can see the Storage attached with **fdisk -l** command

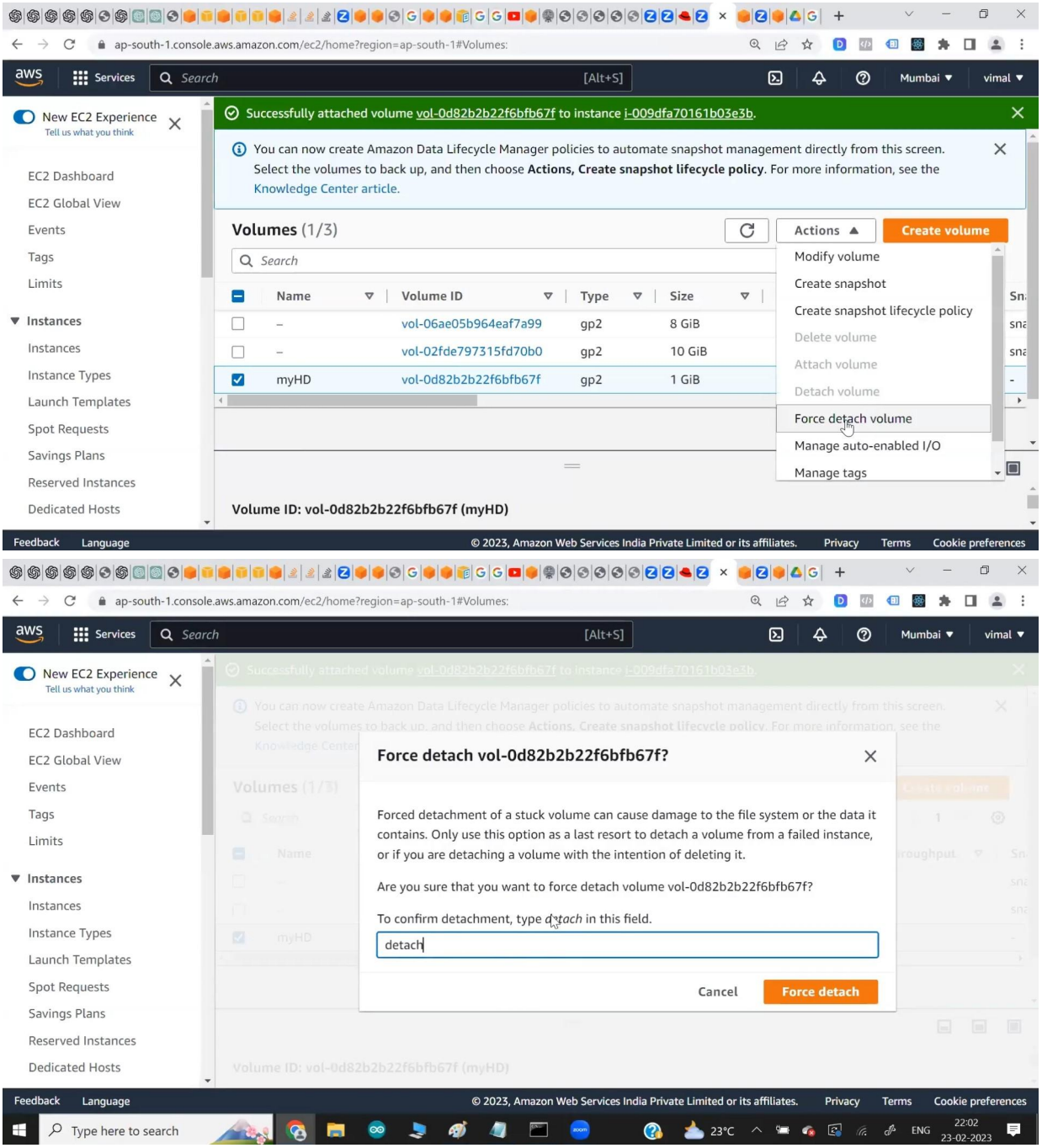


- To create a partition you have to go inside the hard disk with **fdisk /dev/xvdf**

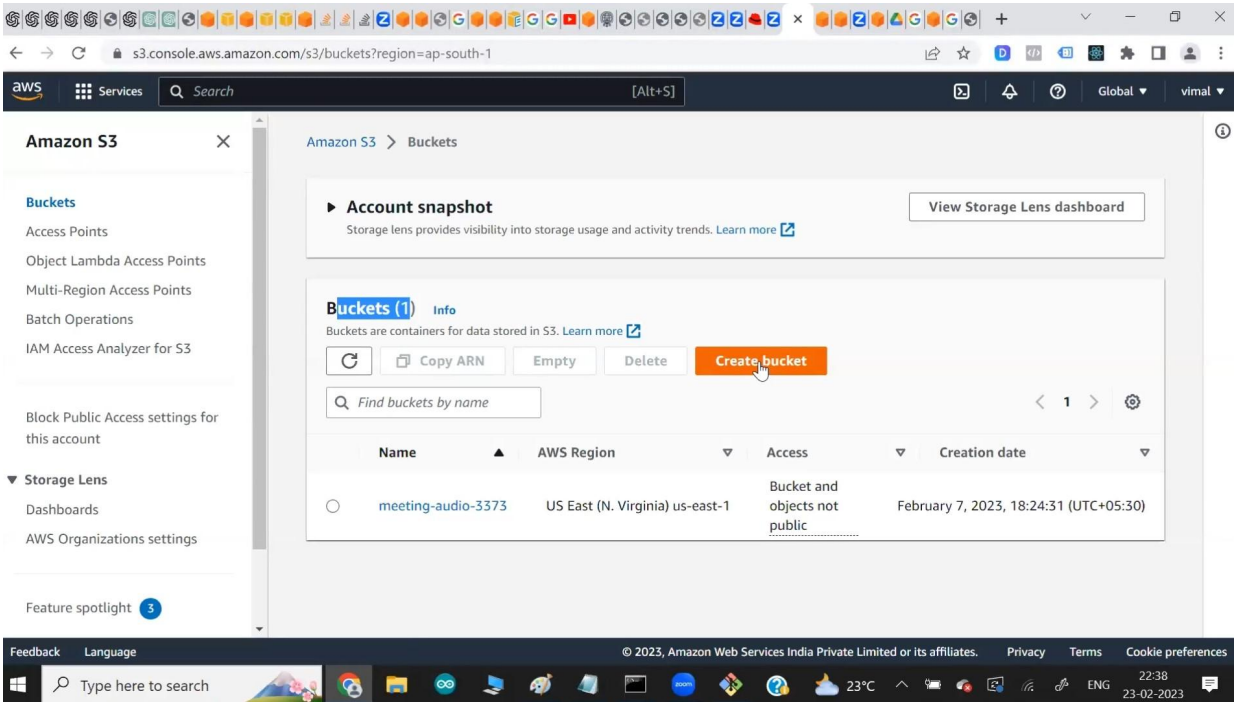
- Type n for new partition
- type p for primary partition
- partition number 1
- command to specify the Size +100M



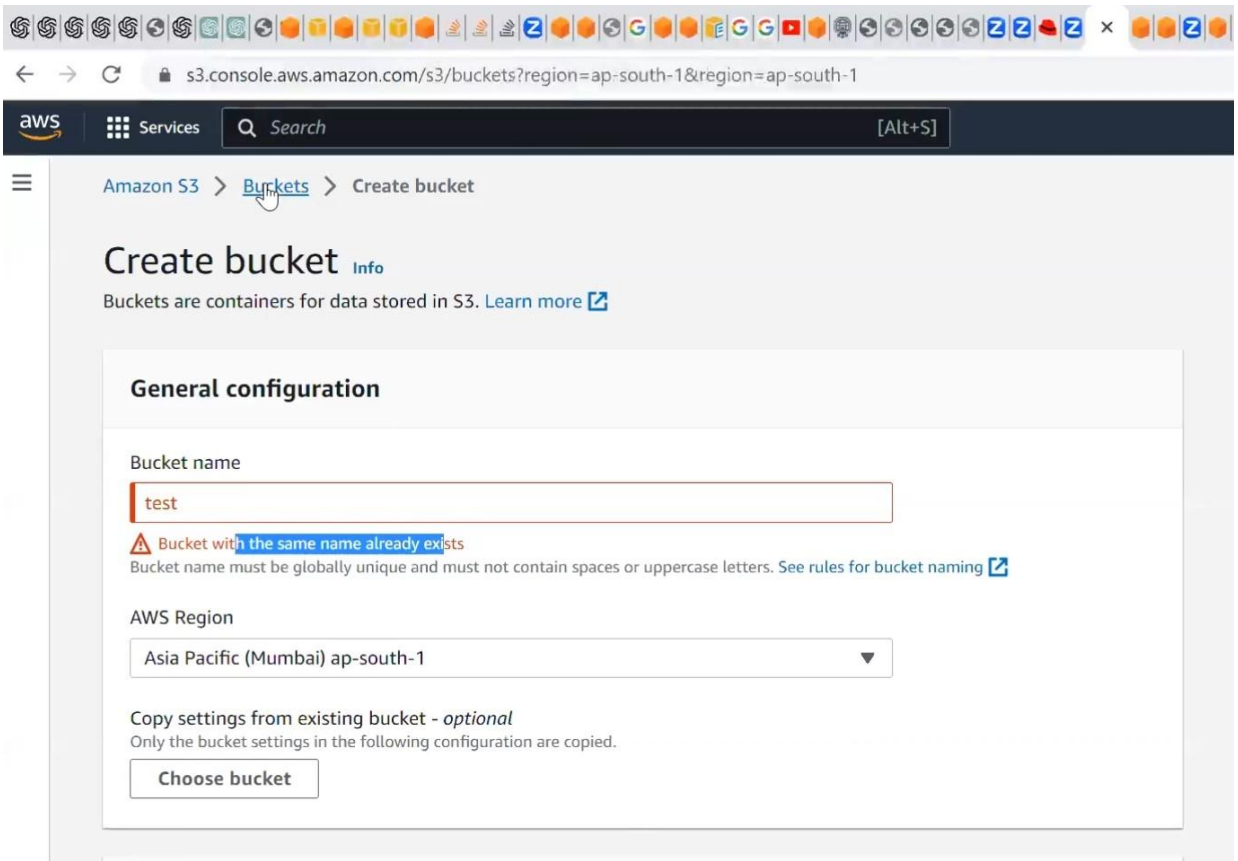
- Type w this command will save the partition
- if you want to remove it, Click on Force detach to remove the hard disk.



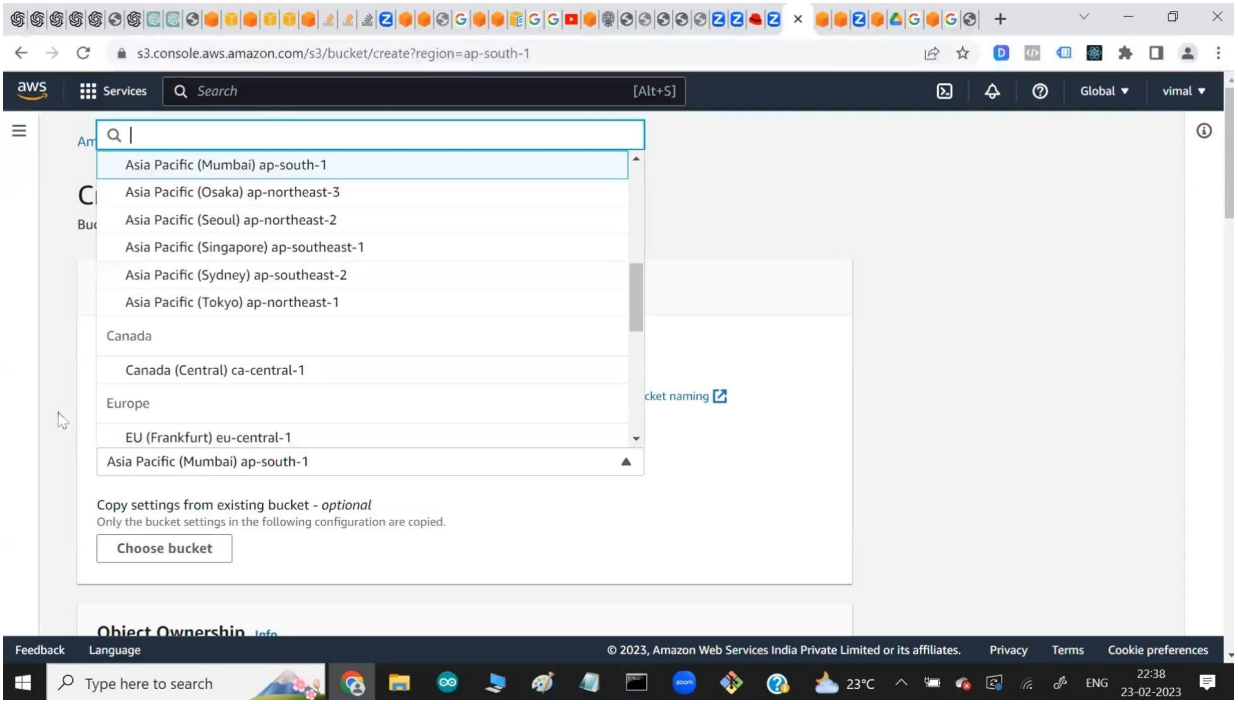
- This hard disk you can Attach to the different instances by clicking on attach volume
- Click on the instance you want to attach. If you want to transfer the data from one VM to another VM this is one of the approach you can use.
- You can Create S3 bucket Click on create bucket.



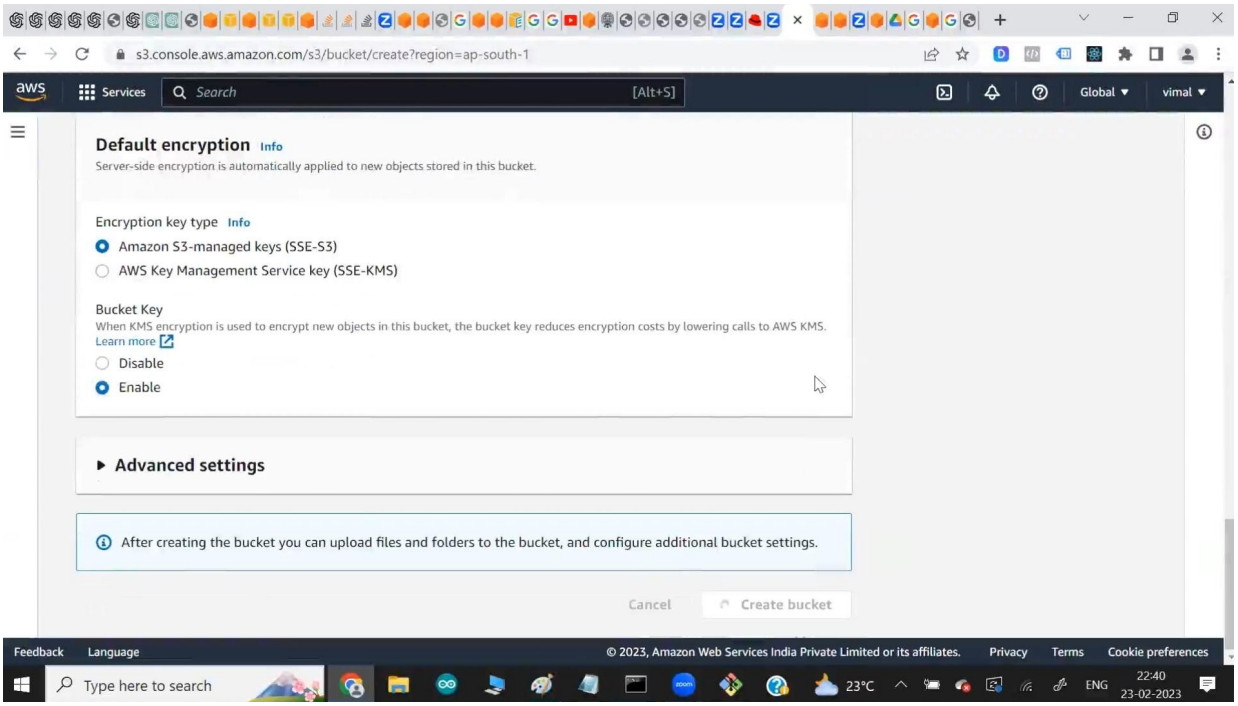
- Enter the name (Remember the name entered should be unique):-

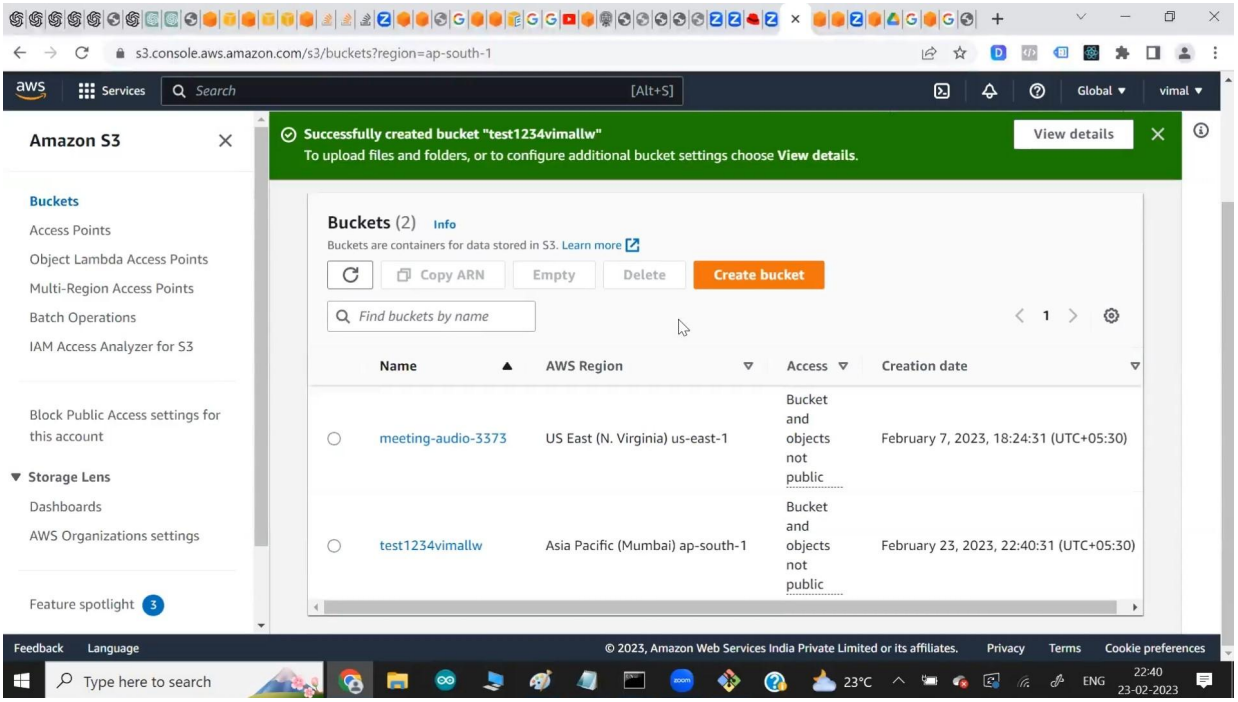


- Select the AWS region

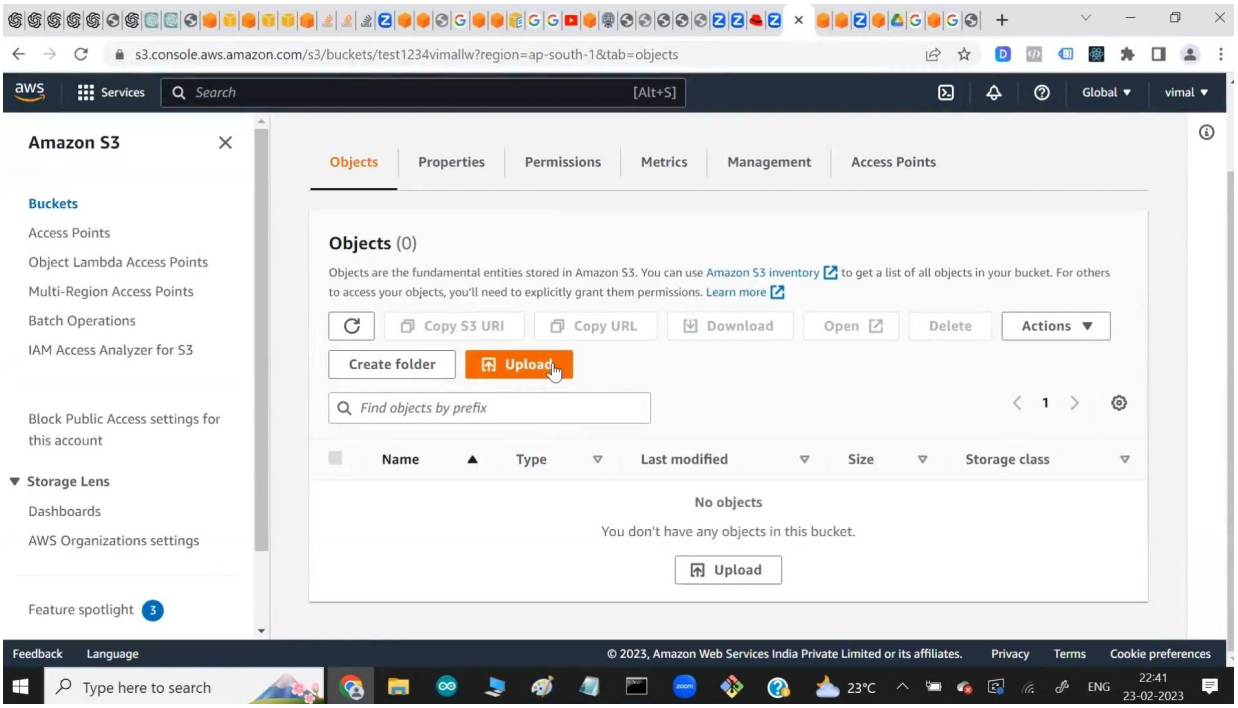


- Click on create a
- bucket and your bucket will be created.

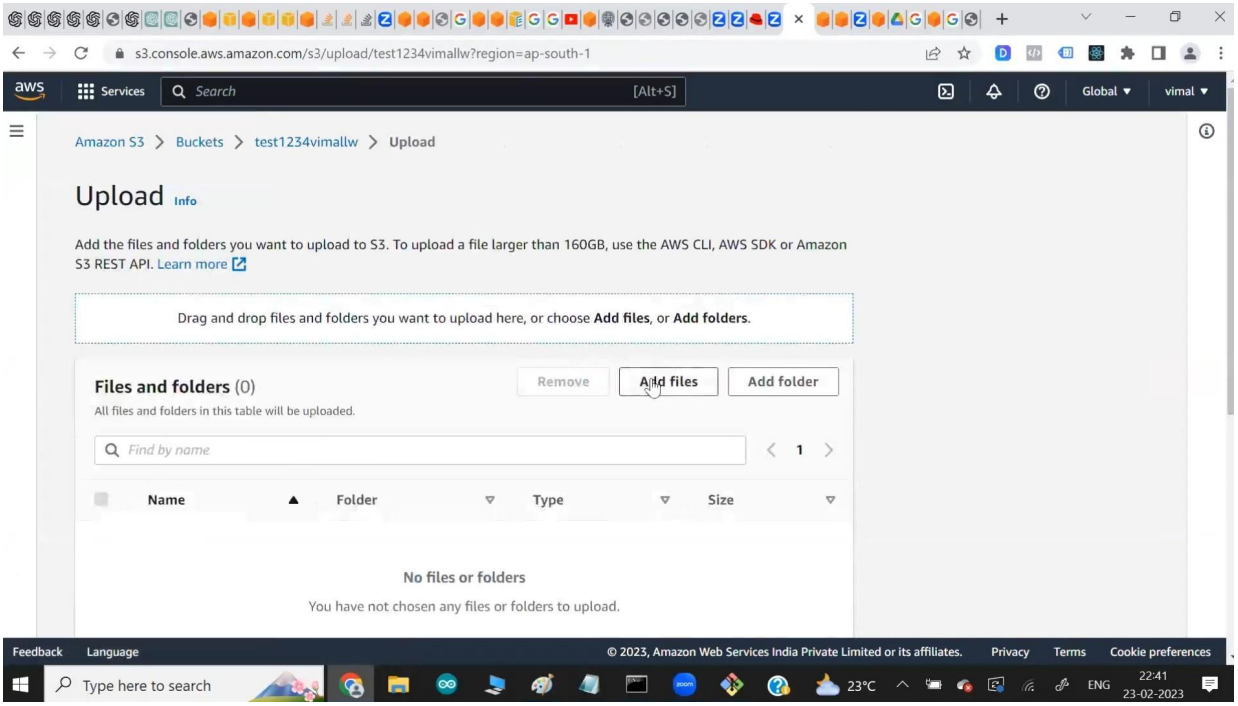


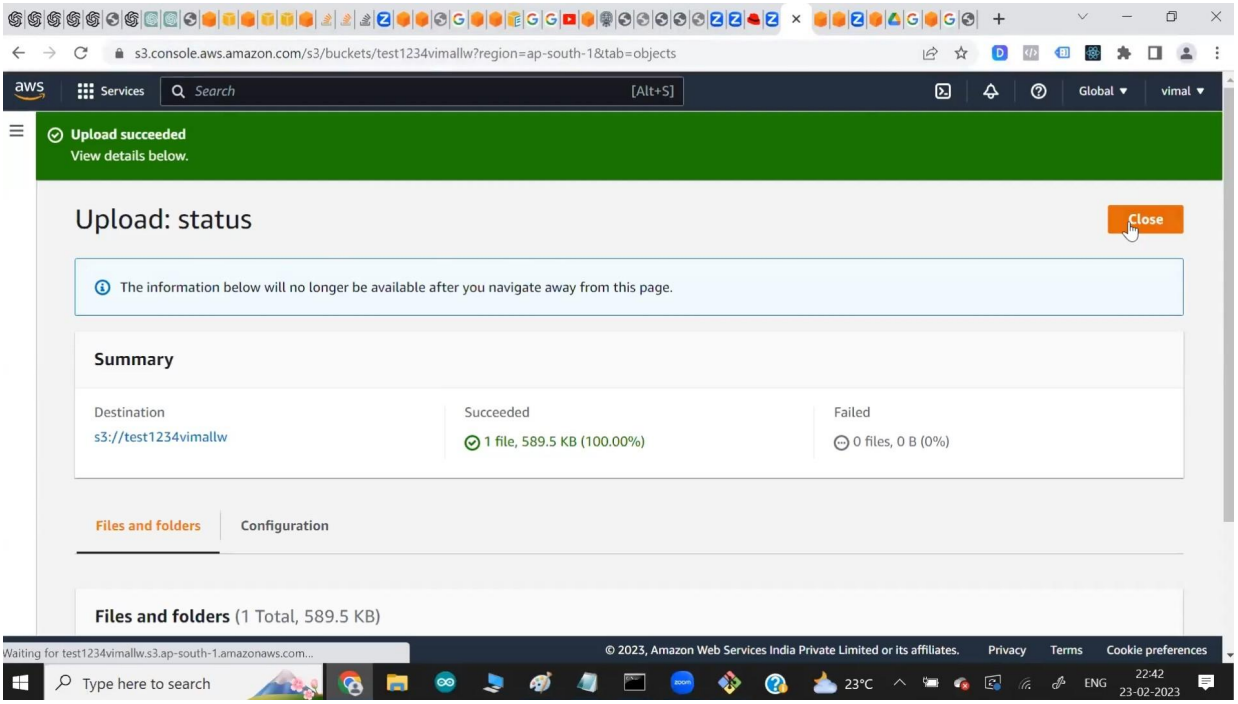


- To upload anything in the bucket click on upload



- Click on the add files and select the file you want to upload in the bucket.





- You can see the file uploaded by simply downloading it or you can also open it through URL, if you want to share this file to someone you can share the URL.
- But before making it public remember to enable the ACL permission otherwise AWS won't allow the client to access the file.