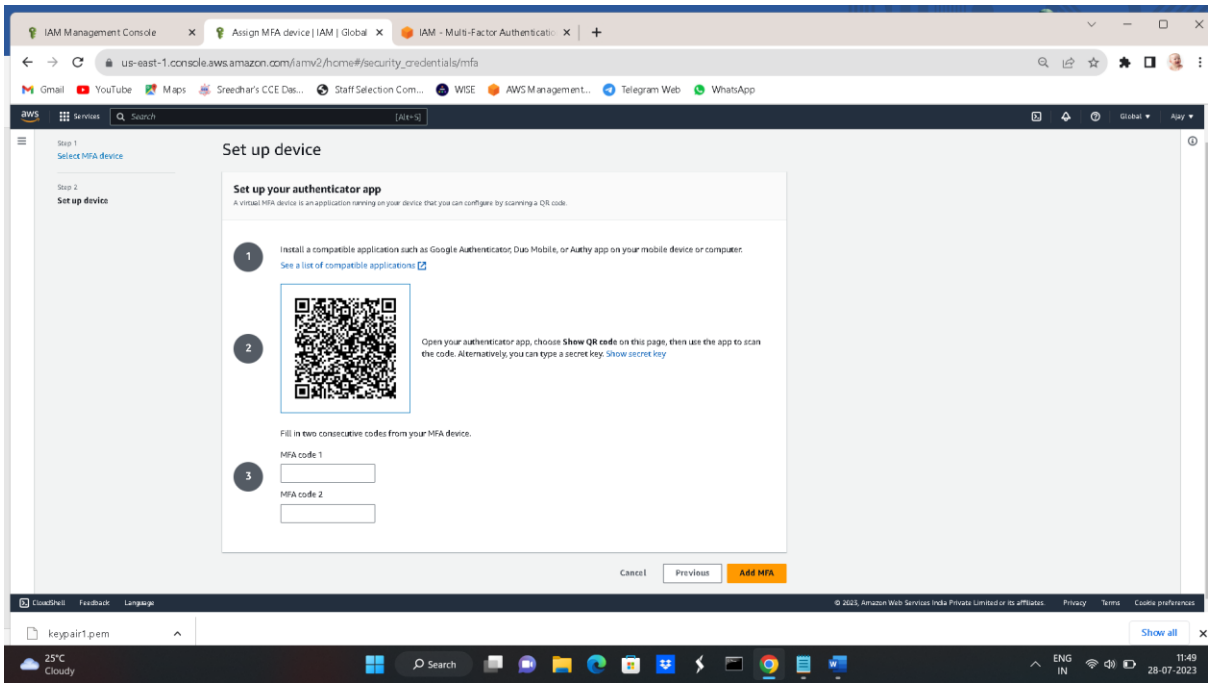
T.Ajay
6301925313

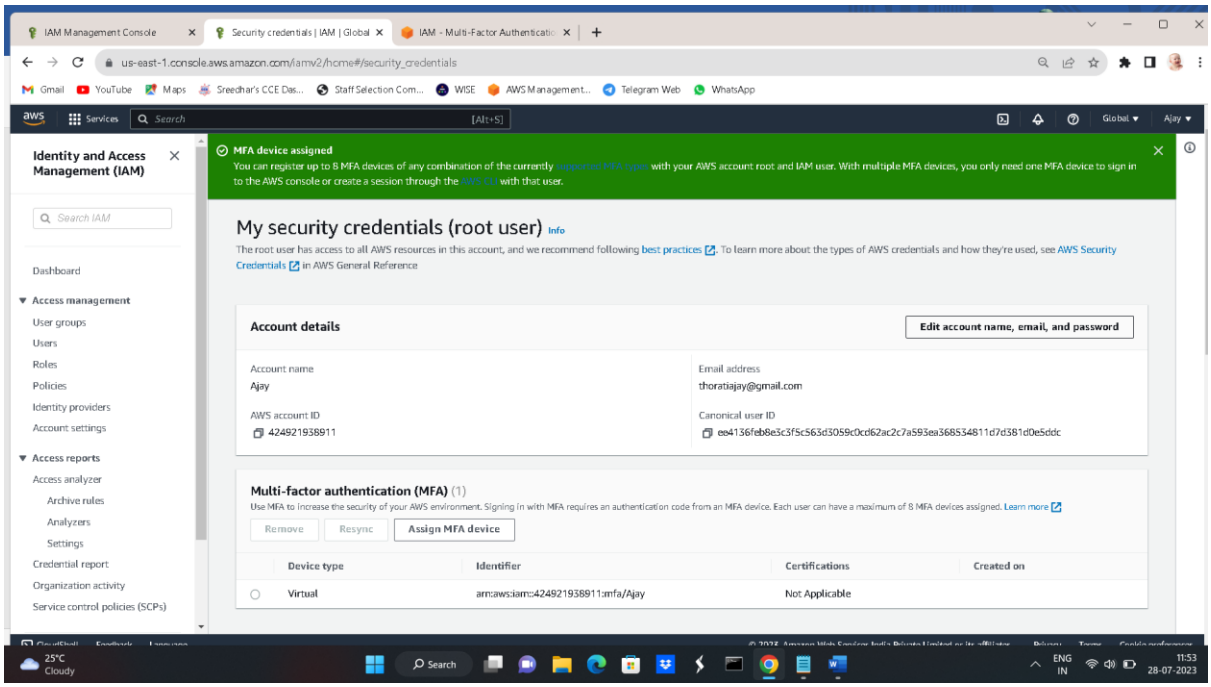
LAB-1

IAM Hands on

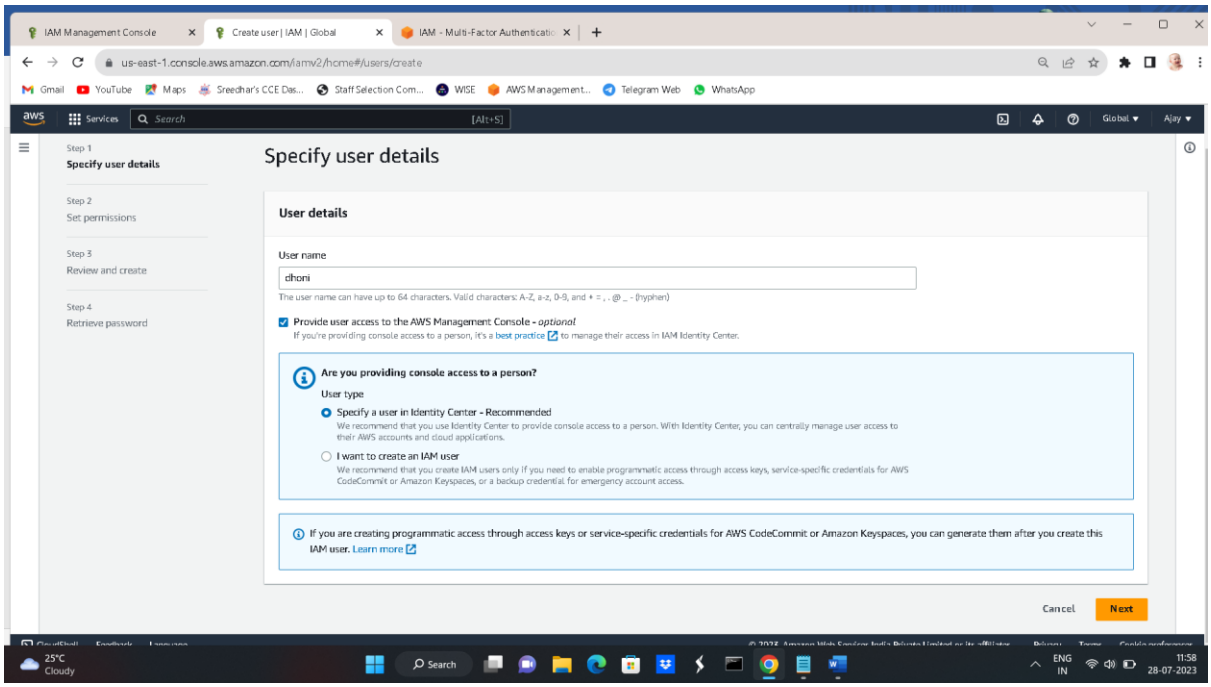
- Creating mfa for root user
- For the creation of mfa you need to install one authenticator app from play store and scan the QR through the app .in that app mfa codes are generated.enter the codes below and click on add mfa.



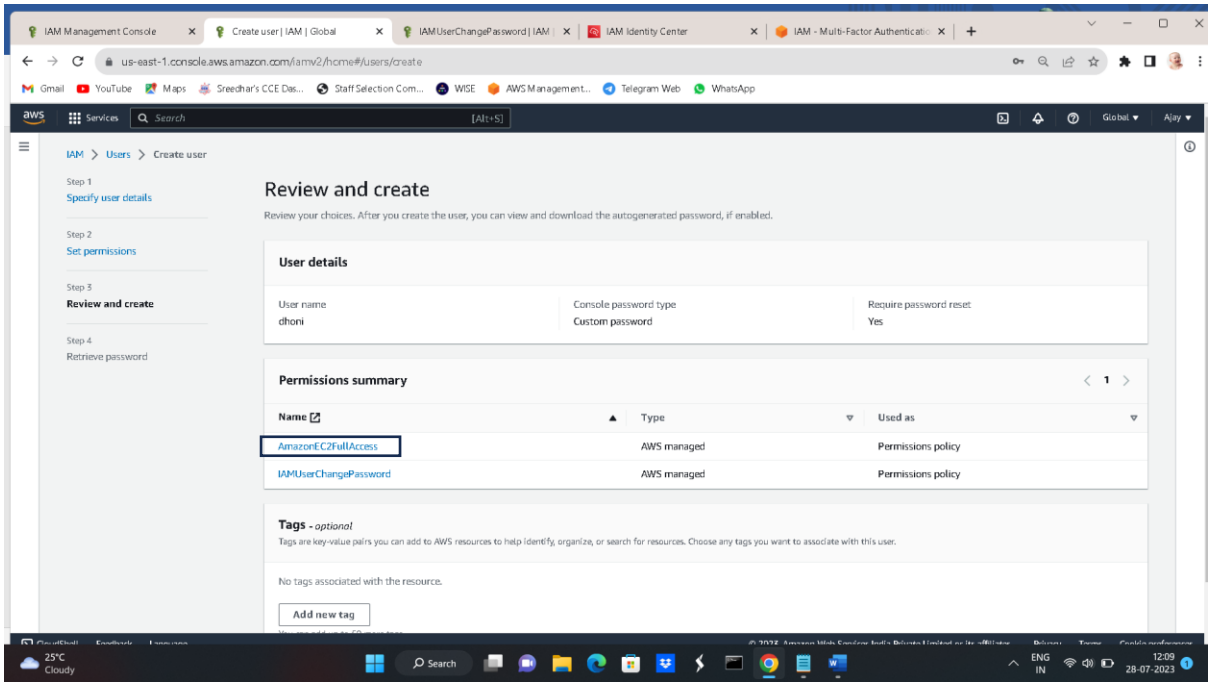
- Mfa is assigned to the user successfully.



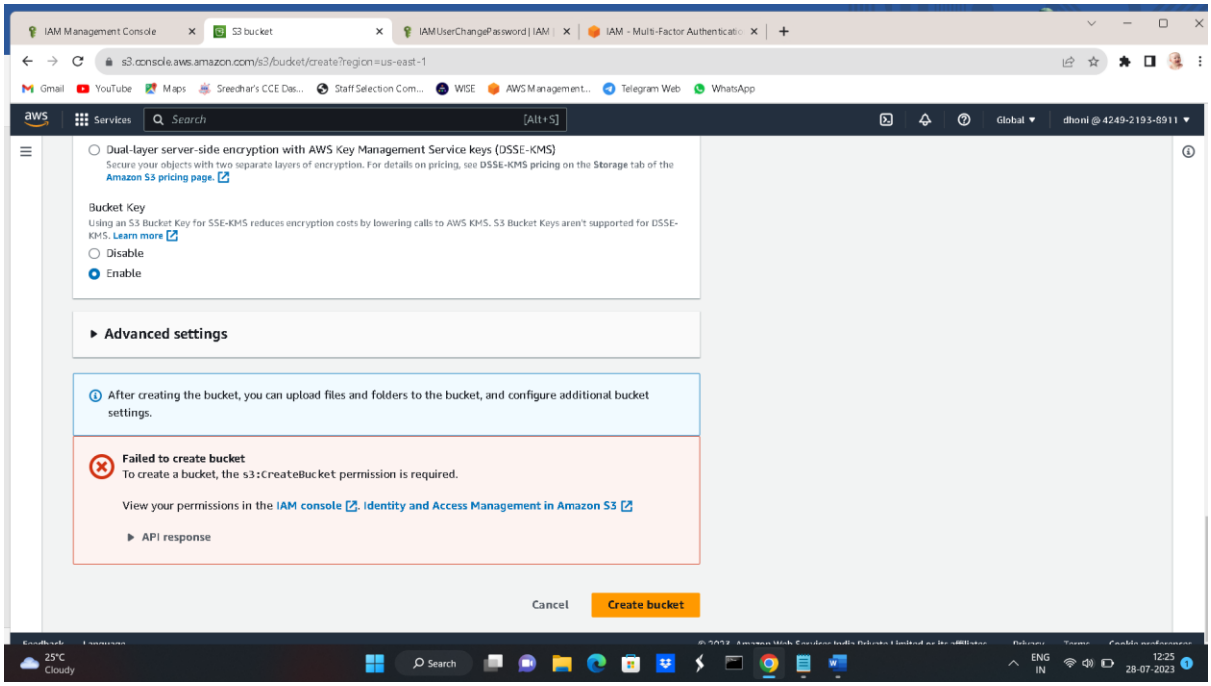
- Creating a new user
- For creating new user go to IAM and goto users and provide name and attach policies to user and create user.



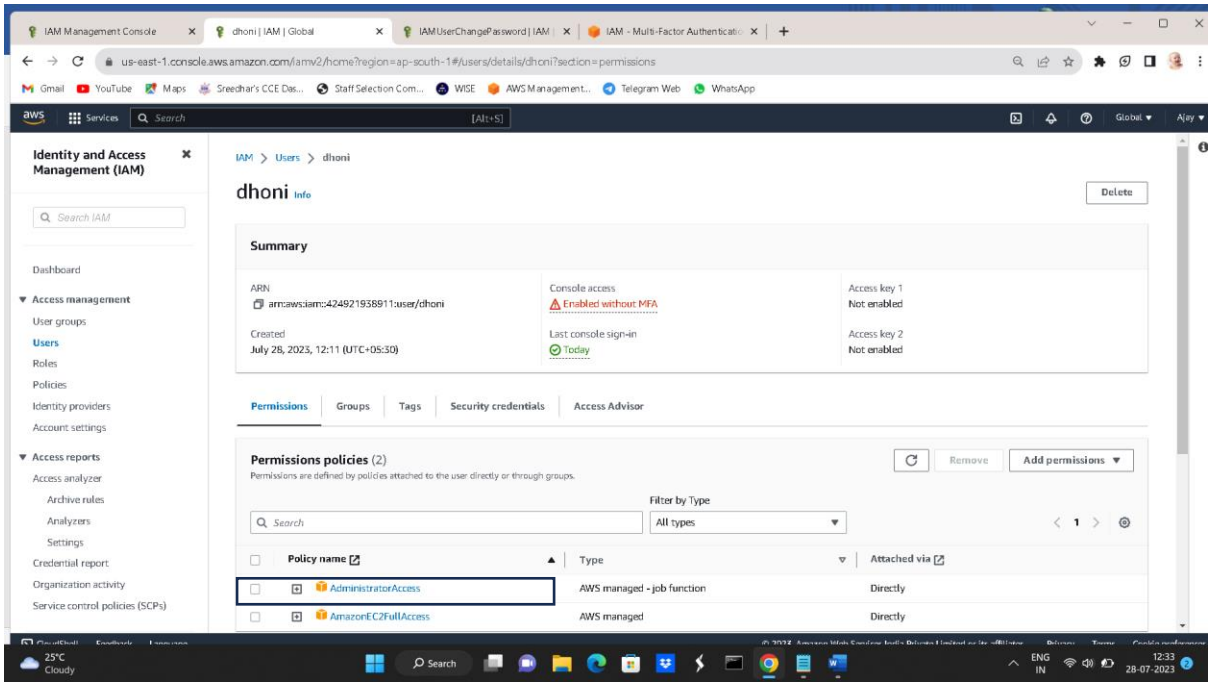
- By default there is no permissions for user you have to attach it. First assign EC2full access and try to access another resource.



- Iam trying to create an s3 bucket it will throw an error as permissions are required.



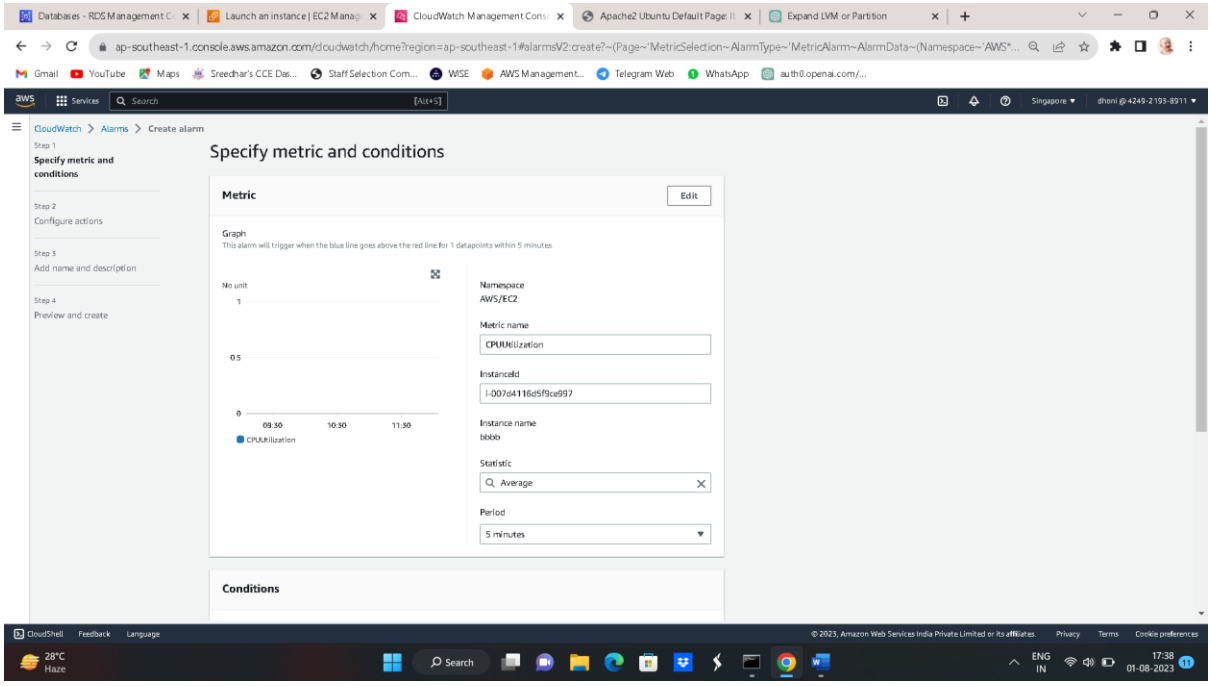
- Adding administration access to the user then you have to access all the all services.



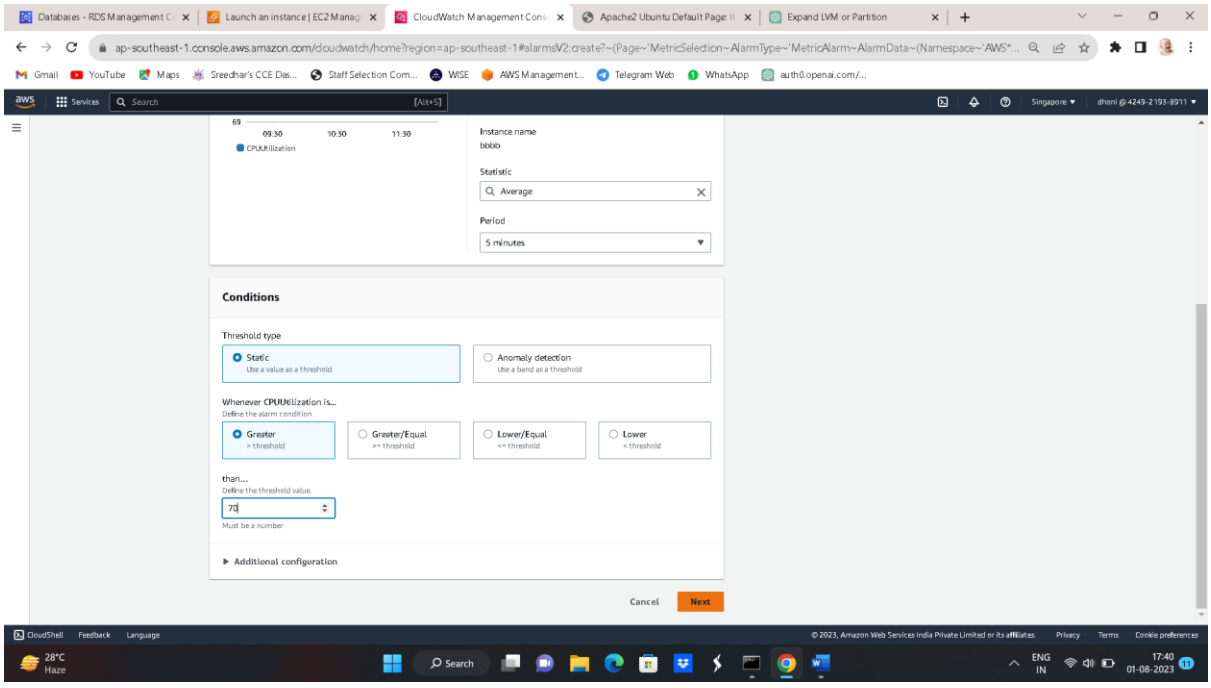
LAB-2

Billing alarm

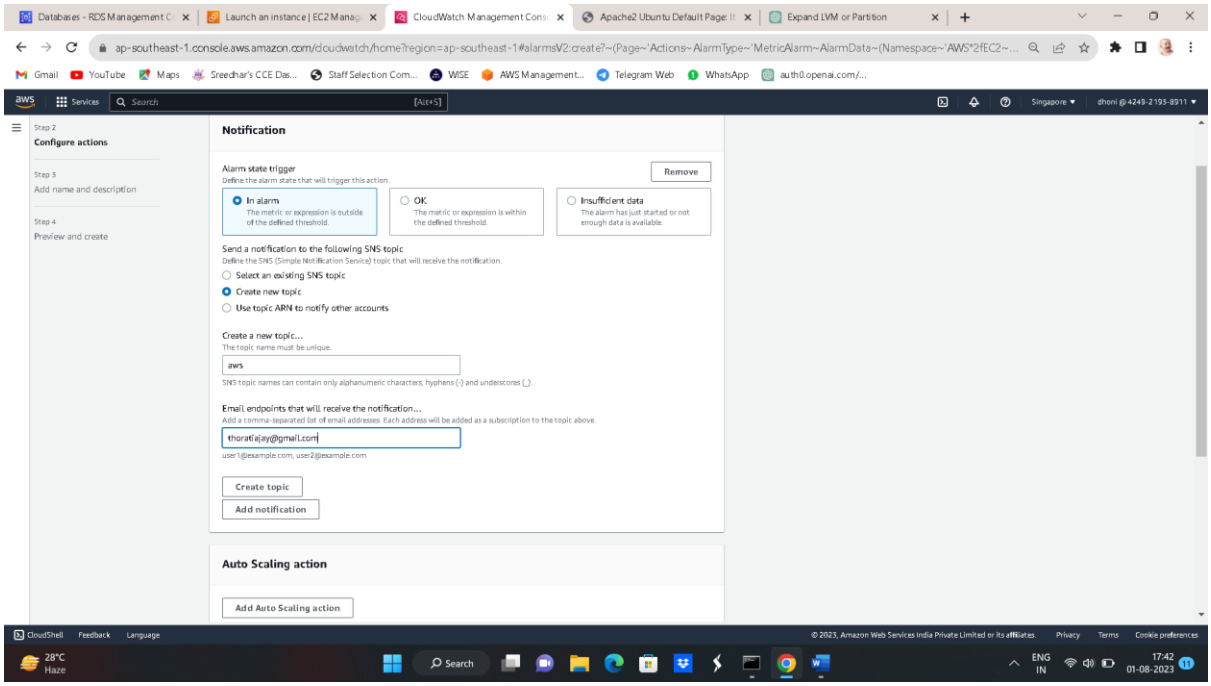
- Creating billing alarm for your account to get a notification whenever you cross the billing threshold.
- For the creation of alarm go to cloud watch and click on create alarm and select metric



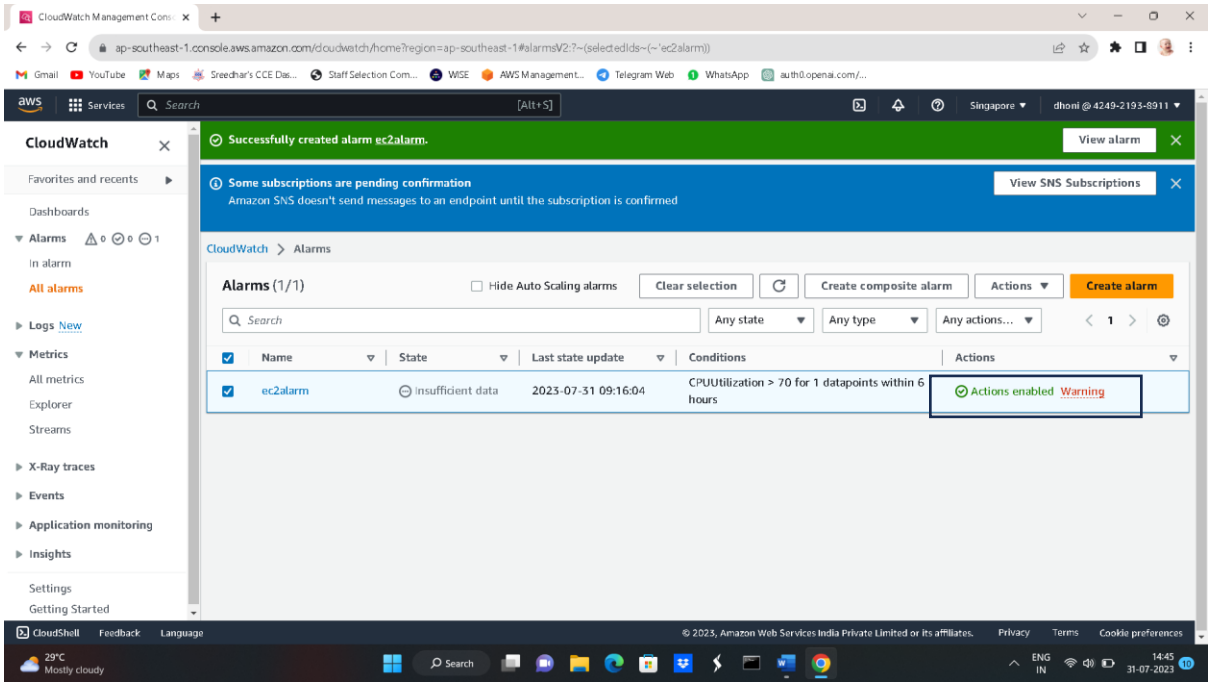
- Setup your conditions and threshold values.



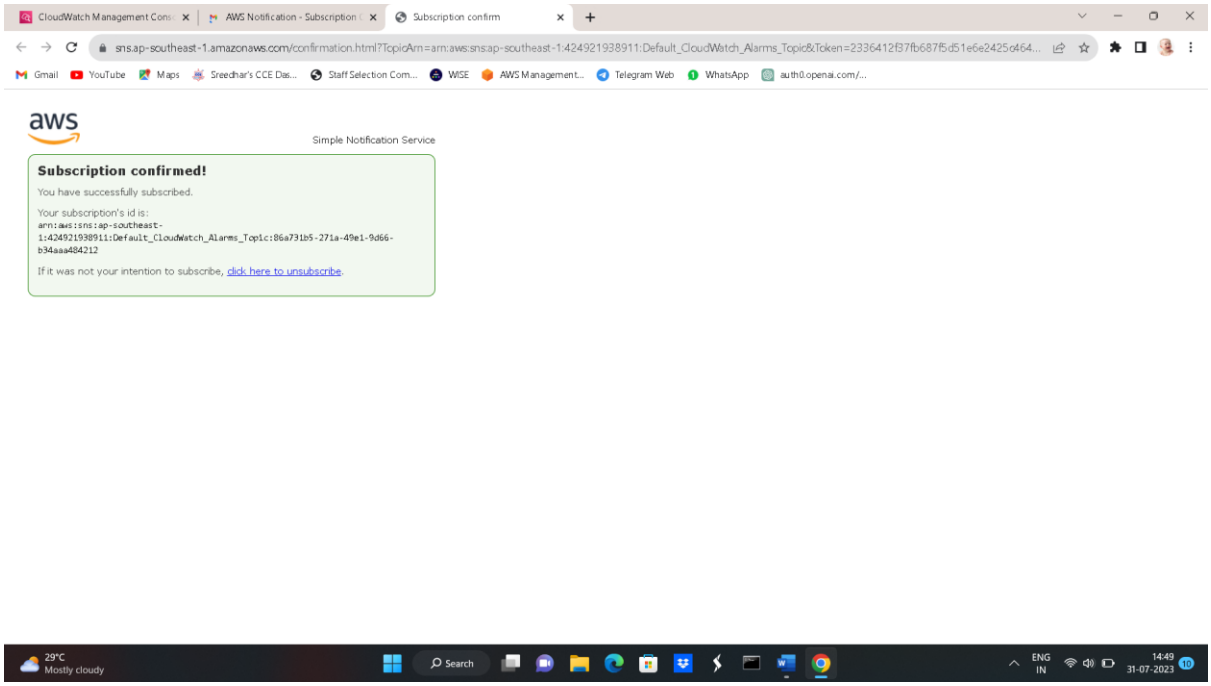
- Create an SNS topic with your email.



- In the next step add name and configuration and click review and create.
- Alarm is created but we need to confirm the subscription via email.



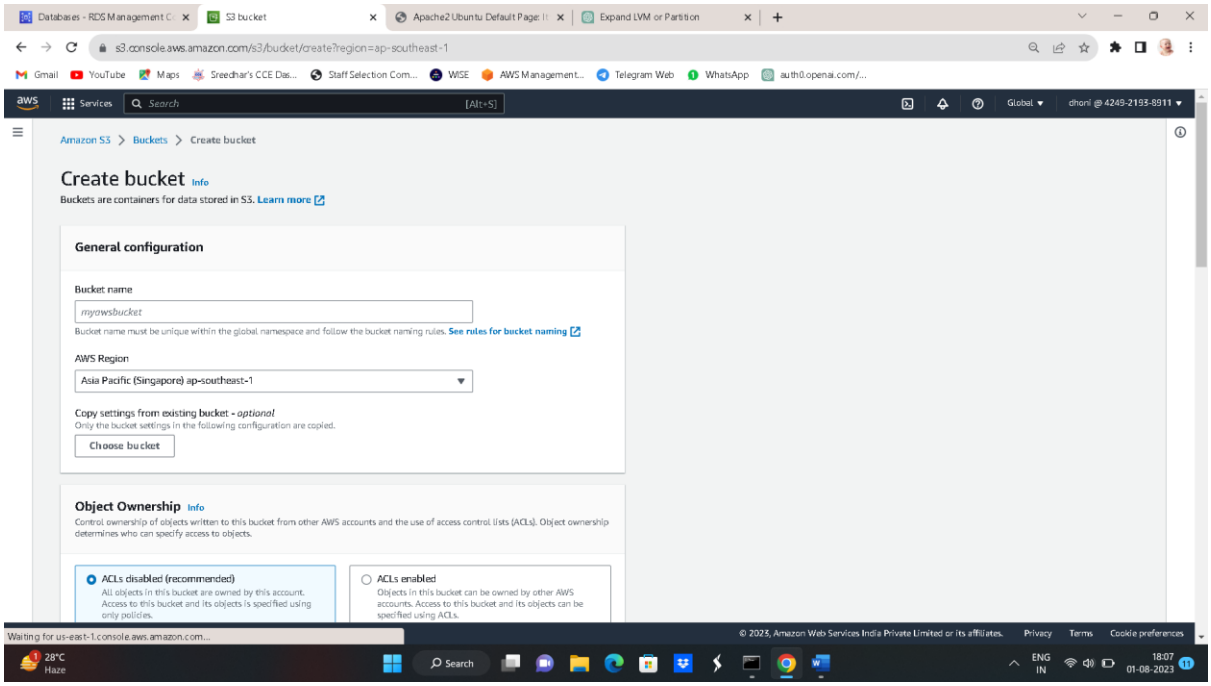
- Open your email and confirm the subscription then you will get alarm notifications to your mail.



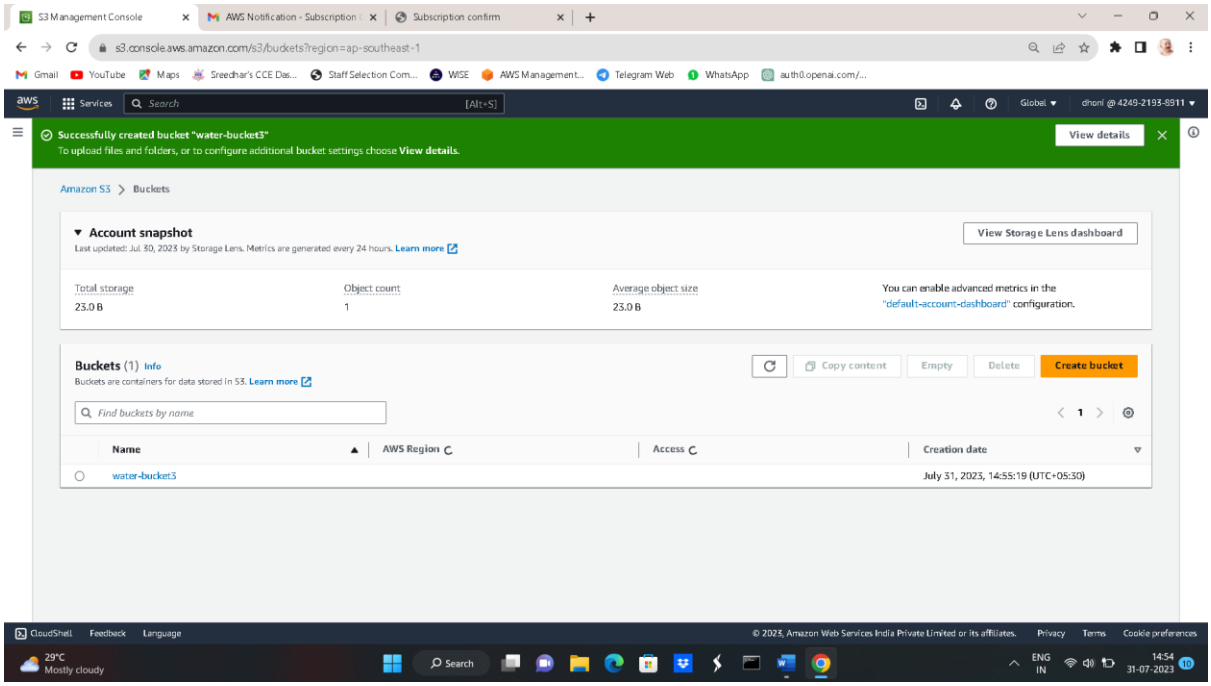
LAB-3

S3 bucket

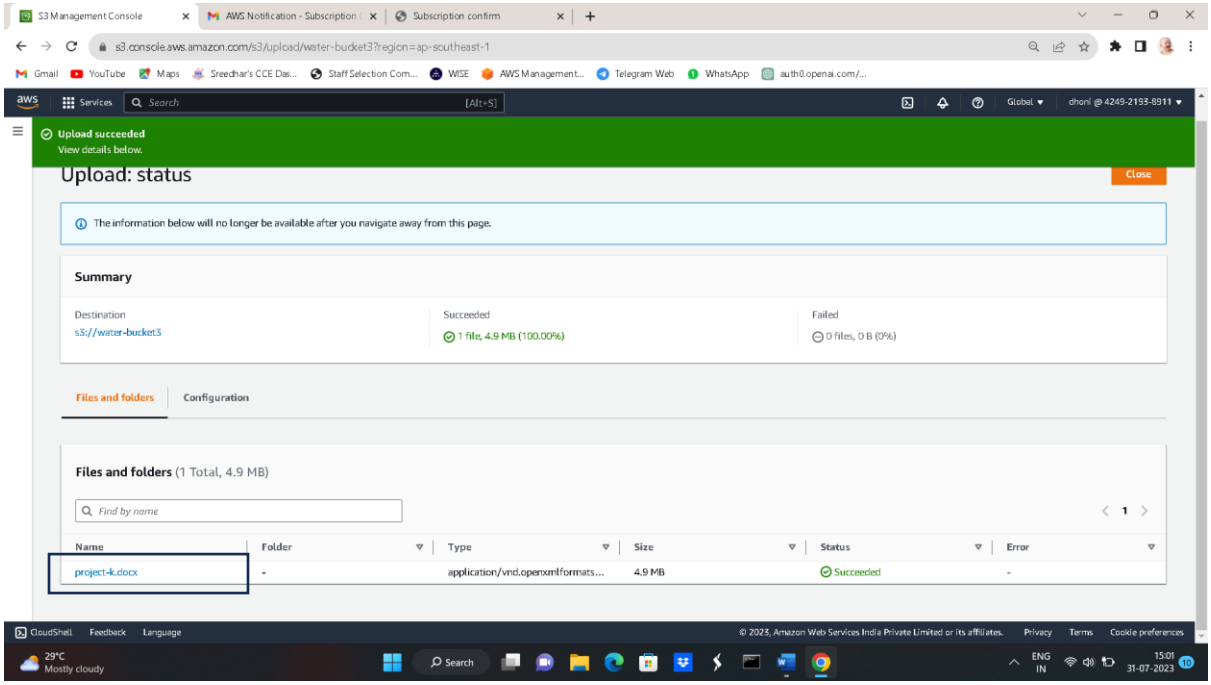
- Creating an s3 bucket with unique name
- For the creation of s3 bucket goto s3 bucket click on create bucket and give bucket name and ACL's disable and don't give any public access.



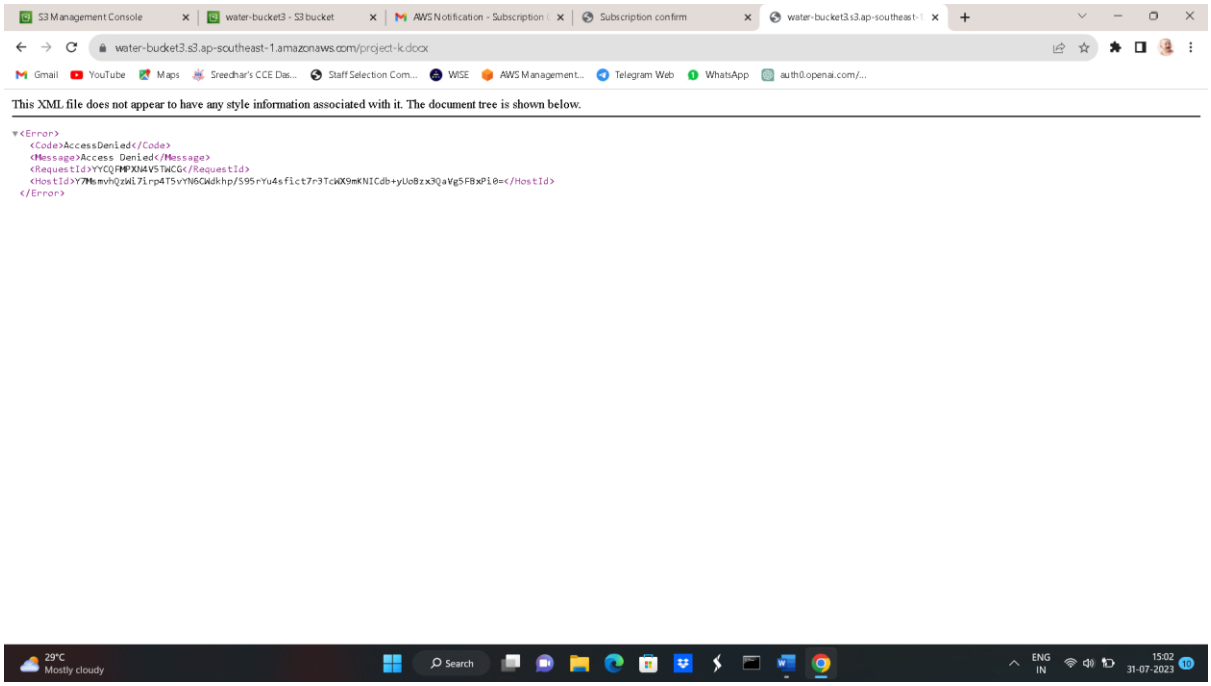
- Bucket created successfully.



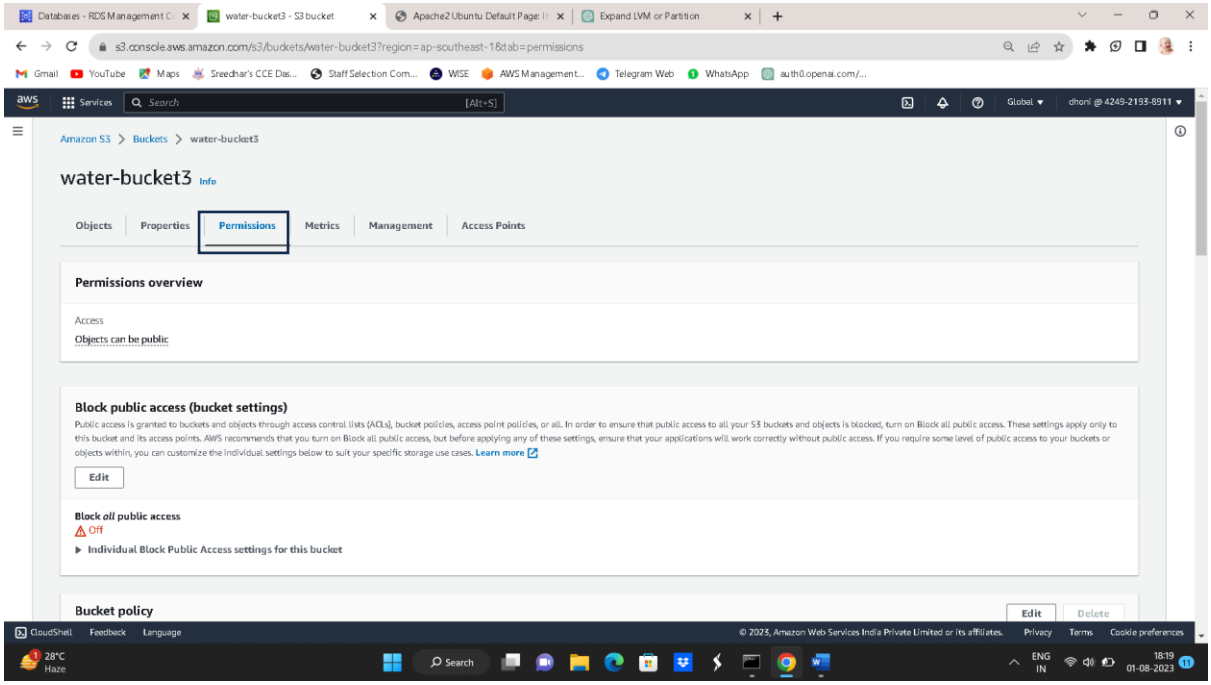
- Enter into the bucket and Add some file into that bucket by using upload file icon.



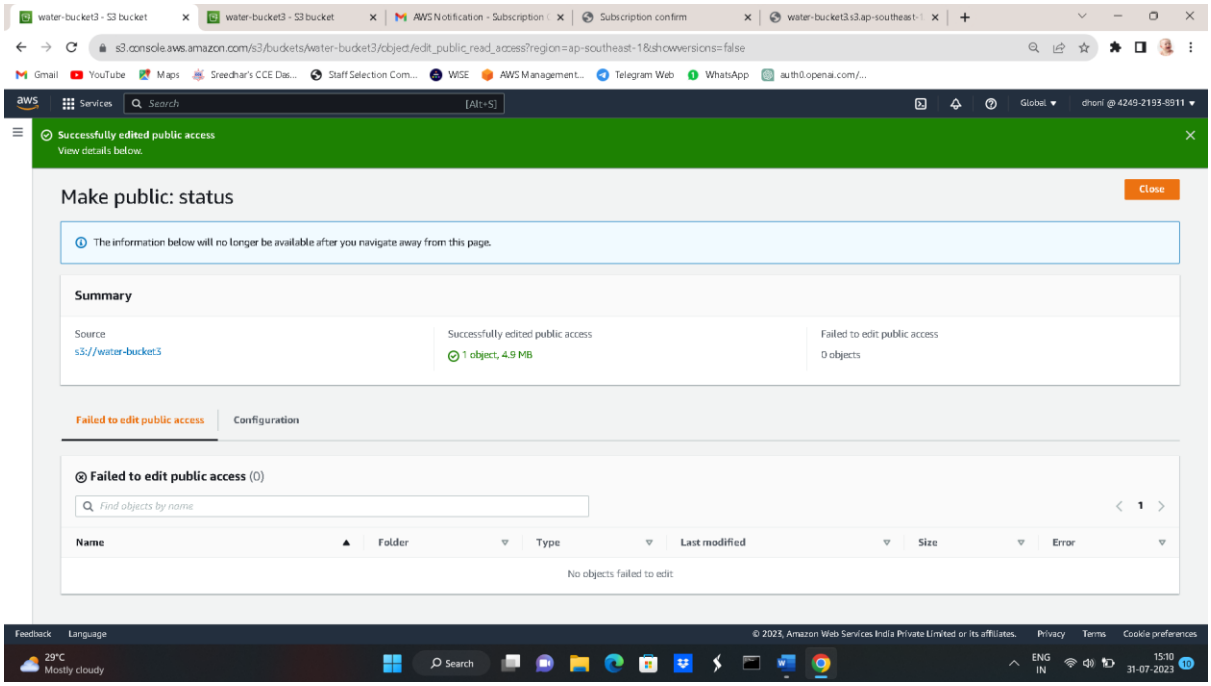
- Try to access the file by copying the url it throws an error because we are not give public access to that bucket.



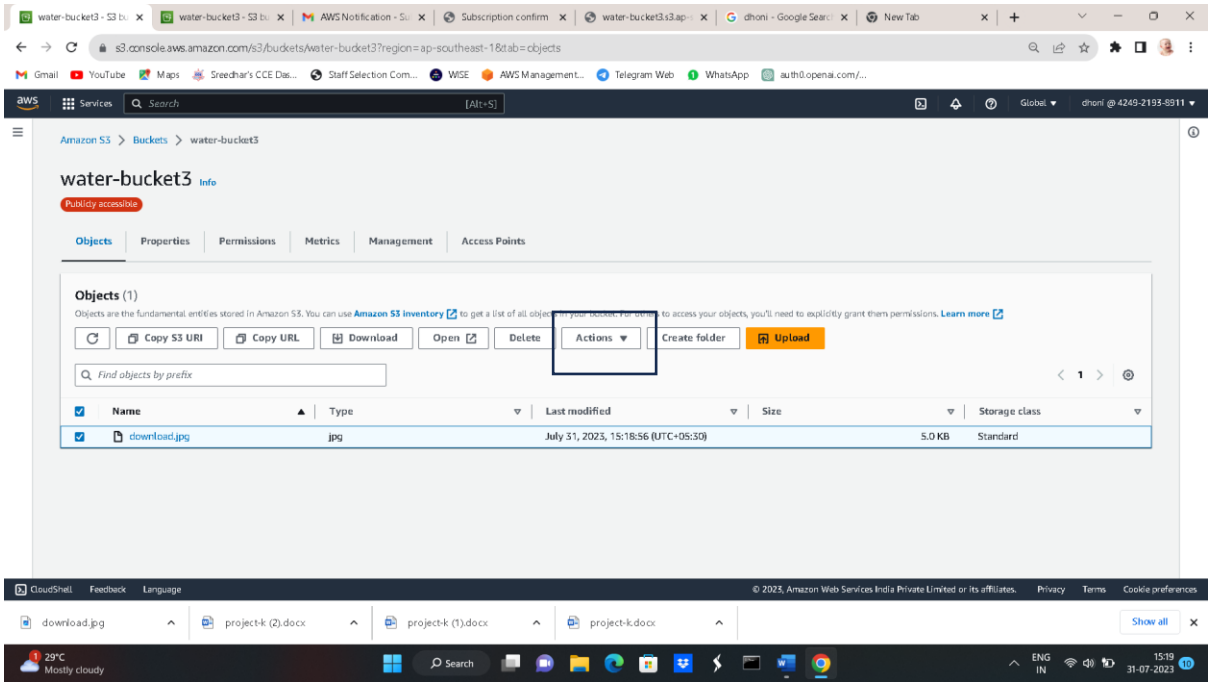
- Modify the permissions of the bucket and enable ACL's in the permissions.



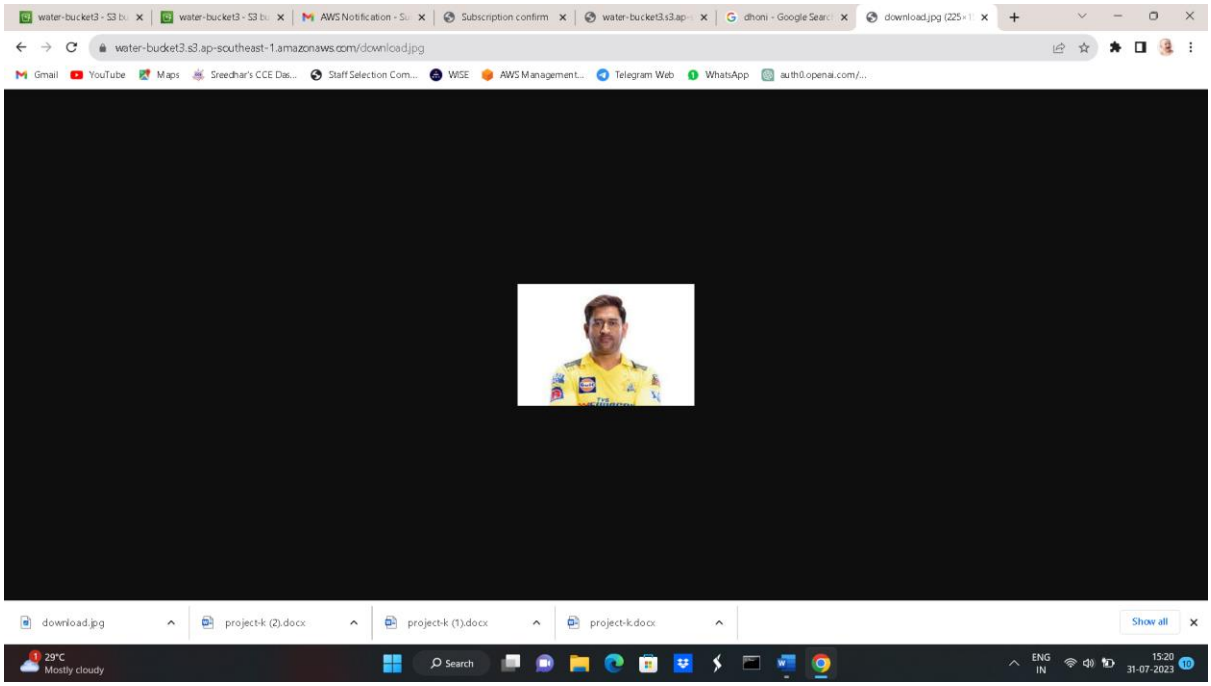
- Successfully added the public access.



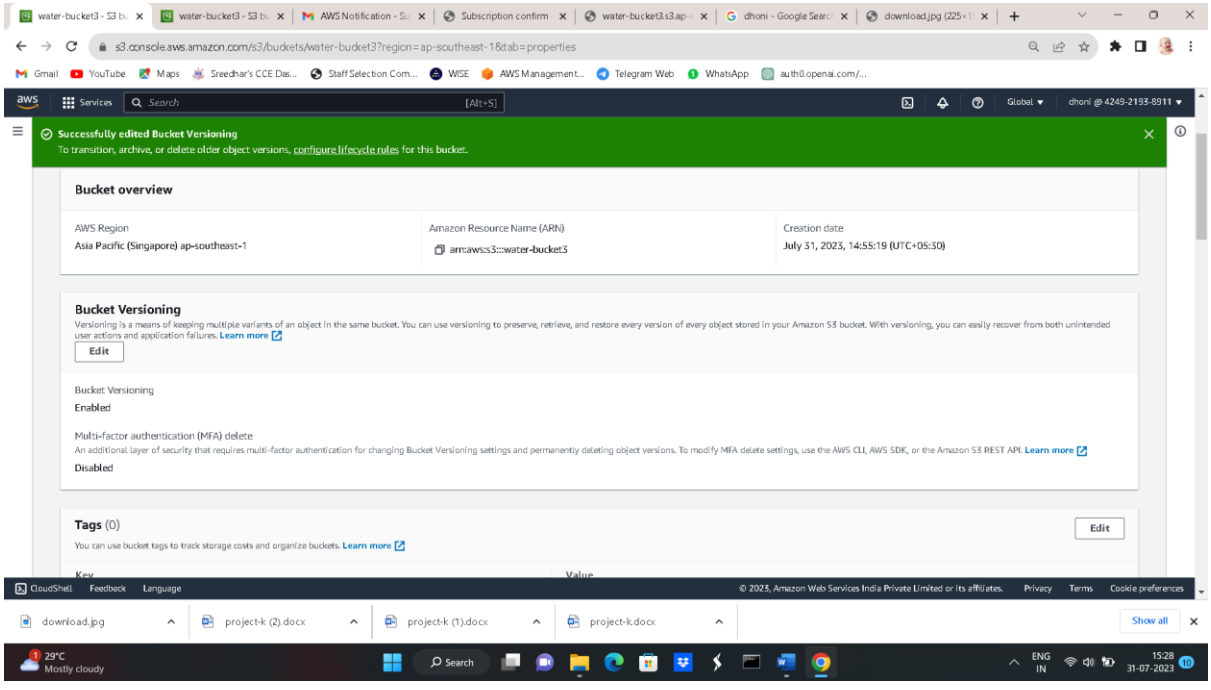
- Upload the file and in the go to actions and select make the object public.



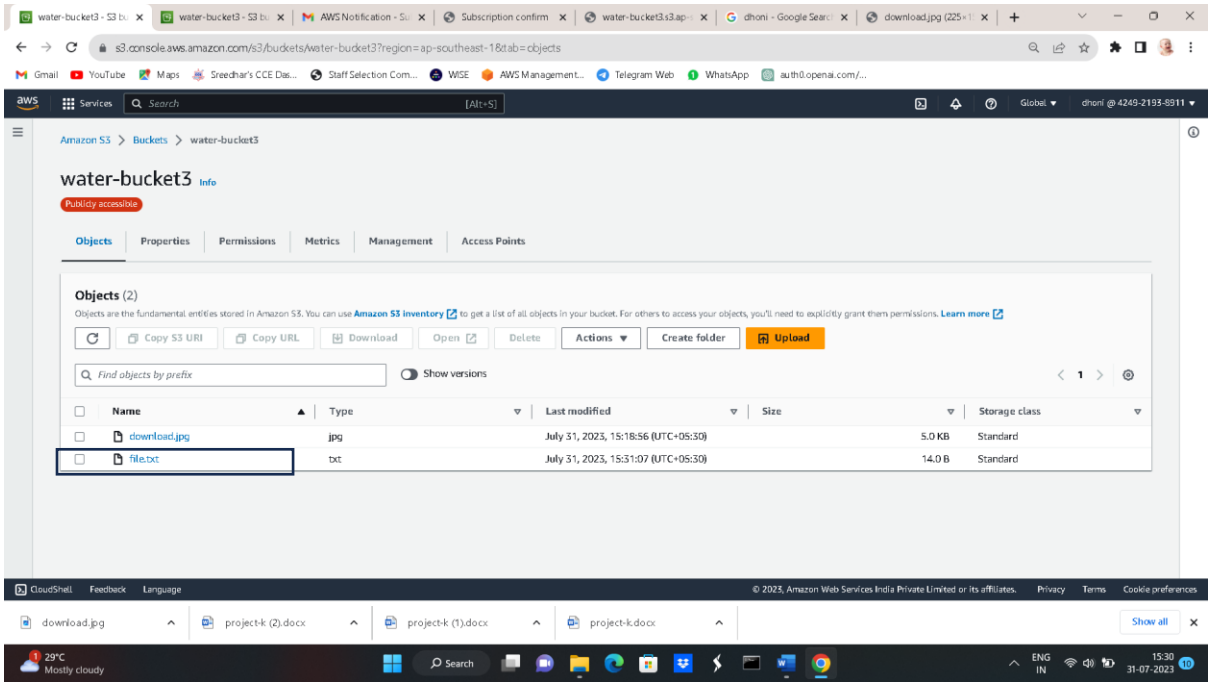
- Copy the URL of that file and paste in browser now you can access file publicly.



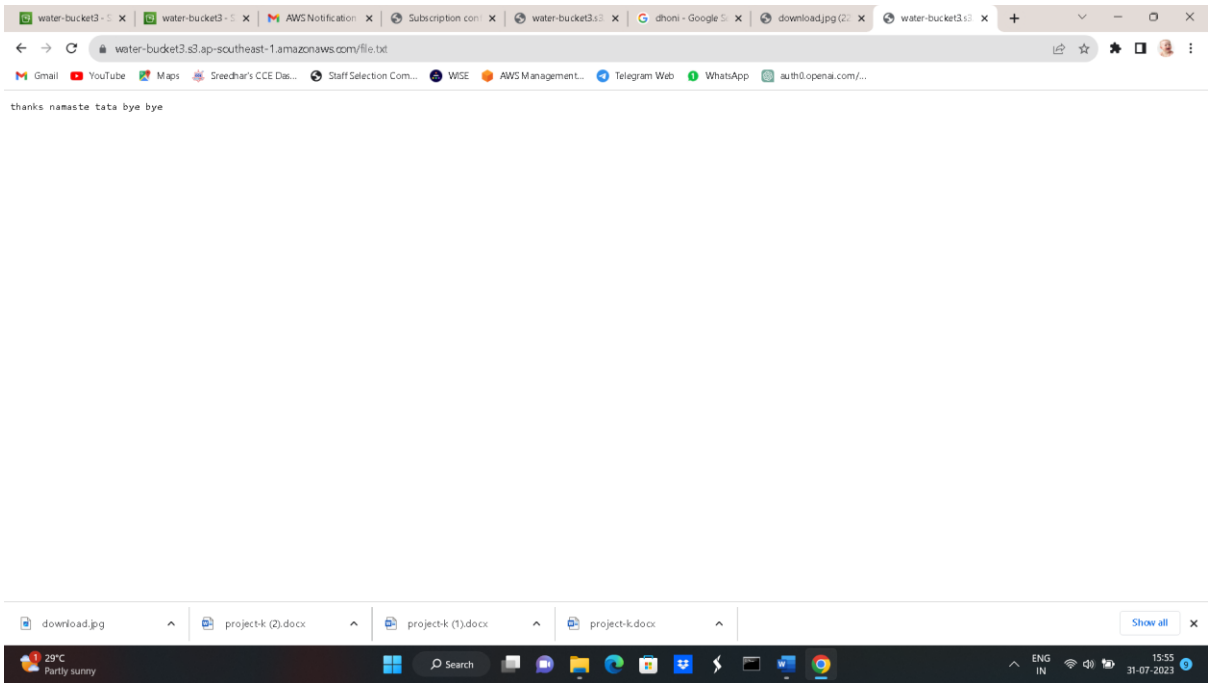
- Now enable the versioning of the bucket so that you can retrive your file after deletion.



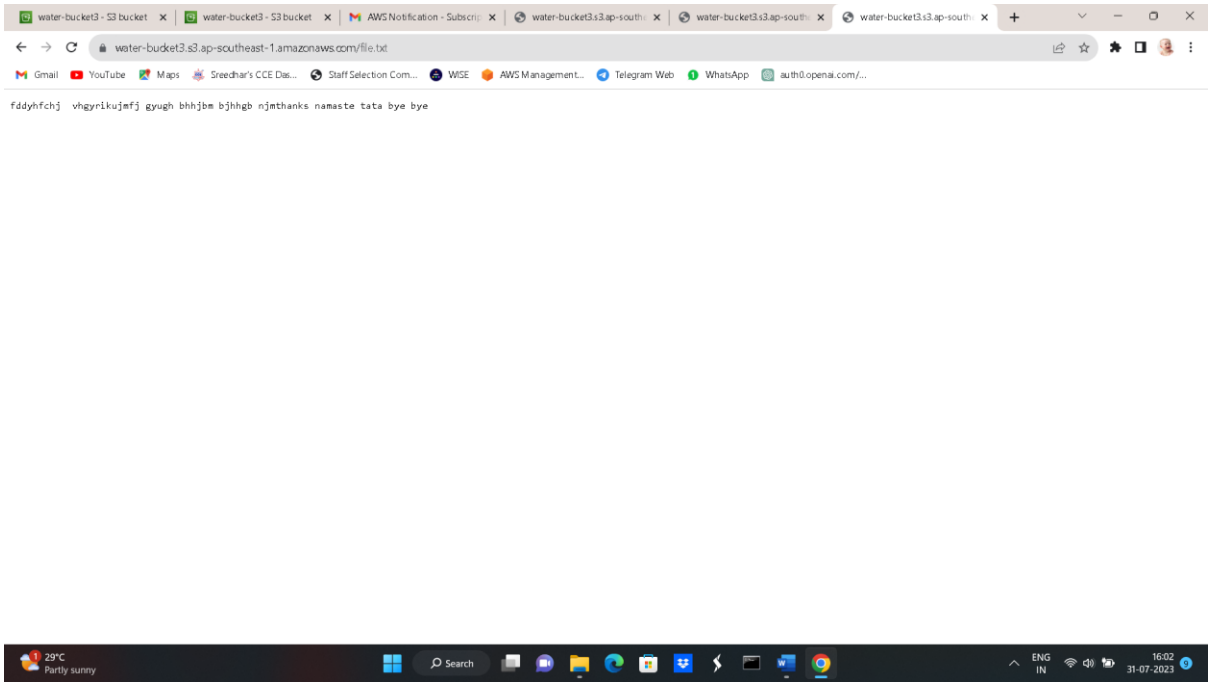
- Created a text file and uploaded in the bucket



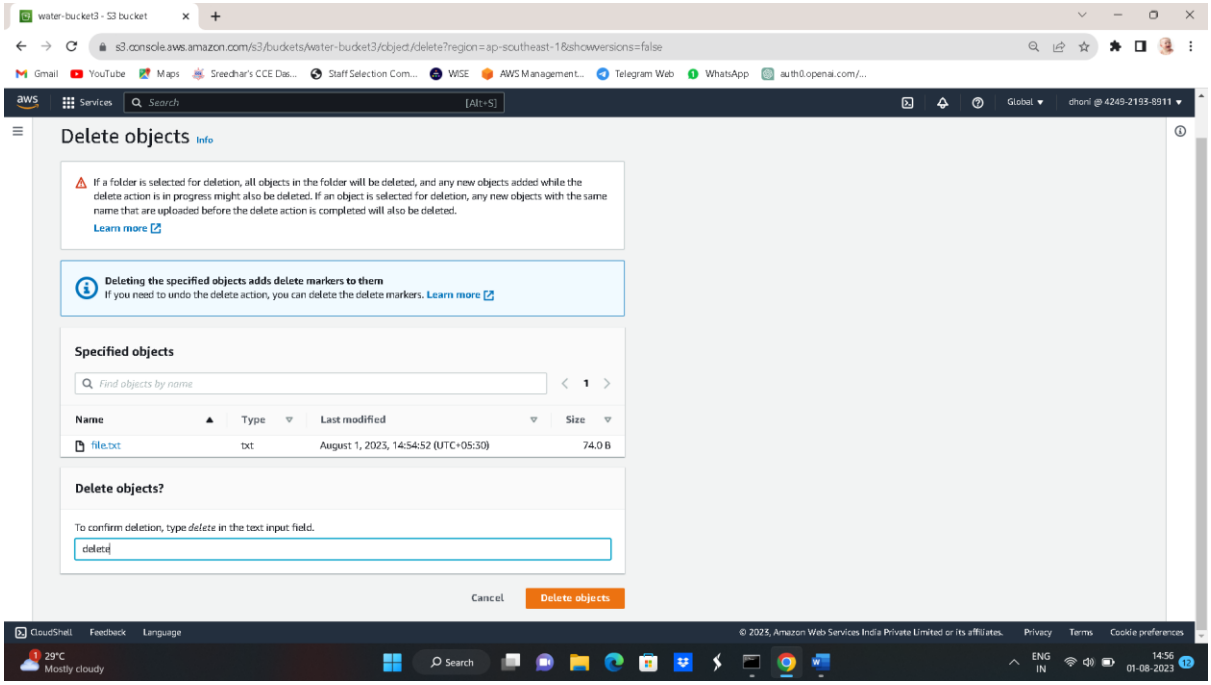
- Check the content of the file



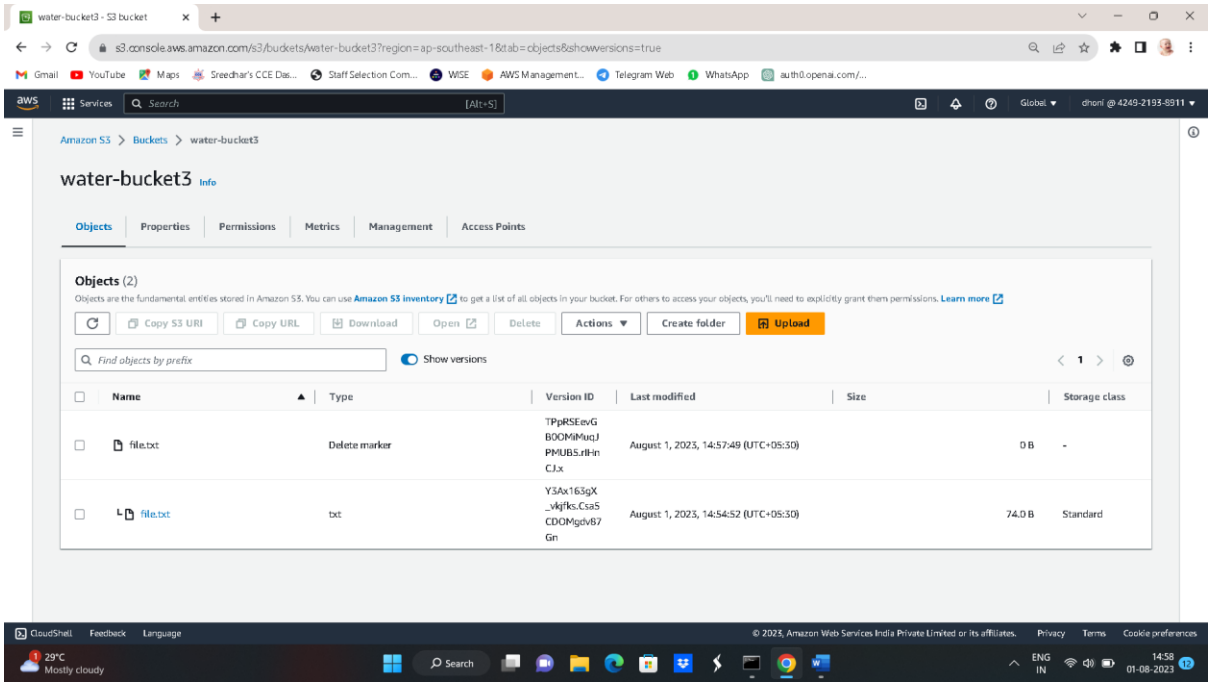
- Update the text file content and upload into the bucket.After uploading the old text file was replaced with new file automatically.



- Delete the text file from bucket



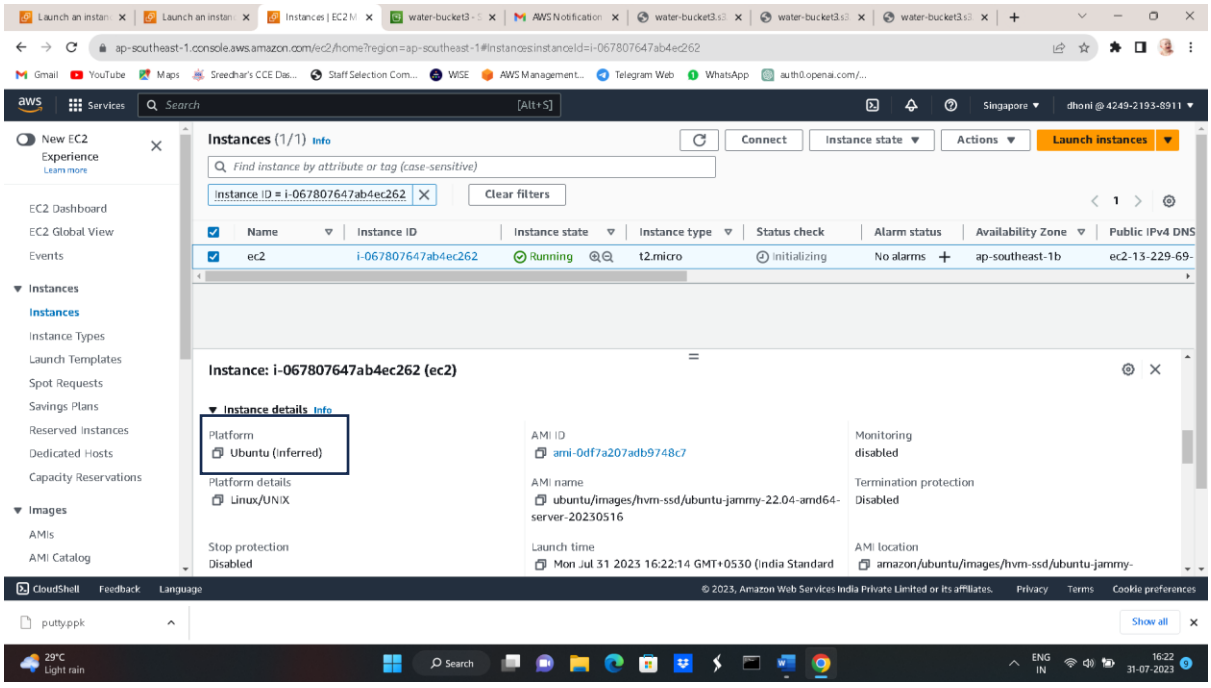
- After deleting the file the versions are present . now click on show versions there you have your deleted file now delete the marker file then the file is retrived back automatically.



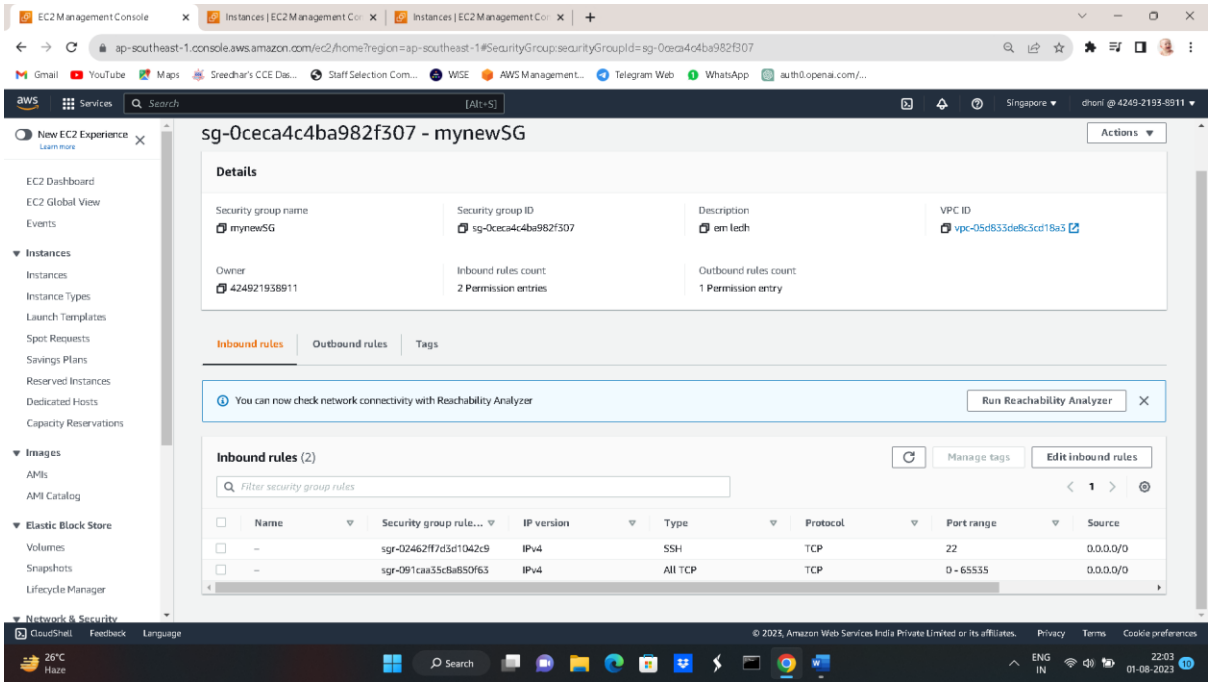
LAB-4

EC2 Instance

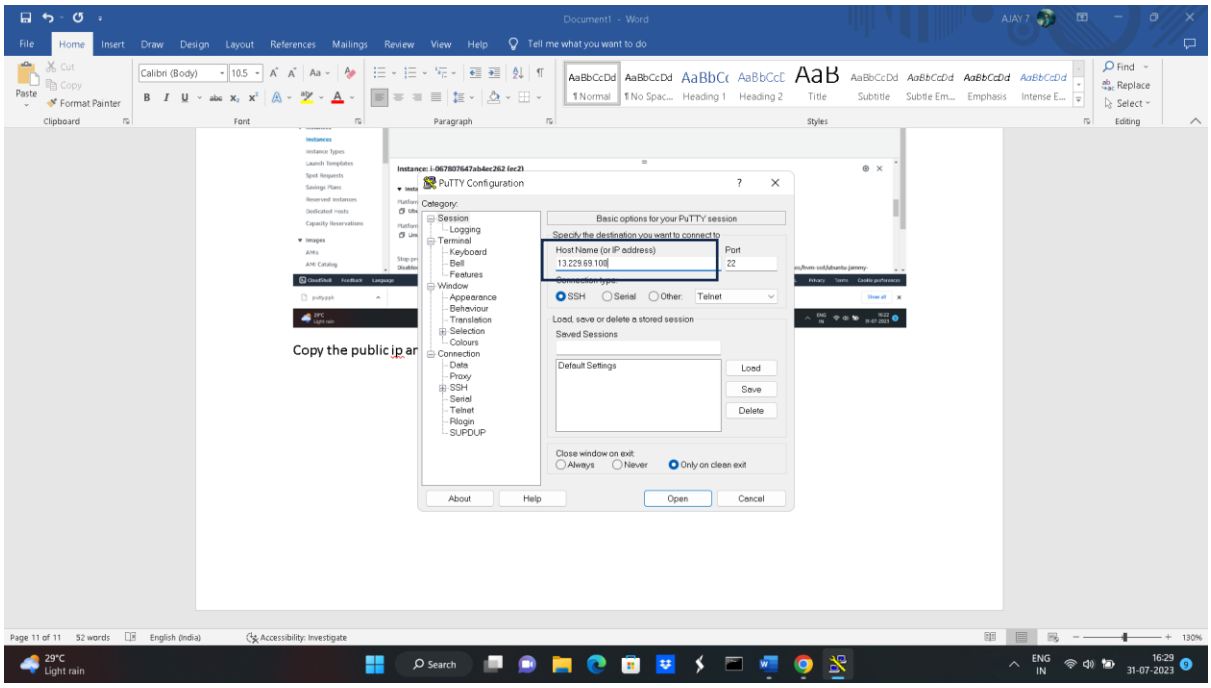
- Creating one ec2 instance of type t2.micro with ubuntu OS .



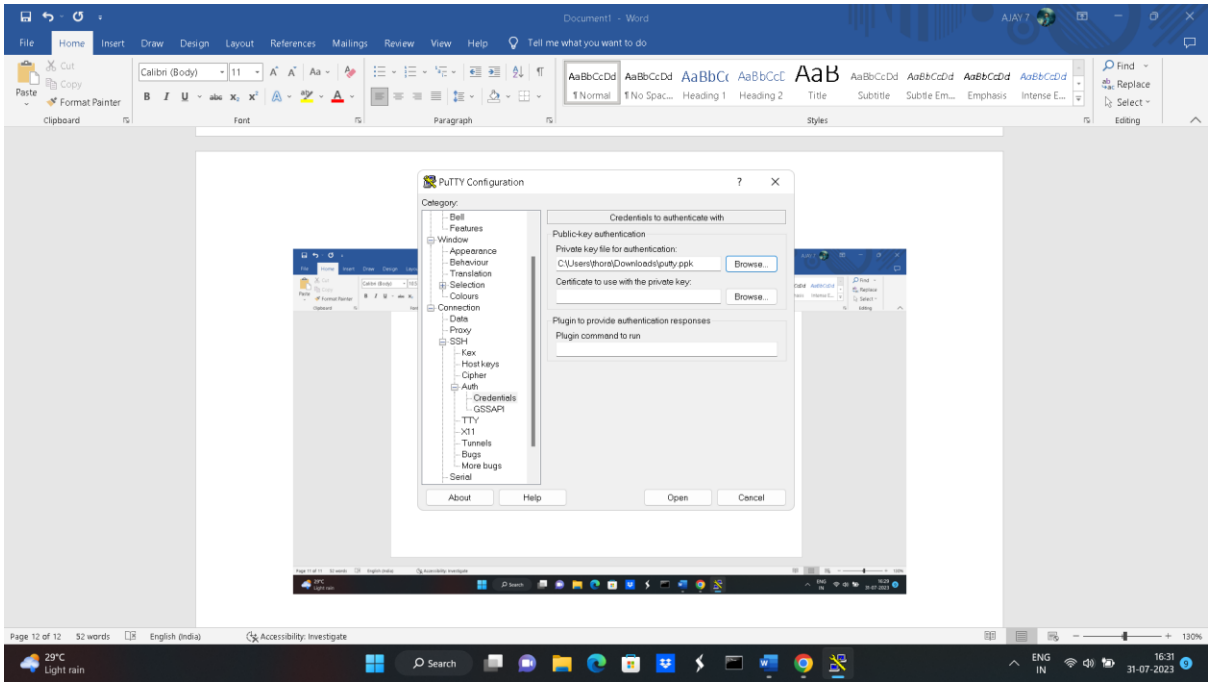
- Allowed the required port in the security groups so that you can access it from outside.



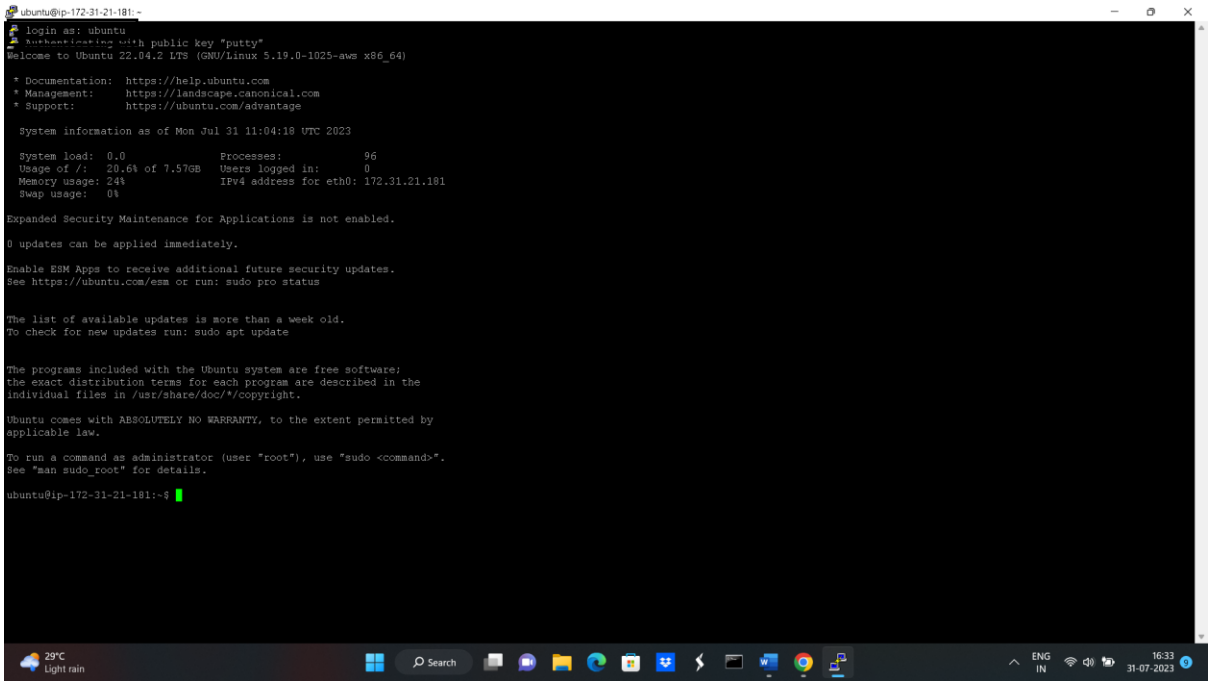
- Copy the public ip of instance and give to the putty.



- Now go to SSH → Auth → credentials → Browse and Provide private key file with .ppk extension click on open.



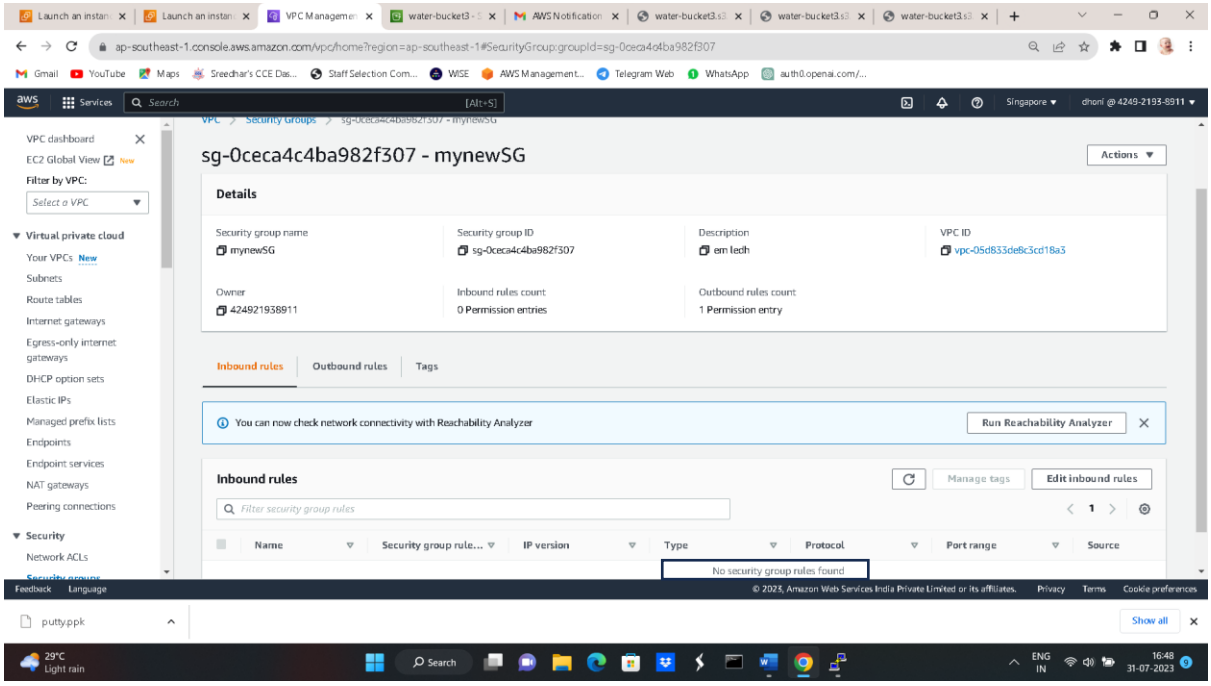
- Enter Login as ubuntu now you can access your ubuntu machine.



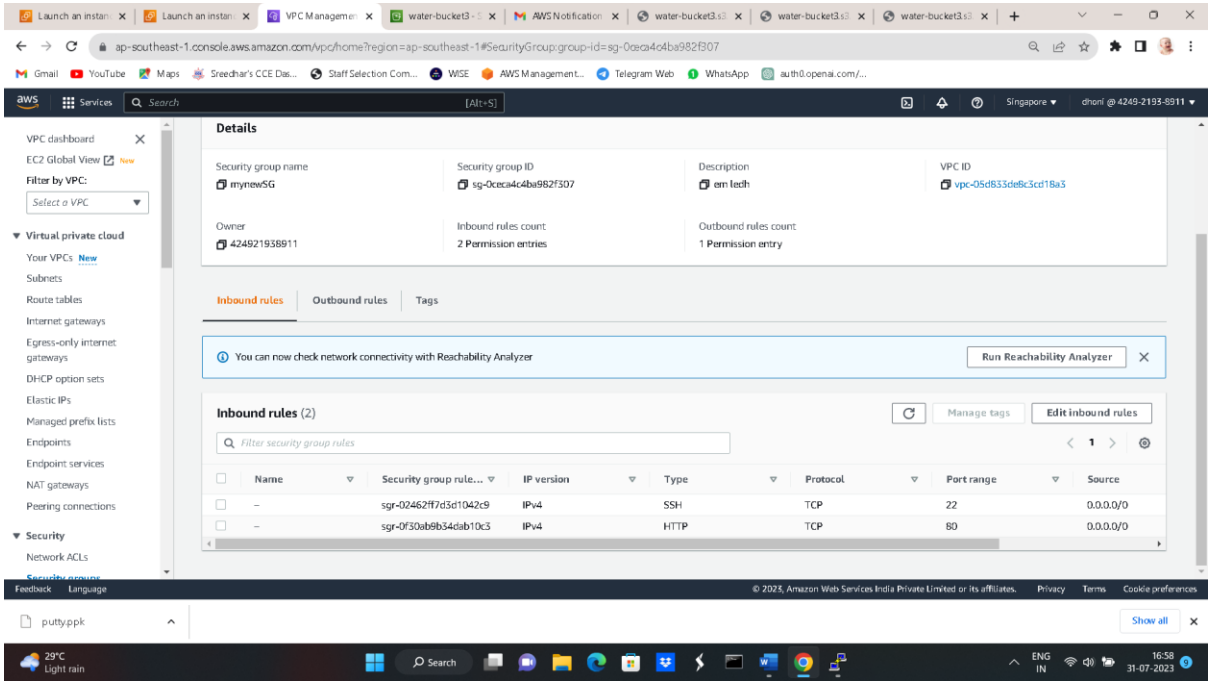
Lab-5

Security group

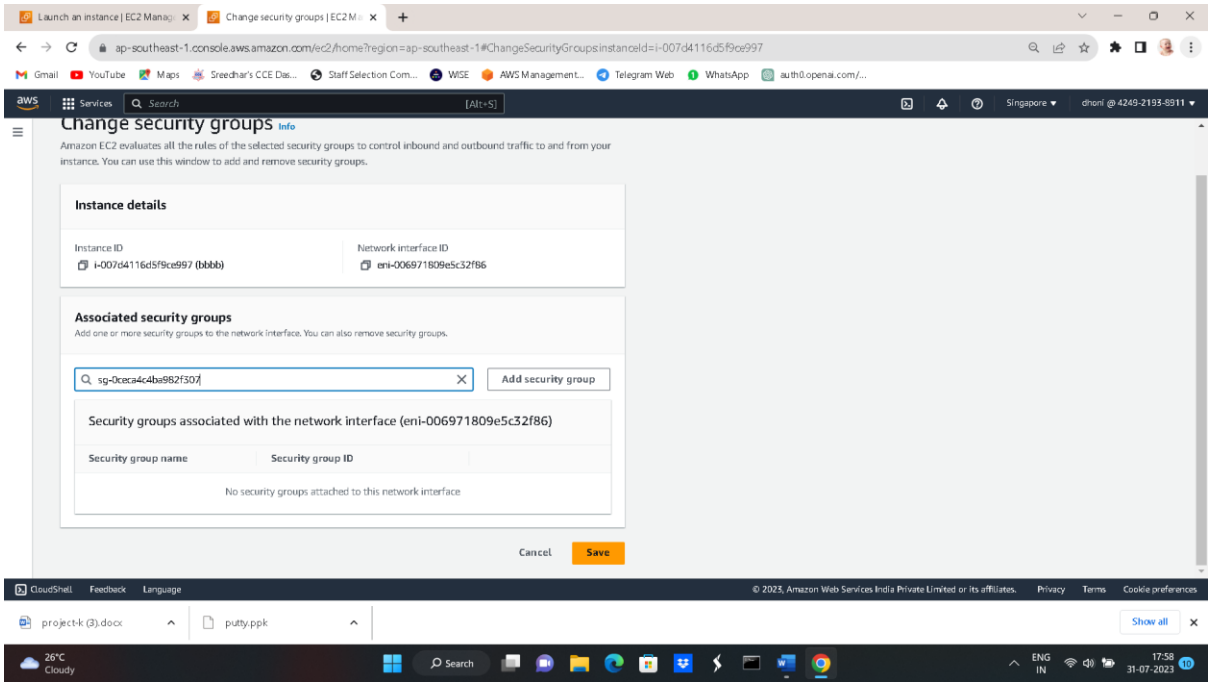
- Creating new security group by default there is no inbound rules assigned to the security group.



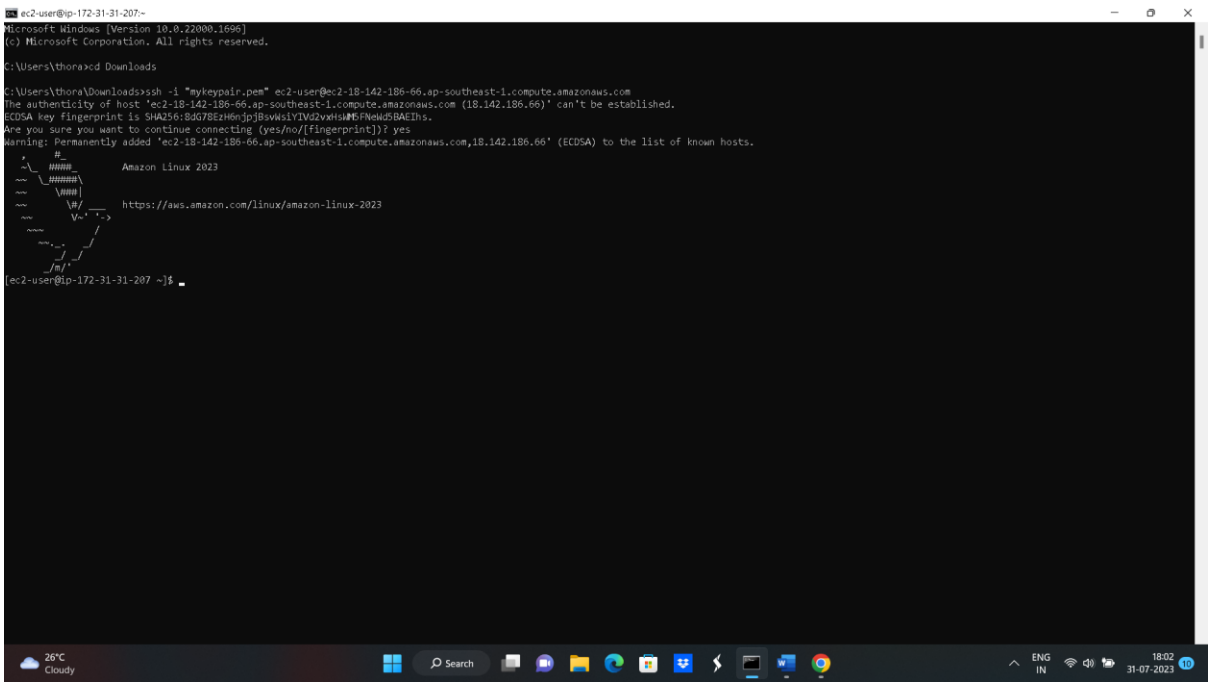
- Add port 22,80 to the security group.



- Attaching this new security group to existing ec2 instance.



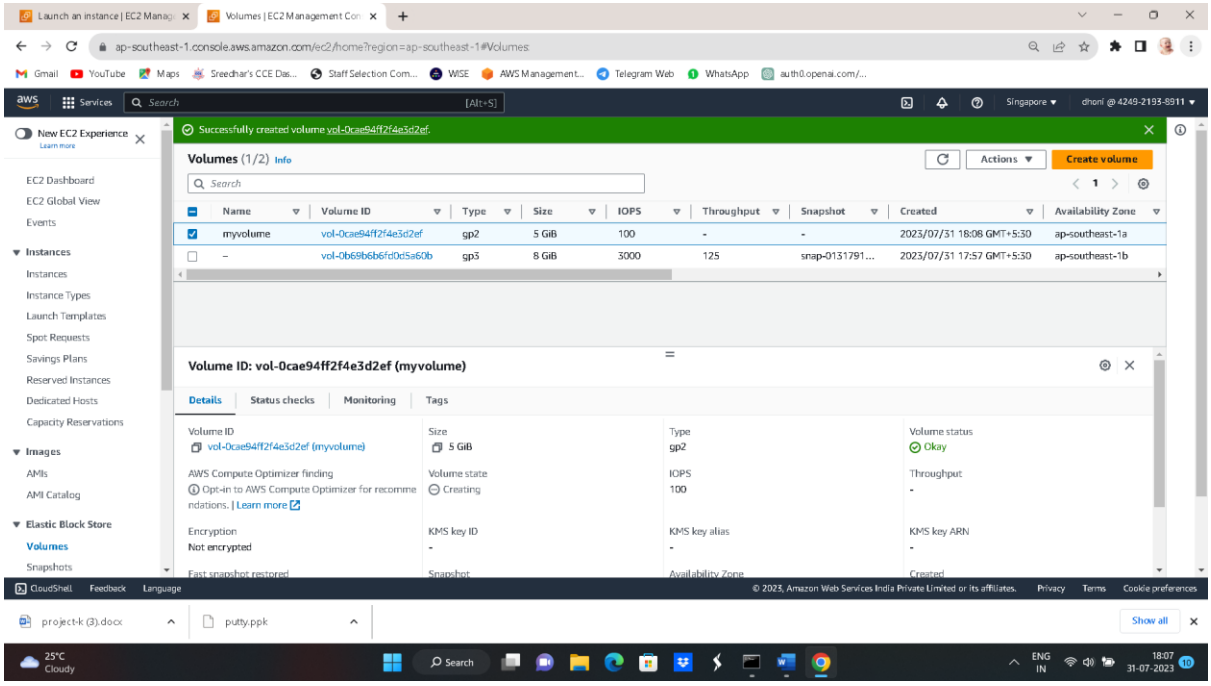
- Connect the instance through ssh using port number 22.



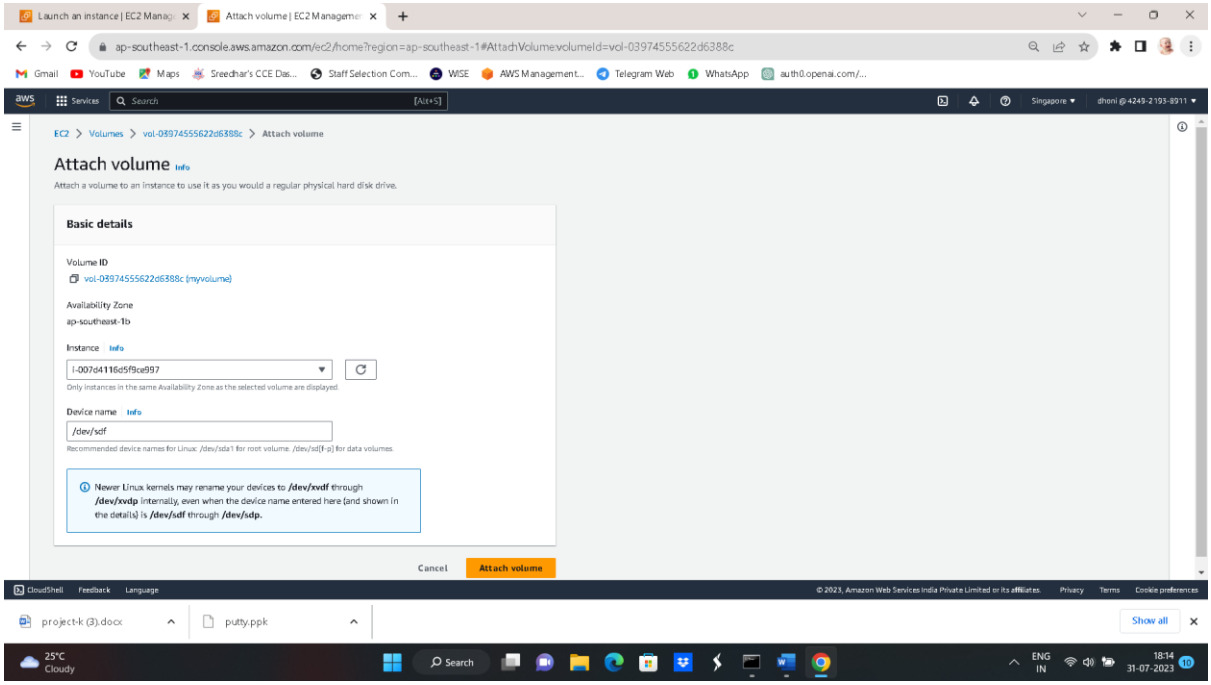
Lab-6

Volumes and Snapshots

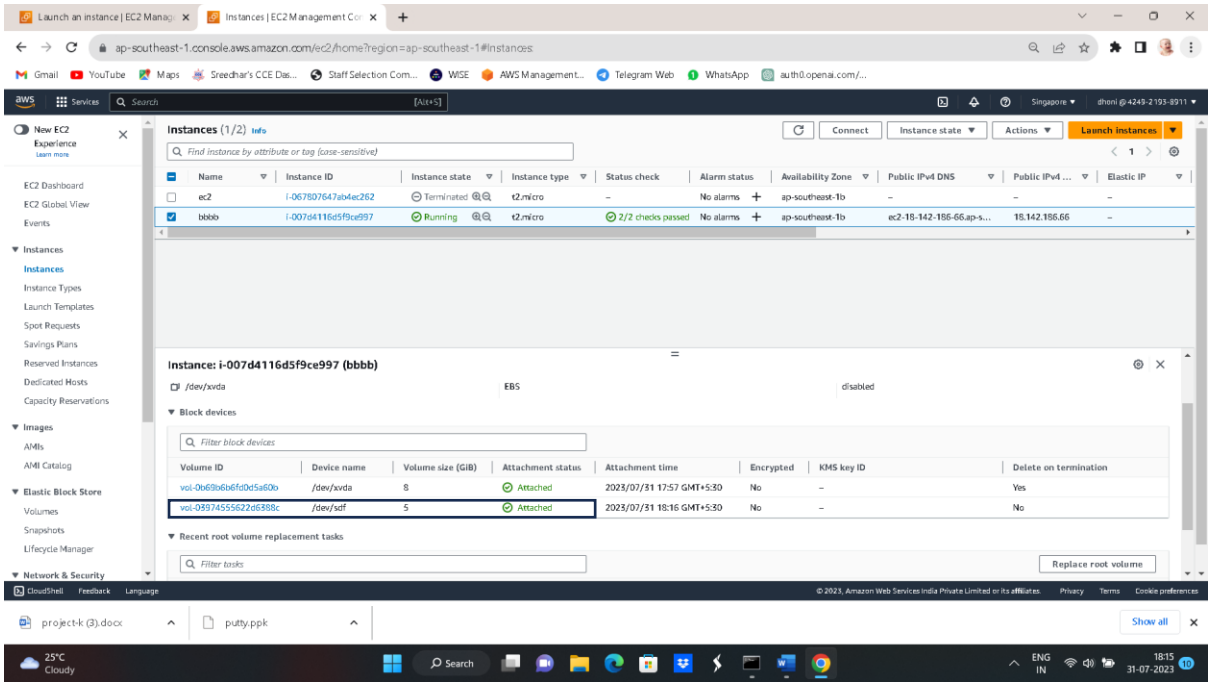
- Creating 5GB EBS volume.



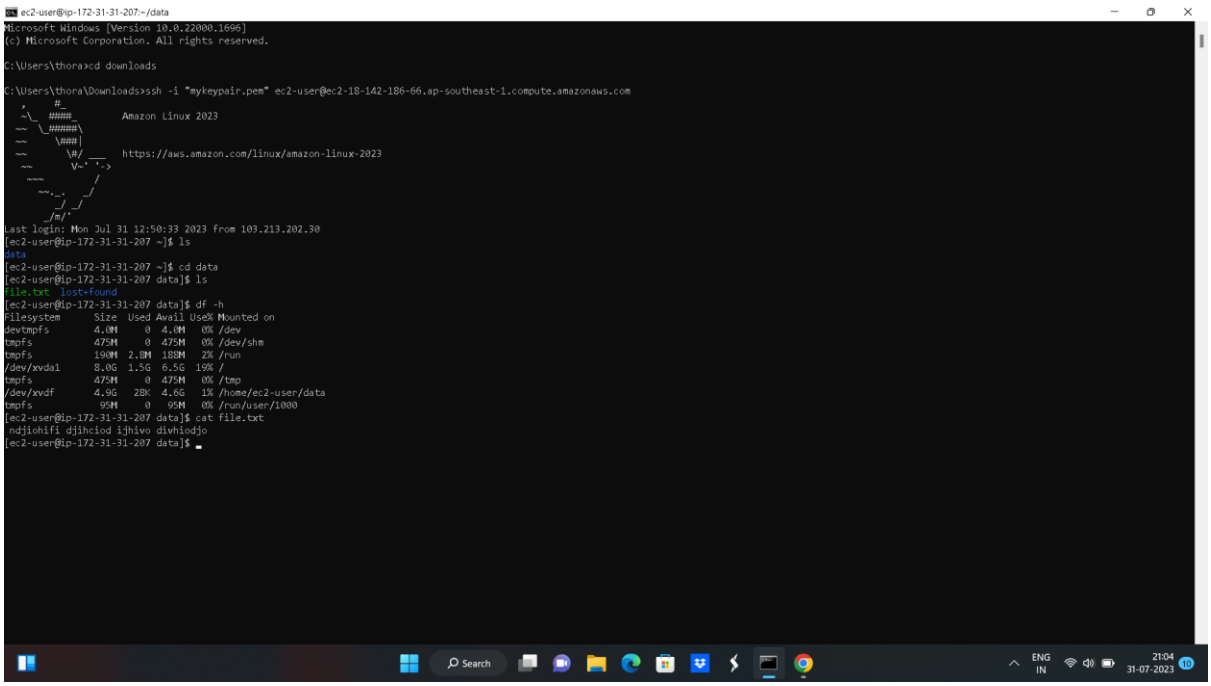
- Attaching this volume to my instance
- For the attachment select volume and go to actions and click on attach volume and select instance and click attach volume.



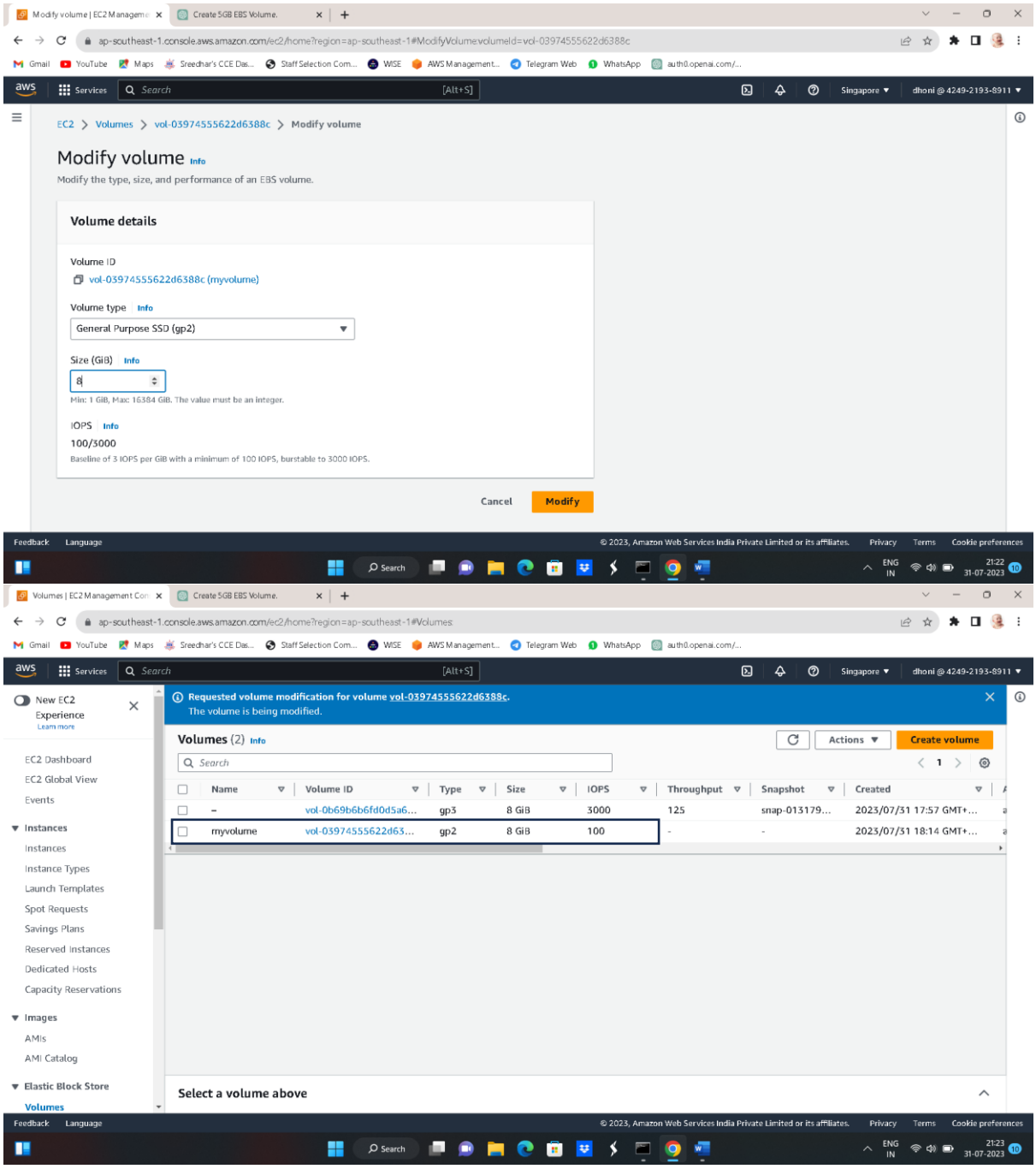
- Successfully volume attached to instance.



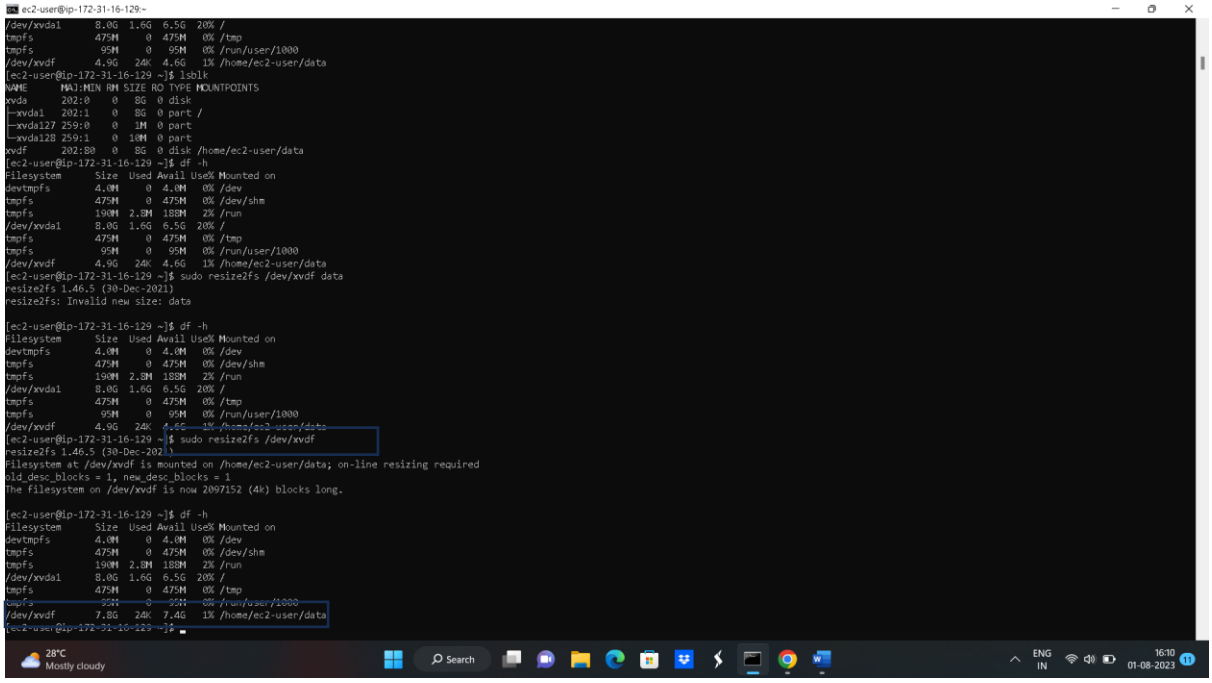
- Mount the volume and add some text file.
- By default volume is not mounted you have to mount by using fallowing commands
    - Sudo mkfs -t ext4 /dev/xvdf
    - Sudo mkdir data
    - Sudo mount /dev/xvdf data
    - echo “This is a sample user data script.” >> data/sample_file.txt



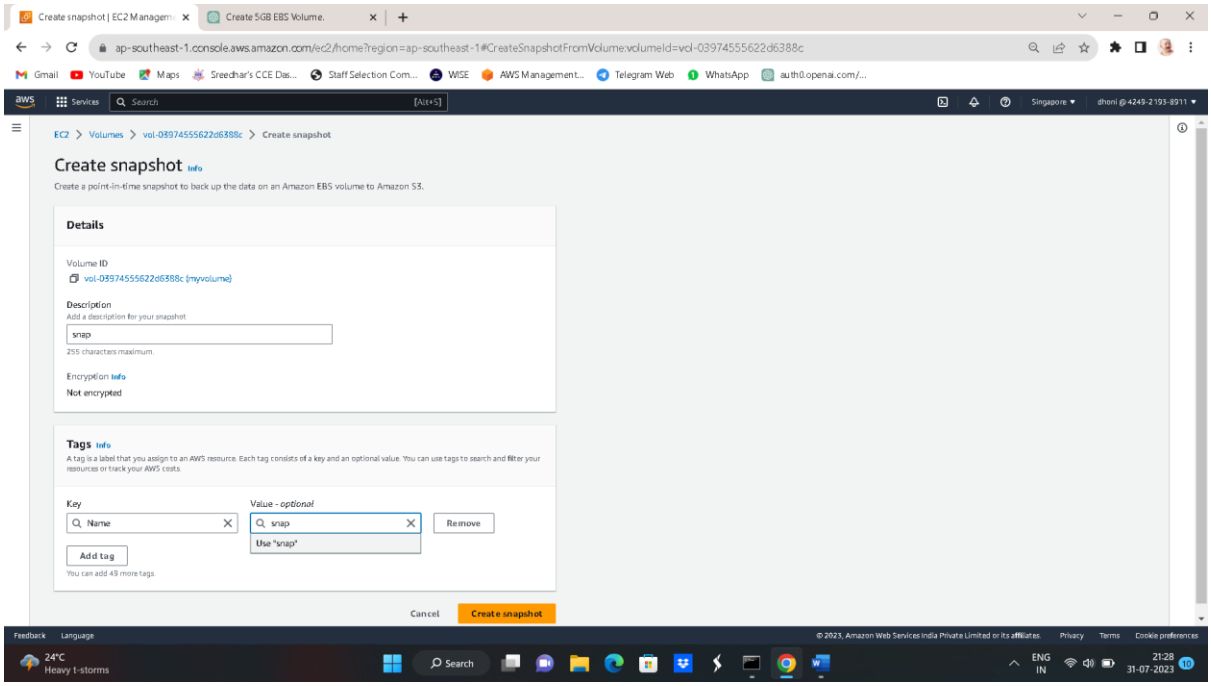
- now modify the volume size to 8 gb.



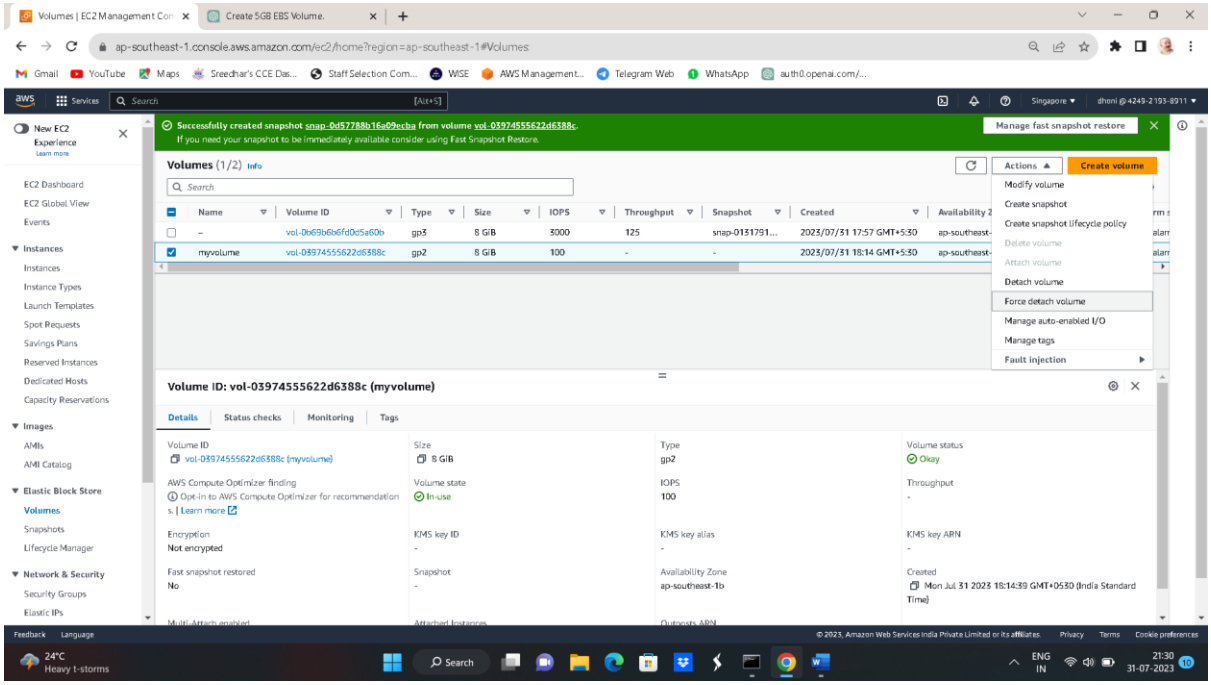
- Bi defaultly modifying volume size in aws console not reflected in the linux machine so Extend the size of this volume inside the linux machine. By using resize2fs command.



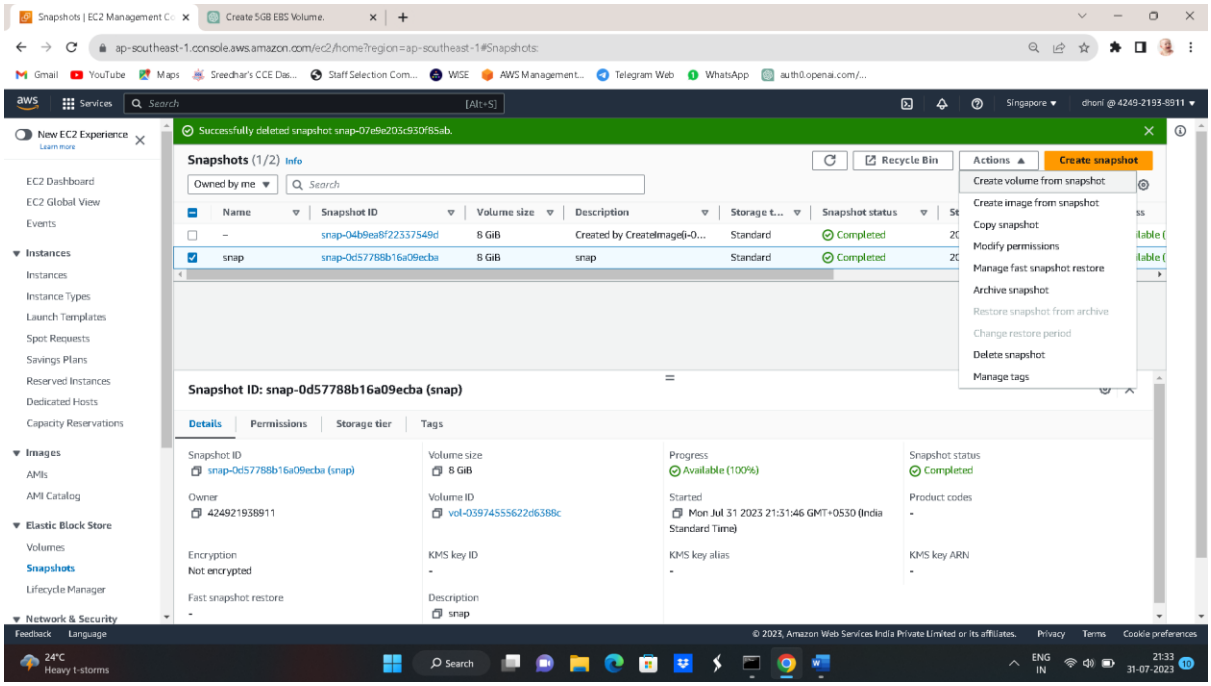
- Creating snapshot from the volume



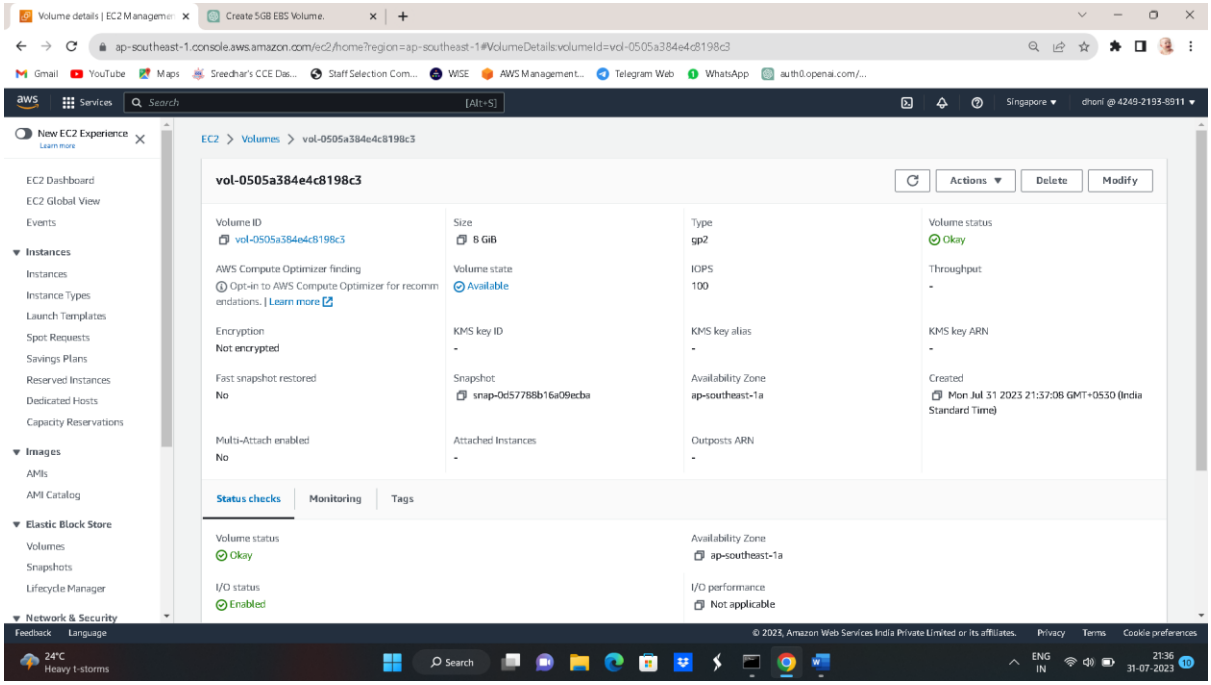
- Now Detach the volume and delete it. you can retrive this volume by using snapshot.



- Creating volume from the snapshot.



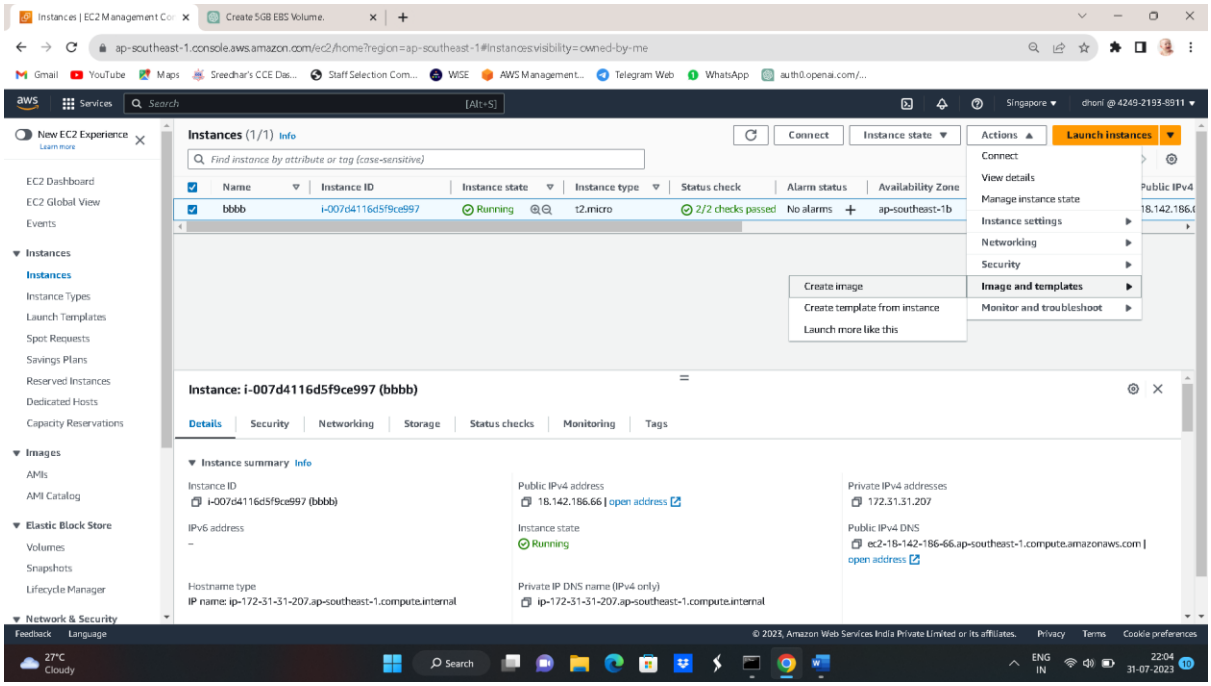
- Volume created successfully from the snapshot.



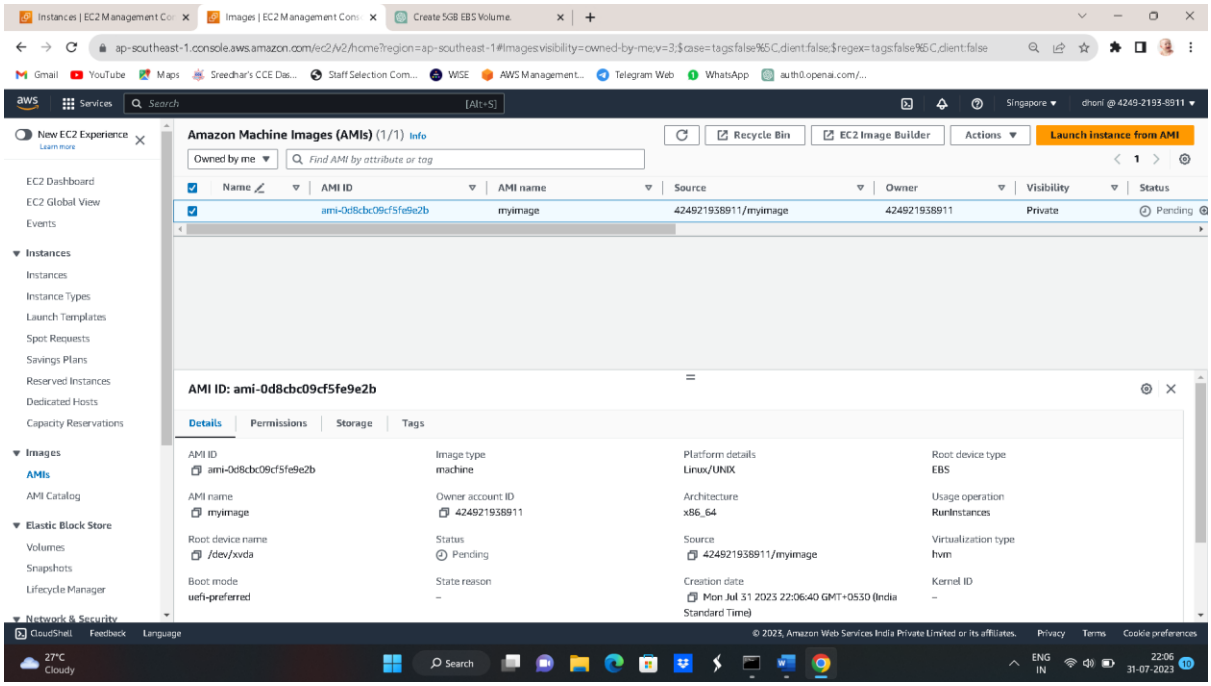
LAB7

Amazon machine image(AMI's)

- Creating AMI of running instance
- Goto instance→ actions → image from templates →create image.



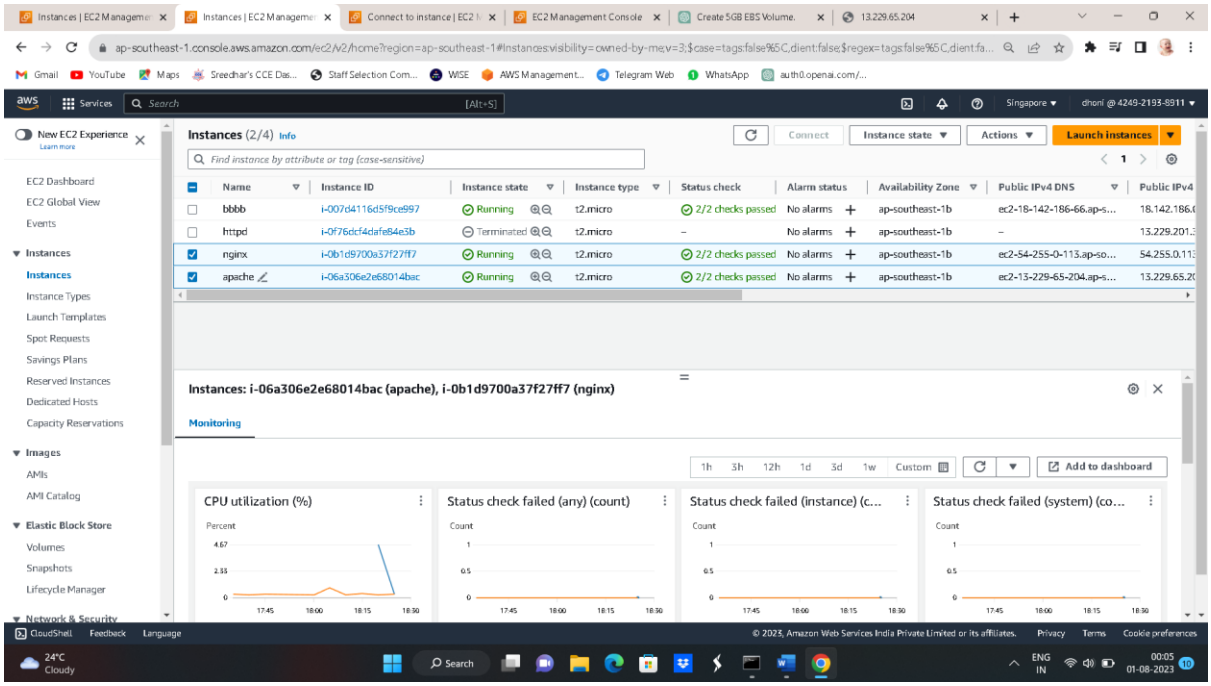
- Created image successfully.



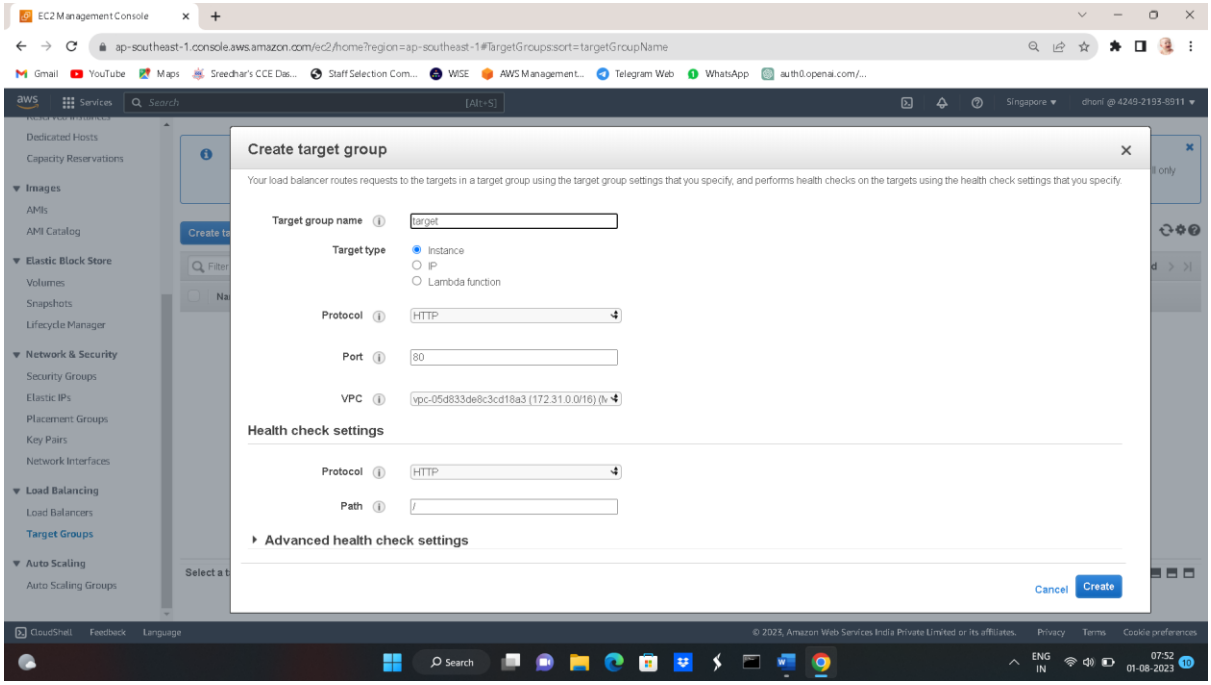
LAB-8

Load balenceres

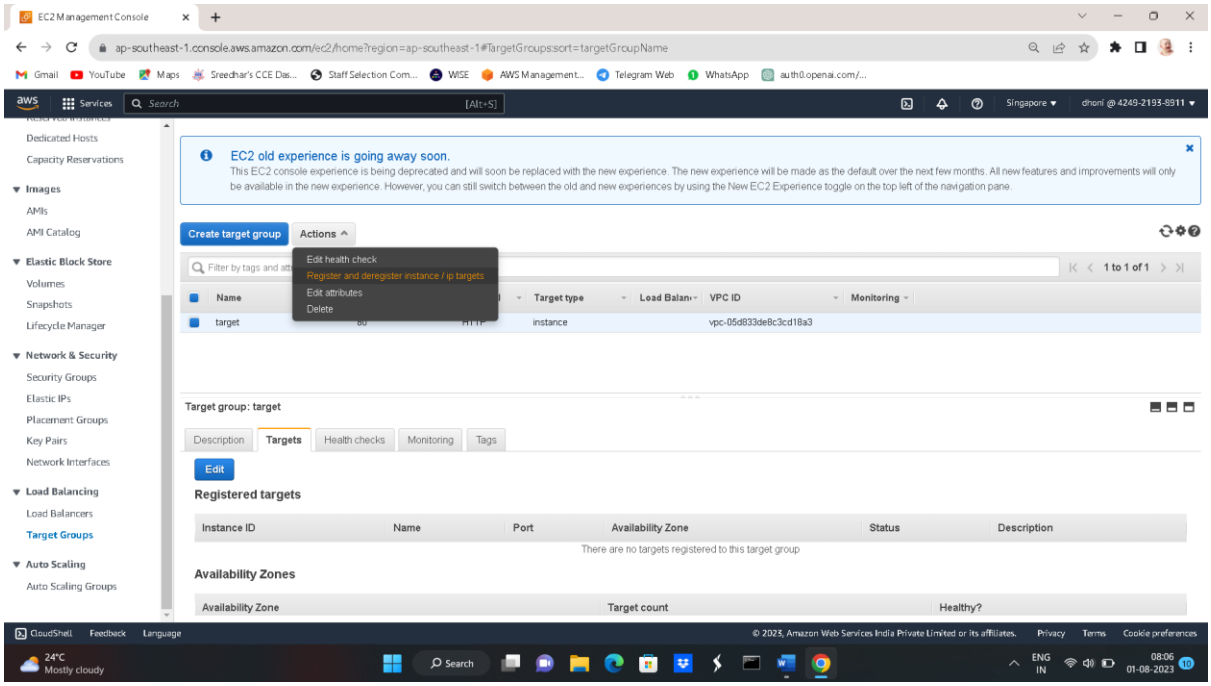
- For the creation of load balancer we need two or more instances.
- In the 1st instance install ngnix and in the 2nd instance we have to install apache .



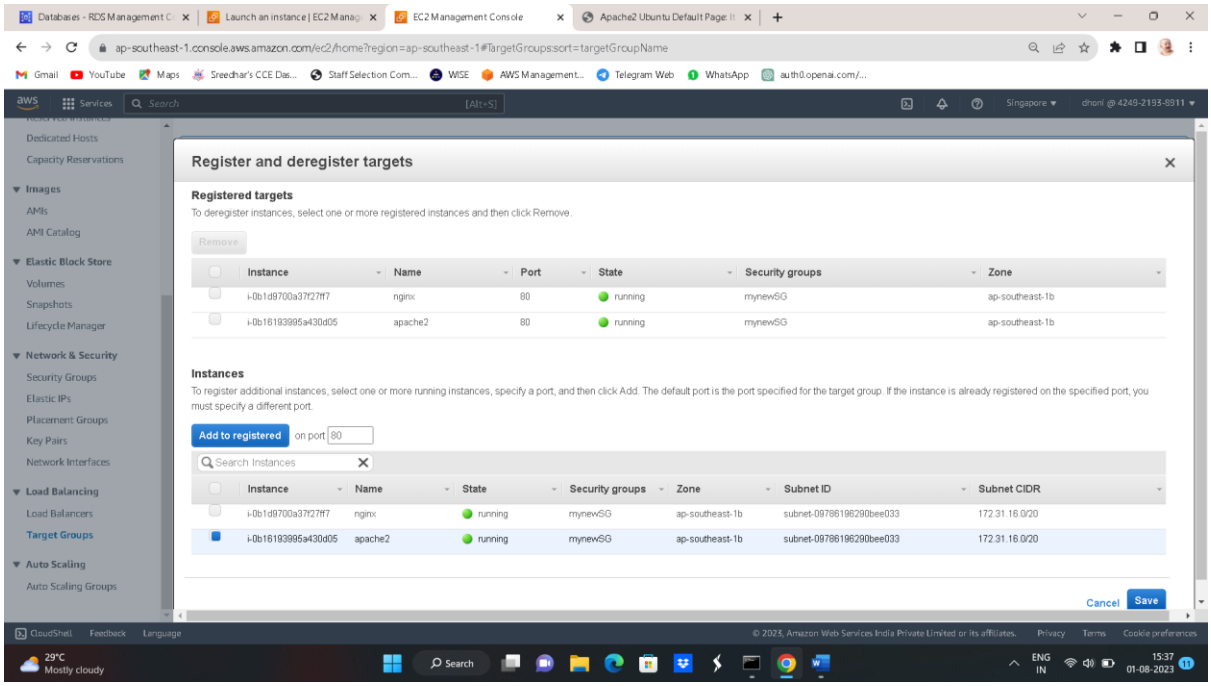
- Before going to create the load balancer you need to create the target group first .



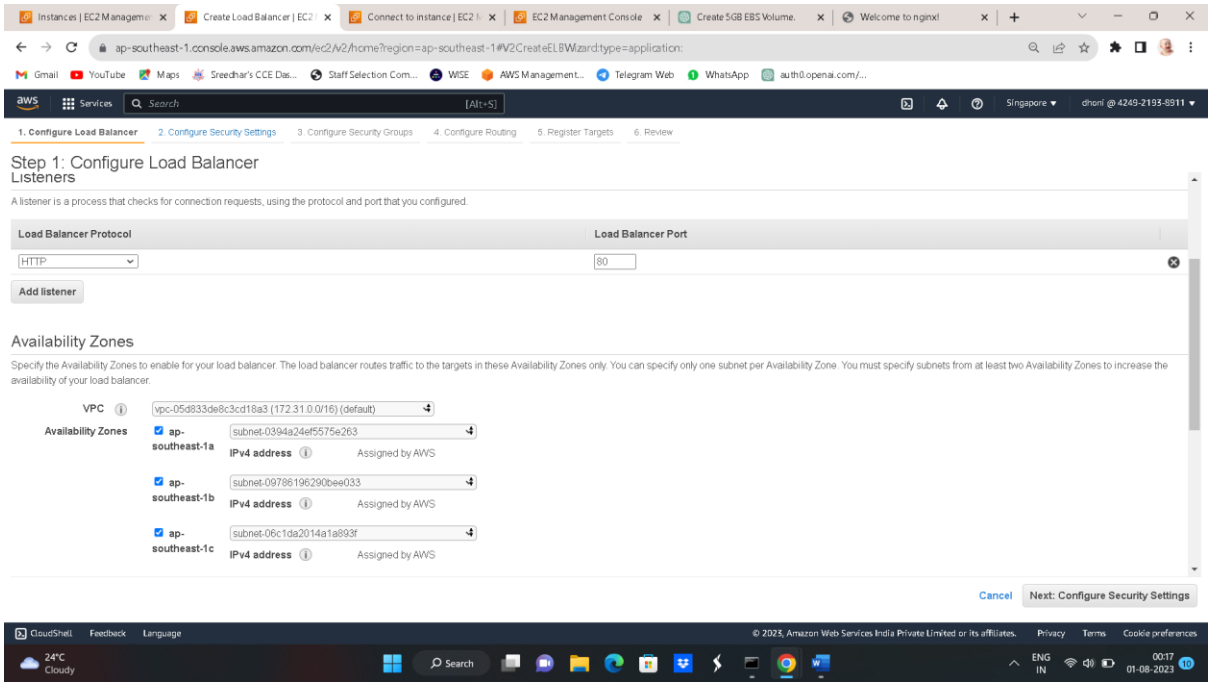
- After creating target group you have to register the targets so go to actions click on register instances.



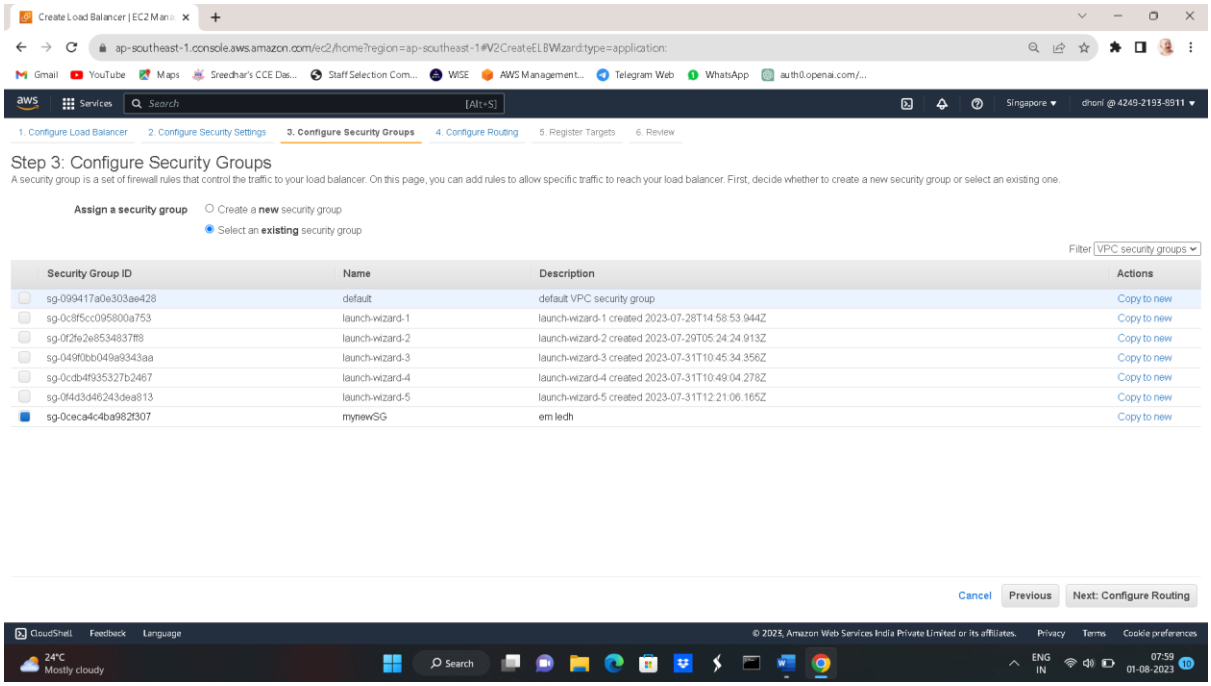
- Select your instances and click on add to registerd and then save it.



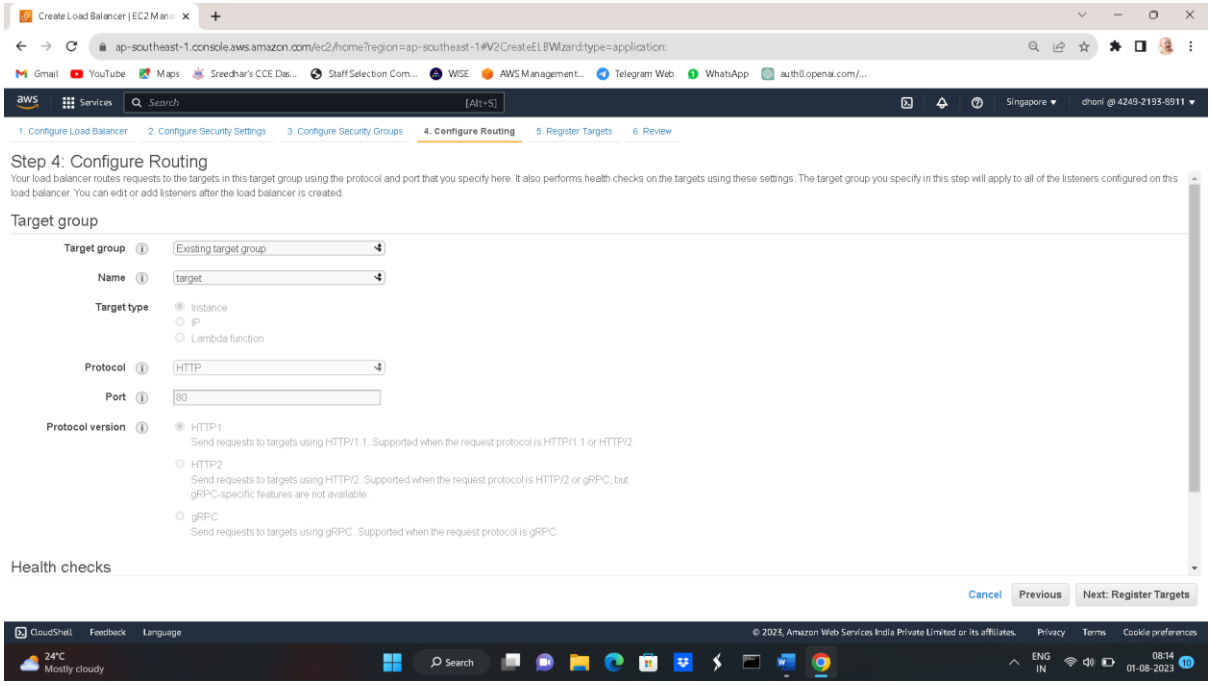
- Create load balancer
- While creating load balancer You need to give name and you must specify two availabilityzones.



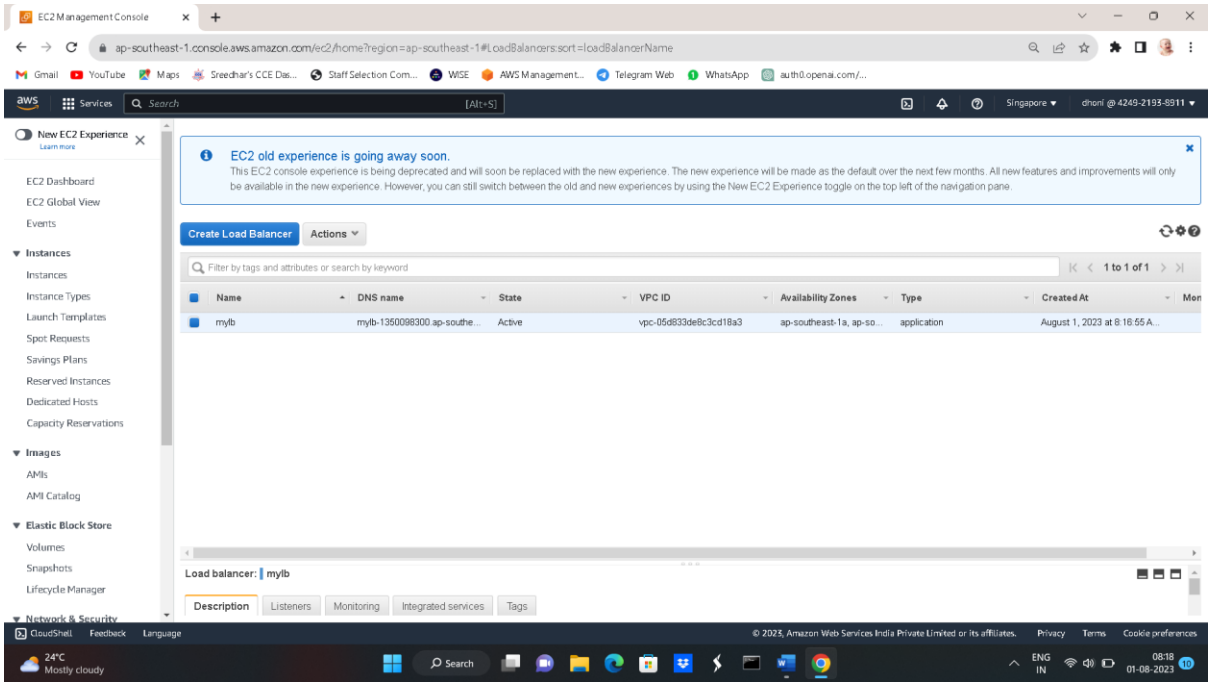
- In the next step select existing security group or create new security group.



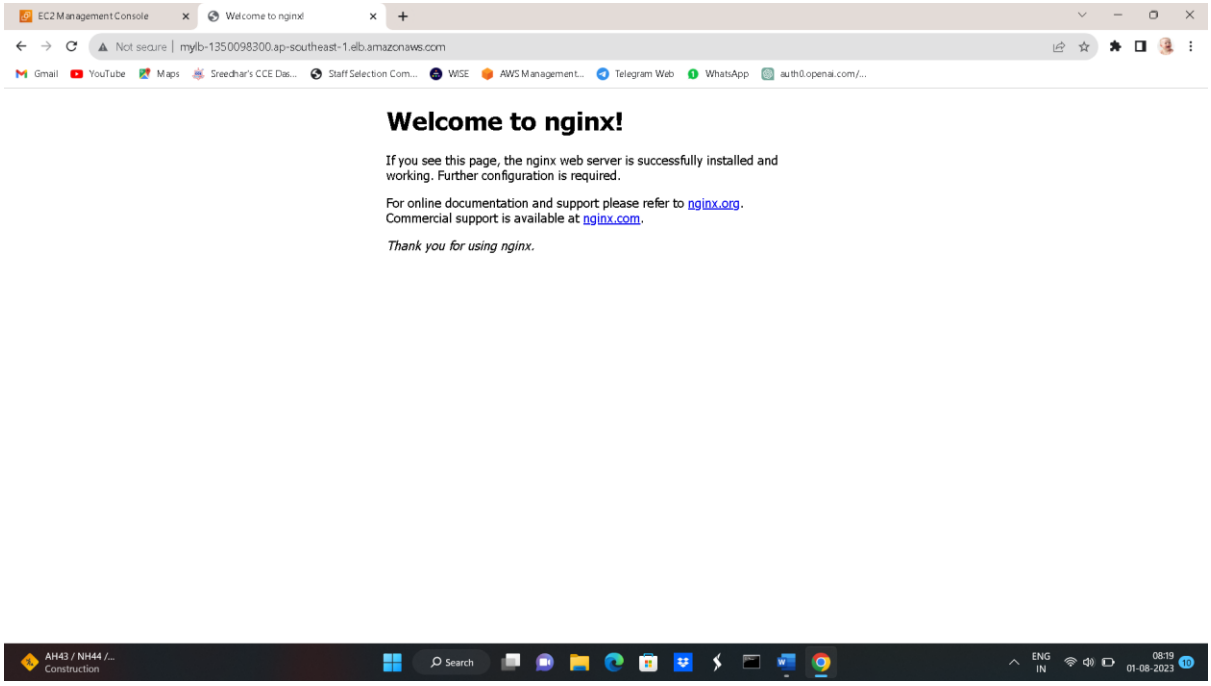
- in the configure routing you need to select an existing target group.



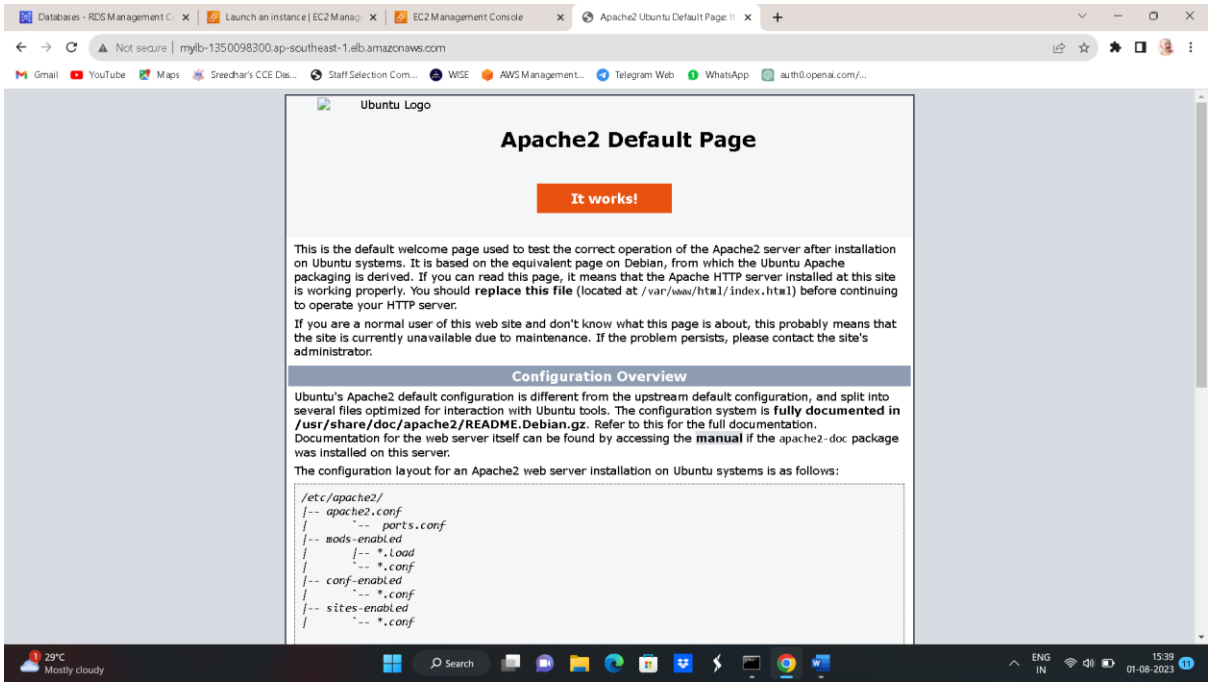
- In nextstep select your registered targets and review it and then create load balancer.



- Copy the DNS end point address and browse it.



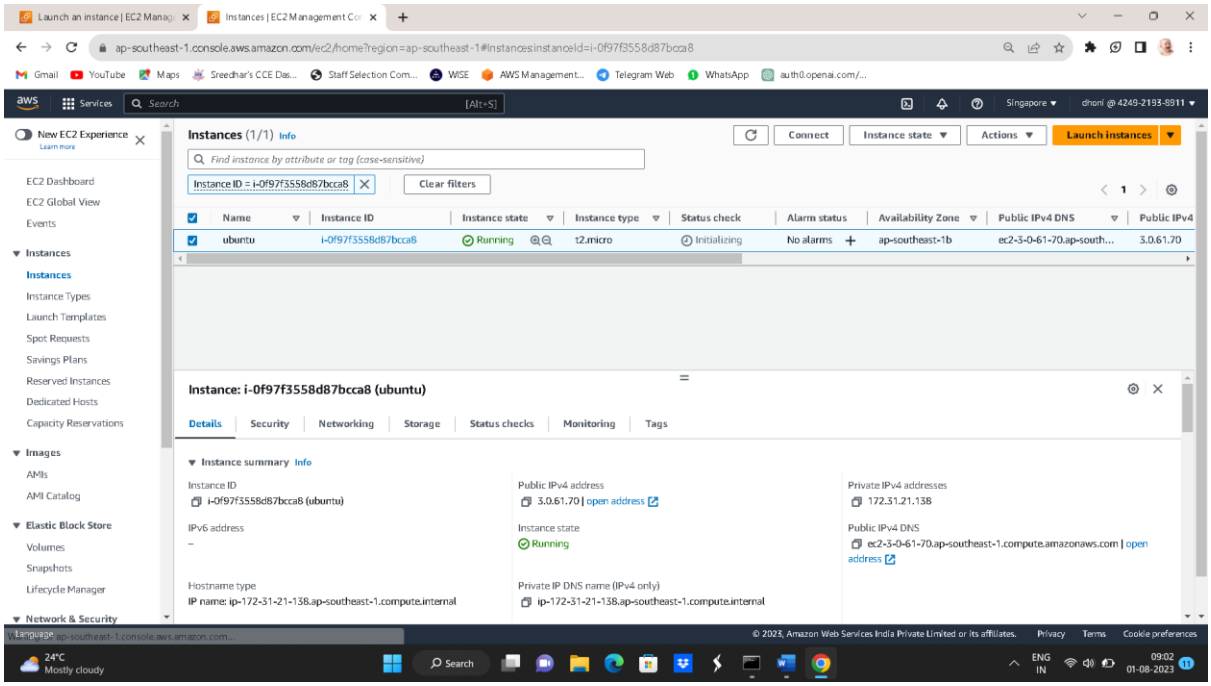
- Click on refresh it will change another server.



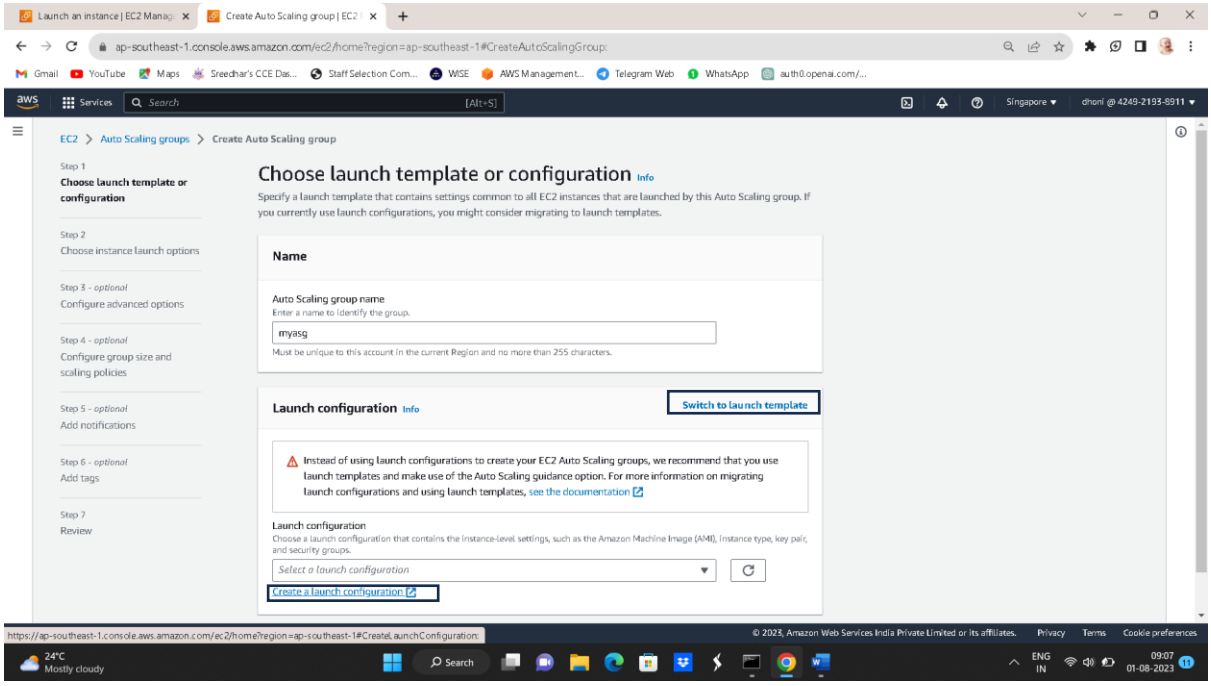
Lab-9

Auto scaling group

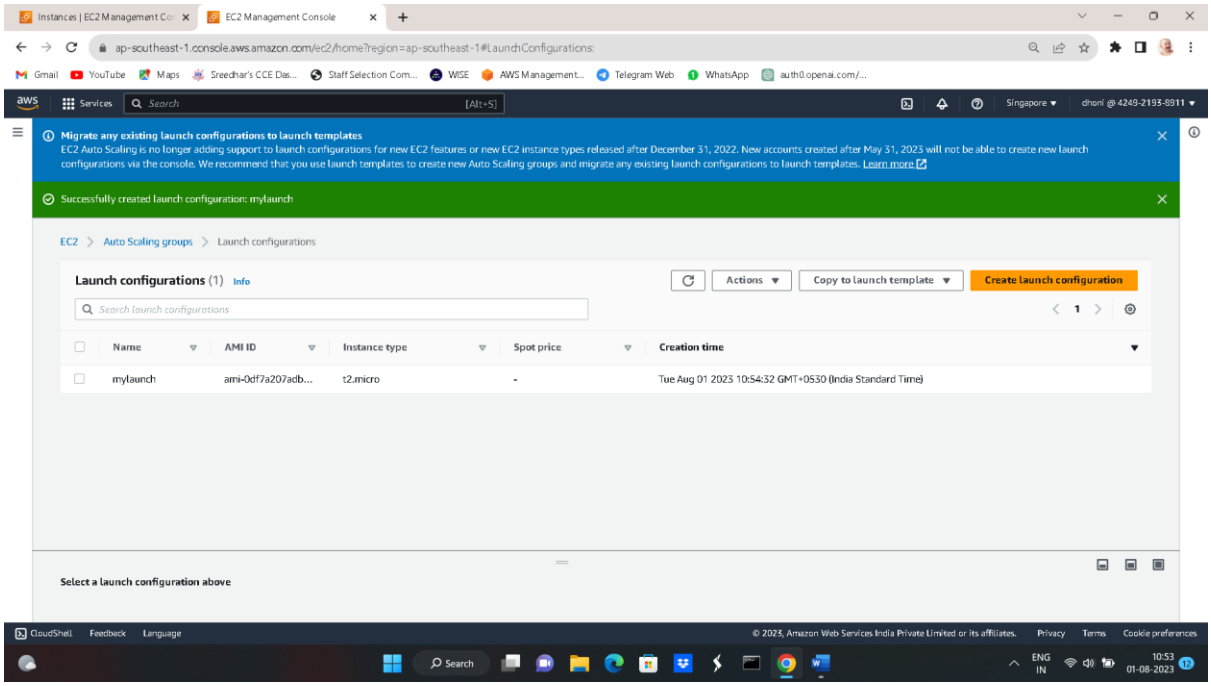
- Create one ubuntu instance



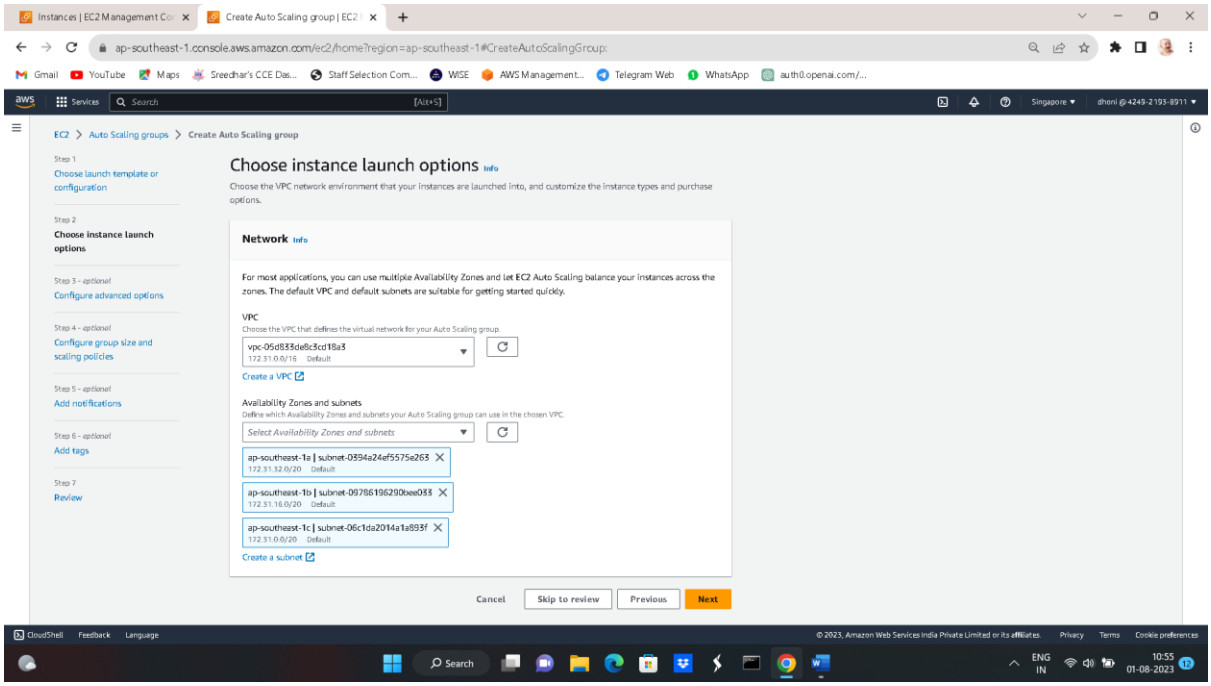
- Goto auto scaling group give name and click on create a launch configuration.



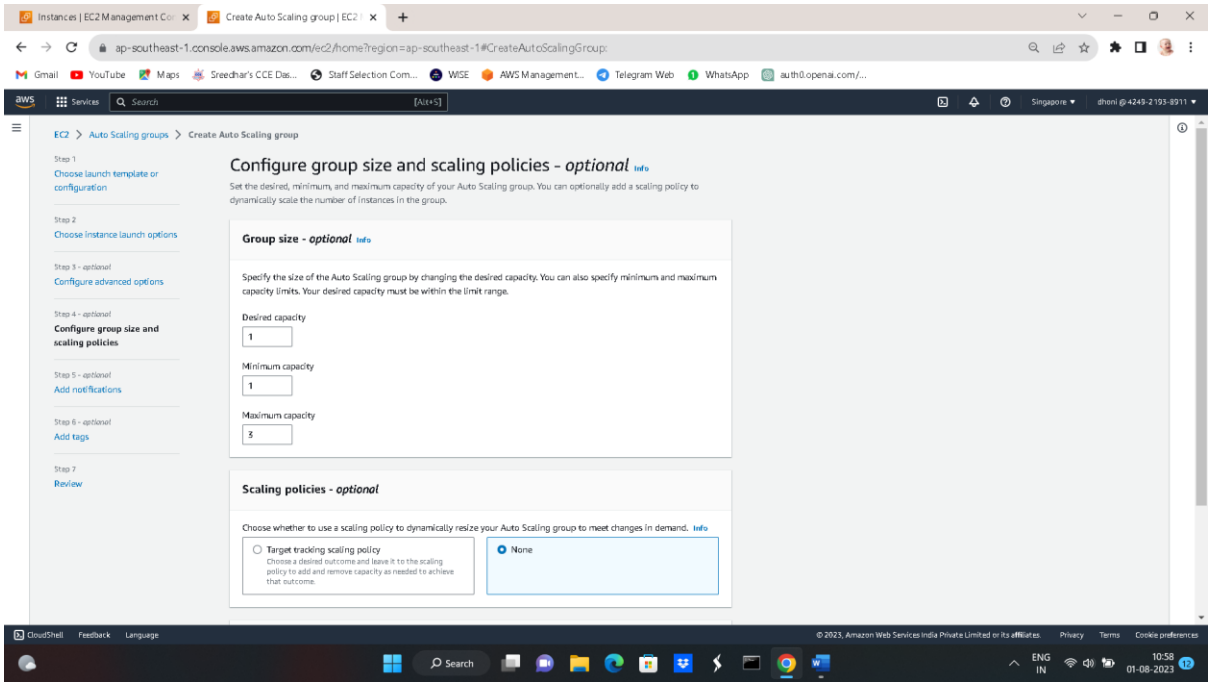
- Choose Ami id and instance type ,security group ,keypair and create launch configuration.



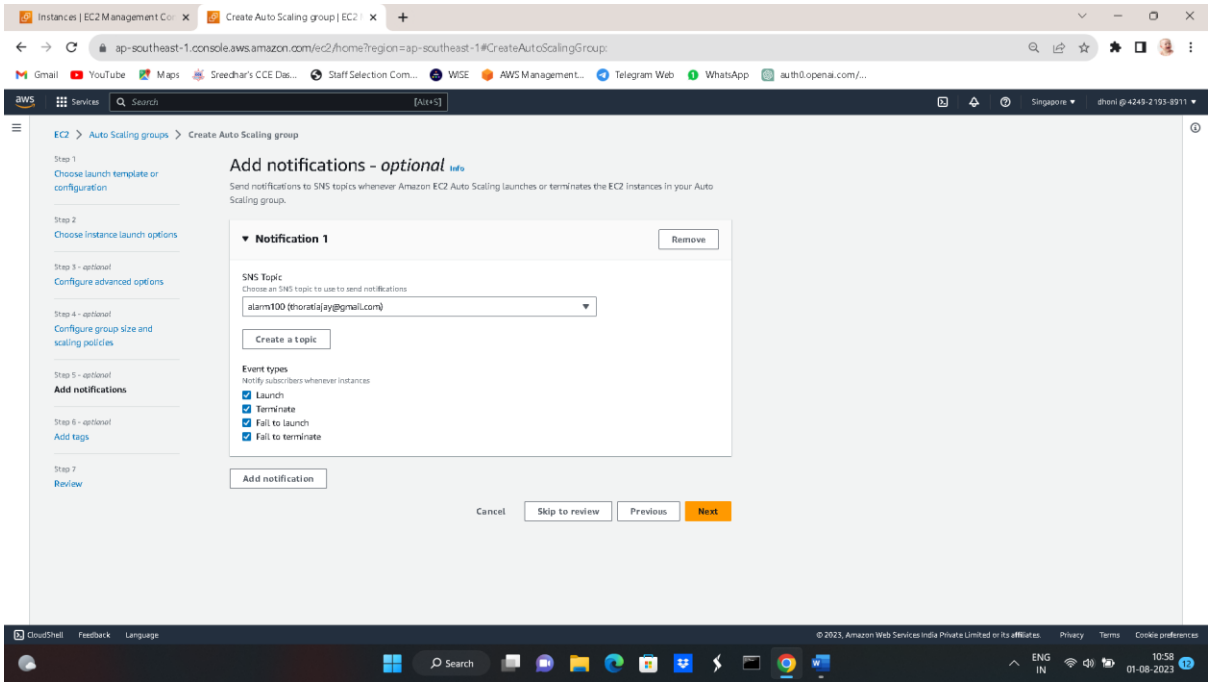
- Choose instance launch options.



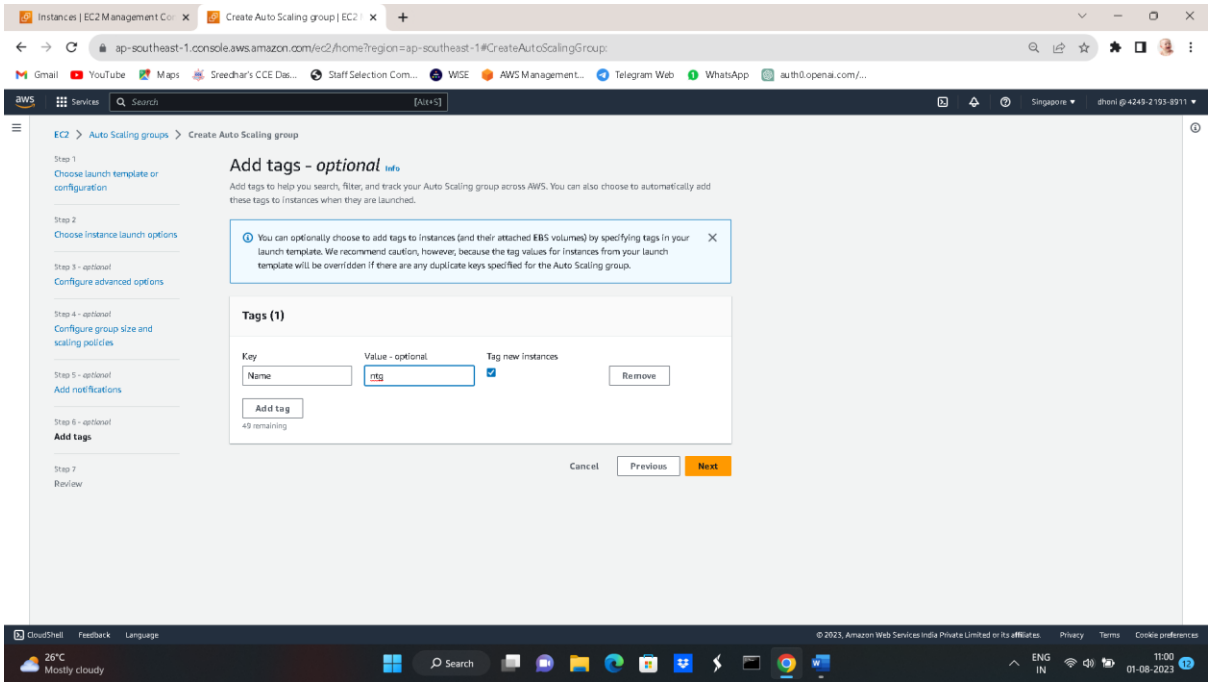
- Select the minimum capacity=1,max capacity=3.



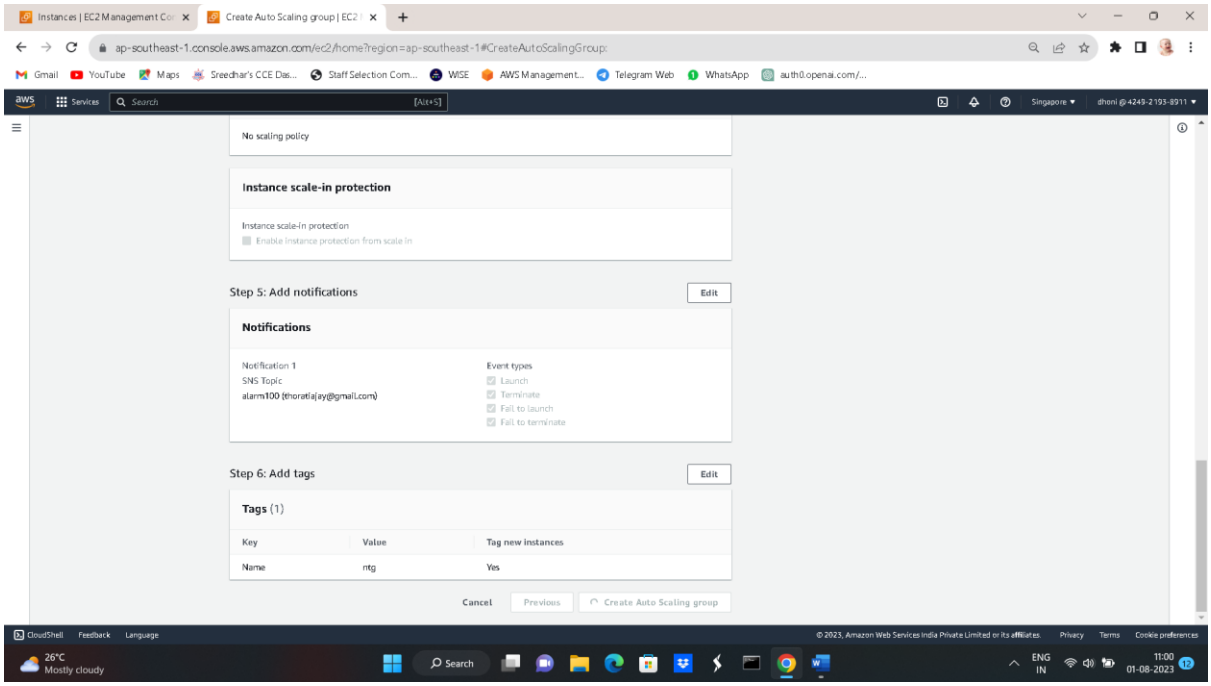
- Add notifications by selecting SNS topic.



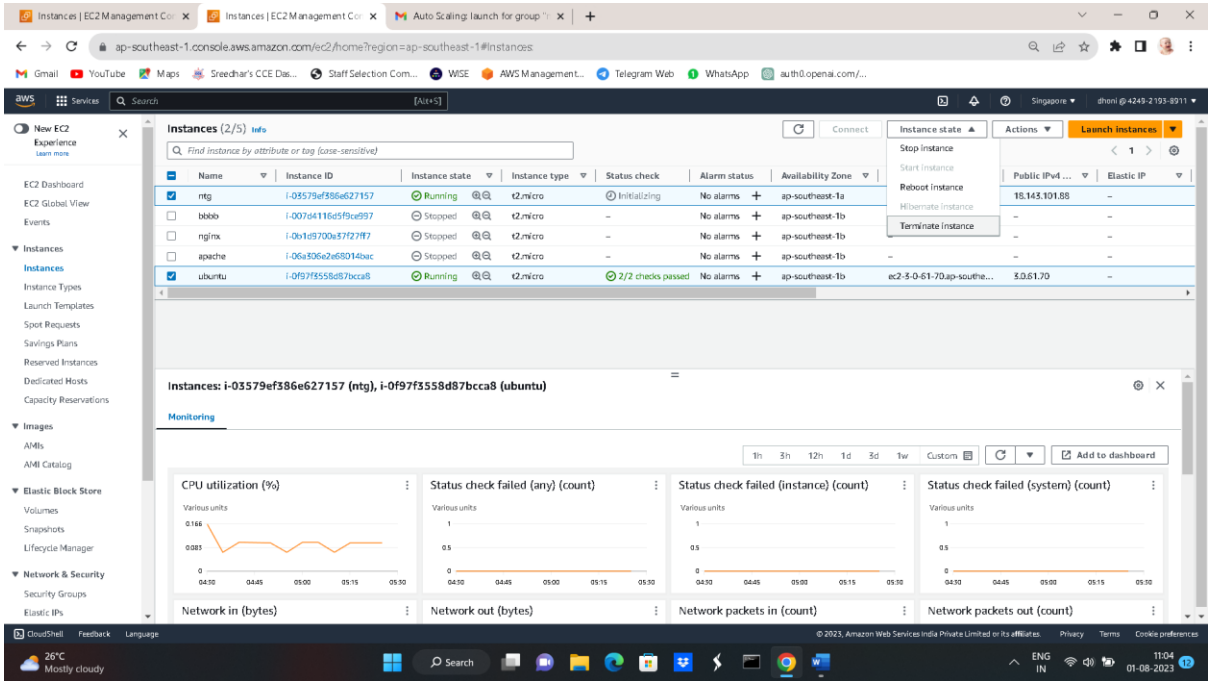
- Add name tag for ASG.



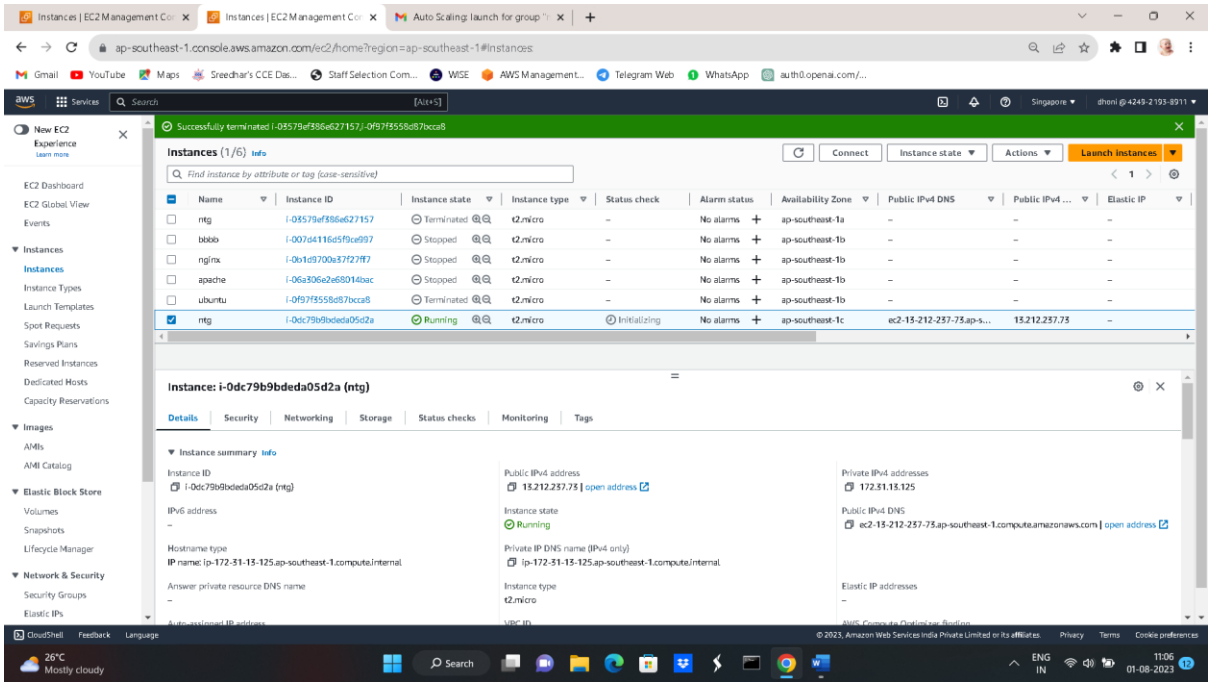
- Now goto review and click on create auto scaling group.



- Now iam going to teriminate the instances .the ASG will create new instances.



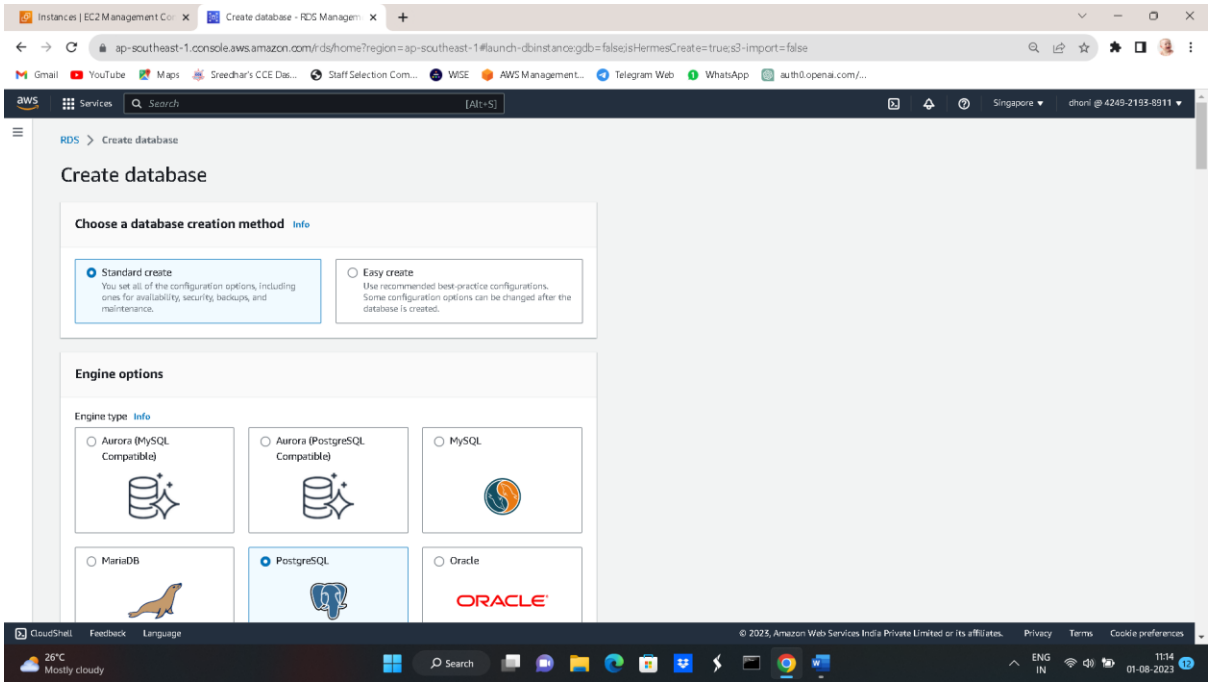
- The instances are created again successfully by using autoscaling group.



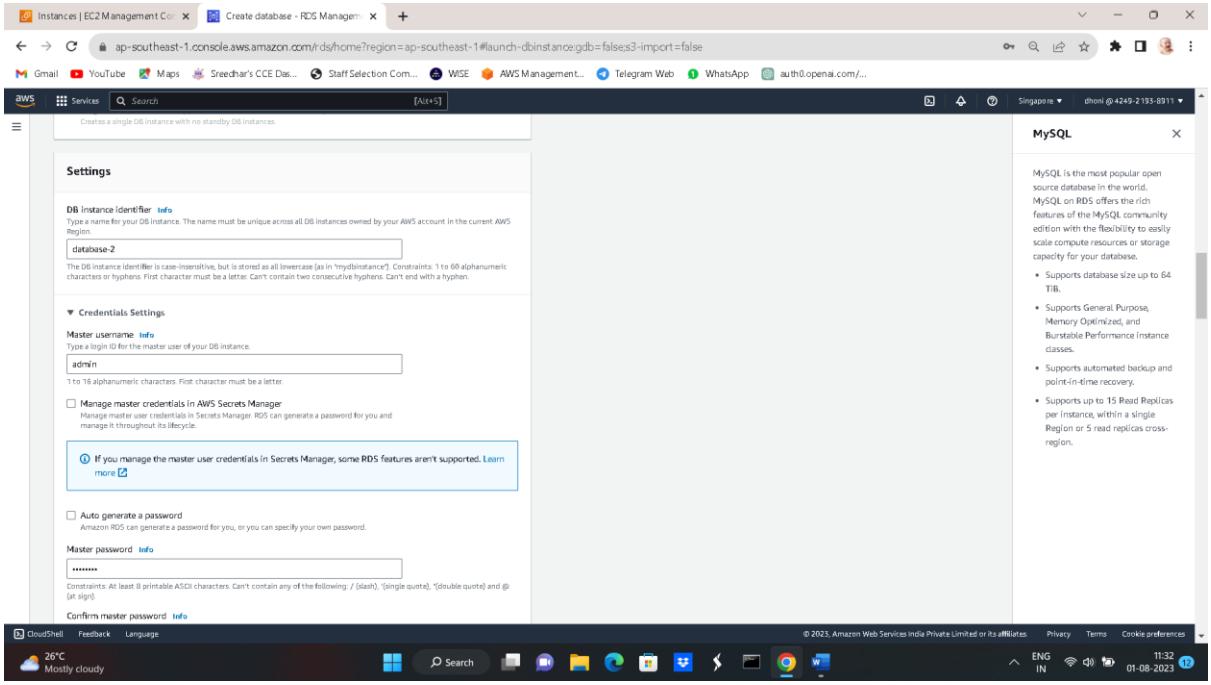
LAB-10

RDS

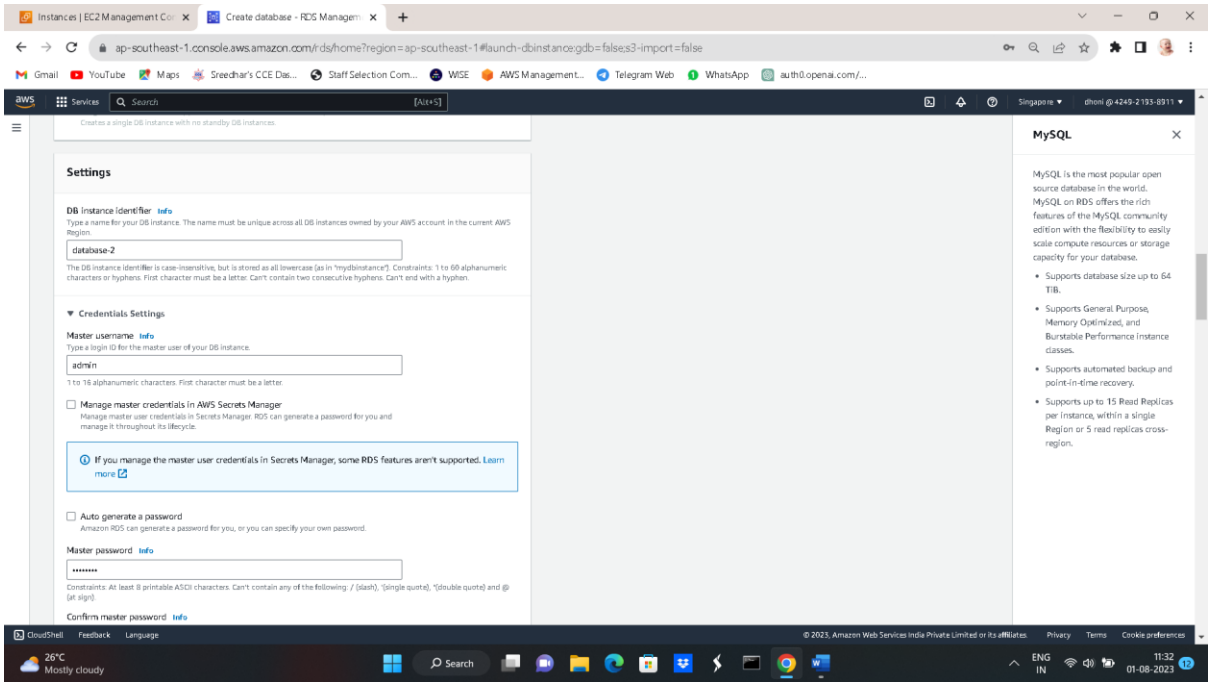
- Goto Rds and create database.



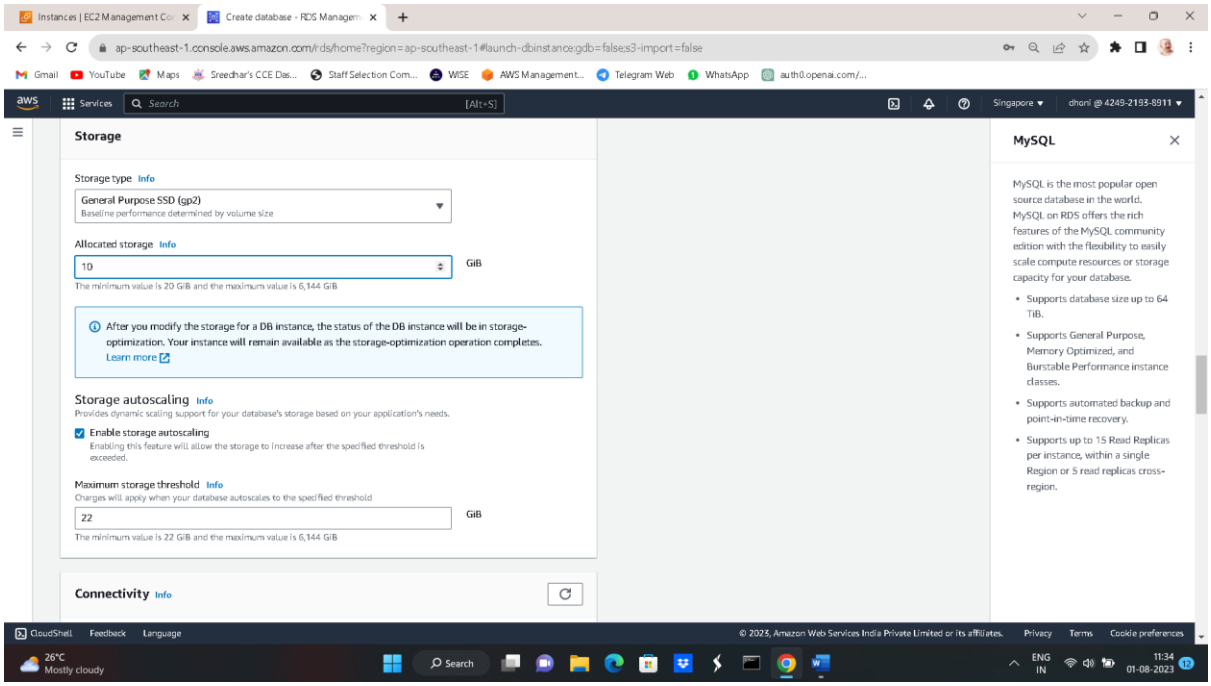
- Give instance name and Create password for the database.



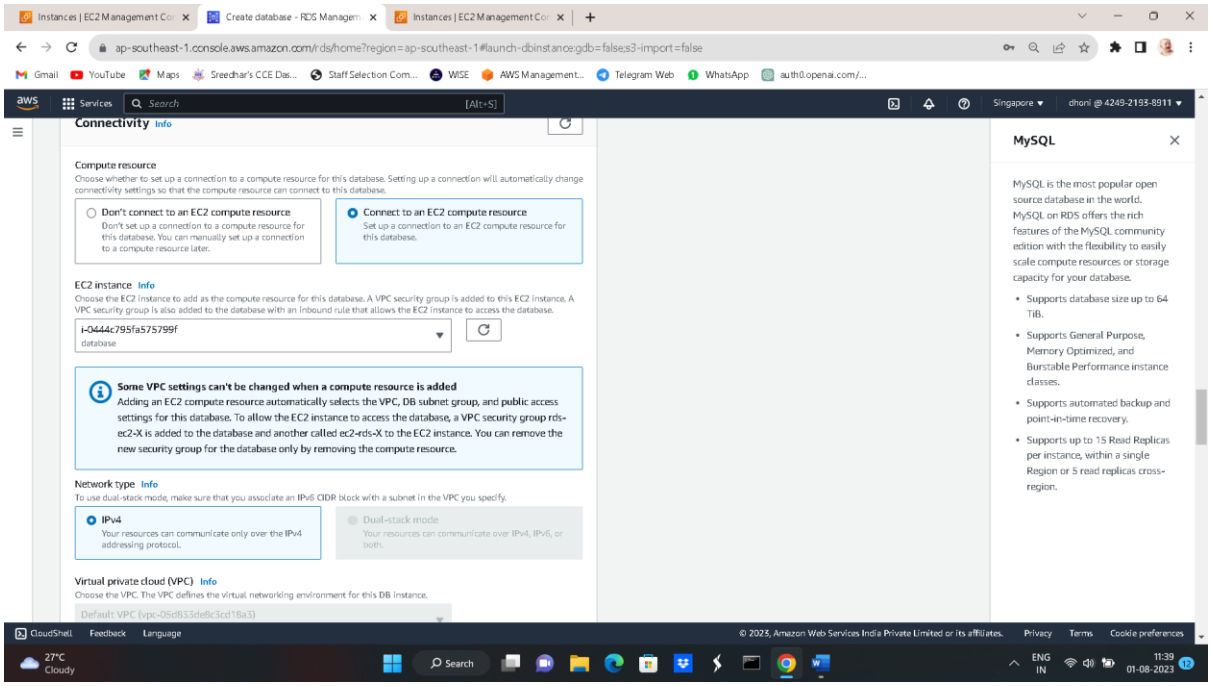
- Give the instance configuration based on your requirement.



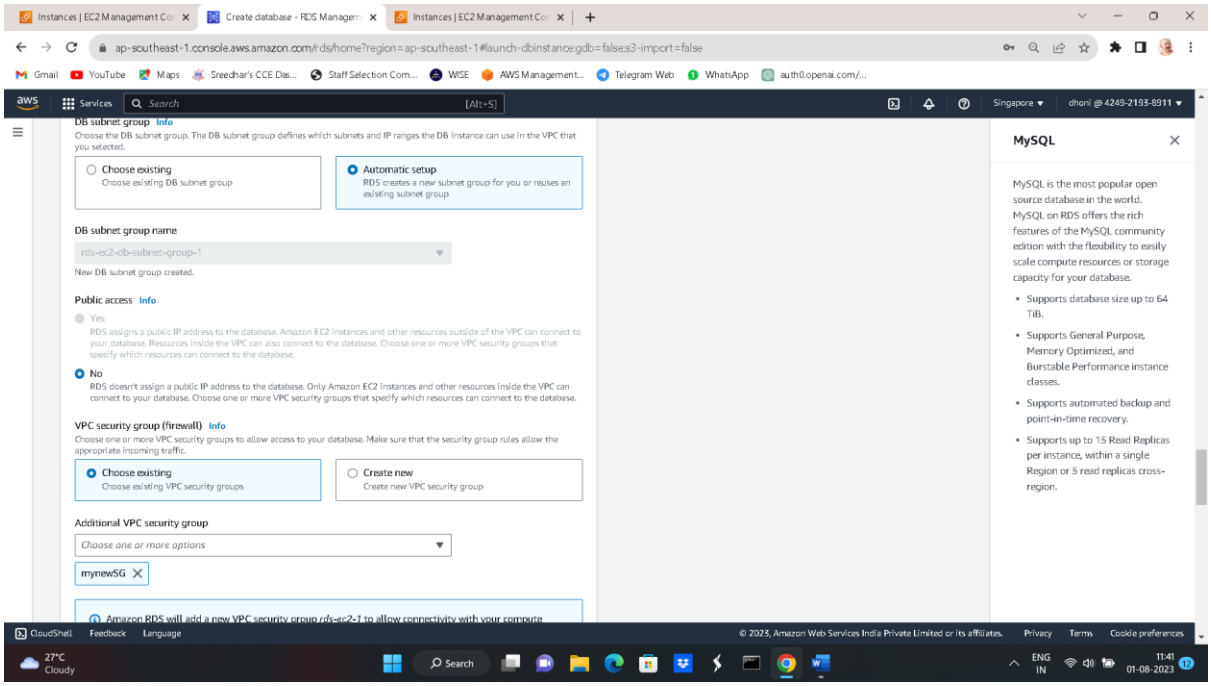
- Set your storage limit



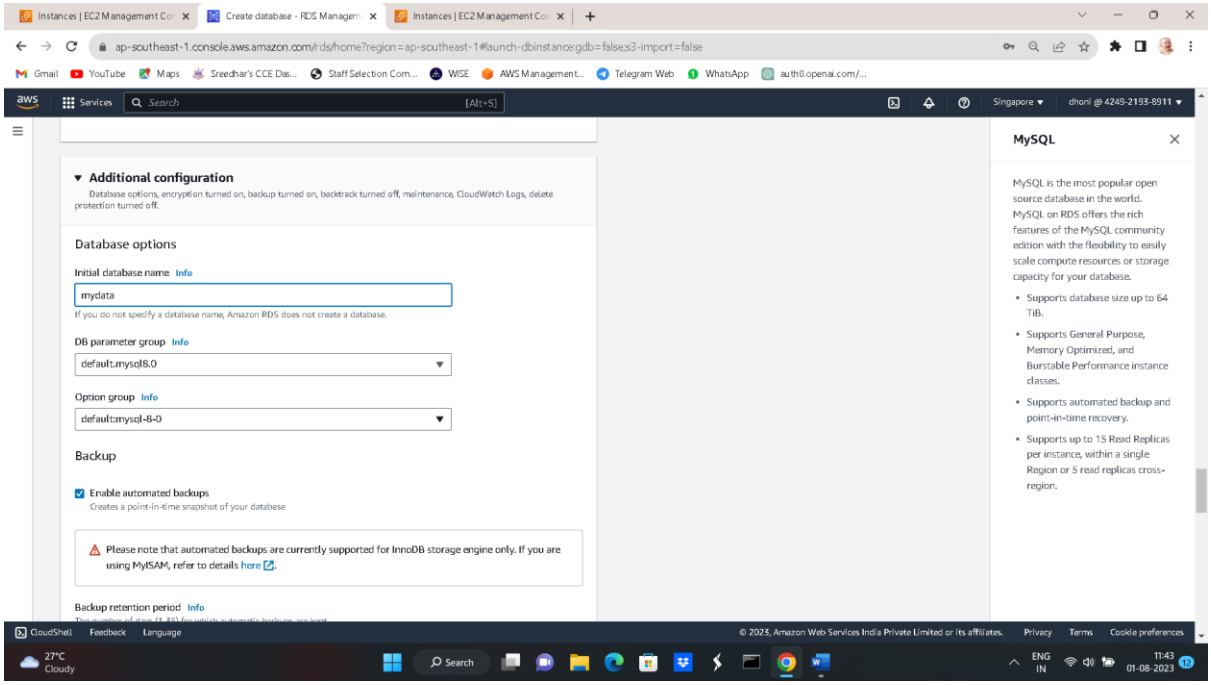
- Set up your ec2 machine



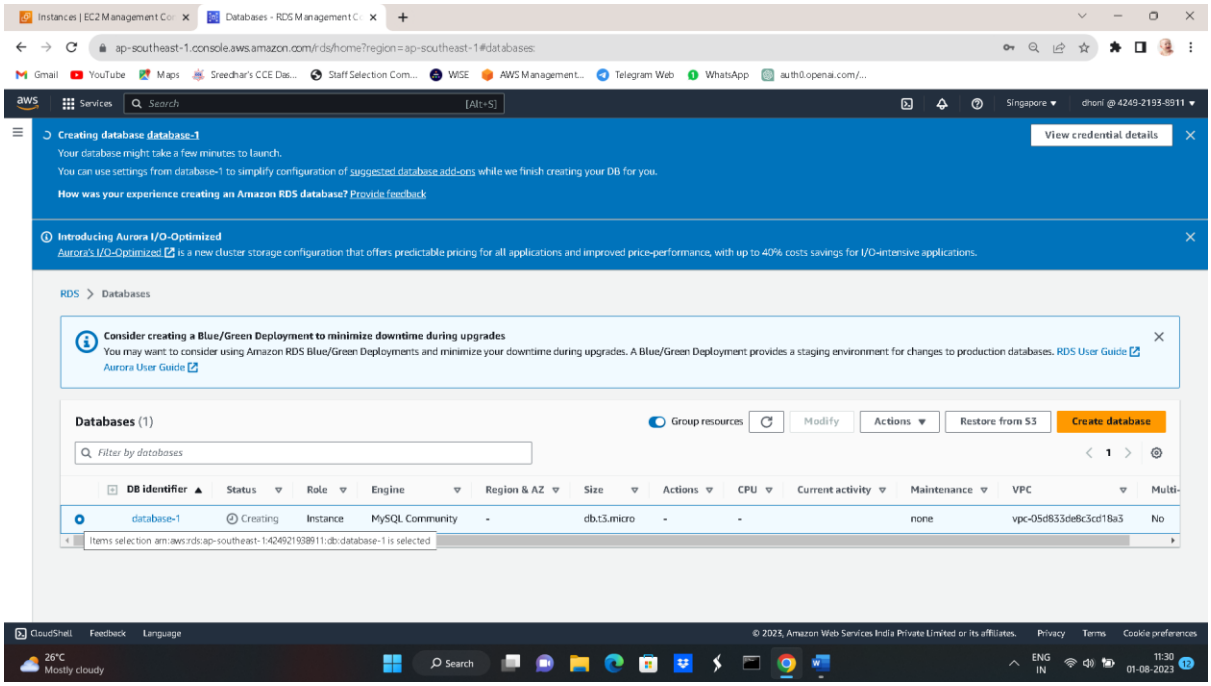
- Assign security group.



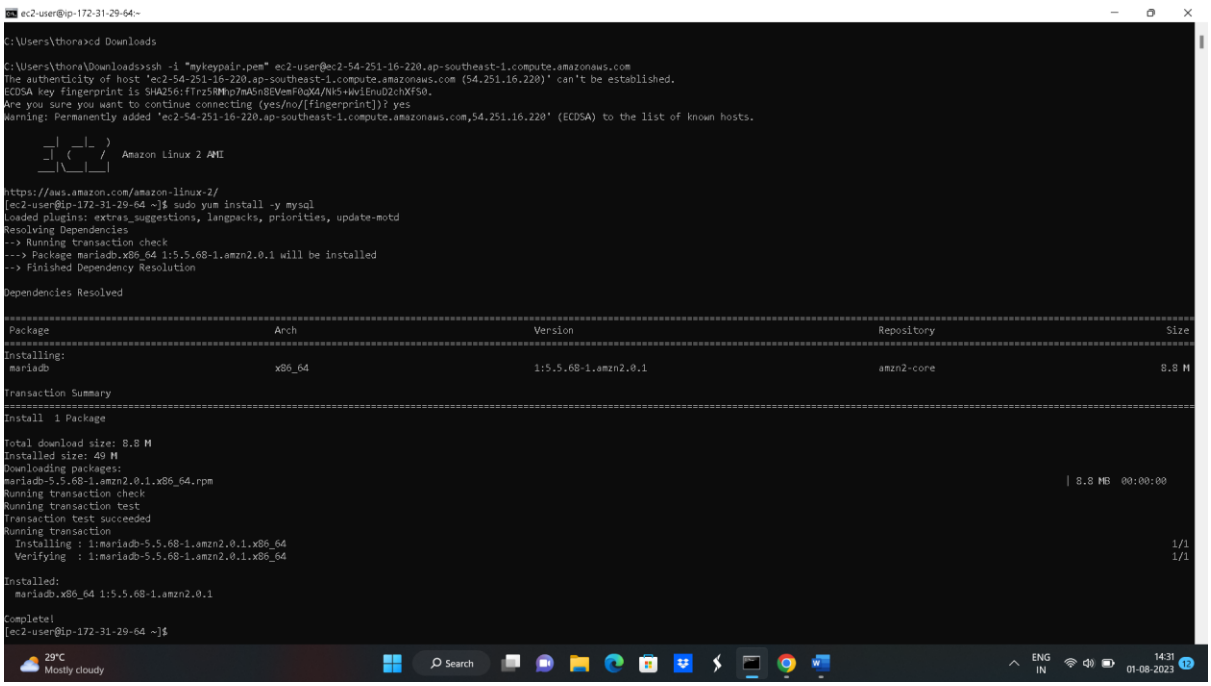
- In additional configurations you have to give the name for database.



- Database is created successfully



- Connect the instance you have created and install mysql in that machine



- Connect the mysql database by using the below command
  - mysql -h database-1.c8yeqqdlhyxj.ap-southeast-1.rds.amazonaws.com -u admin -P 3306 -p
- in the next step you have to provide password.