# LABORATORY REPORT

## AWS SOLUTION ARCHITECT

## CSE3016

## BL2025260100772

**Submitted by**

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**VIT BHOPAL UNIVERSITY**

**July-August 2025**

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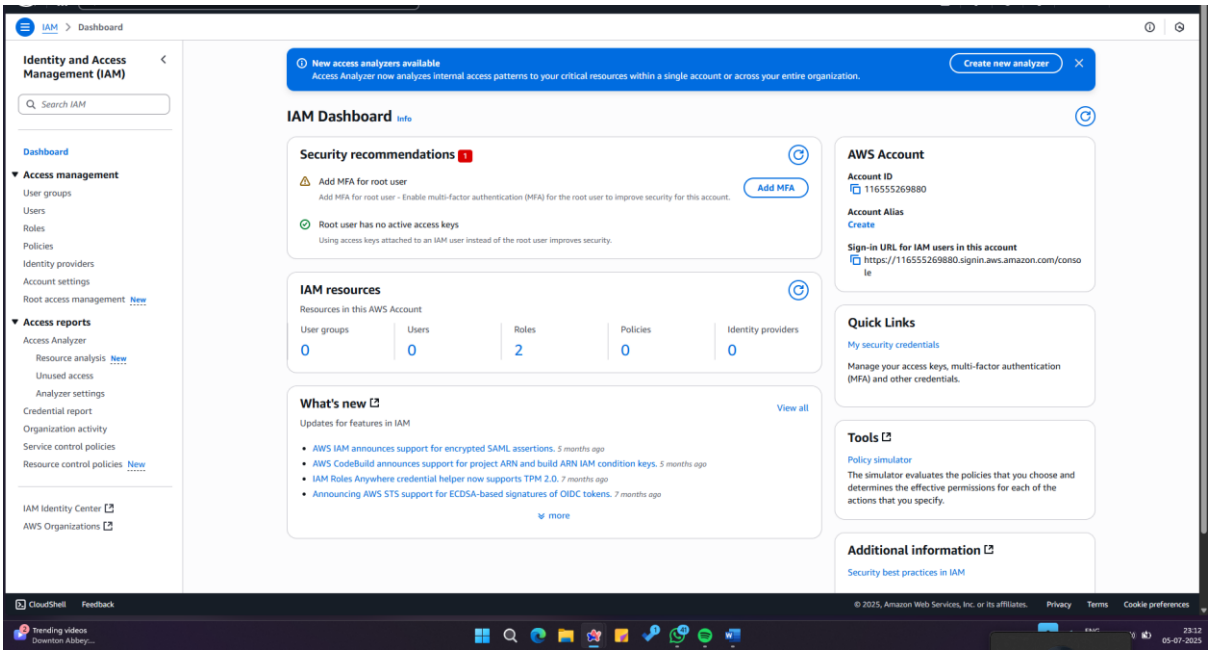
| Exp. No: 01 | Creating IAM Users and Defining Custom Policies in AWS Identity and Access Management (IAM) |

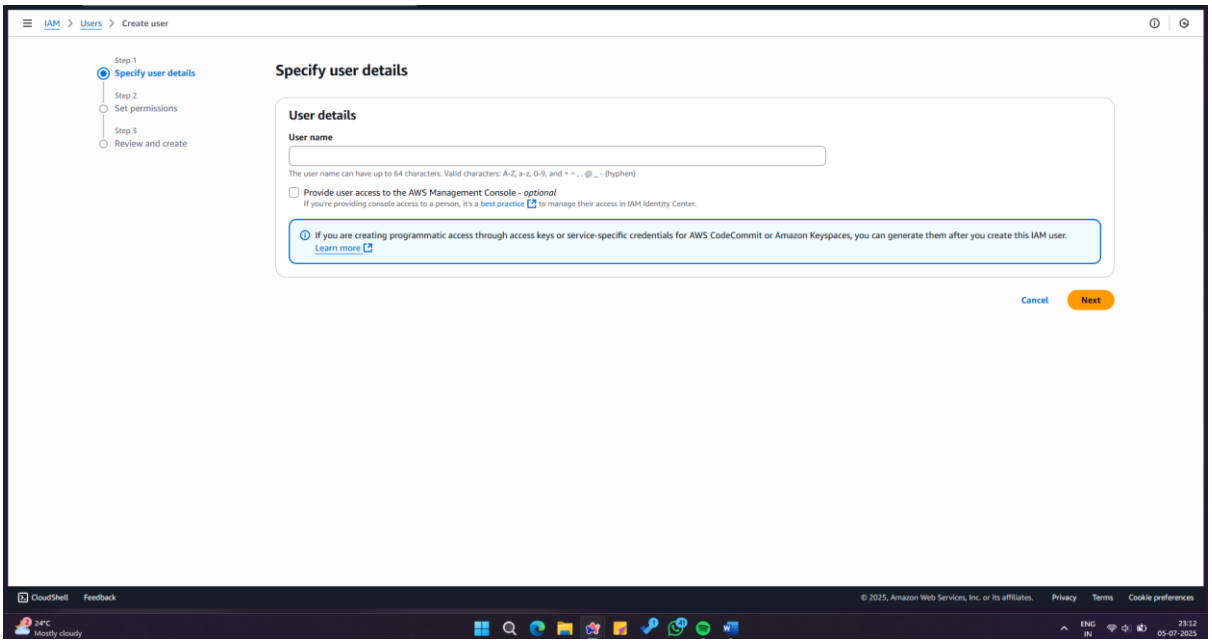
**AIM OF THE EXPERIMENT:** Creating IAM Users and Defining Custom Policies in AWS Identity and Access Management (IAM)

## PROCEDURE:

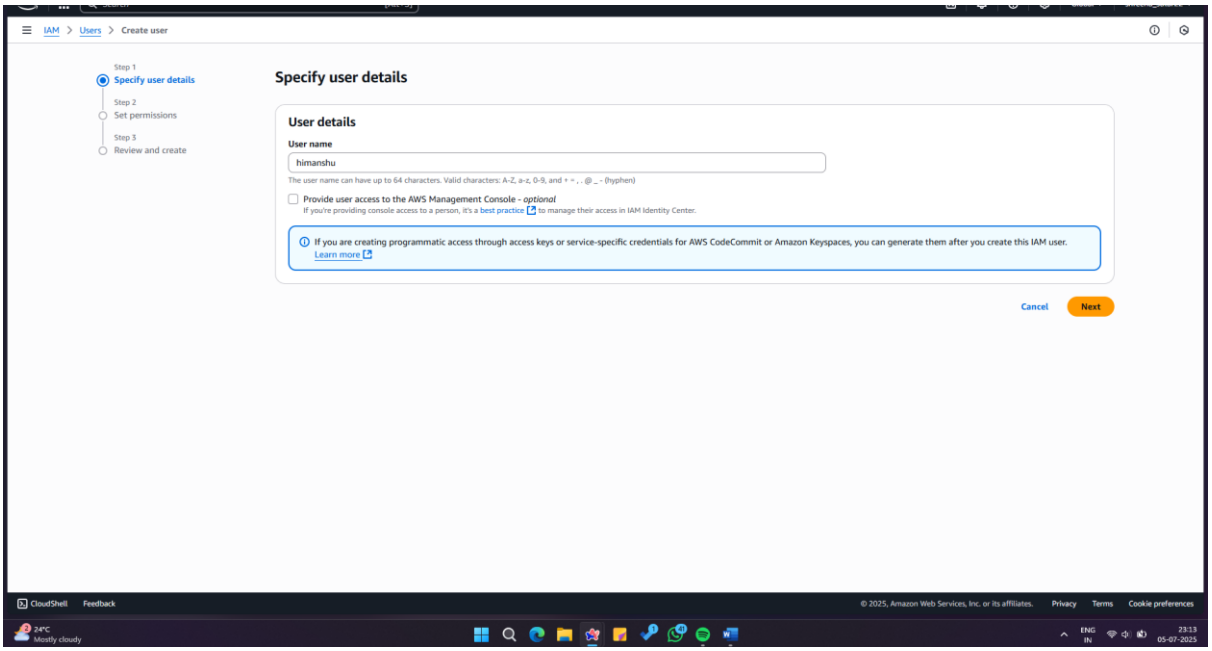
1. After logging in , Open the IAM (Identity and Access Management) service from the AWS Console.



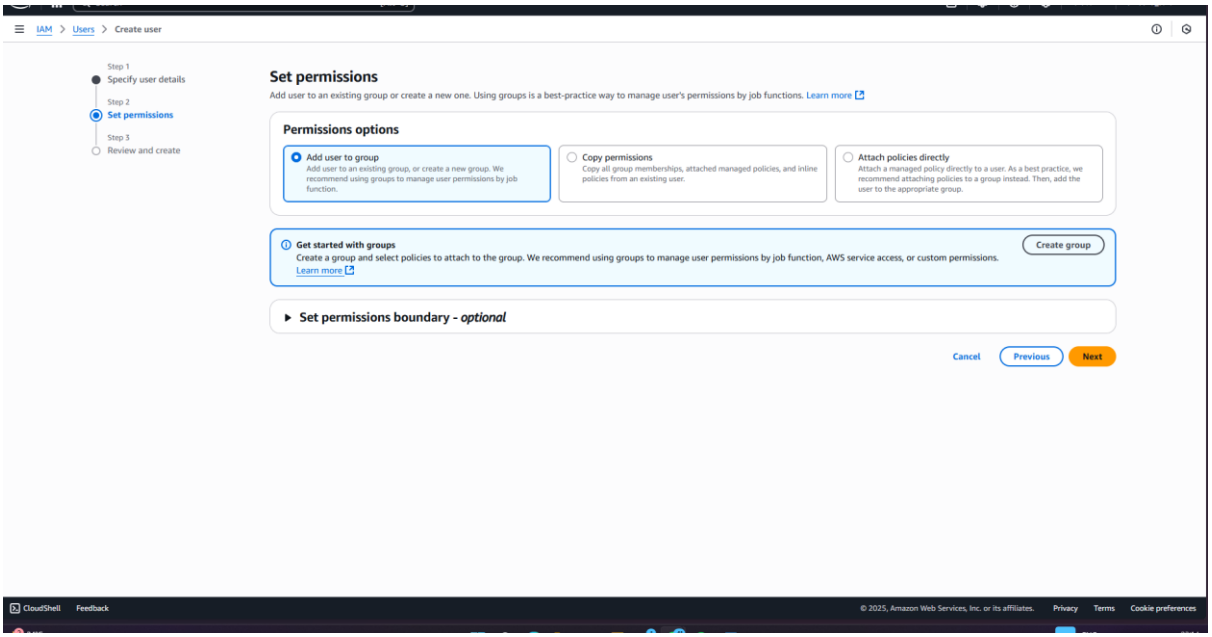
2. In the IAM dashboard, select “Users” and click “Add users”.



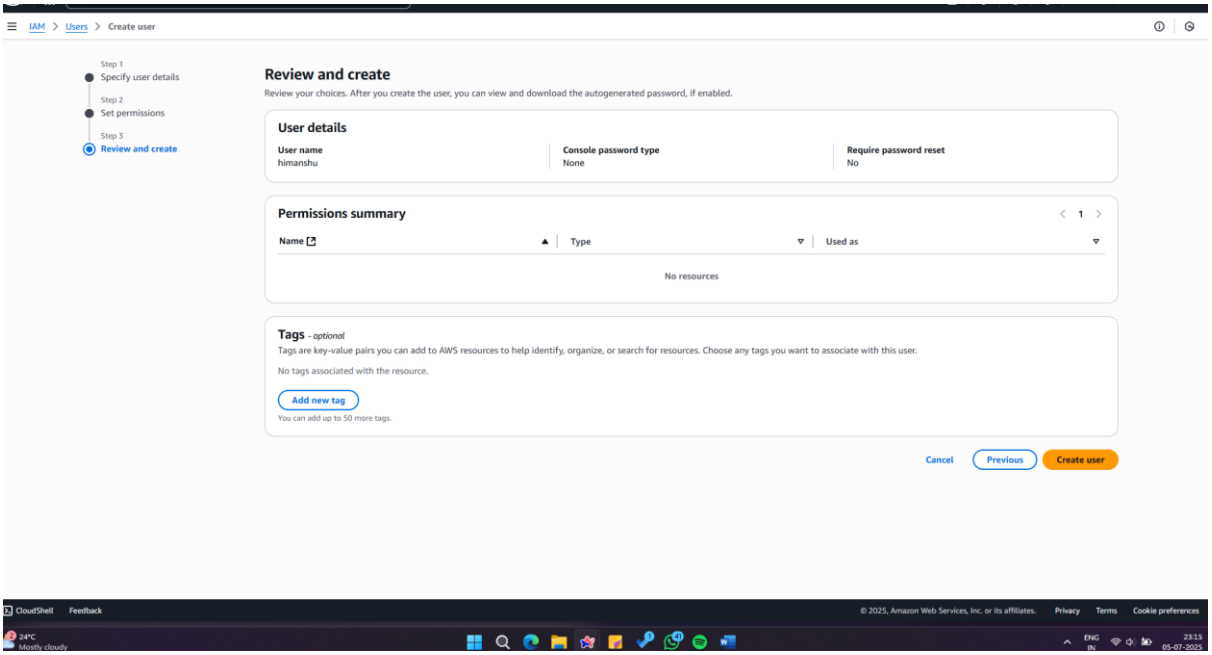

3. Enter the username in the required format and select the type of access required



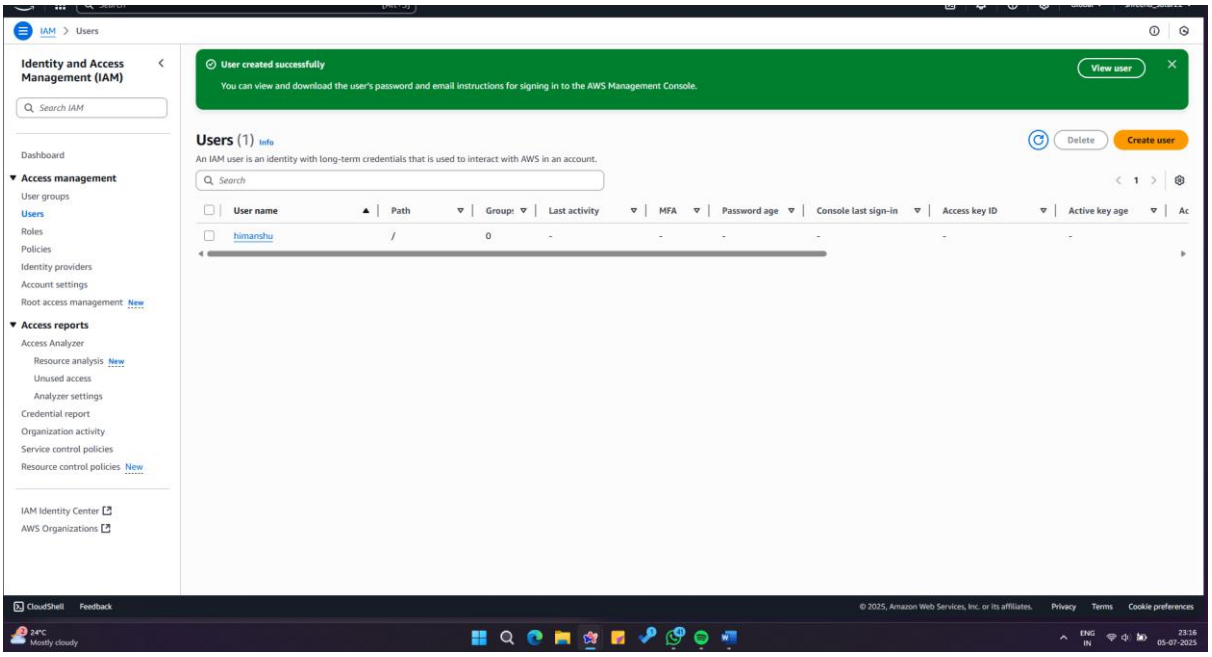
4. Set permission to add user to group .



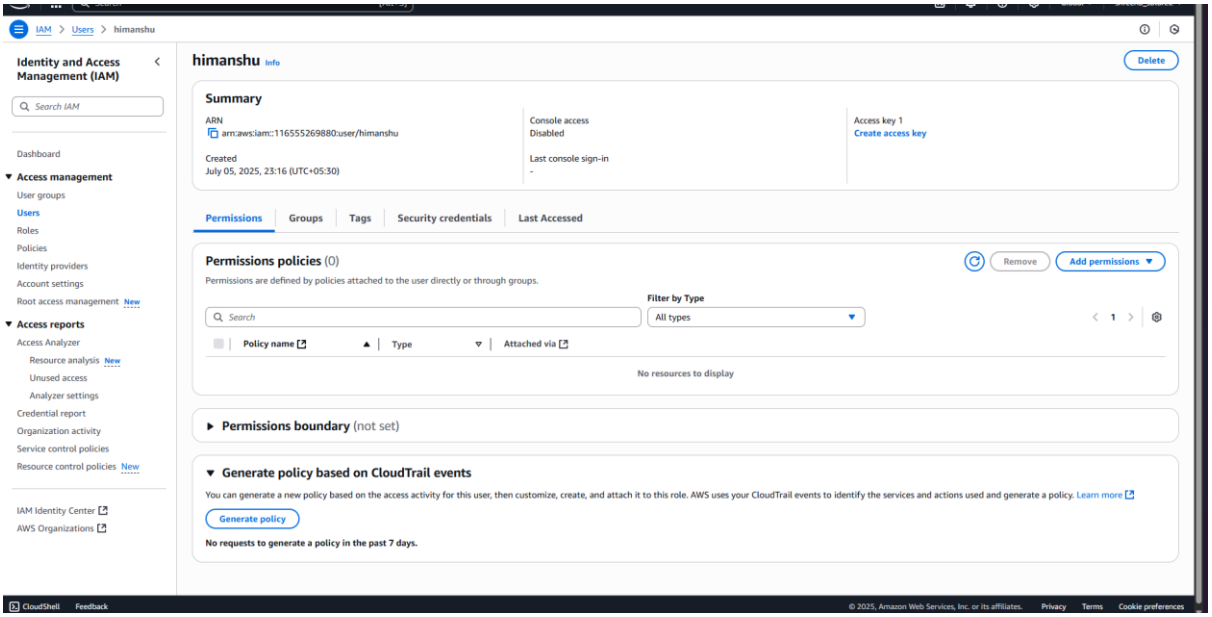

5. After proceeding , review all the details and click on create user .



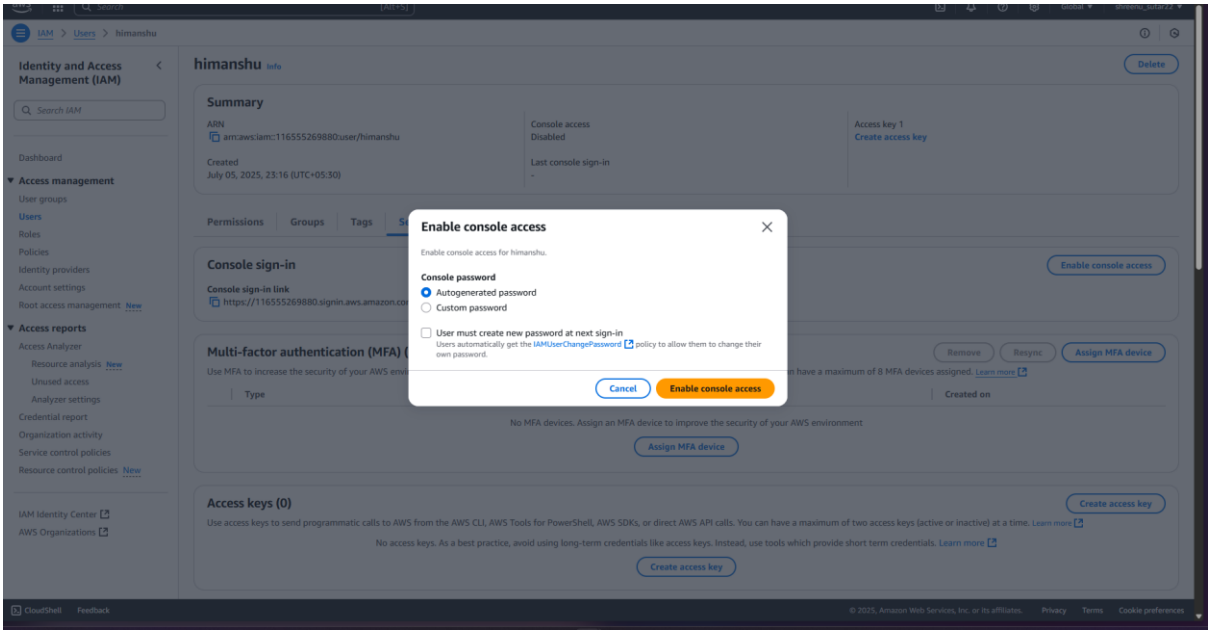
6. User has been successfully created



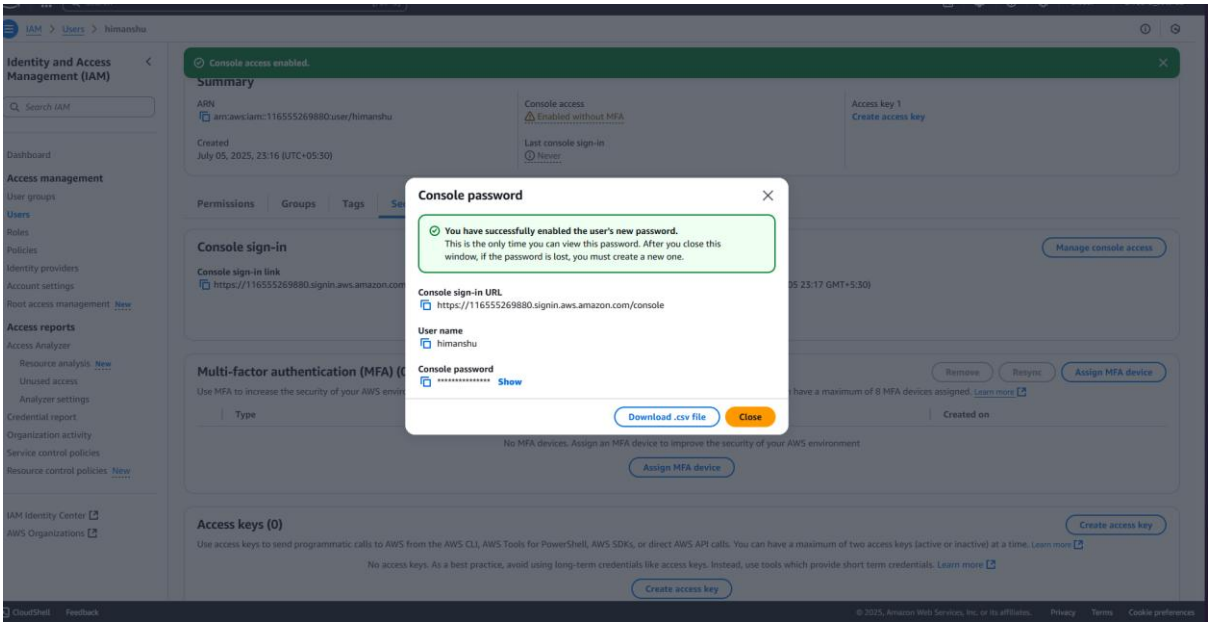

7. Go to the permissions section of the user created , by clicking over it .



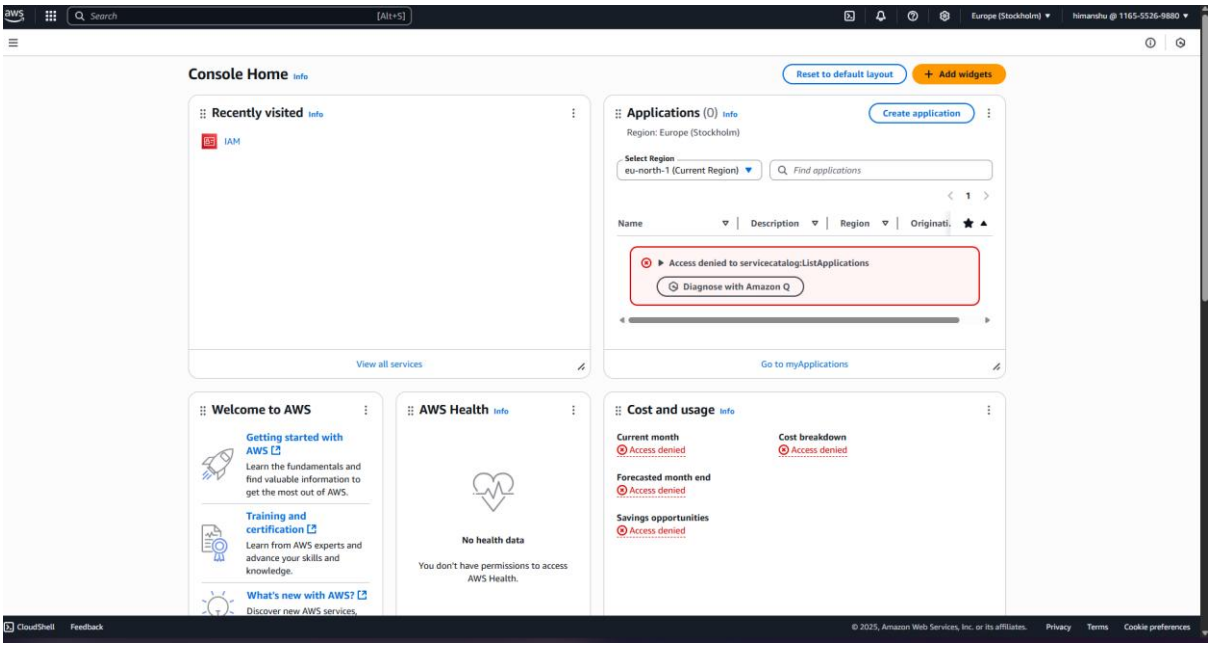
8. Now go on security ceredentials and click on enable console access.



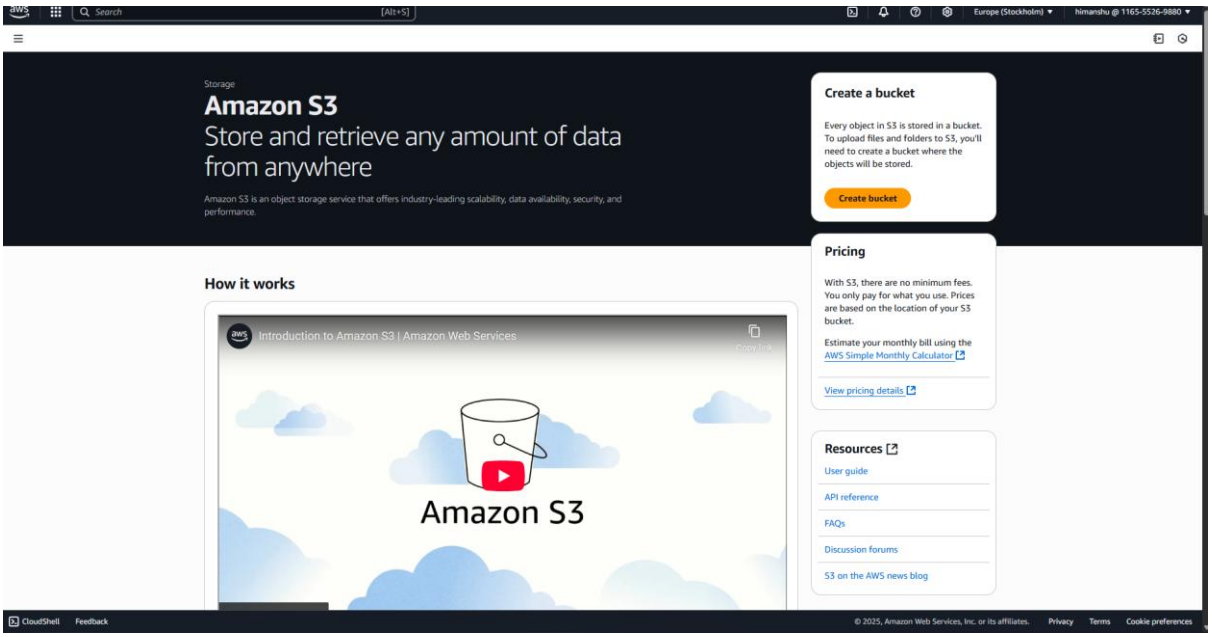

9. Console password successfully created .



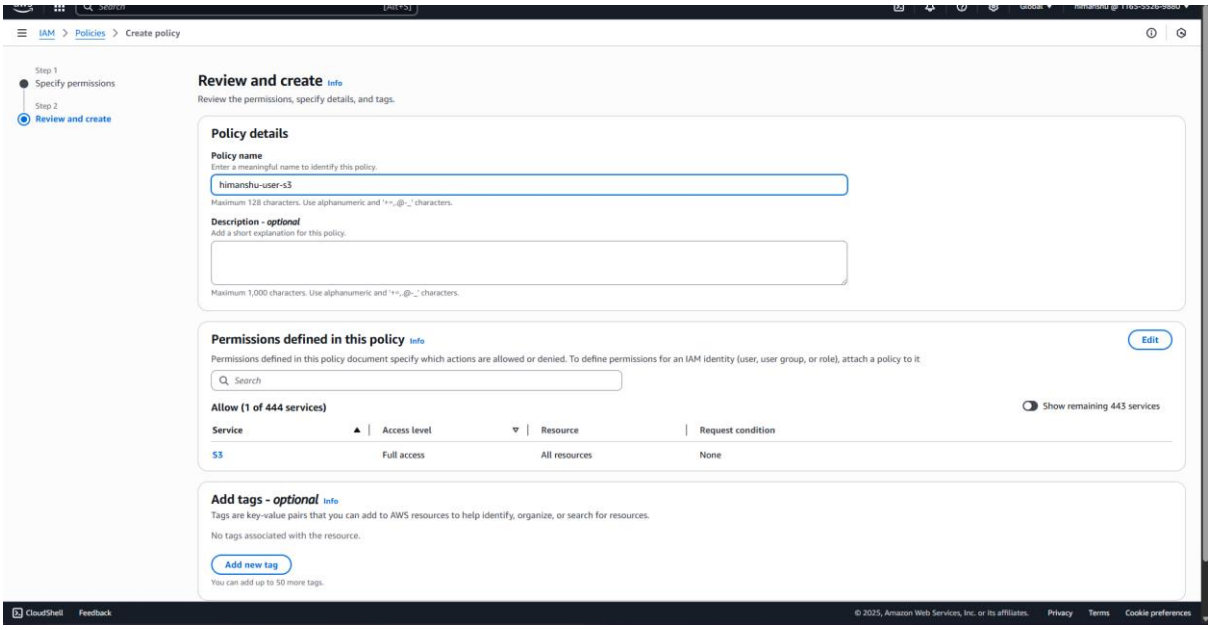
10. With the help of ceredentials created log into your user account .



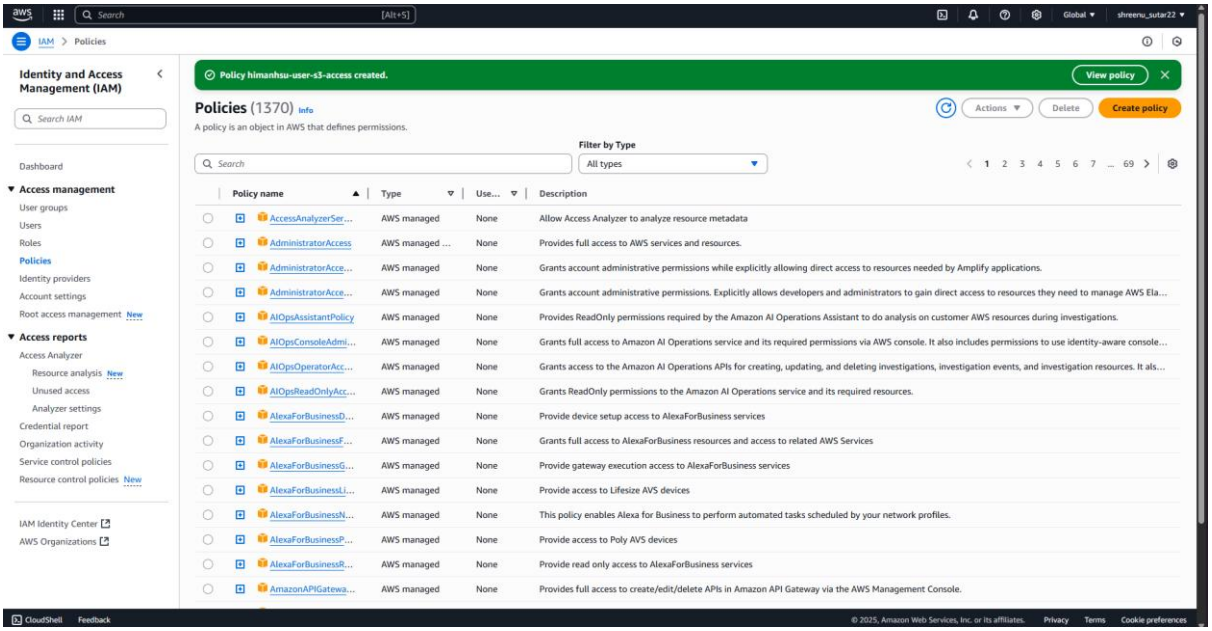

11. You can use any service now with the help of user account , if you have permission . Now will provide permission for amazon s3



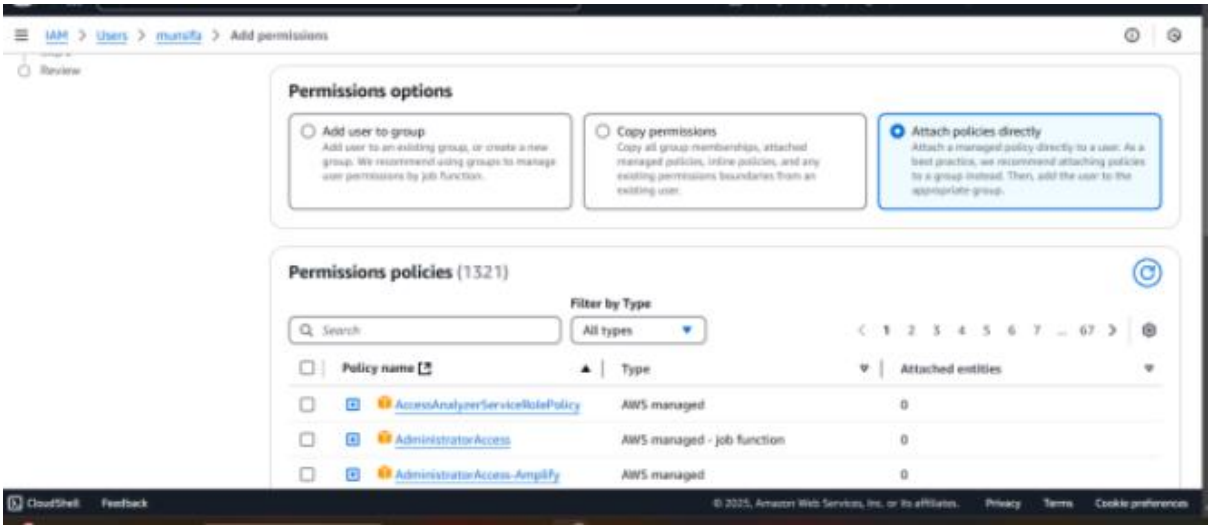
12. Go on IAM dashboard then policies and click on create policies (Fill in the details).



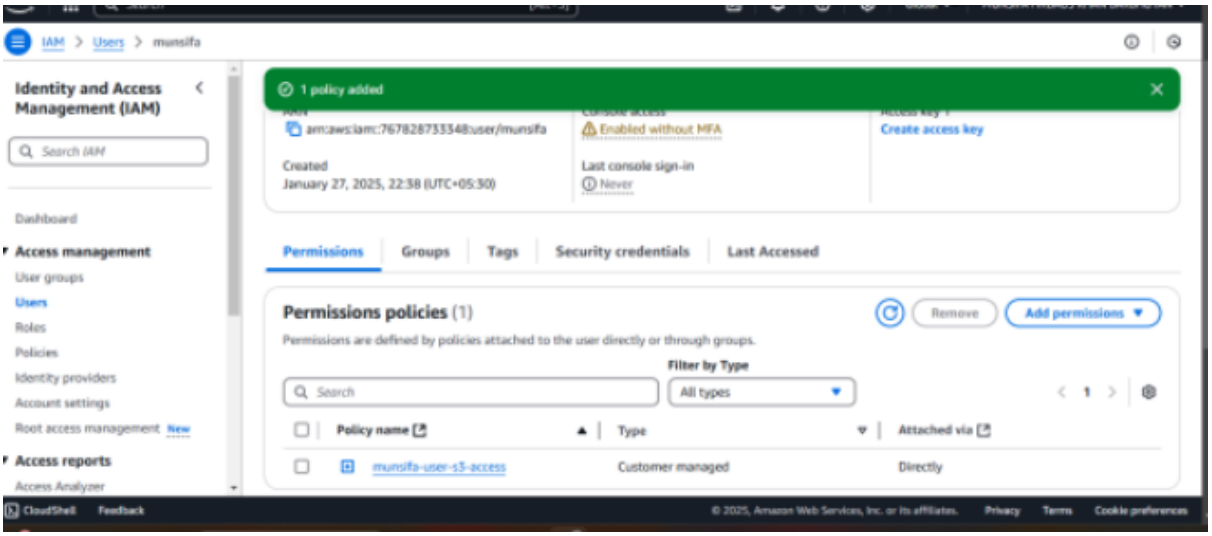

13. Policy successfully created.



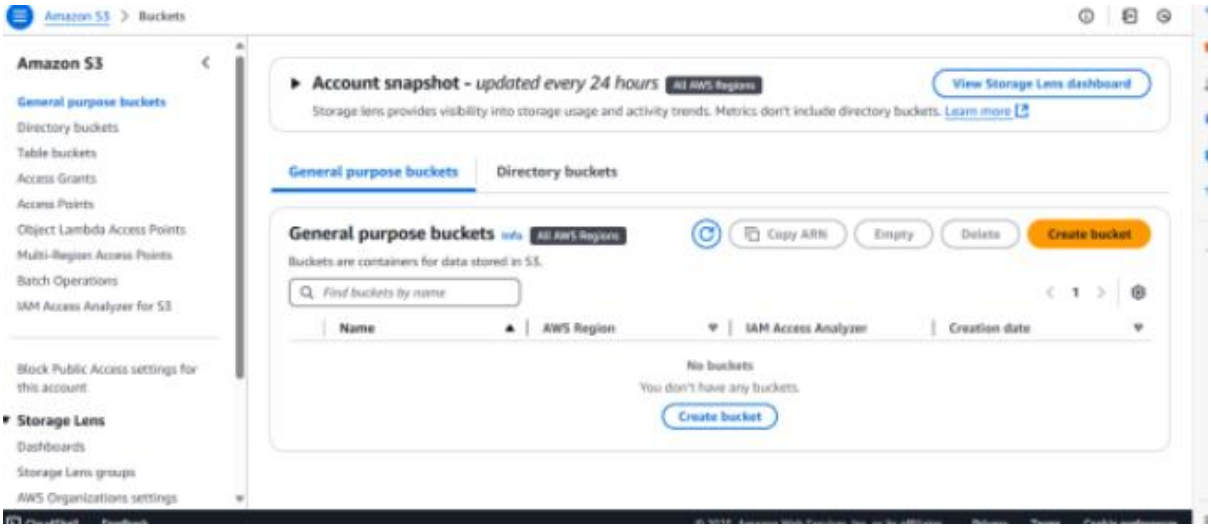
14. Now click on your user and add permission  and attach policies .




15. Policy successfully added .



16. Now we are able to use amazon s3 service in our user and successfully added a custom policy .



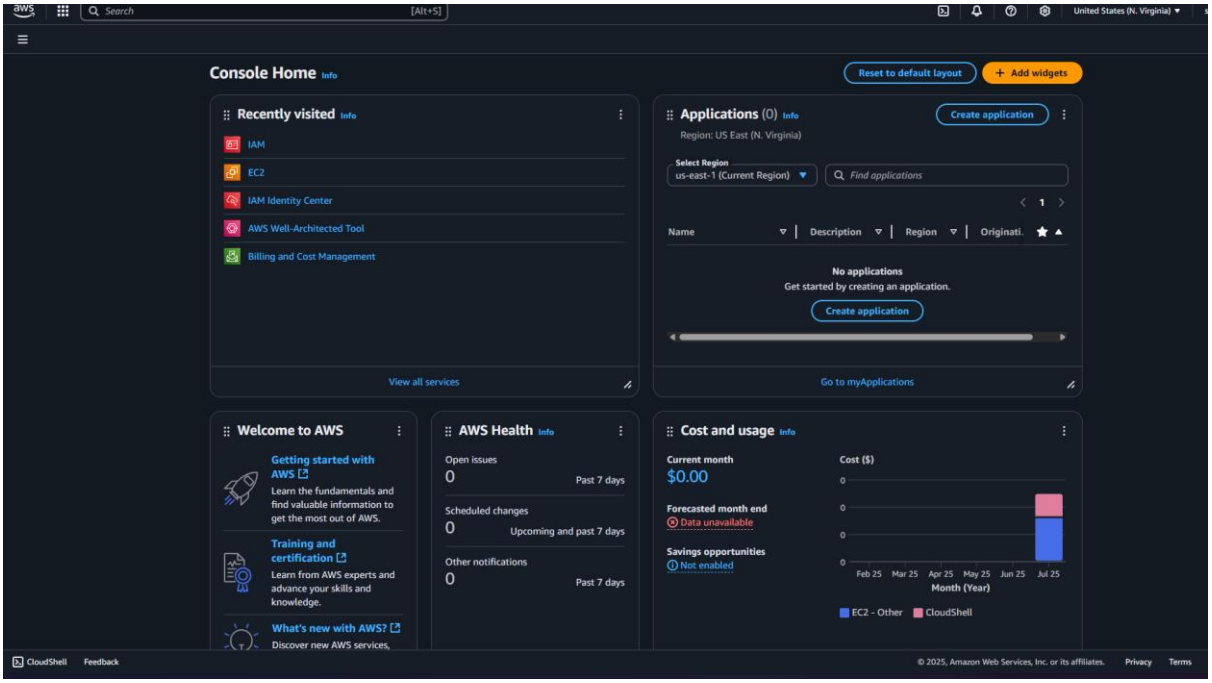
| Date: 11-07-2025 | Title |
|---|---|
| Exp. No: 02 | How to create IAM Groups |

**AIM OF THE EXPERIMENT:** How to create IAM Groups

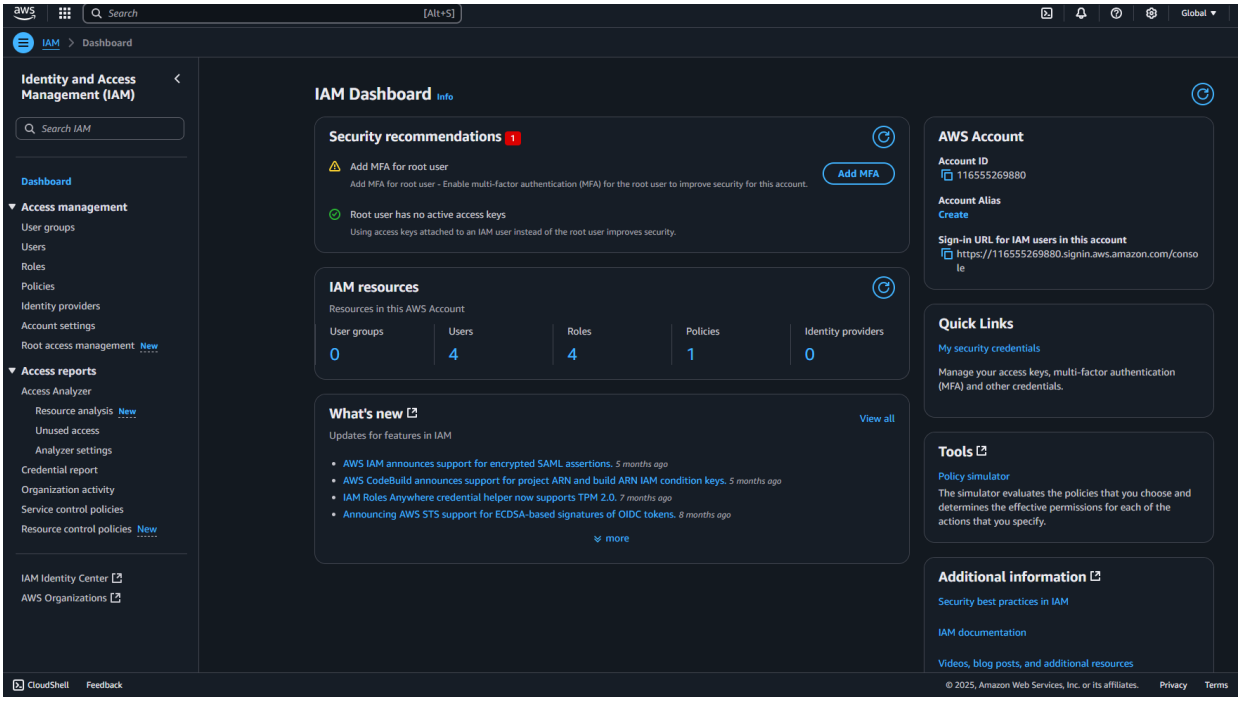
## PROCEDURE:

Below are the steps to create iam groups with screenshots :

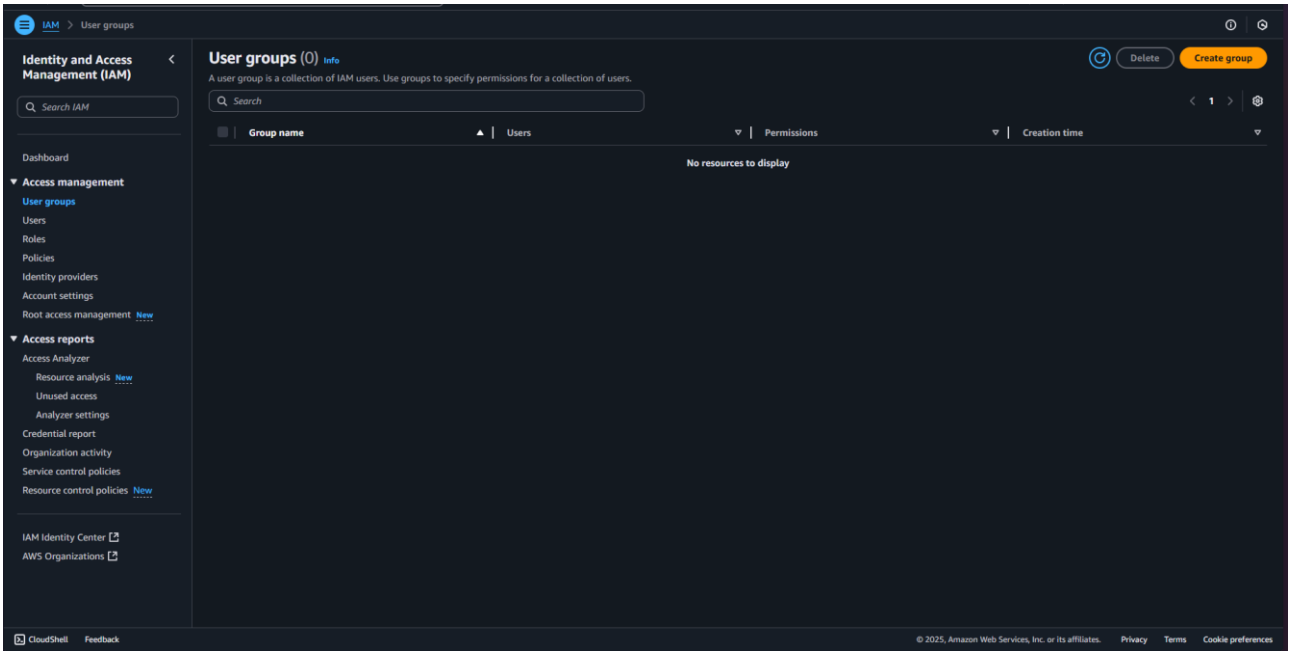
i) Sign in to the aws management console



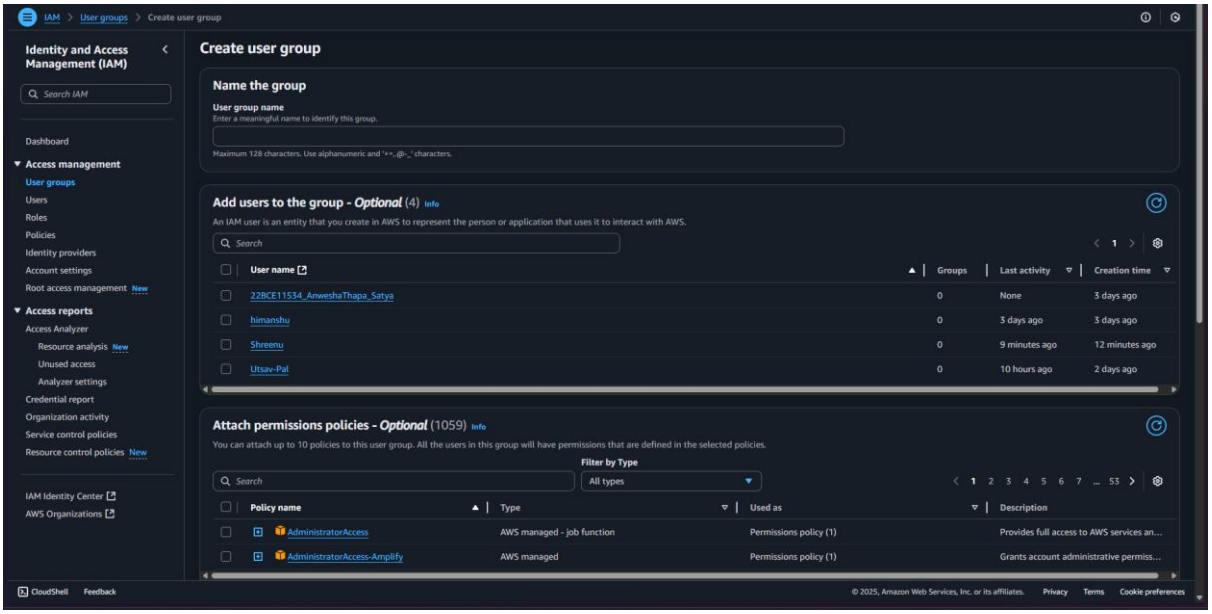
ii) Navigate to the iam services .



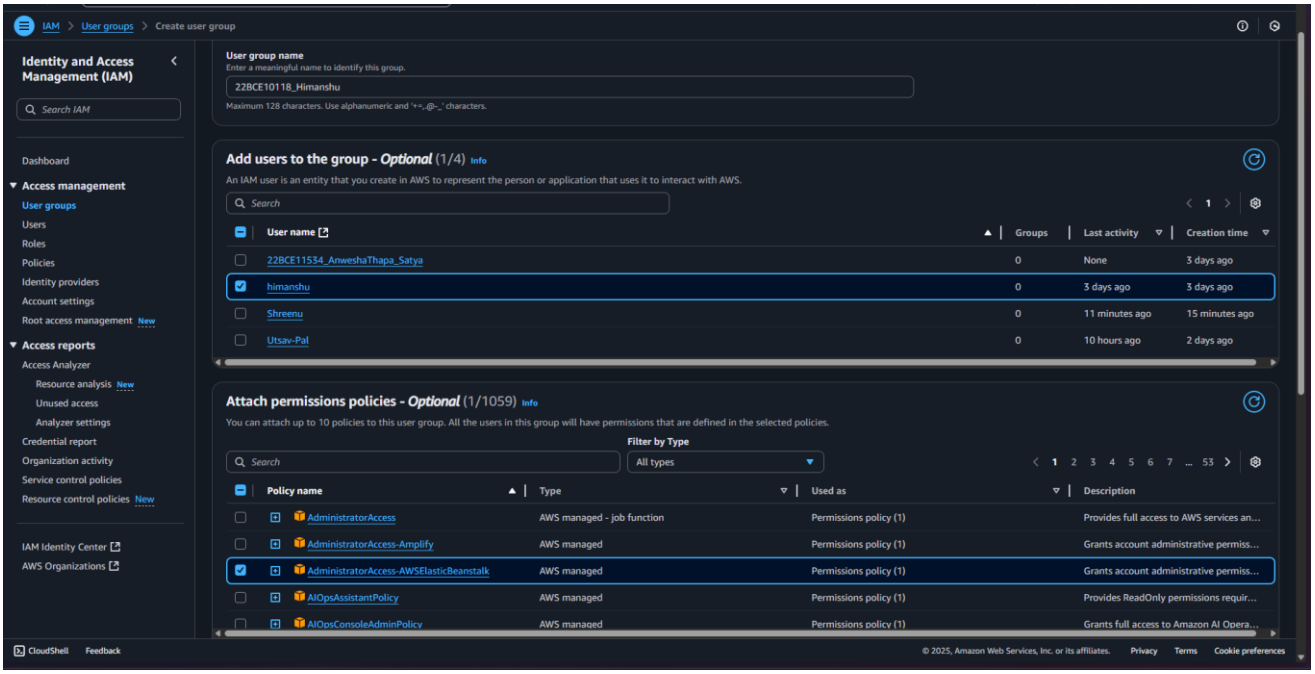

iii) Access the group section on the left navigation pane .



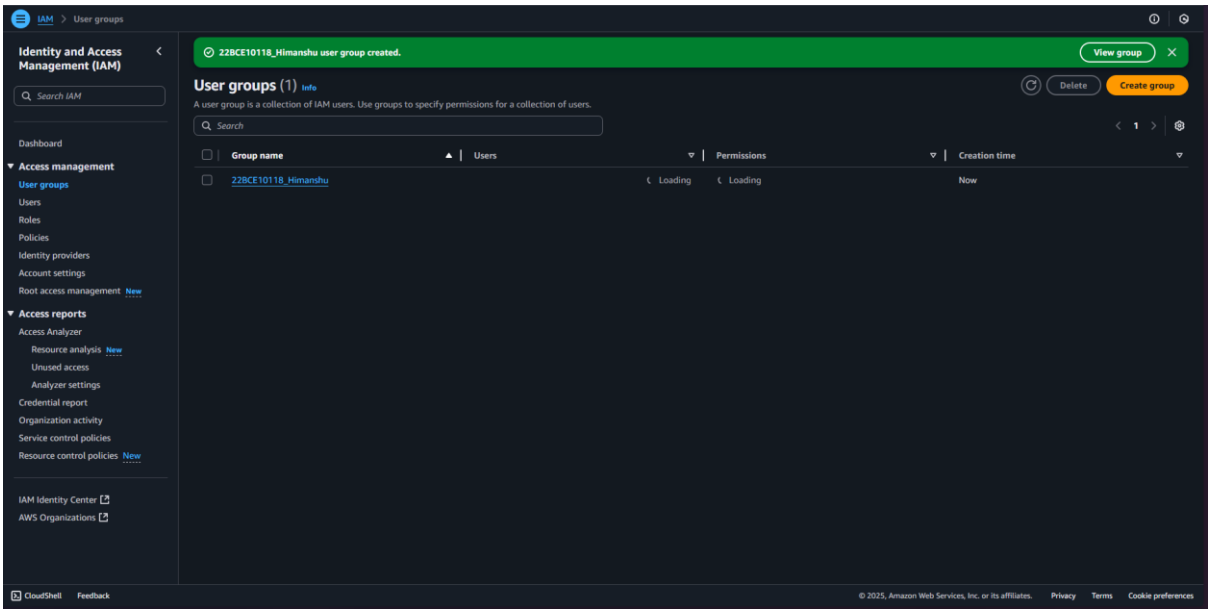
iv) Click on create group .




v) Fill in all the required information and click on create group .



vi) Group successfully created .




vii) Now we can edit group permissions ( revoke and grant permissions anytime ) according to the need .

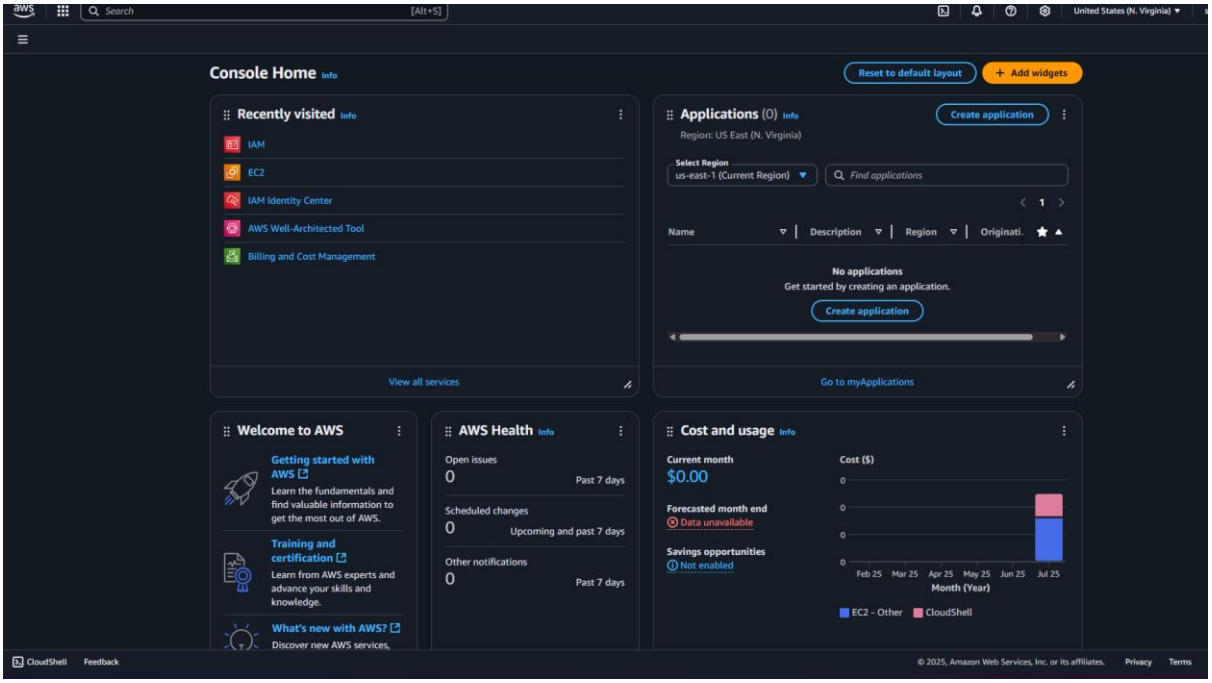
| Date: 14-07-2025 | Title |
|---|---|
| **Exp. No: 03** | How to assume IAM Roles |

**AIM OF THE EXPERIMENT:** How to assume IAM Roles

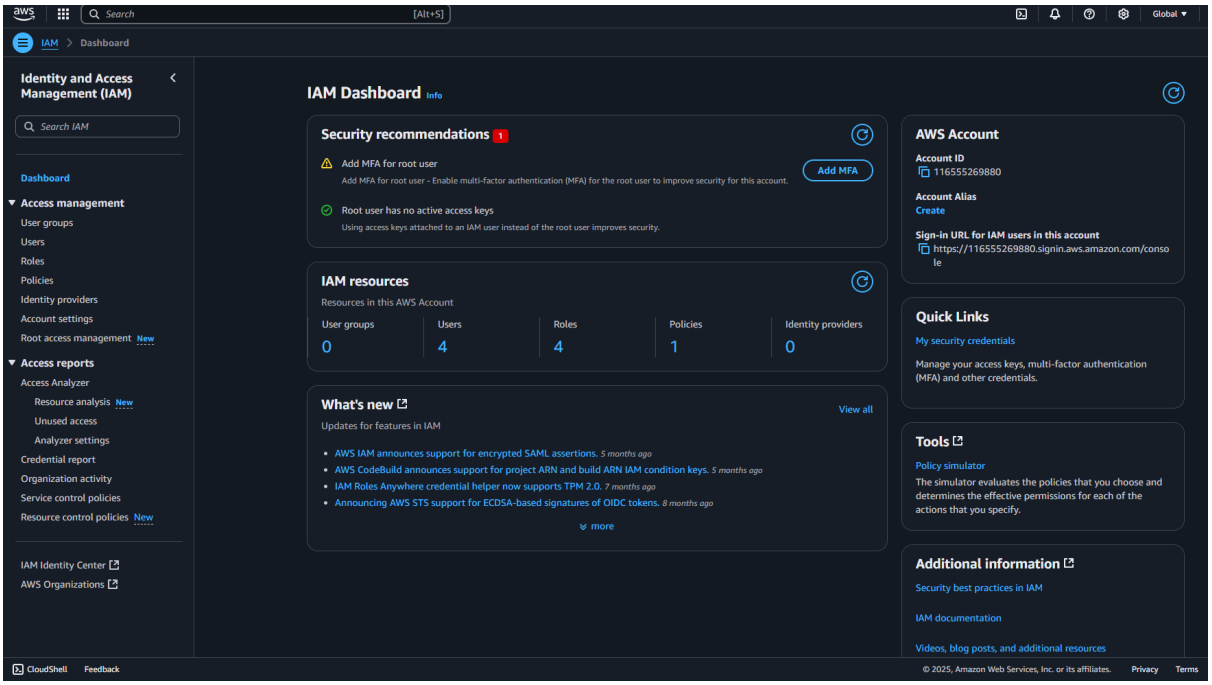
**PROCEDURE:**

Below are the steps to create iam groups with screenshots :

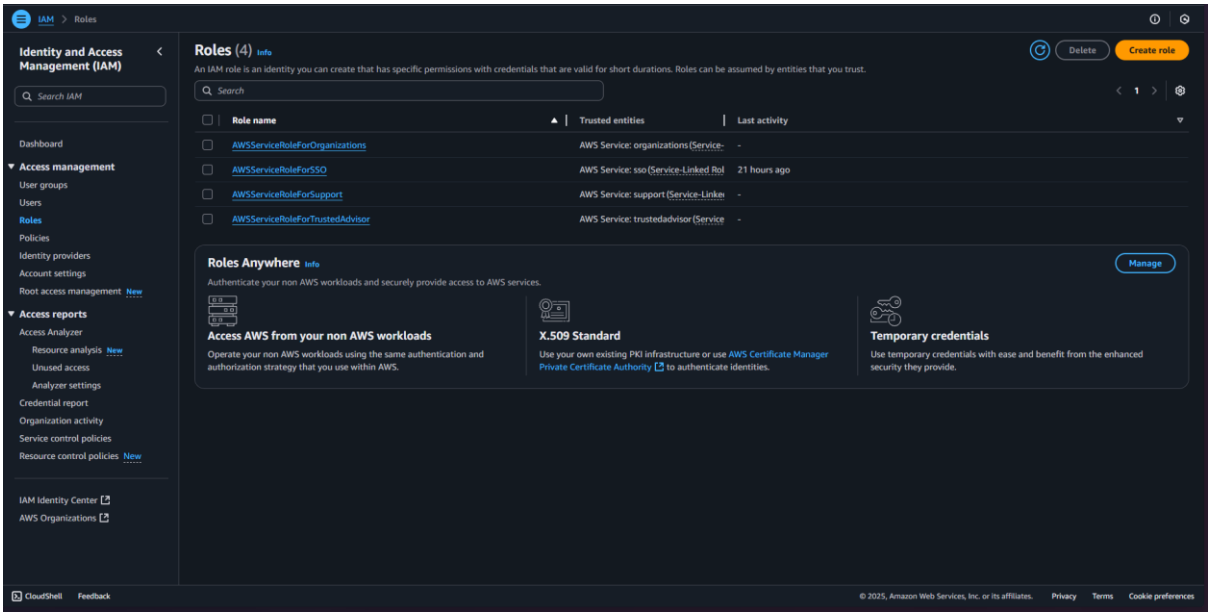
i) Sign in to the aws management console .



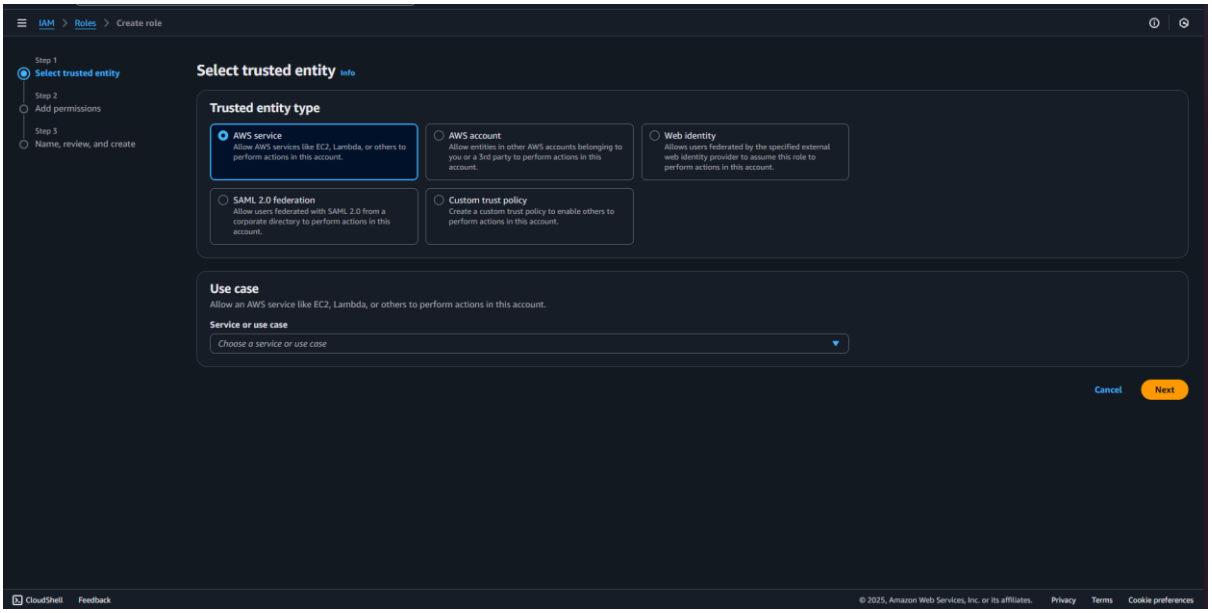
ii) Open iam .



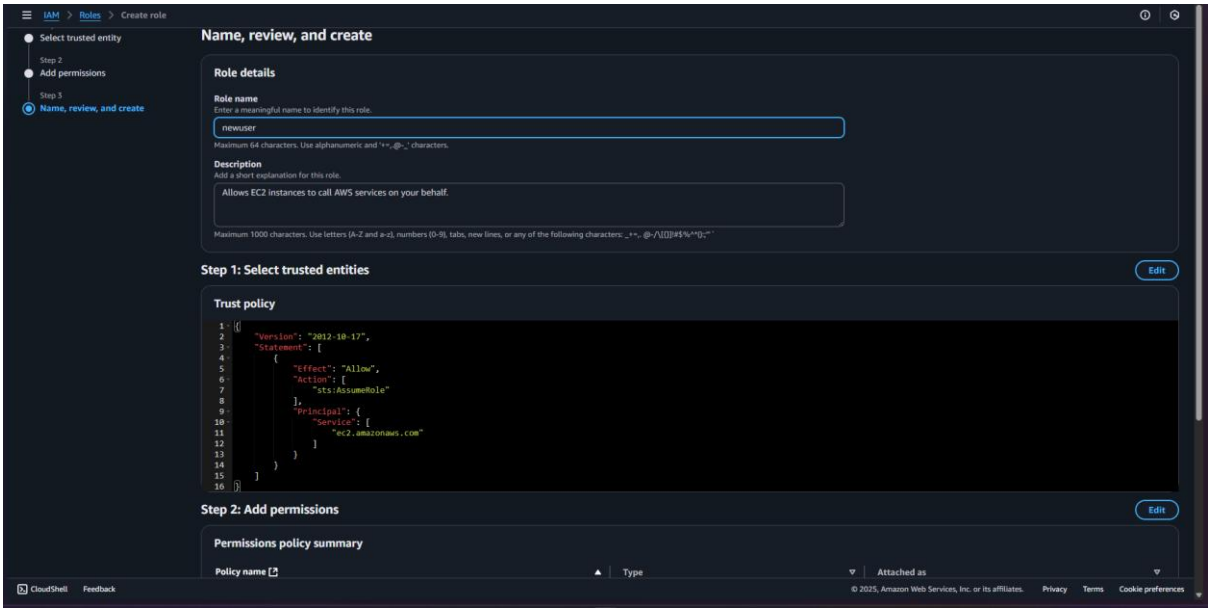

iii) Now click on roles on the left hand navigation pane .



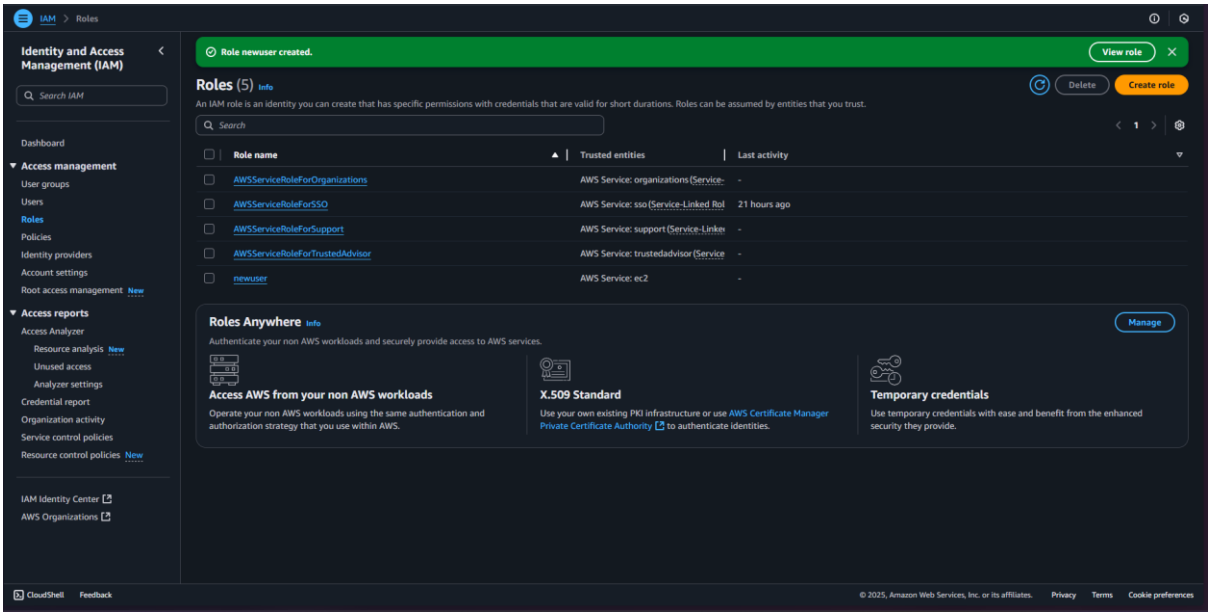
iv) Now click on create role .



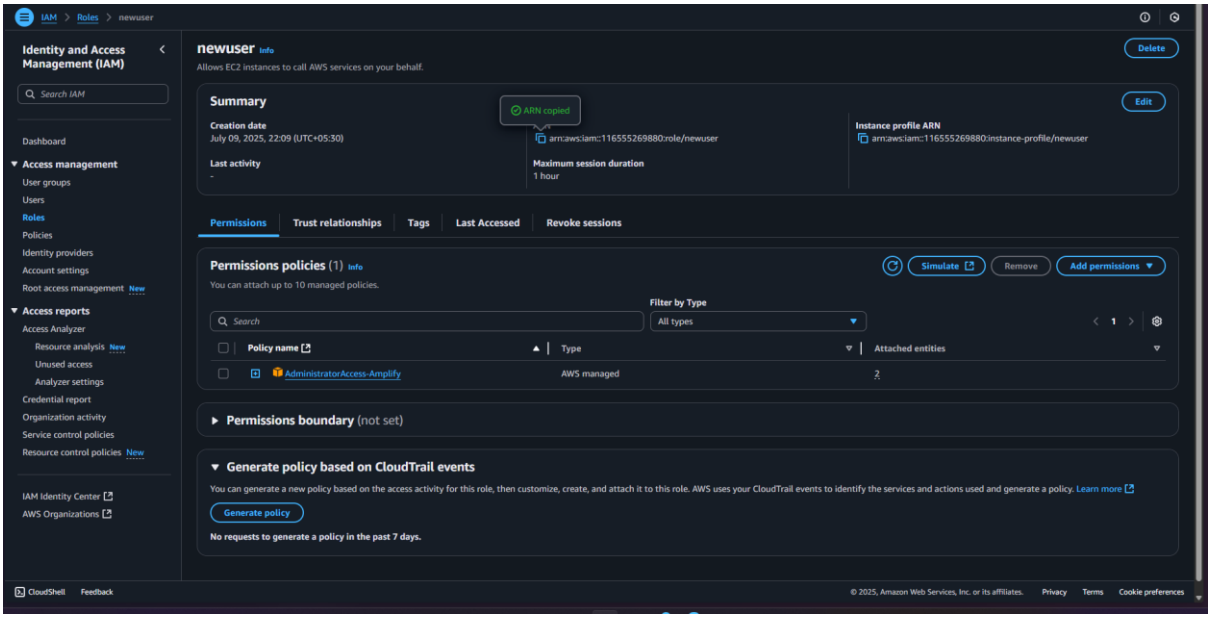

v) Fill in the all necessary information . ( add use case , provide permission and give it a name ).



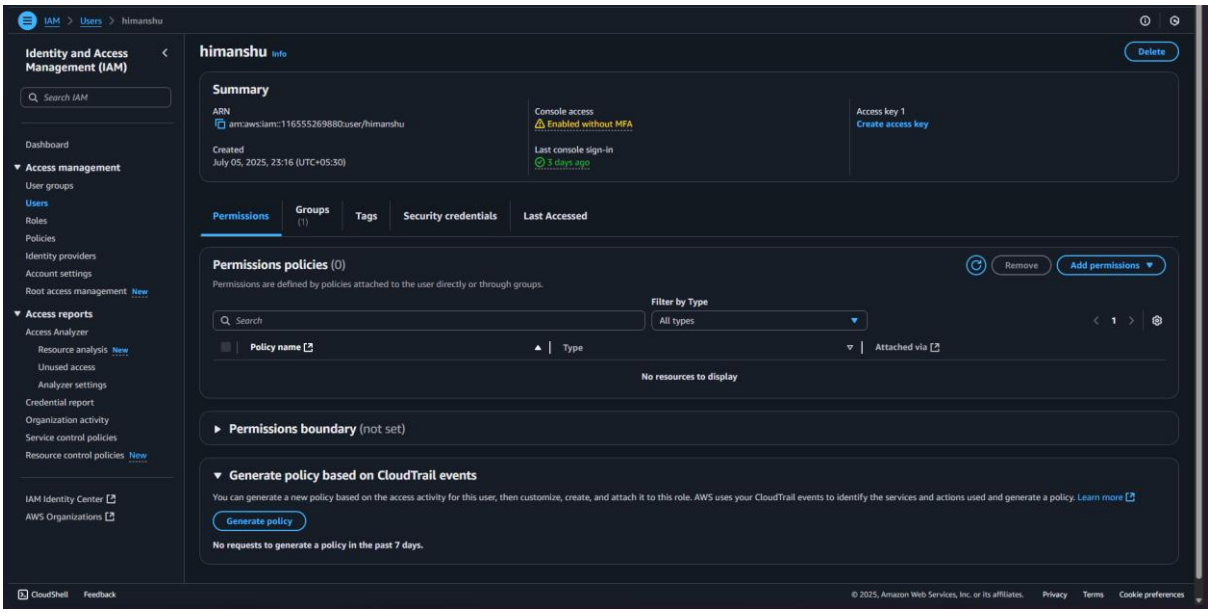
vi) New role successfully created .



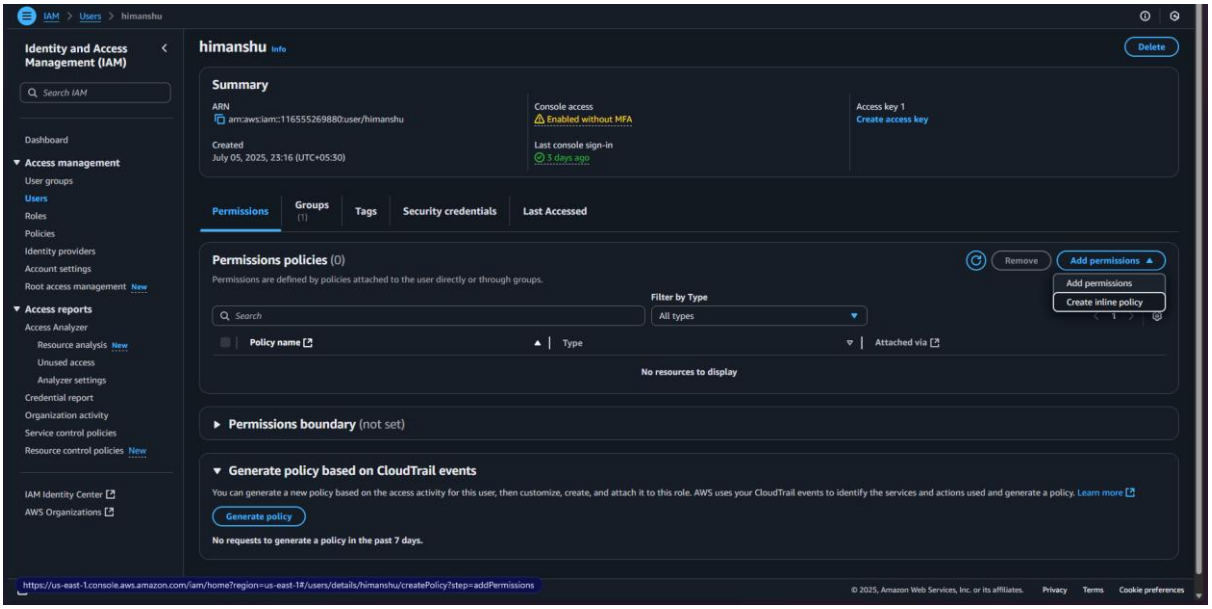

vii) Click on role and copy arn .



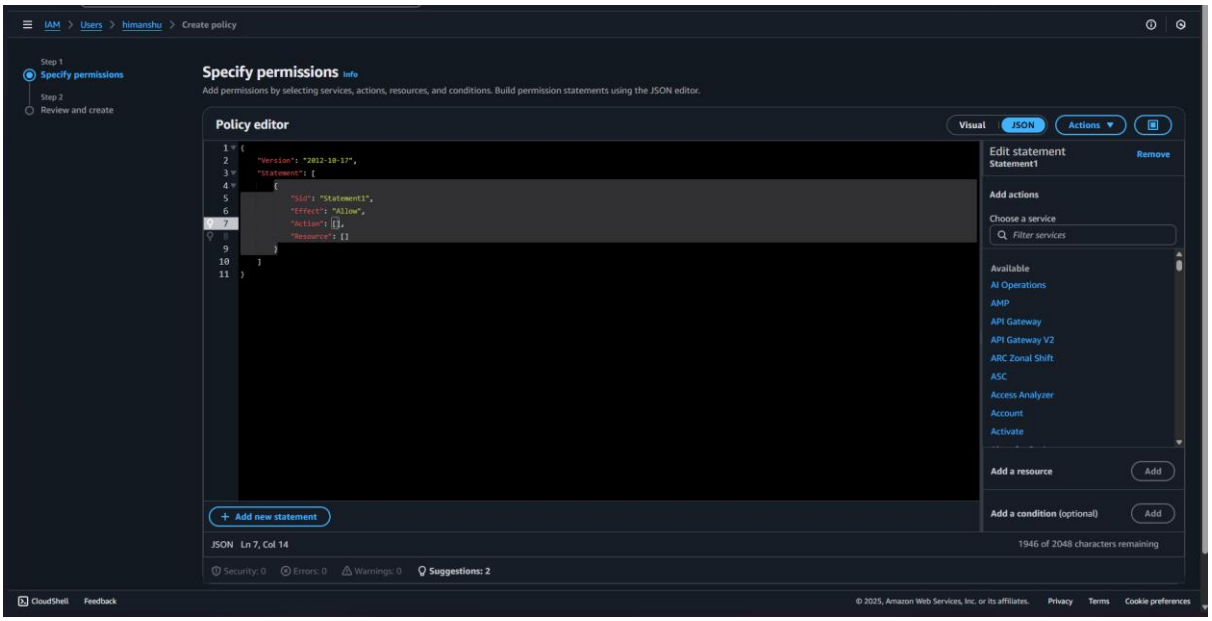
viii) Now in the users section , click on the user whom you want to assume role .




ix) In permissions section click on add permission .

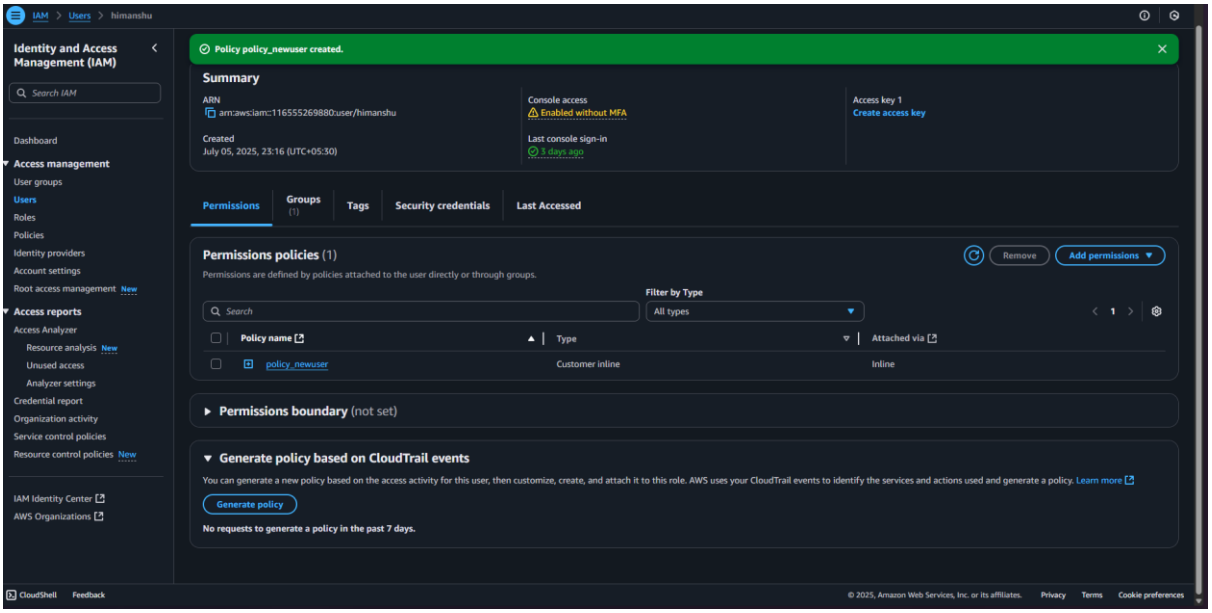


x) Click on create inline policy .

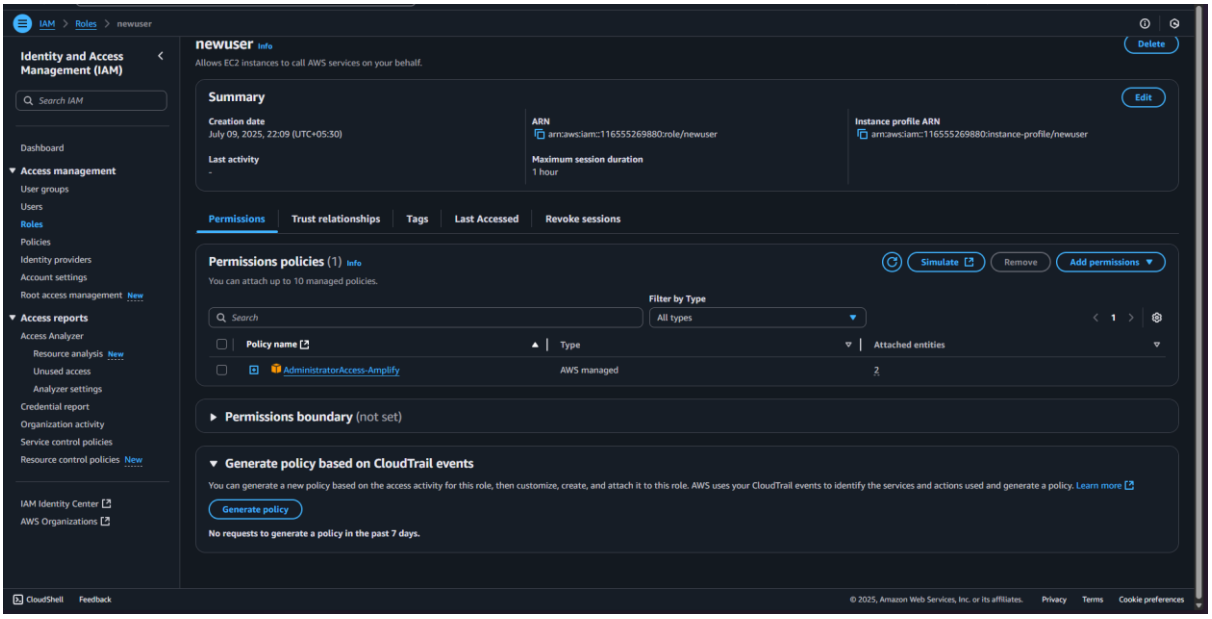



xi) Change the policy editor lines and click on next and create .

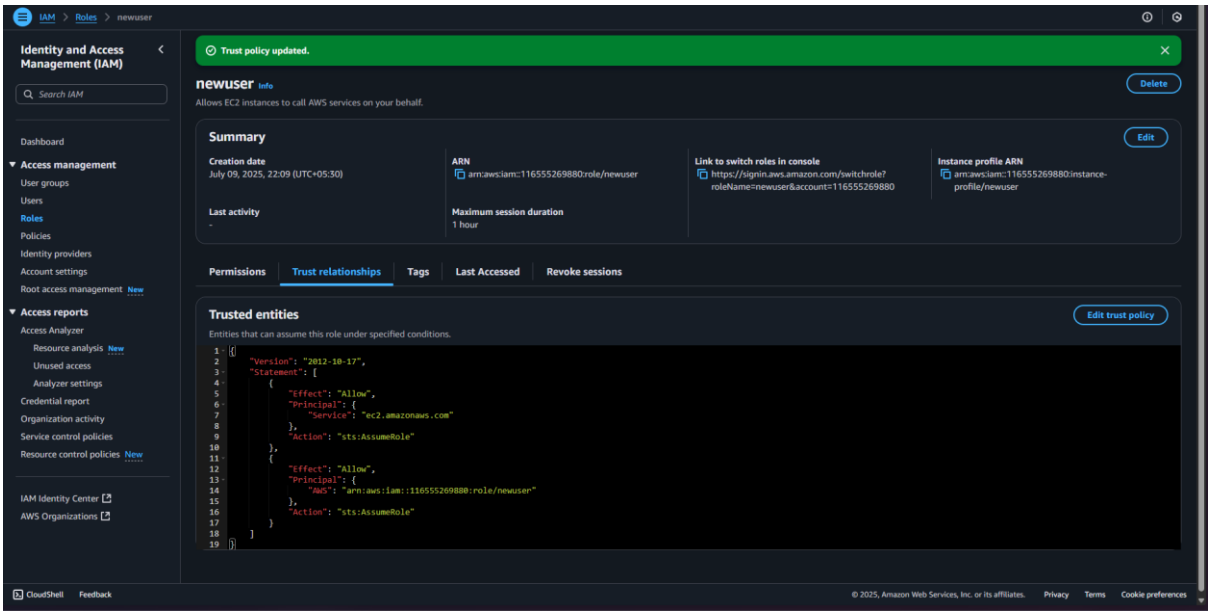
Successfully created policy .



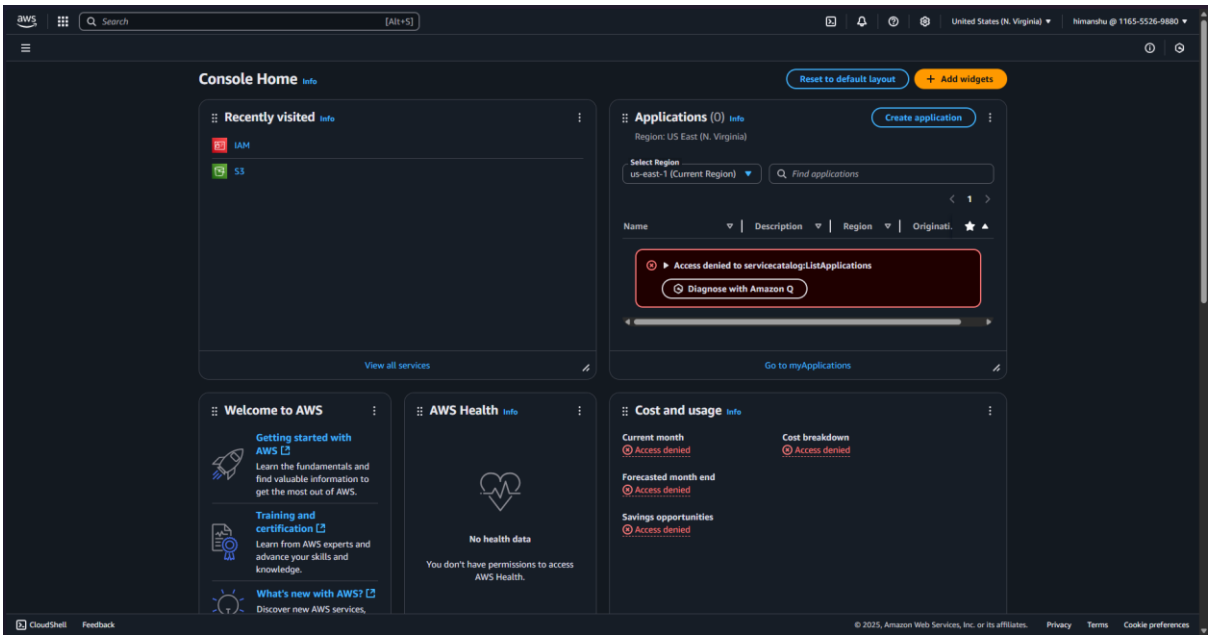
xii) Go back to roles and select the target role .



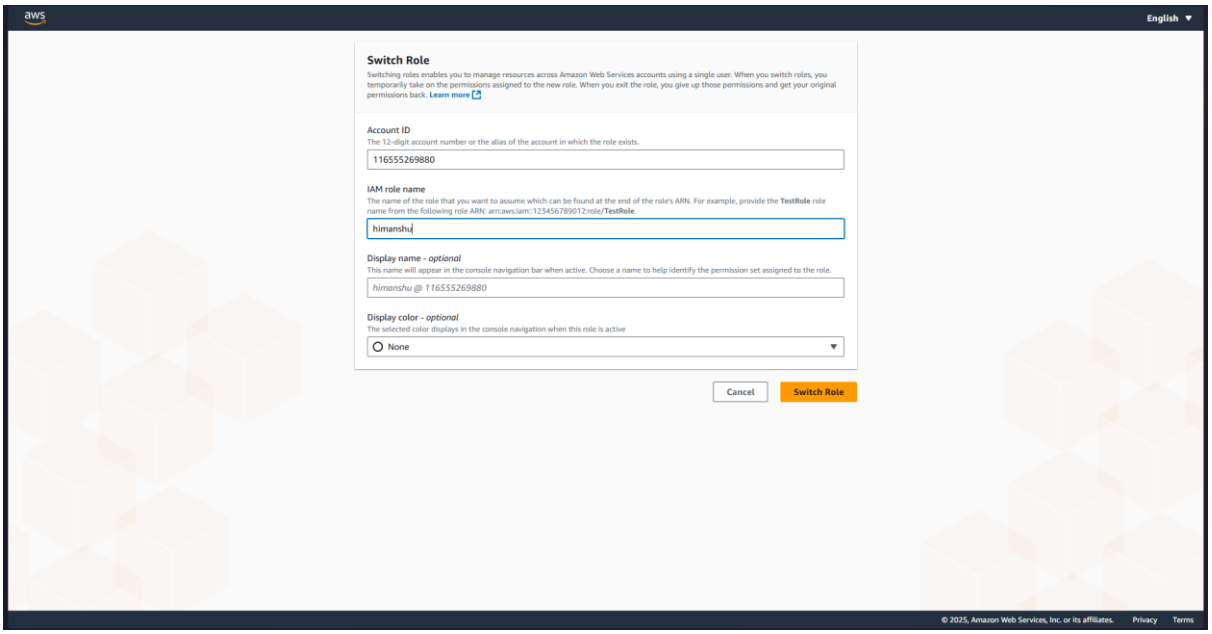

xiii) Click on trust relationship tab then edit the trust policy .



xiv) Login to your user now .




xv) One the topleft account section click on switch and fill in the details .




xvi) You are now operating under the permissions of the assumed role. The console will indicate the role name and color at the top.

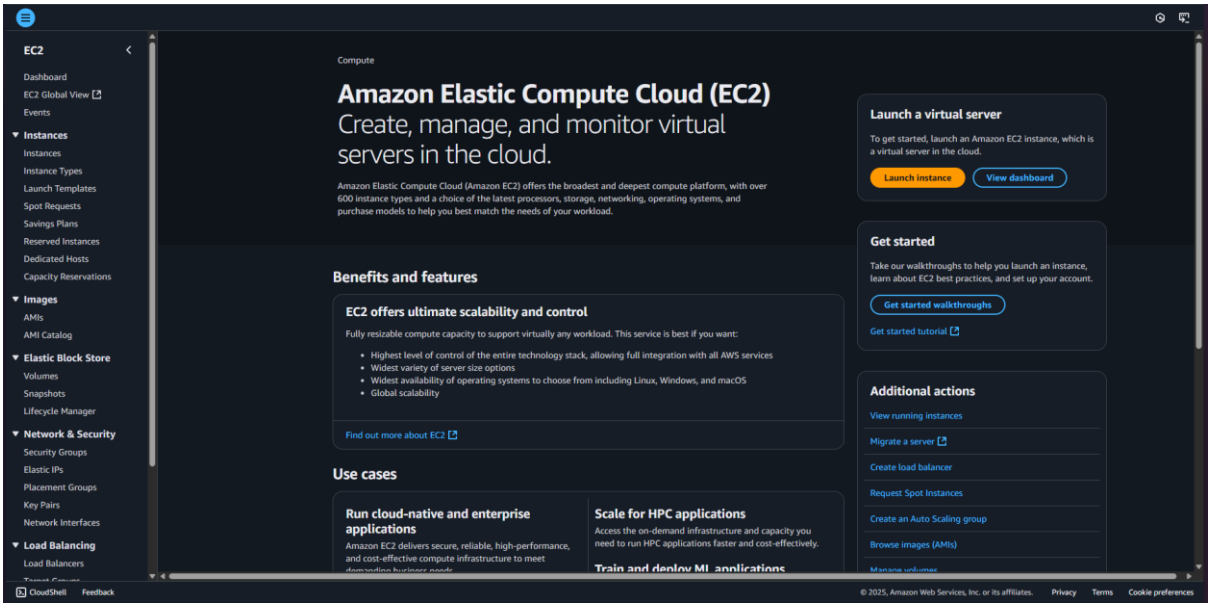
| Date: 17-07-2025 | Title |
|---|---|
| Exp. No: 04 | How To Launch An EC2 Instance With Template |

**AIM OF THE EXPERIMENT:** How To Launch An EC2 Instance With Template

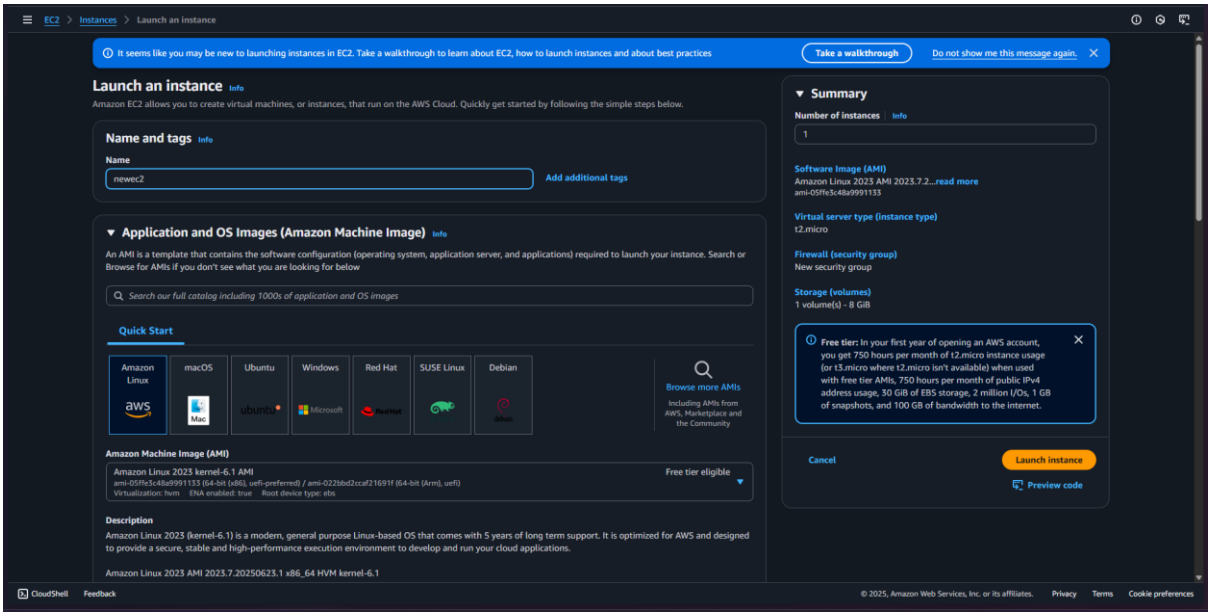
**PROCEDURE:**

Follow the below steps to complete the requirements :

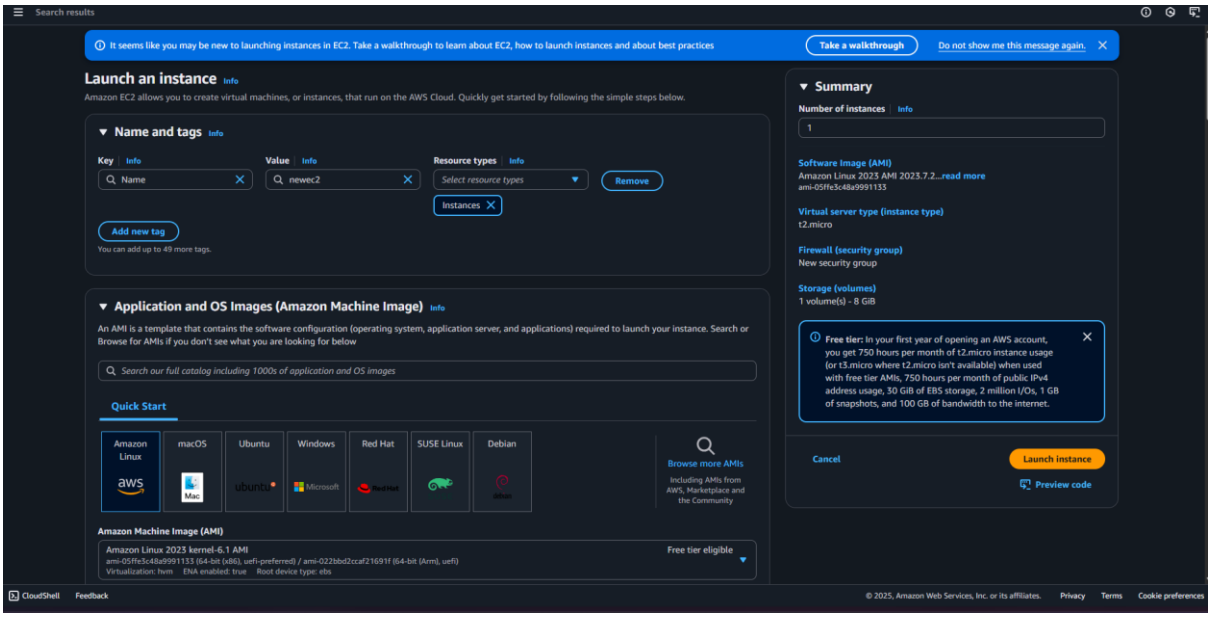
i) open the ec2 dashboard and click on launch templates>create launch template .



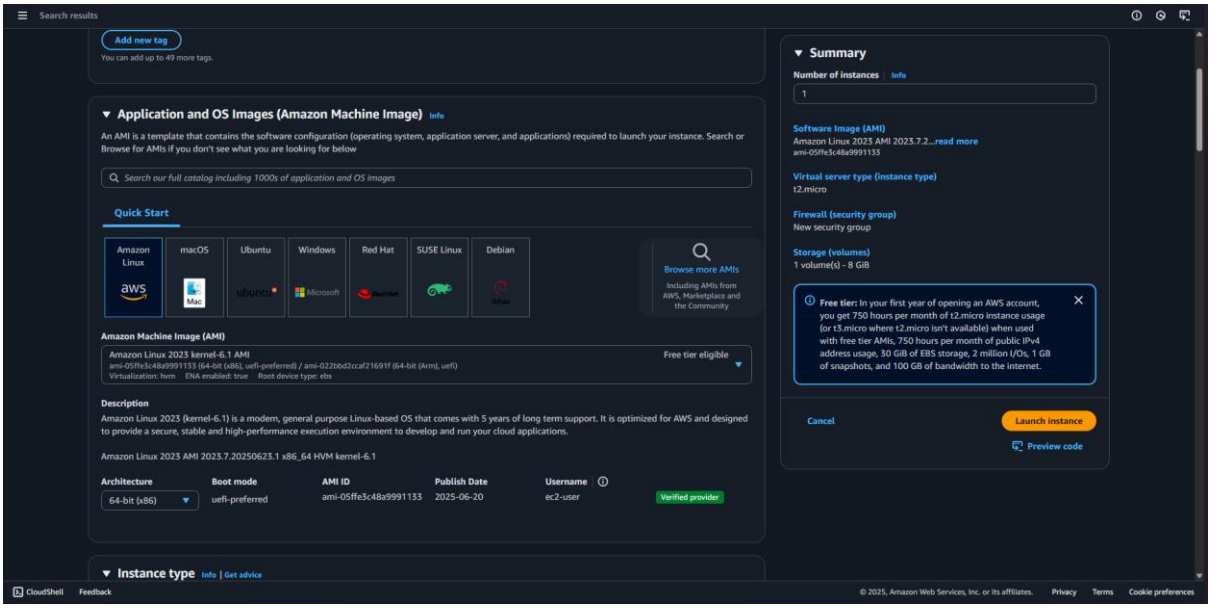
ii) give a suitable name and description to the template .



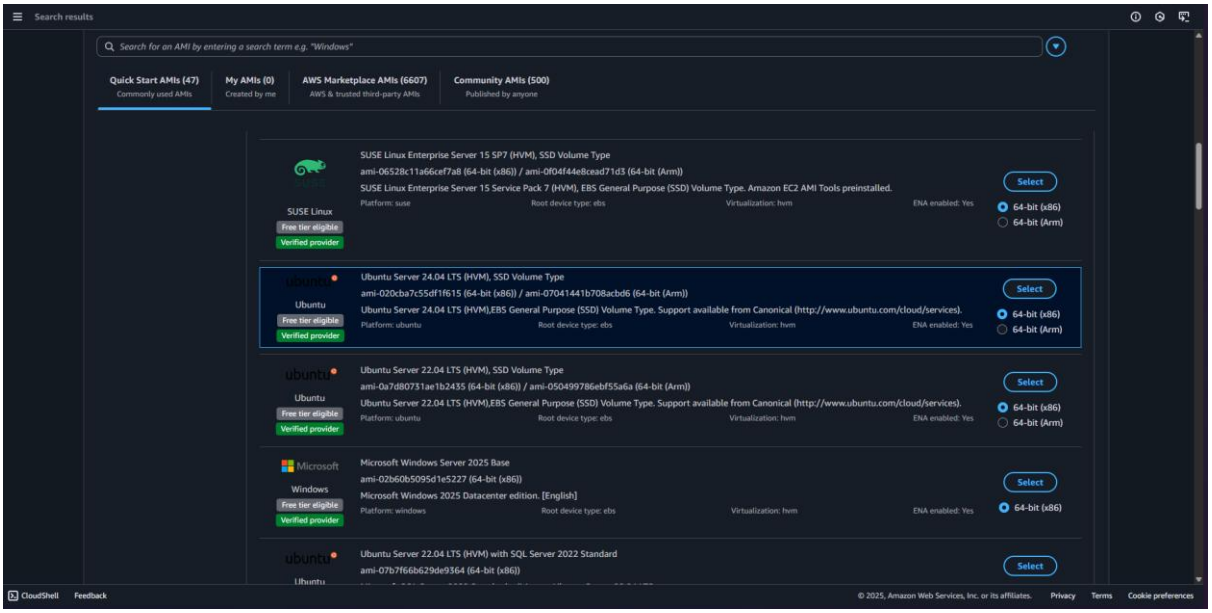

iii) click on template tags>add tags>info:name>value:any name



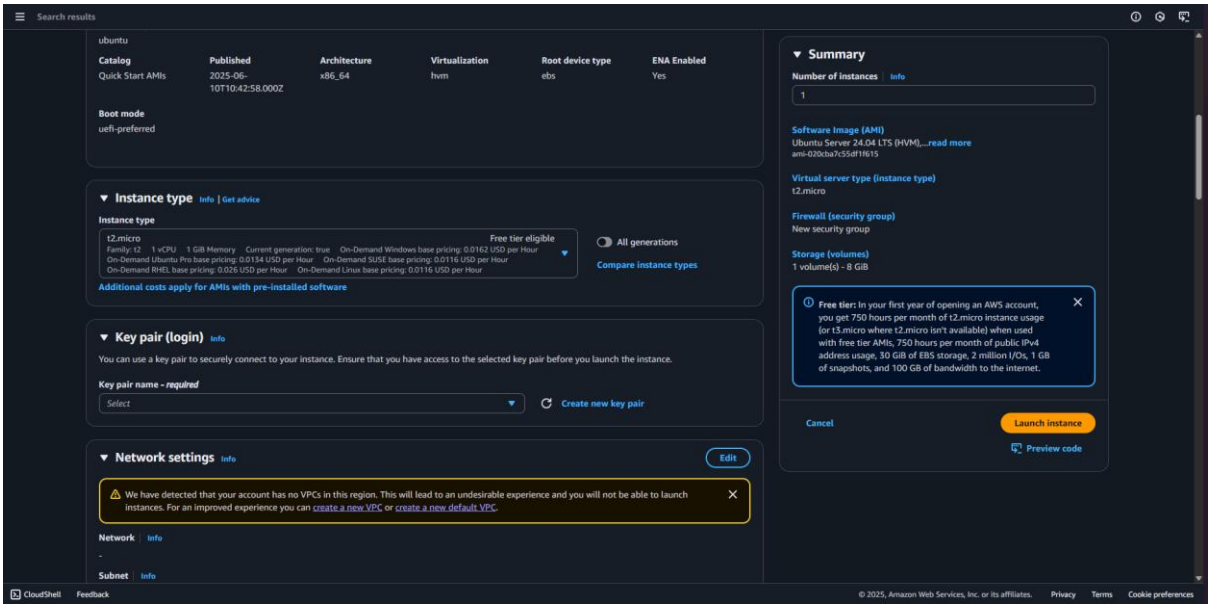
iv) click on browse more ami



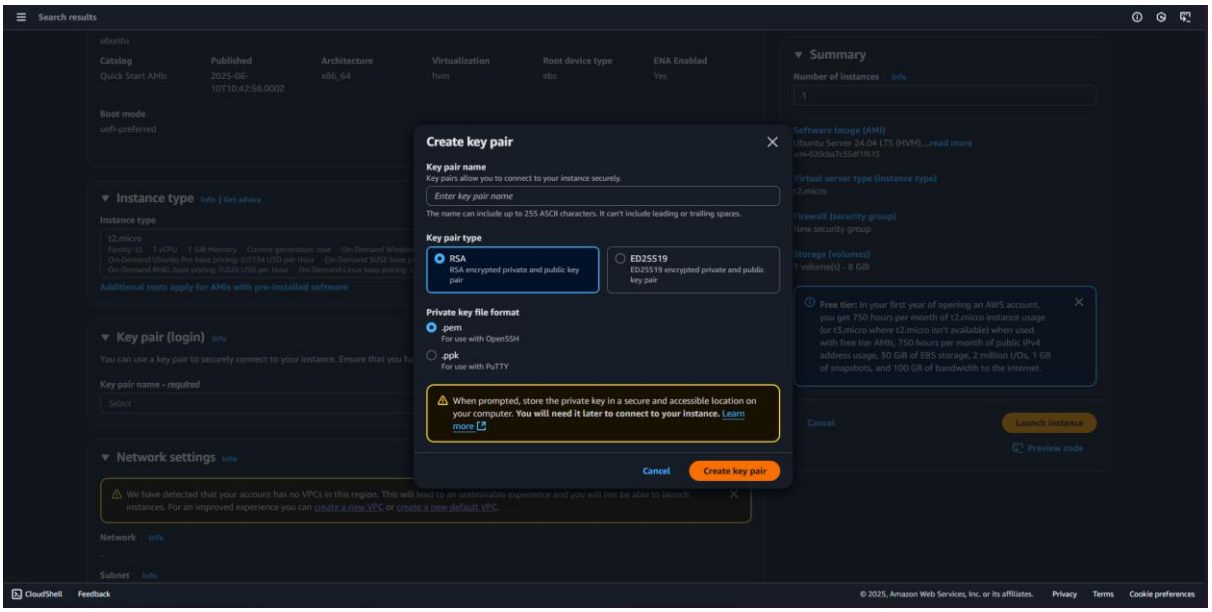

v) select ubuntu from the list



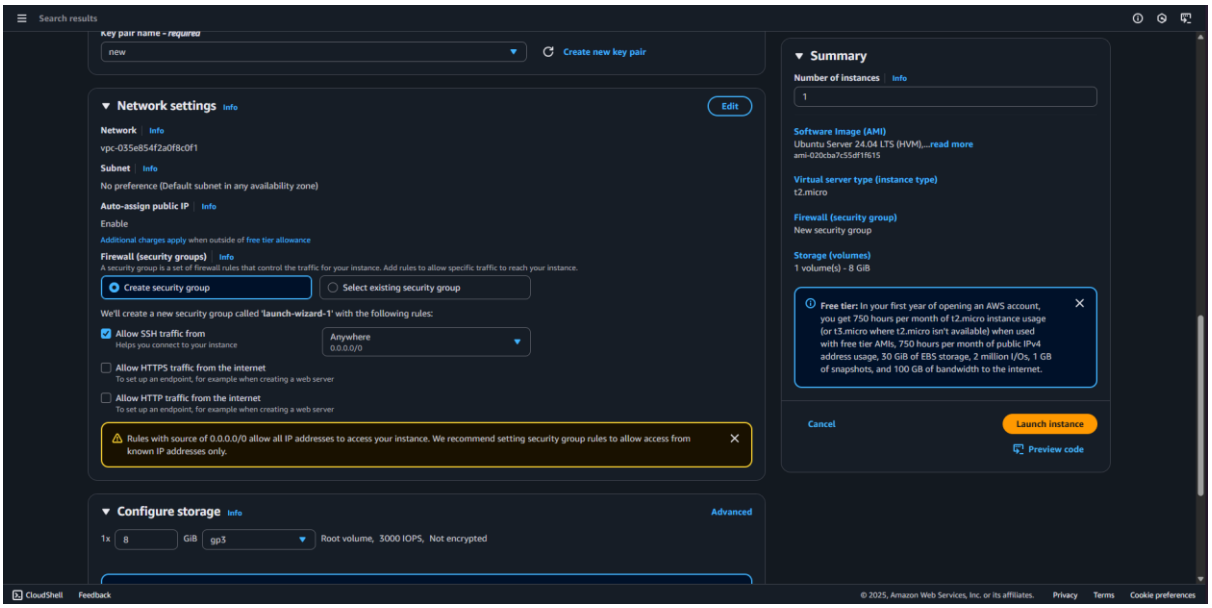
vi) select the instance type:t2 micro (free tier)



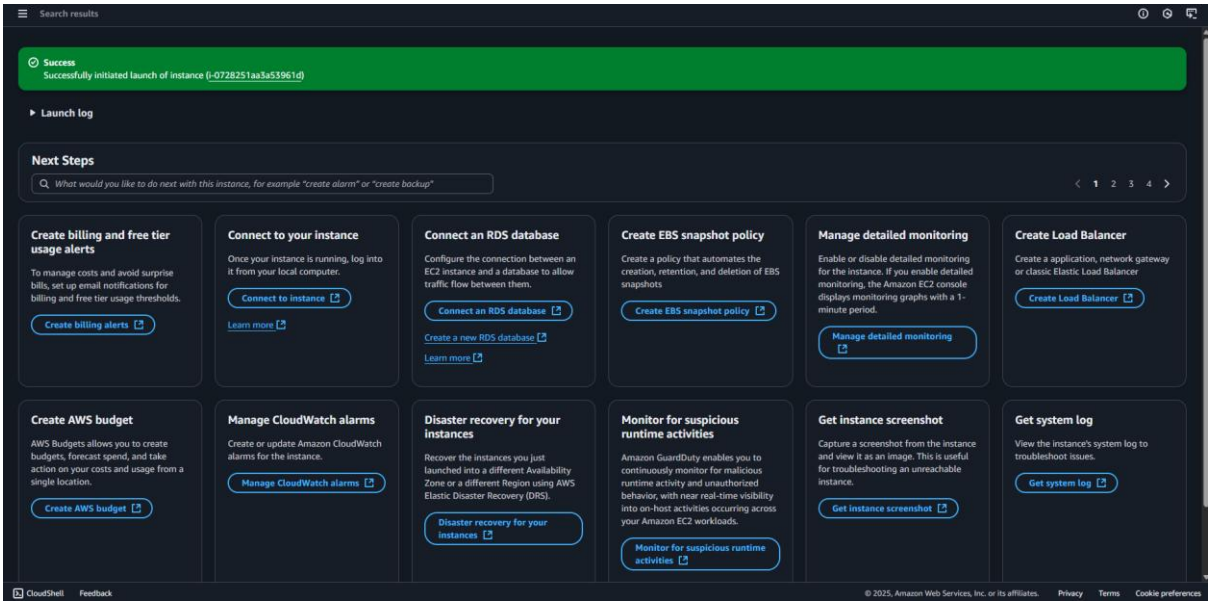

vii) create key pair

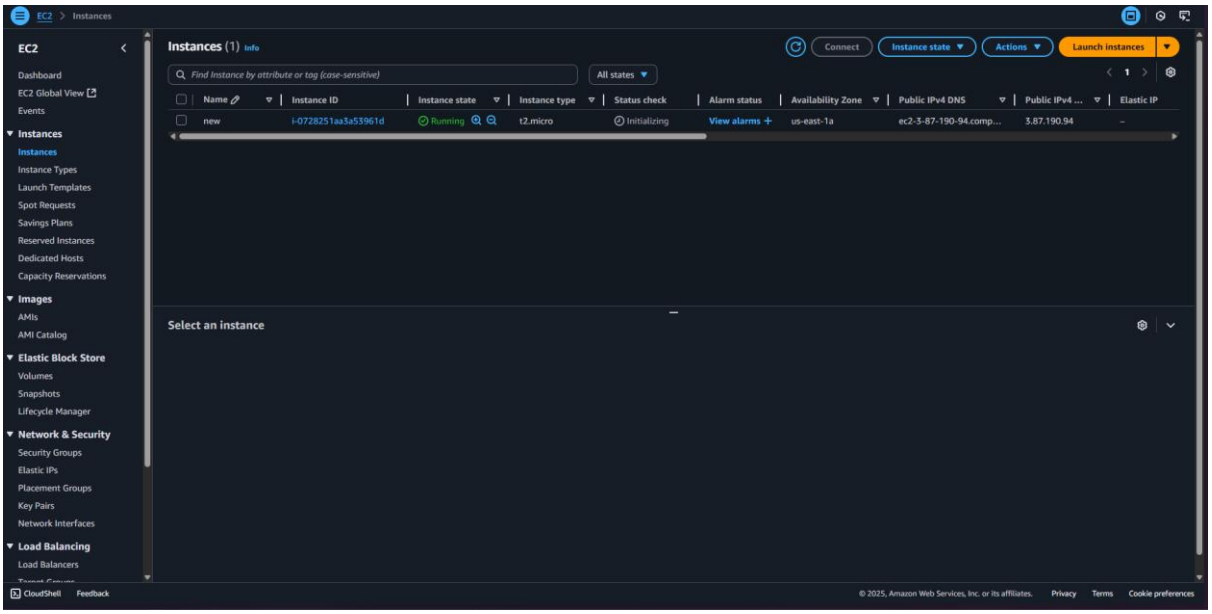


viii) select create security group and required things. choose type:ssh> source type: anywhere

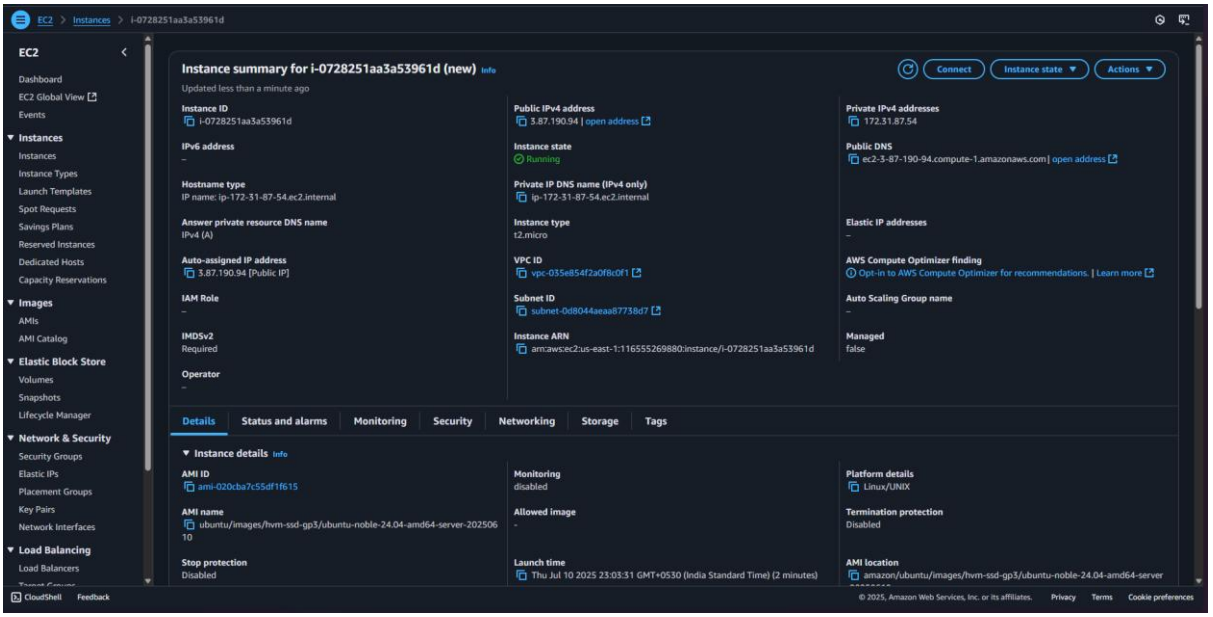



ix) click on launch instance >launch template is created>click on view template .

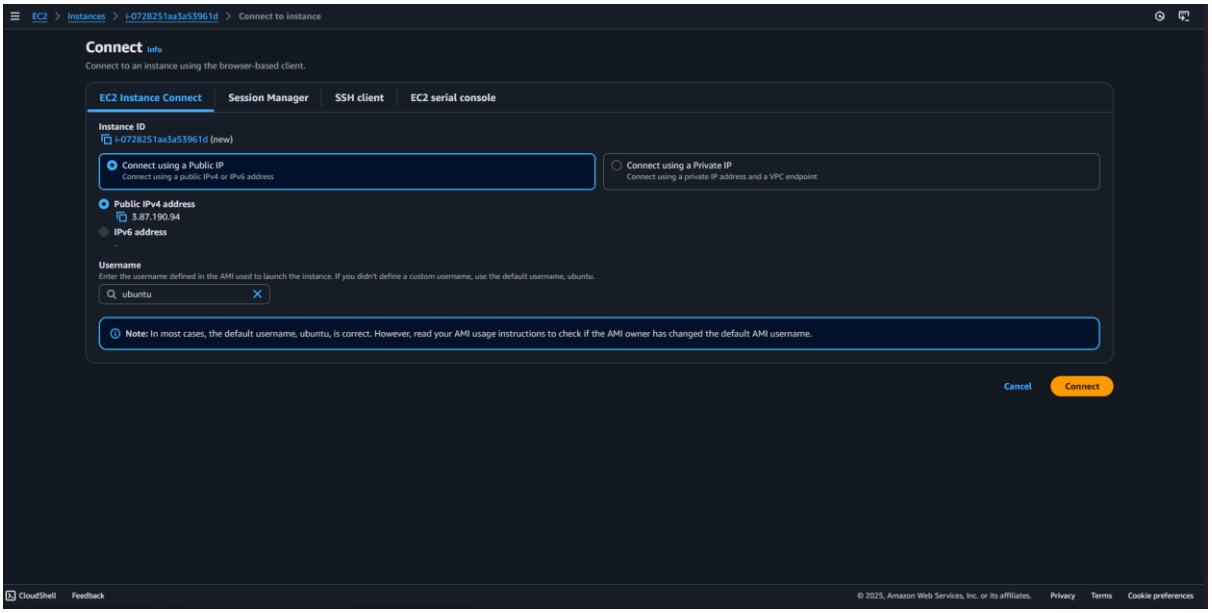




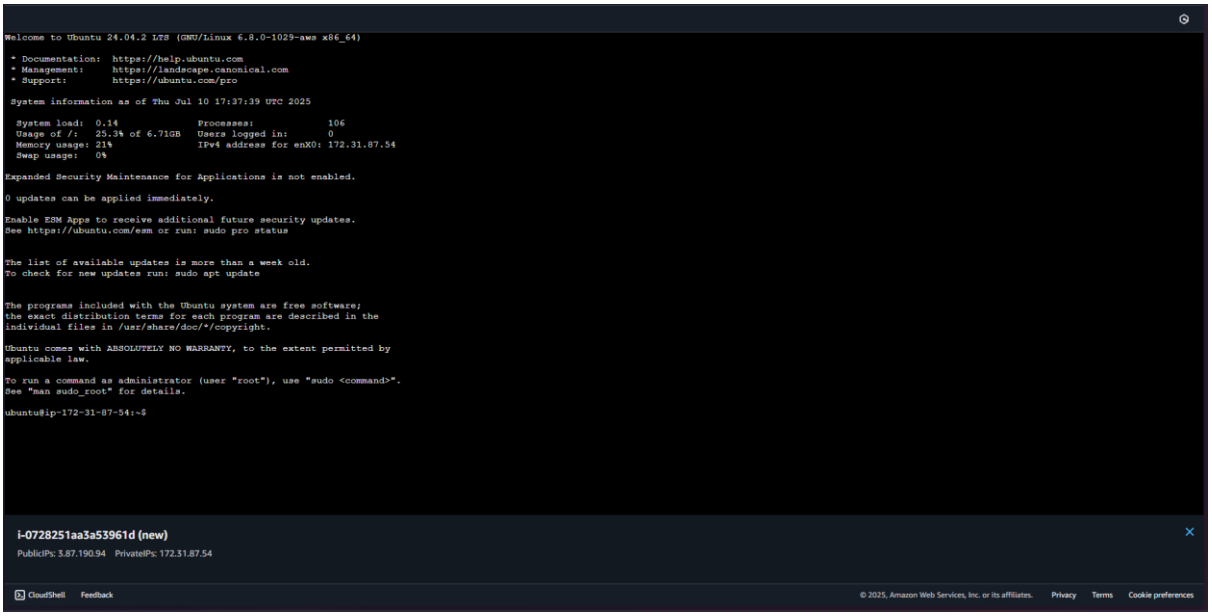

x) open instance and click on connect



xi) click on connect to instance




xii) now its successfully connected



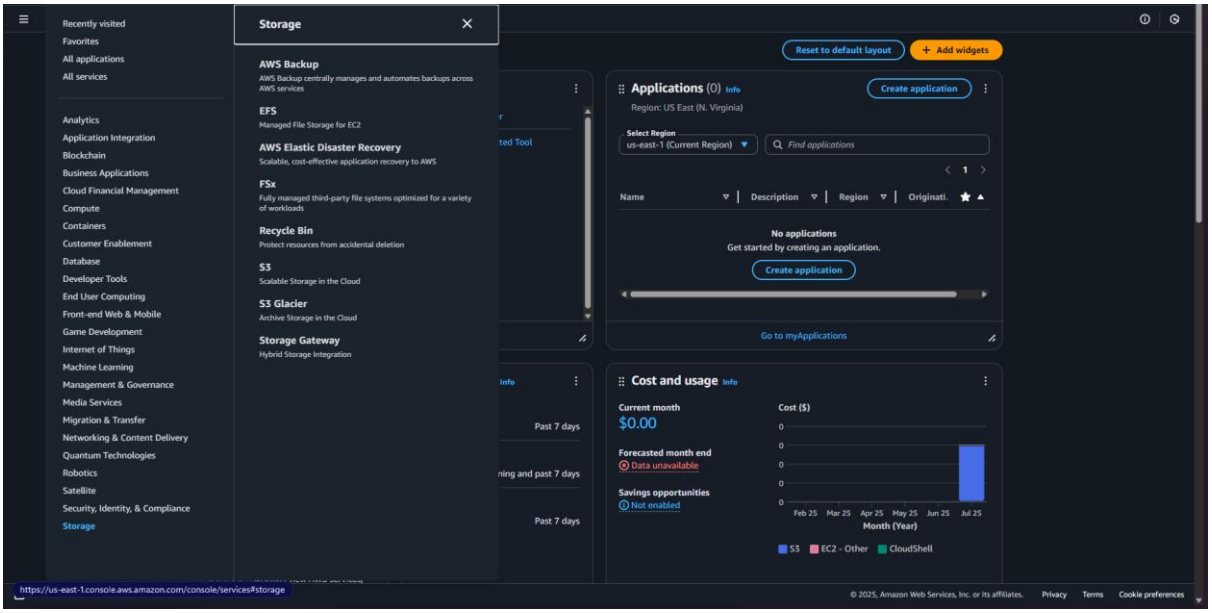
| Date: 24-07-2025 | Title |
|---|---|
| Exp. No: 05 | Amazon S3 ( Bucket creation, creating URL and S3 Life cycle Management) |

**AIM OF THE EXPERIMENT:** Amazon S3 ( Bucket creation, creating URL and S3 Life cycle Management)

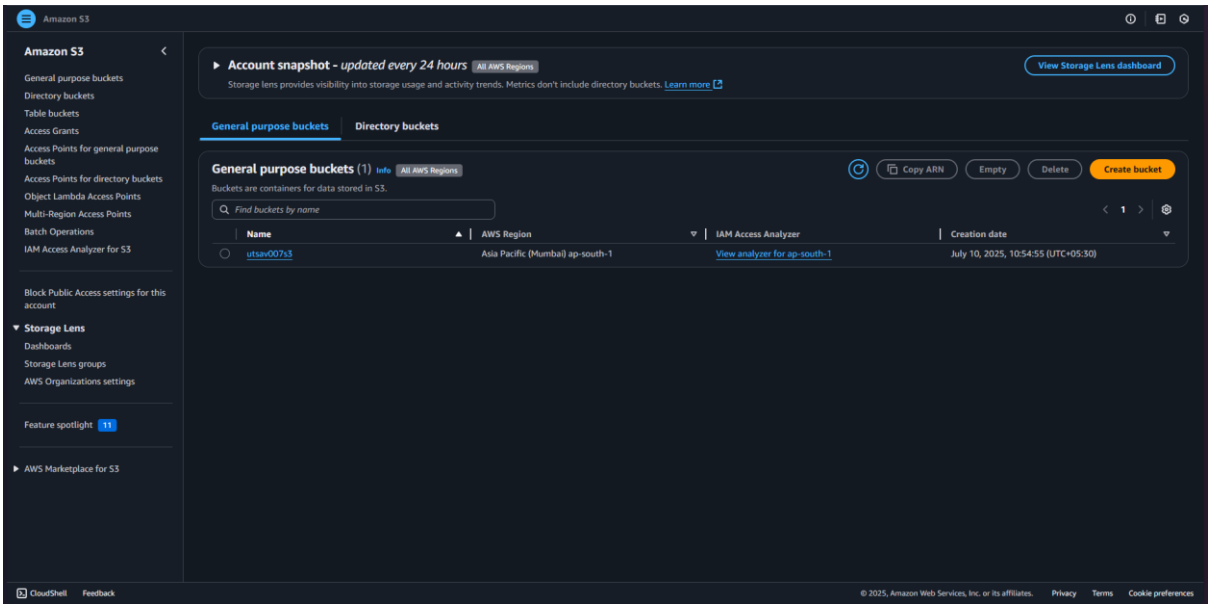
## PROCEDURE:

Follow the below steps to complete the requirements :

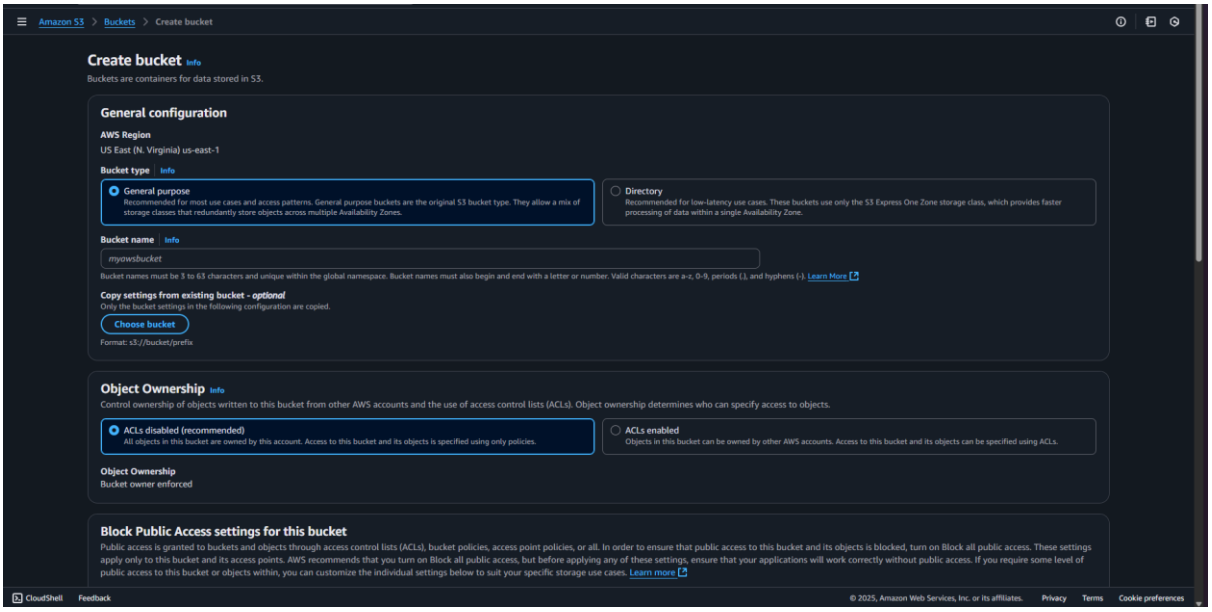
i) Get in storage and then in storage dashboard.



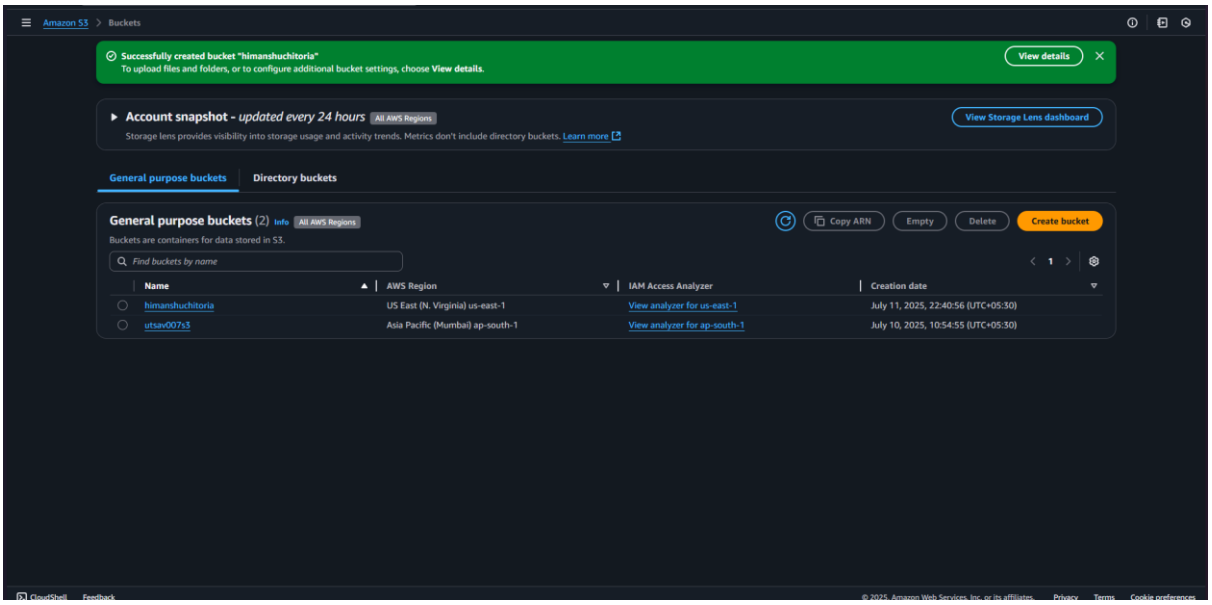
ii) Since no bucket is created so click on create bucket.



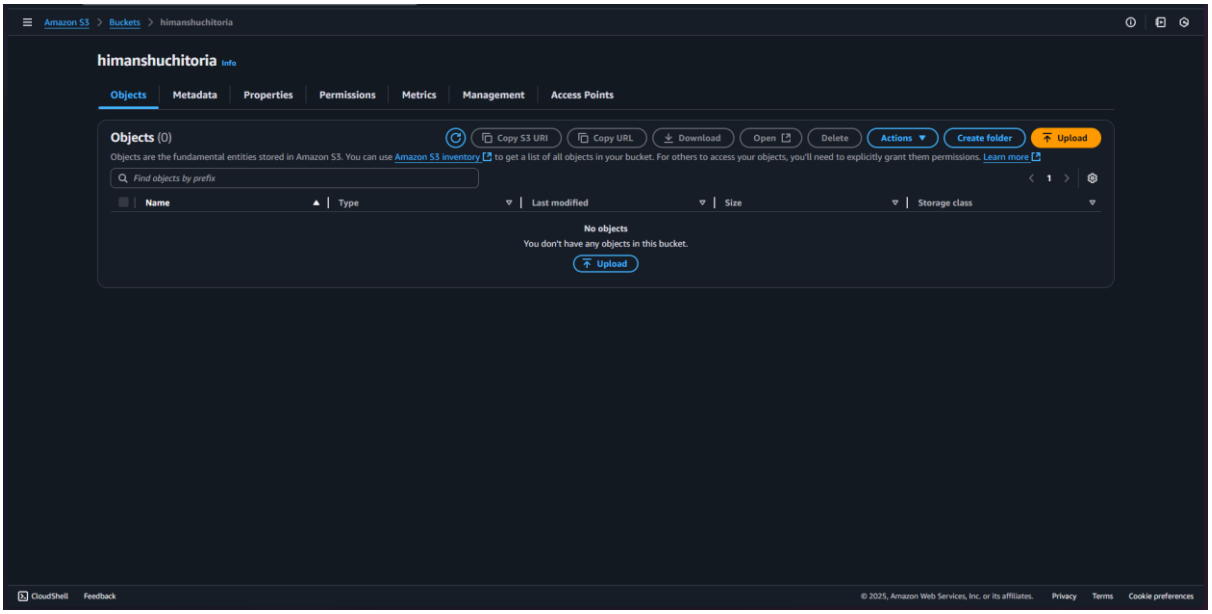

iii) Fill in the general configuration and other details as required (also select the region.)



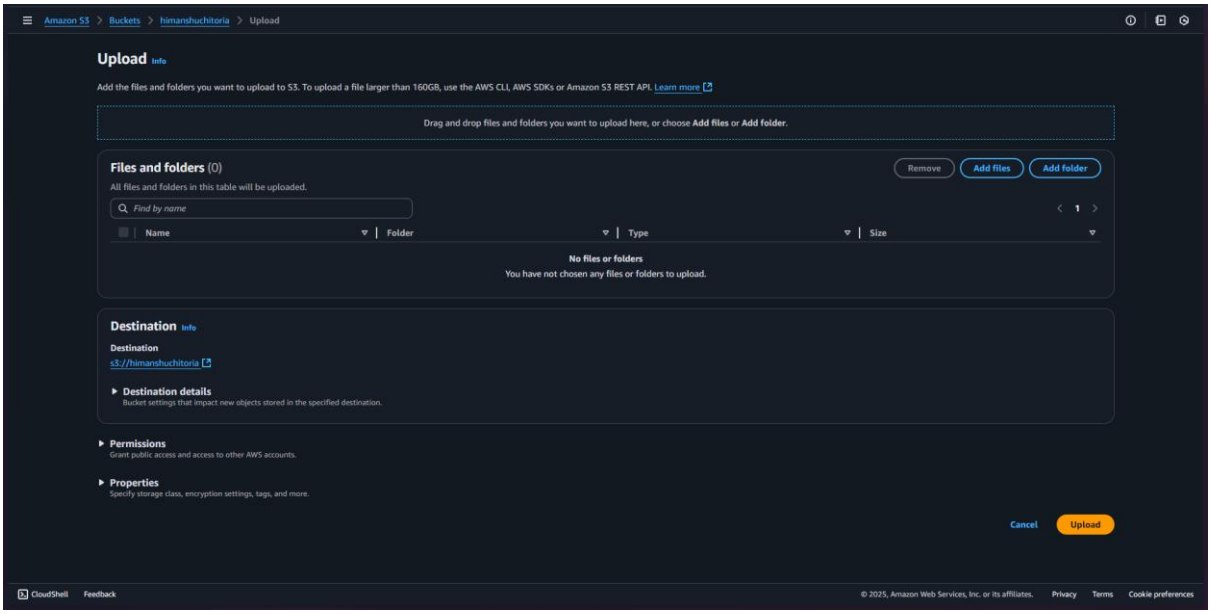
iv) New bucket himanshuchitoria successfully created .



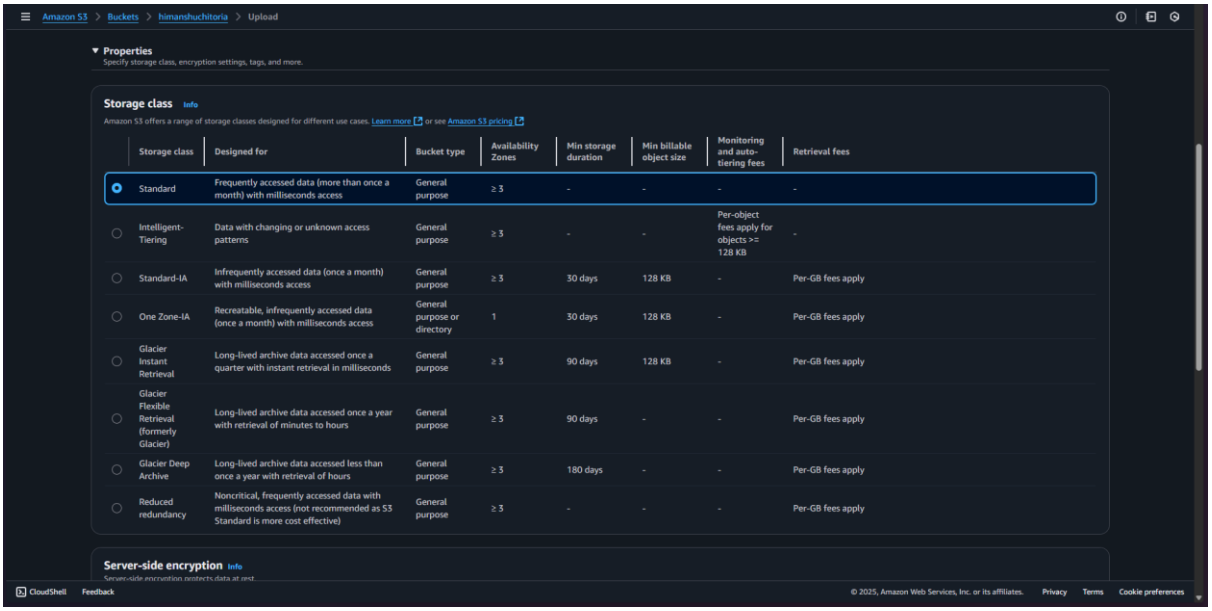

v) Now we click on our bucket and upload file by clicking upload.



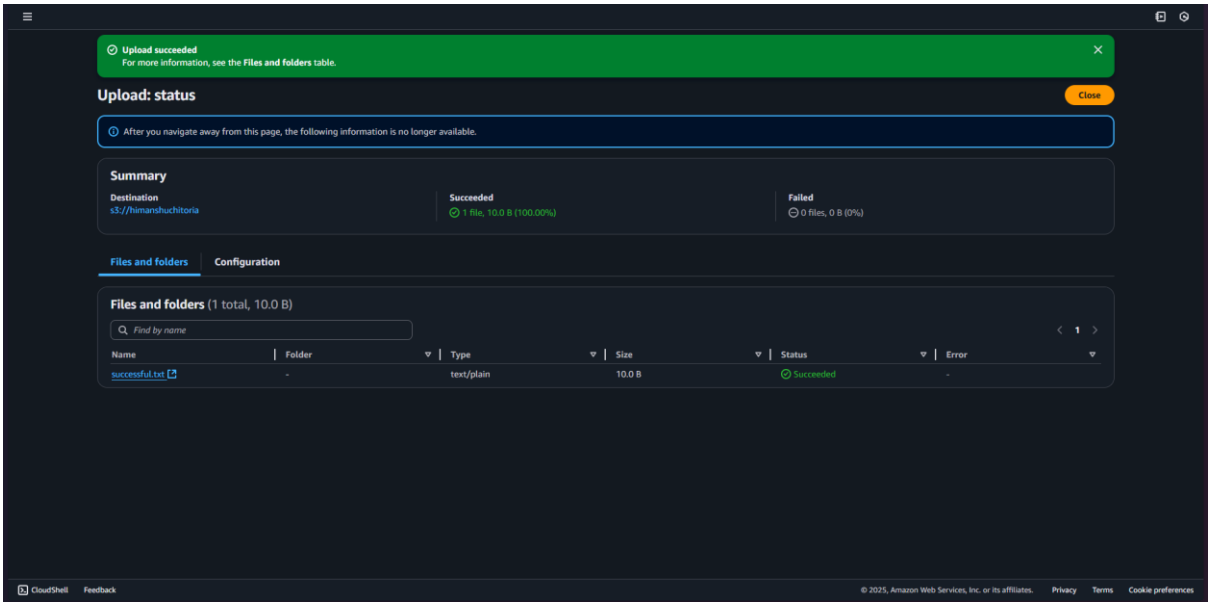
vi) Now under upload section we can upload the file as well as folder.



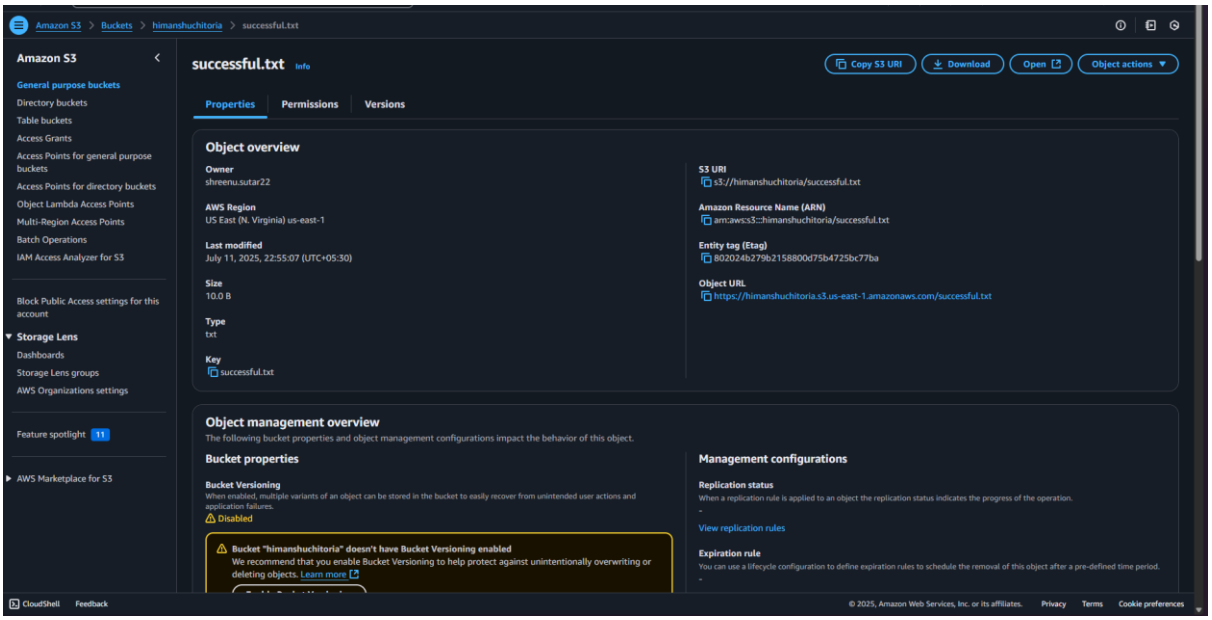

vii) In storage class there are different types so choose any one as per use.



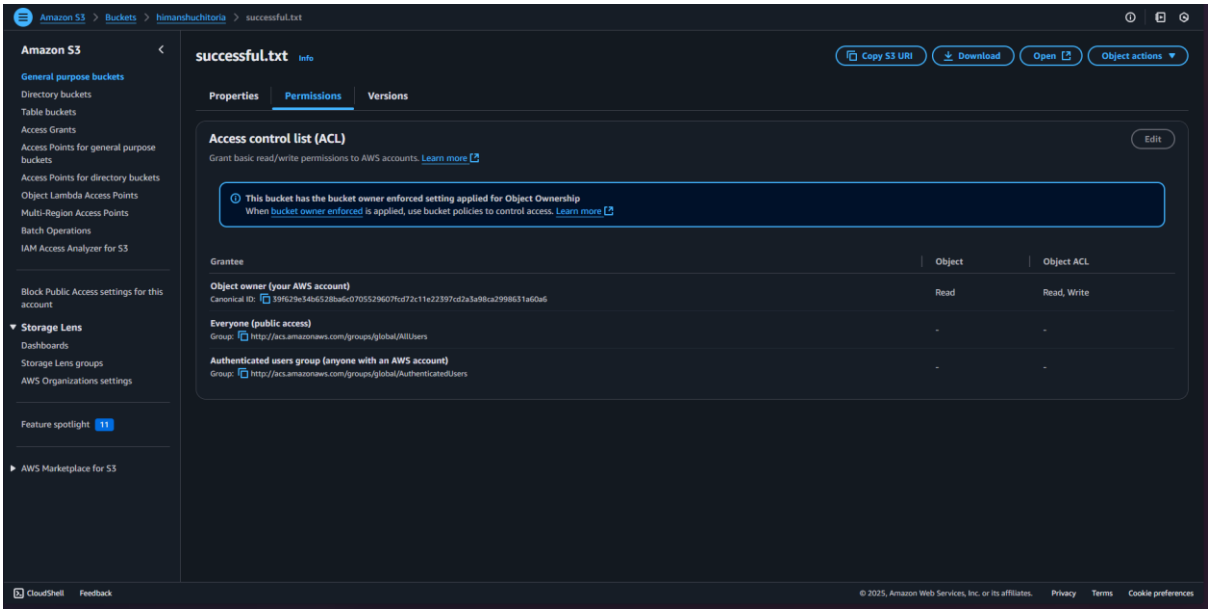
viii) Now click on upload it show success.



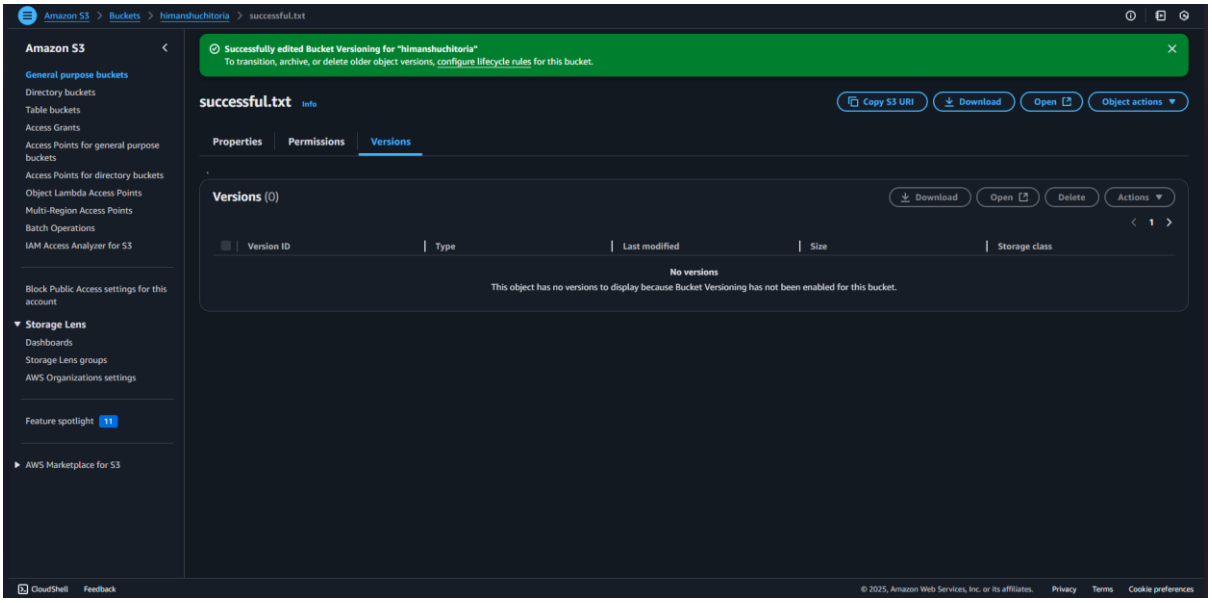

ix) Now open the file and we can see everything as shown in fig.



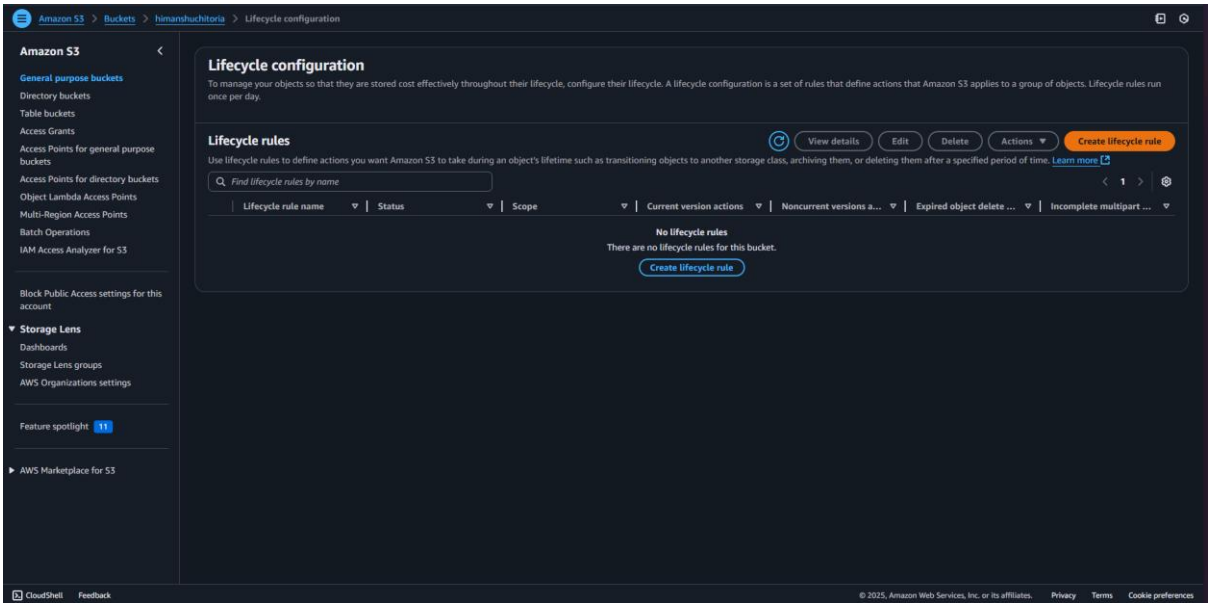
x) Under permission section you can see all required things like public url .



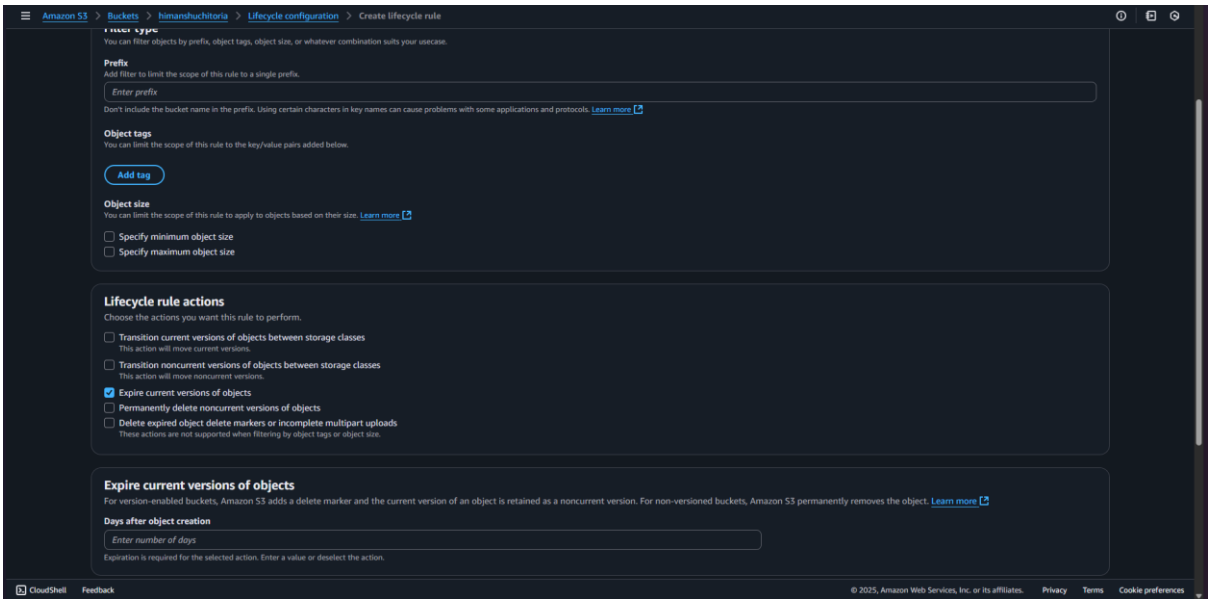

xi) Now for lifecycle rules click on configure lifecycle rules .



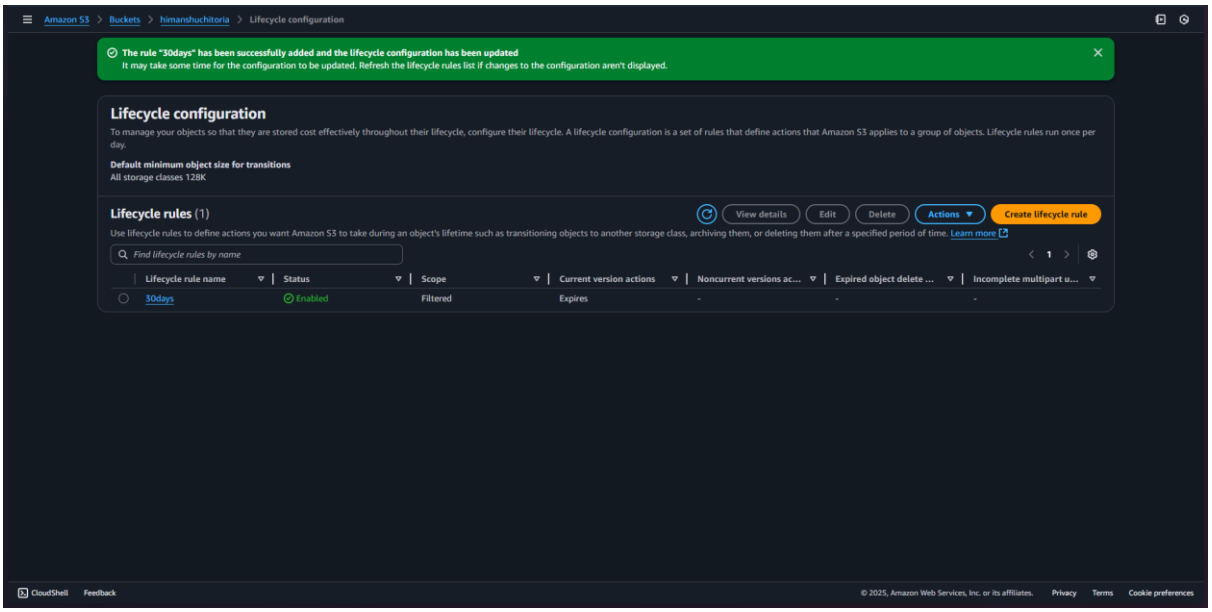
xii) Click on create lifecycle rules .



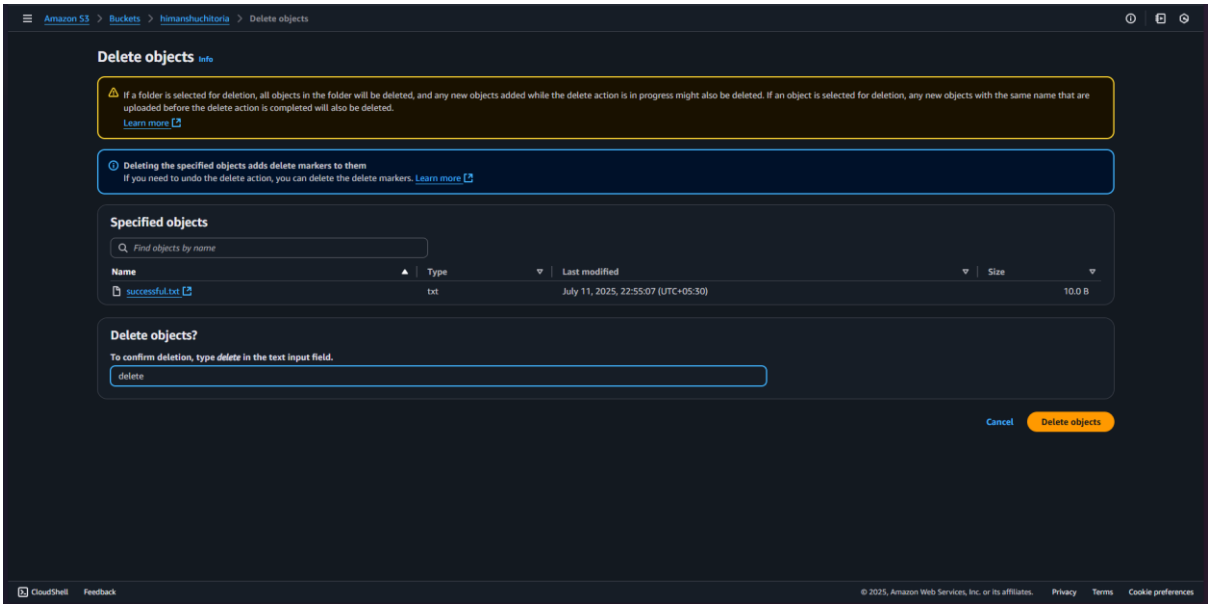

xiii) Enter all required configurations as per your need . For example here we are providing 30 days of expiration time .



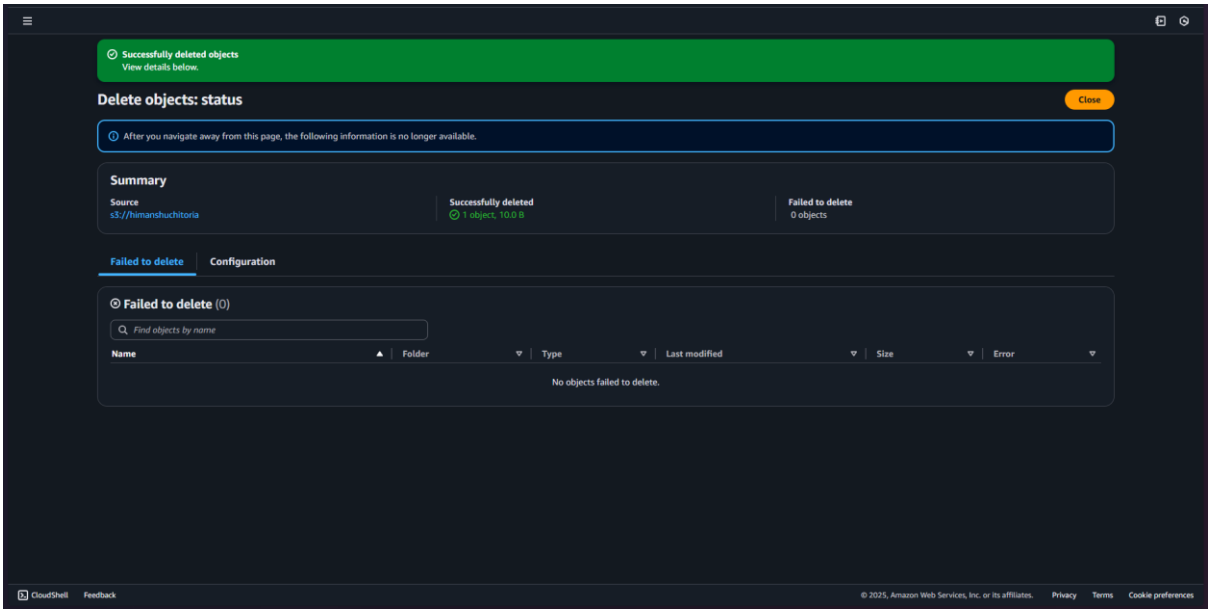
xiv) Rule successfully created .



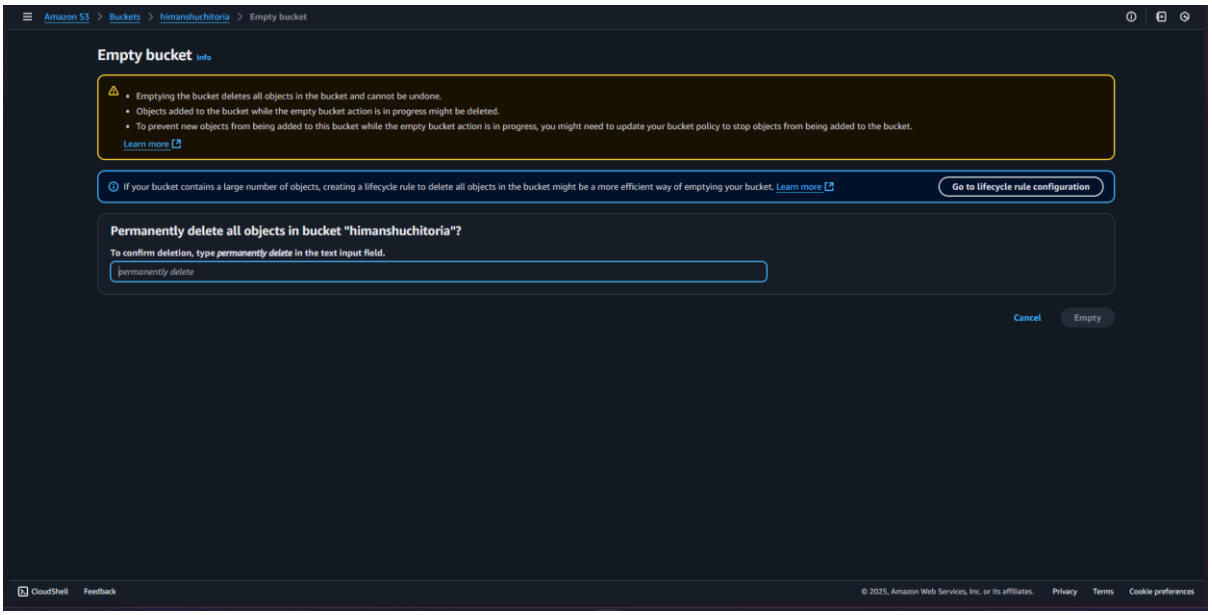

xv) Now in this we will see how to delete the object in bucket. Clicking on the object which we have to delete.



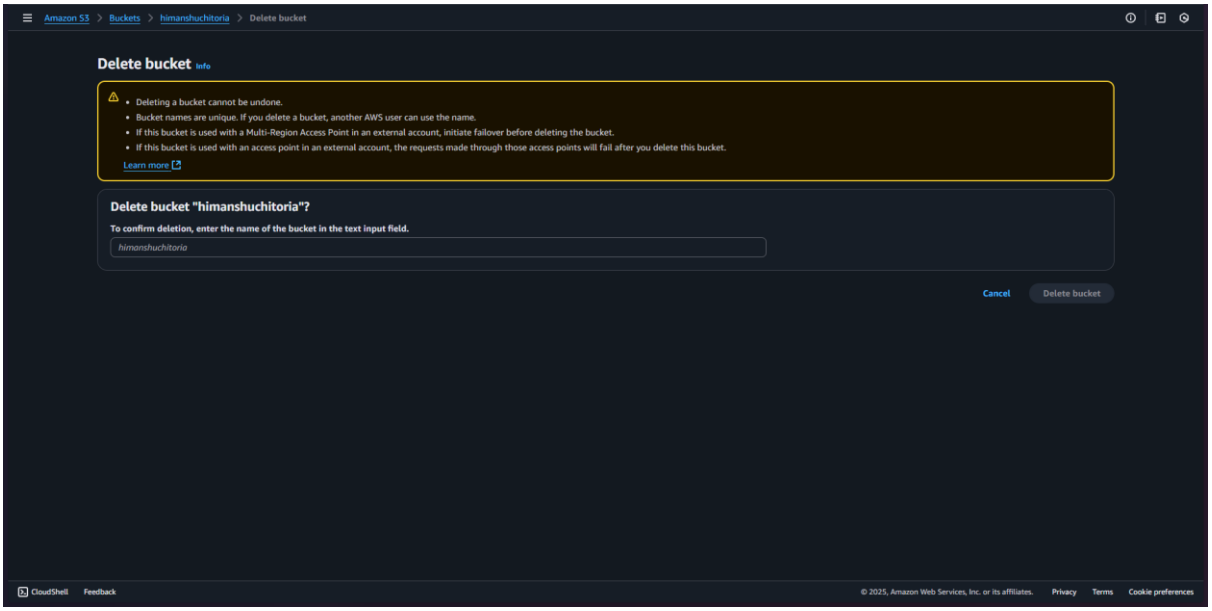
xvi) Successfully delete the object .



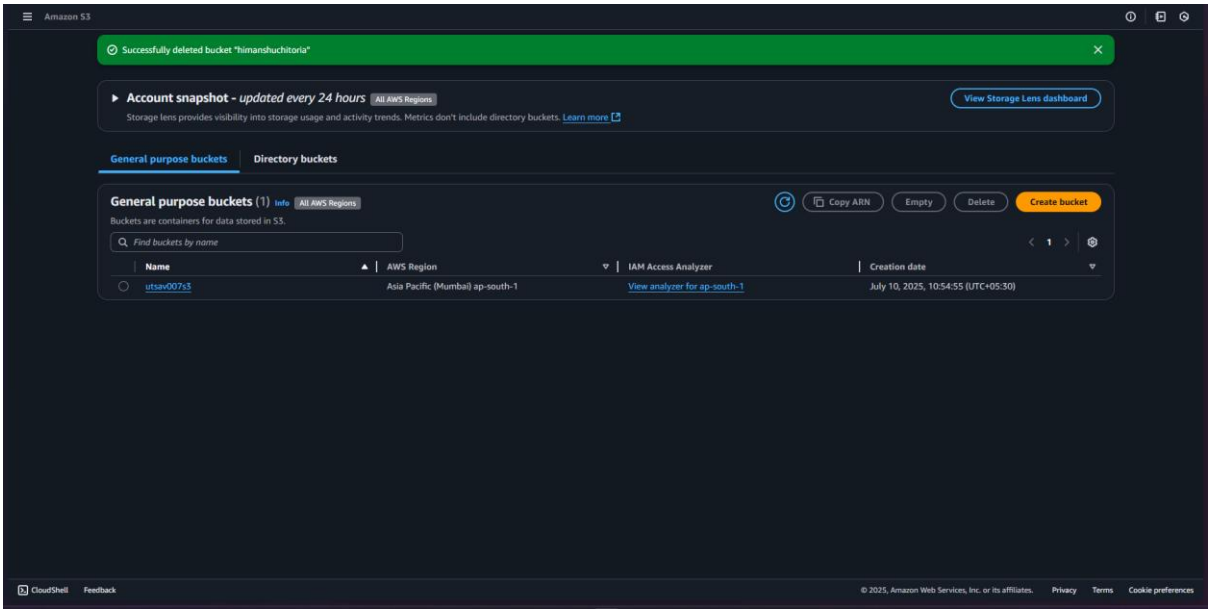

xvii) Now in this we will delete the bucket which we have created .For this the most important part is the bucet must be empty .



xviii) Now again tick the bucket and click on delete and you will see this .




xix) Bucket successfully deleted .



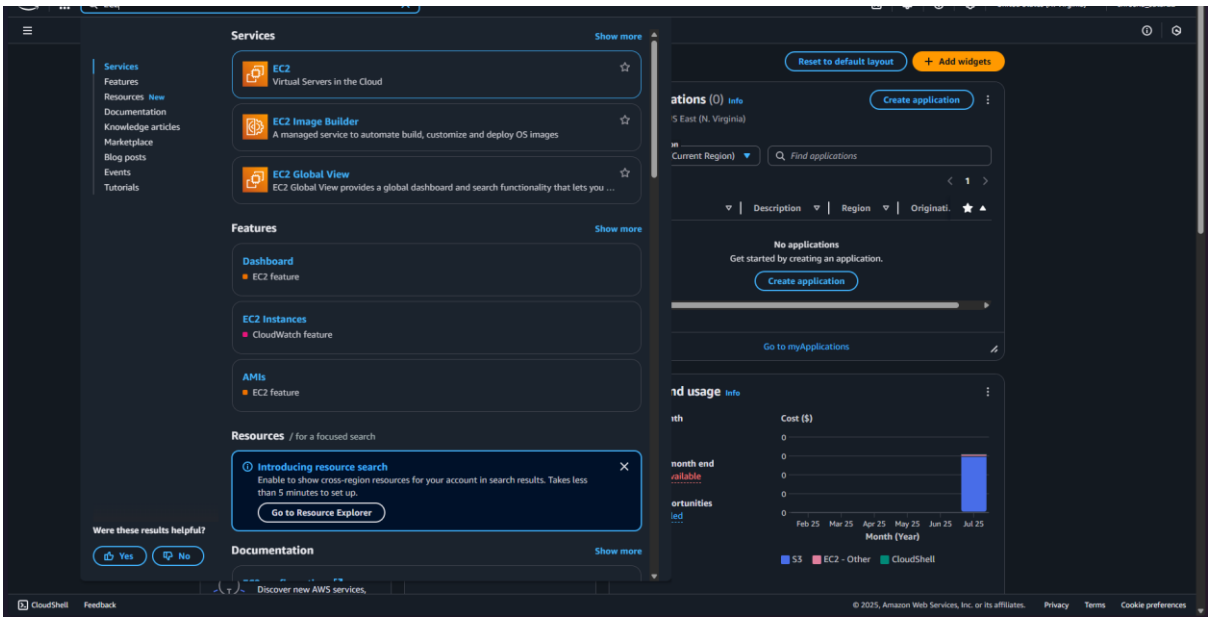
| Date: 25-07-2025 | Title |
|---|---|
| Exp. No: 06 | HOW TO CREATE AN EC2 INSTANCE |

**AIM OF THE EXPERIMENT:** HOW TO CREATE AN EC2 INSTANCE

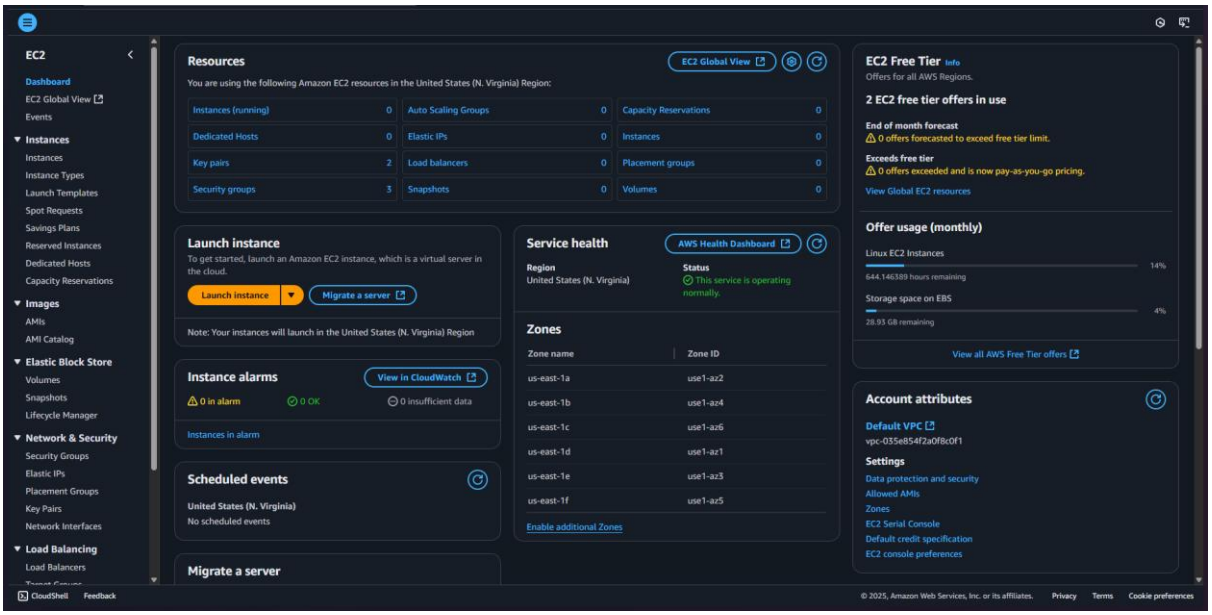
**PROCEDURE:**

Follow the below steps to complete the requirements :

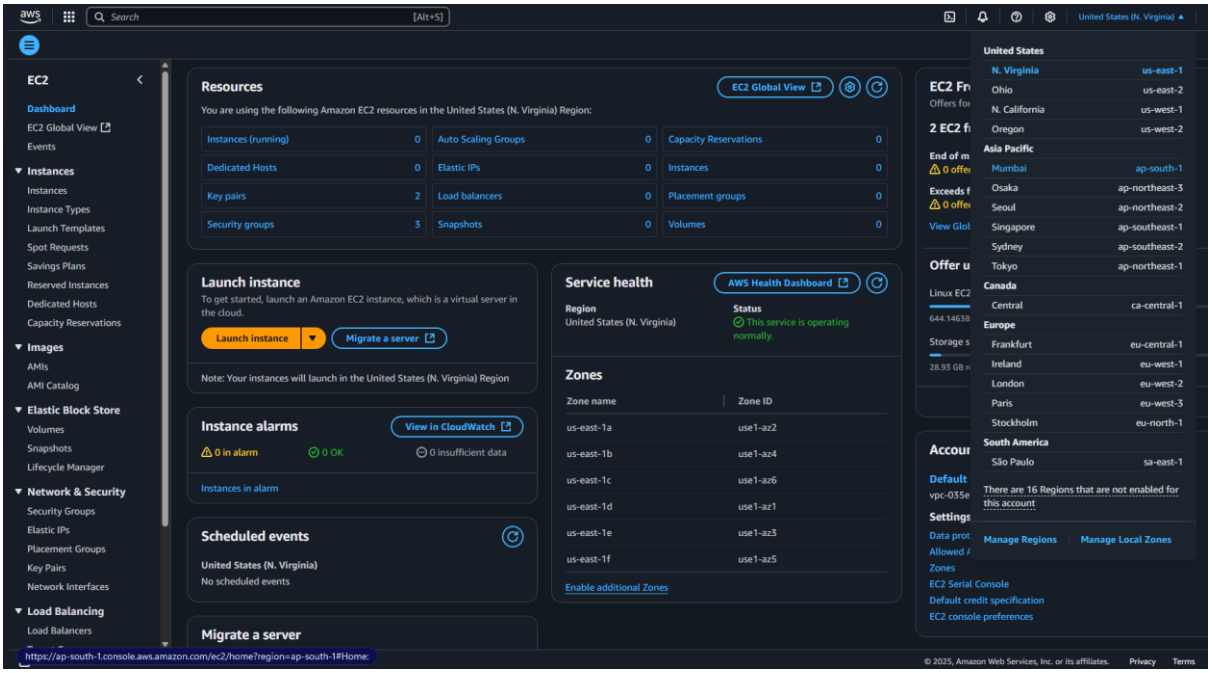
i) OPEN THE AWS ROOT ACCOUNT AND SEARCH FOR EC2



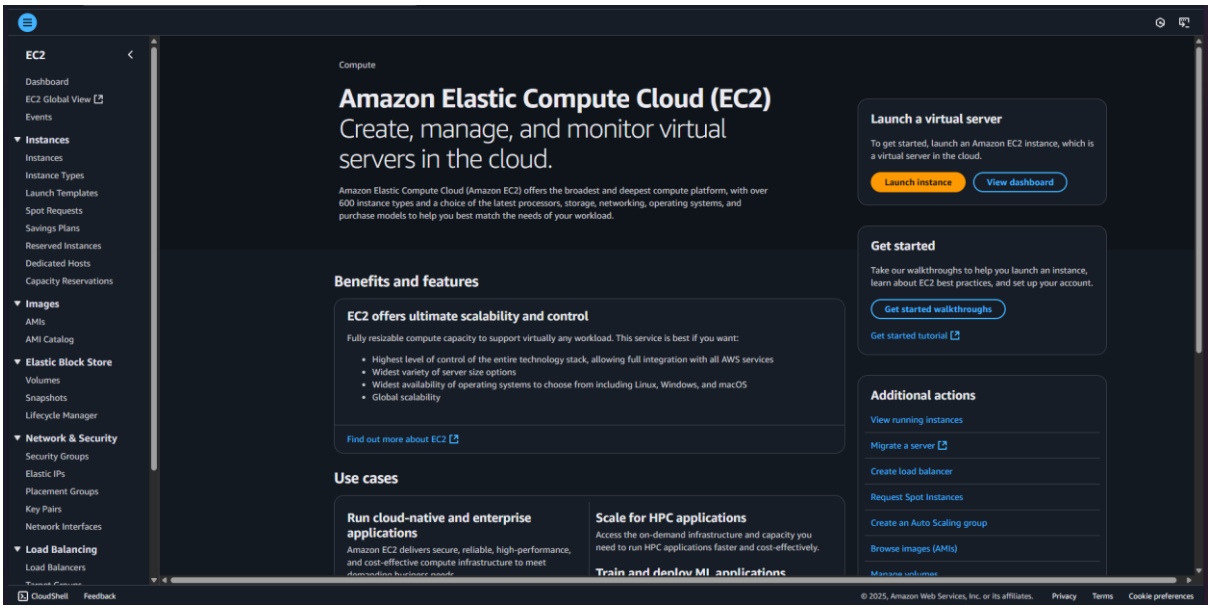
ii) CLICK ON EC2, EC2 DASHBOARD WILL APPEAR.



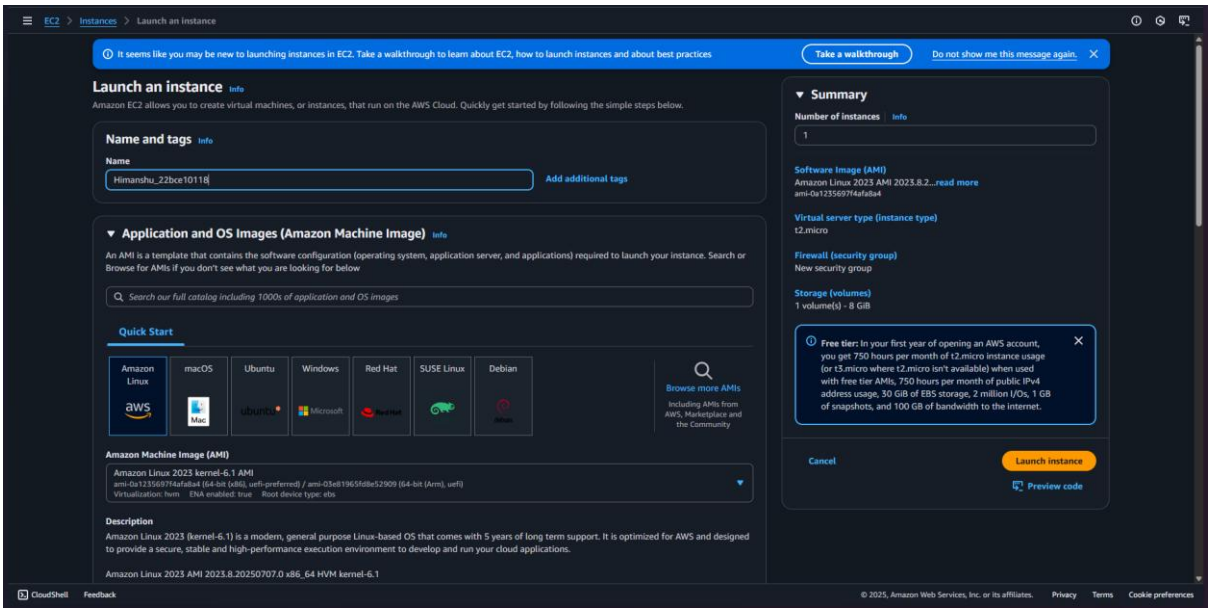

iii) SELECT THE REGION>ASIA PACIFIC>MUMBAI



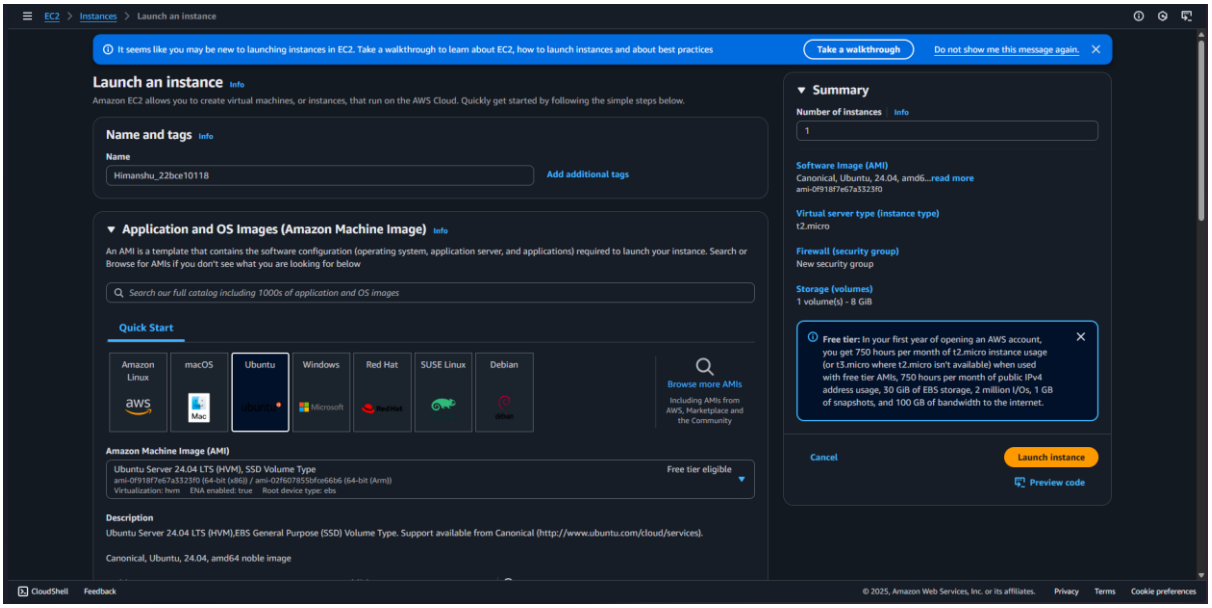
iv) SELECT LAUNCH INSTANCE



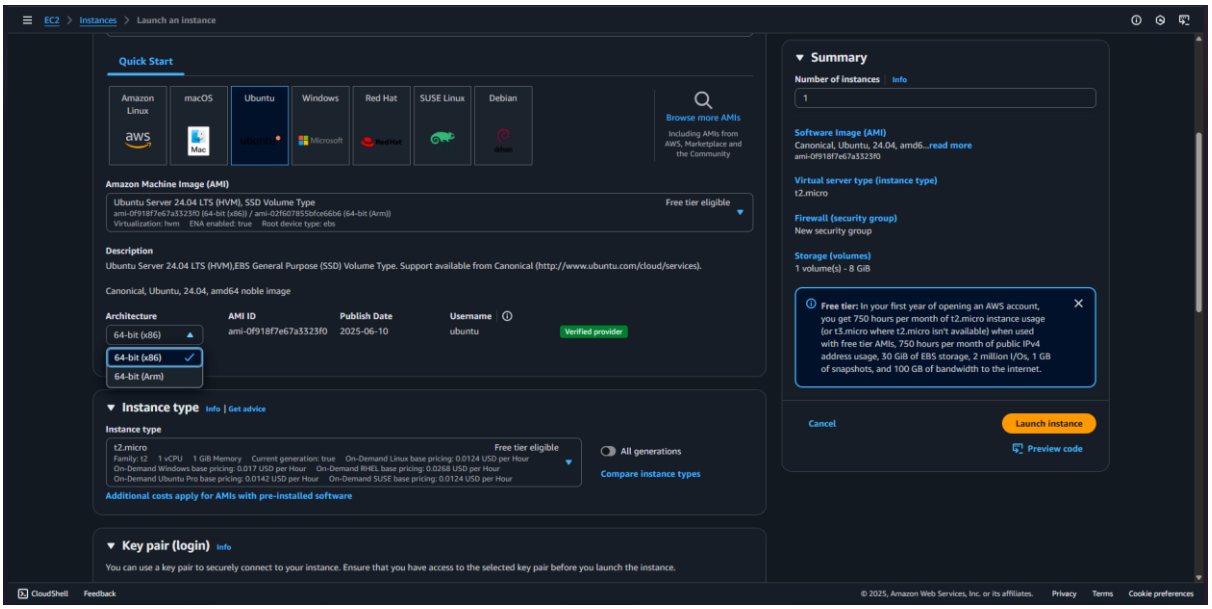

v) TYPE THE NAME OF THE INSTANCE



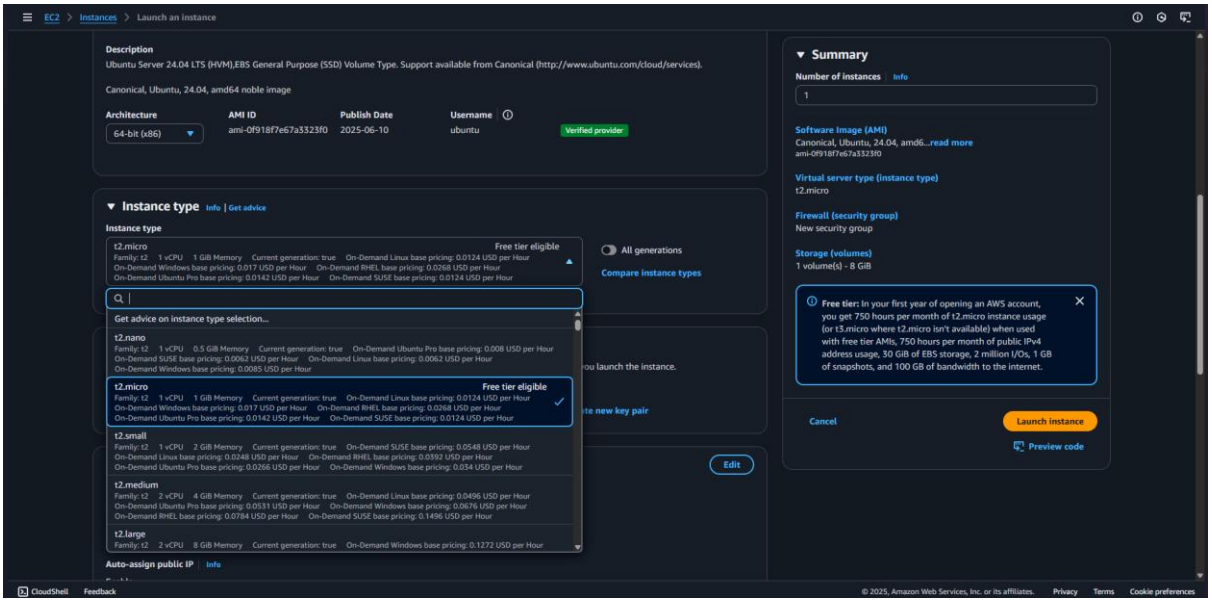
vi) CHOOSE THE OPERATING SYSTEM>UBUNTU



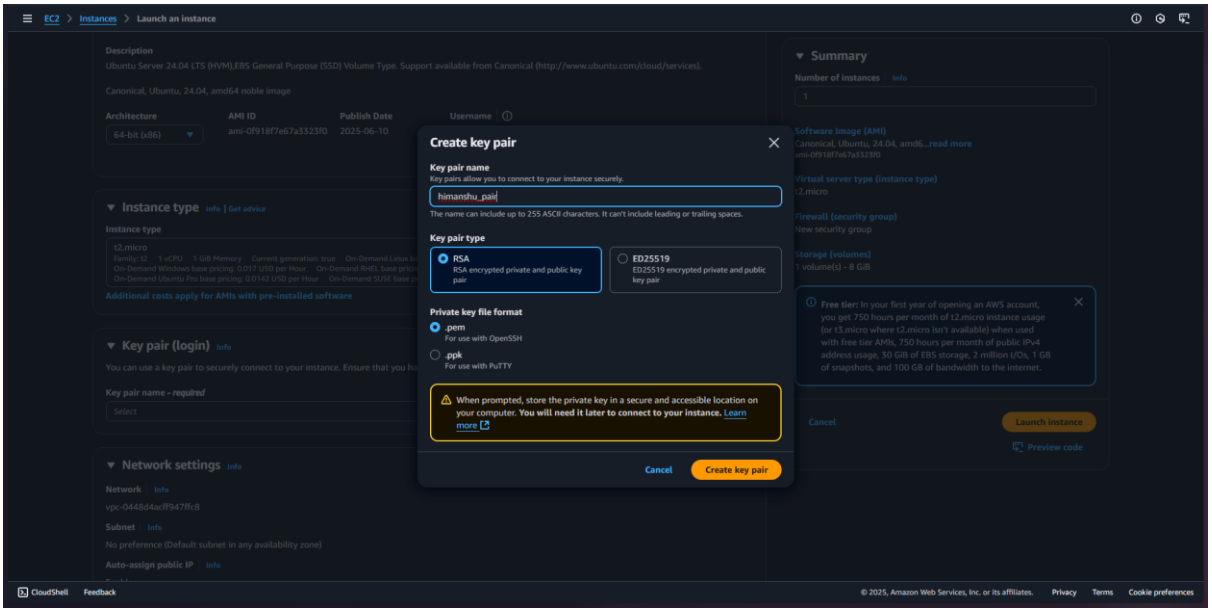

vii) CHOOSE THE ARCHITECTURE>64-bit(x86)



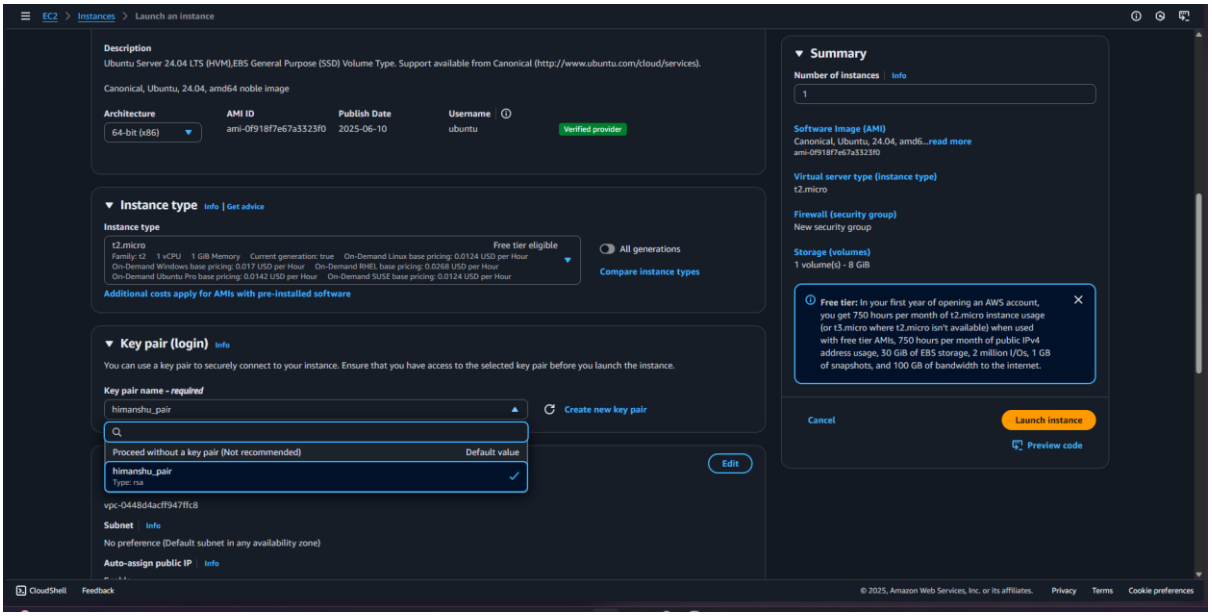
viii) CHOOSE INSTANCE TYPE: t2 micro (Free tier eligible)



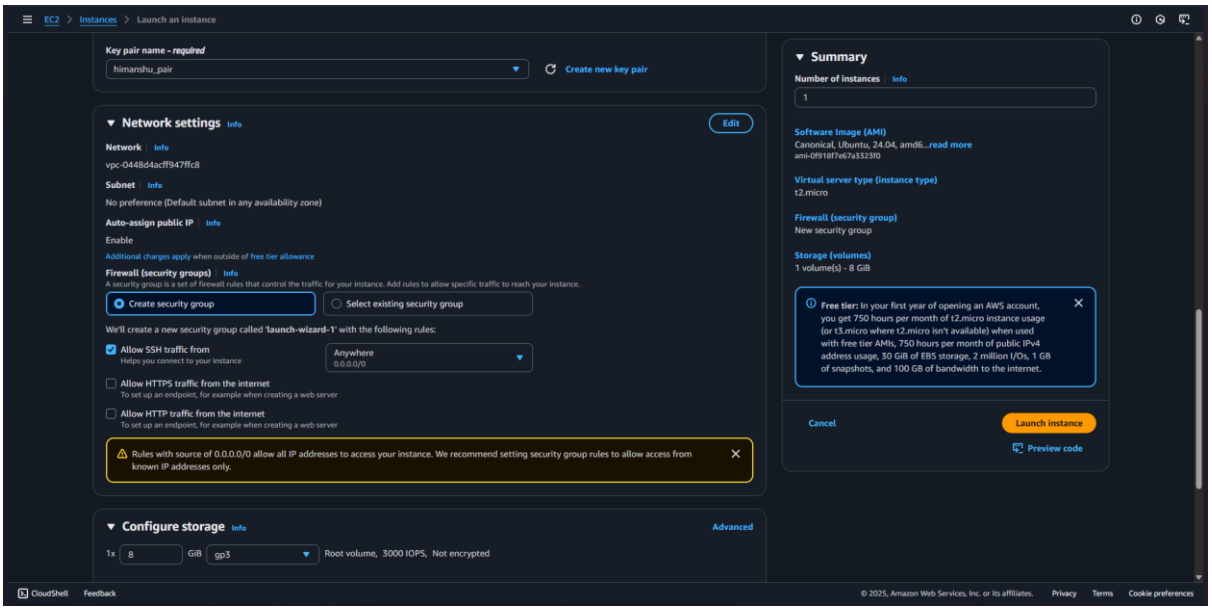

ix) CREATE A NEW KEY PAIR: There are two keys involved in this step. One is private key for user and another is public key for the EC2 instance. Once we create a pair, both the keys will be generated. Public key need to saved separately for future use. Both keys will have same name as given.



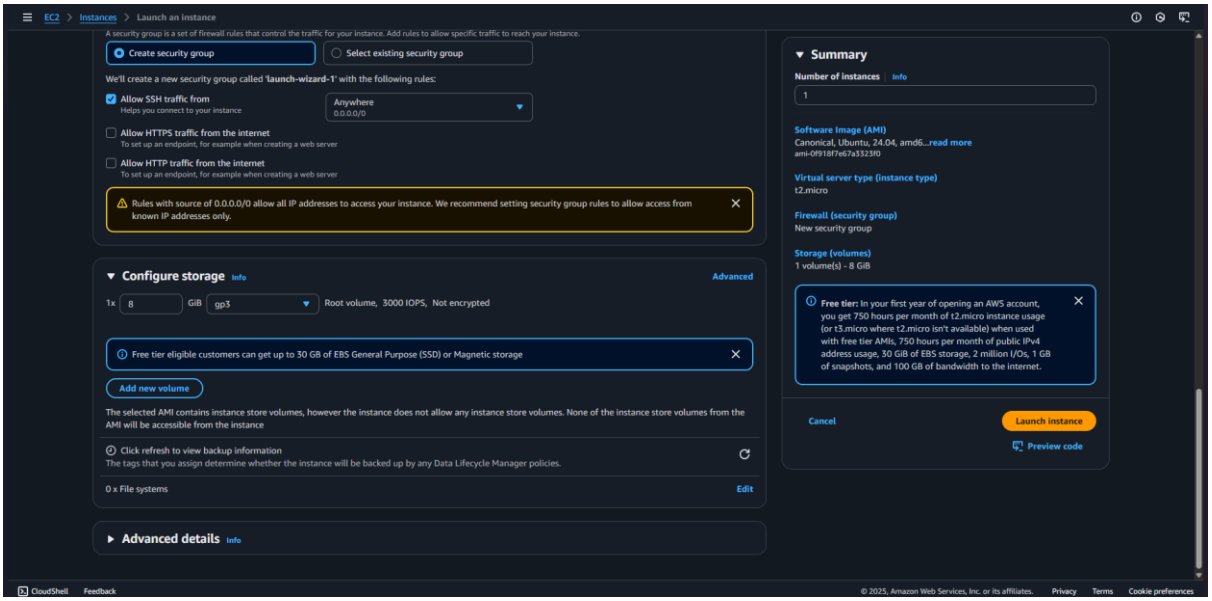
x) PUBLIC KEY IS AUTOMATICALLY ENABLED IN EC2 INSTANCE



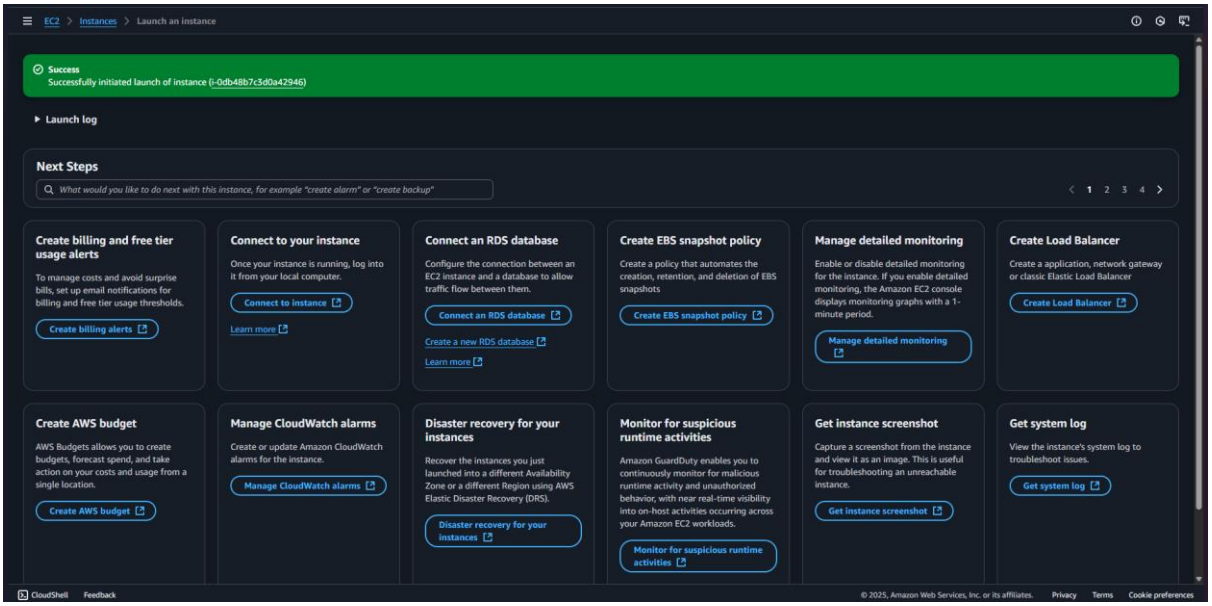

xi) CHOOSE THE DEFAULT NETWORK SETTINGS(NOTE: Auto-assign public IP should be enabled and source:0.0.0.0/0 allows all the IP addresses to access the EC2 instance )



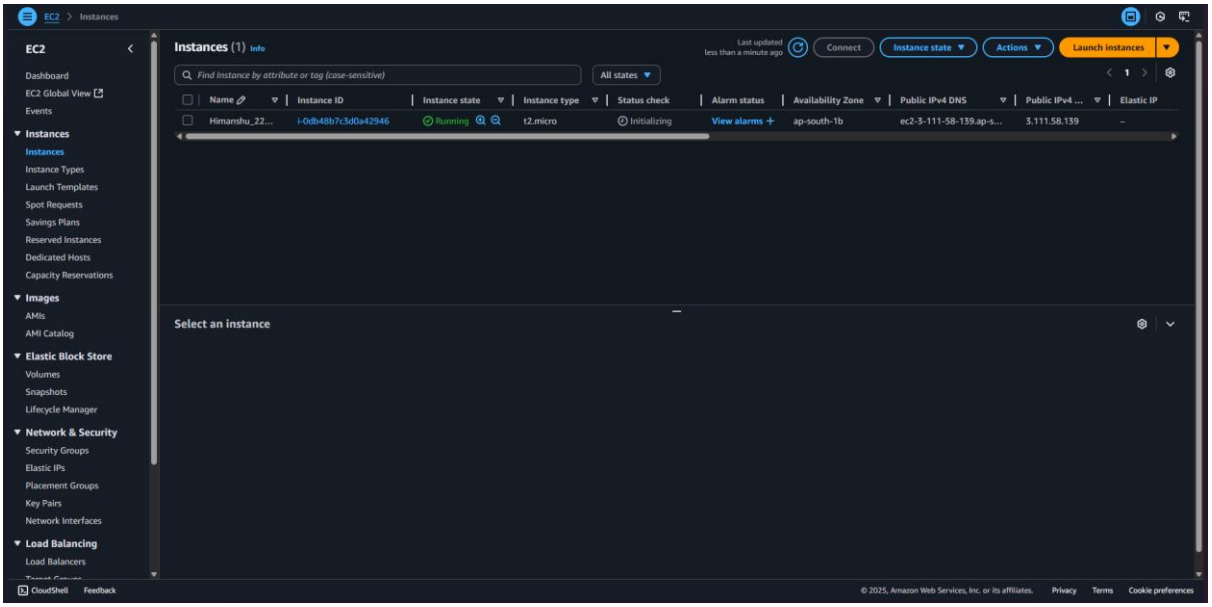
xii) CHOOSE THE DEFAULT CONFIGURE STORAGE AND CLICK ON LAUNCH INSTANCE



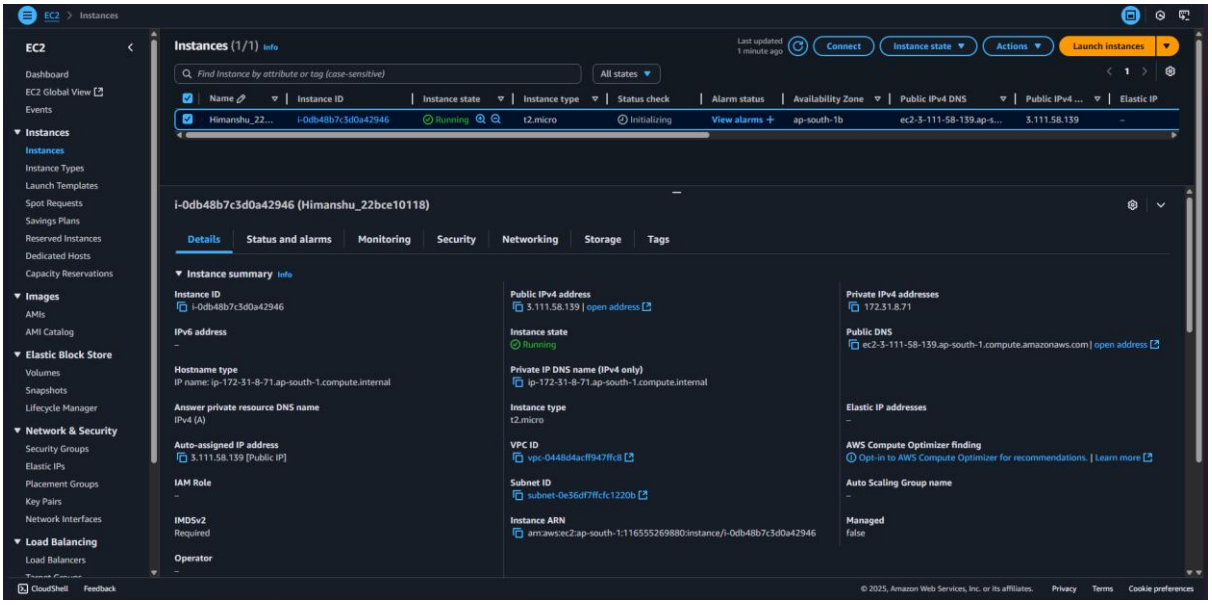

xiii) EC2 INSTANCE IS CREATED, CLICK ON THE INSTANCE.



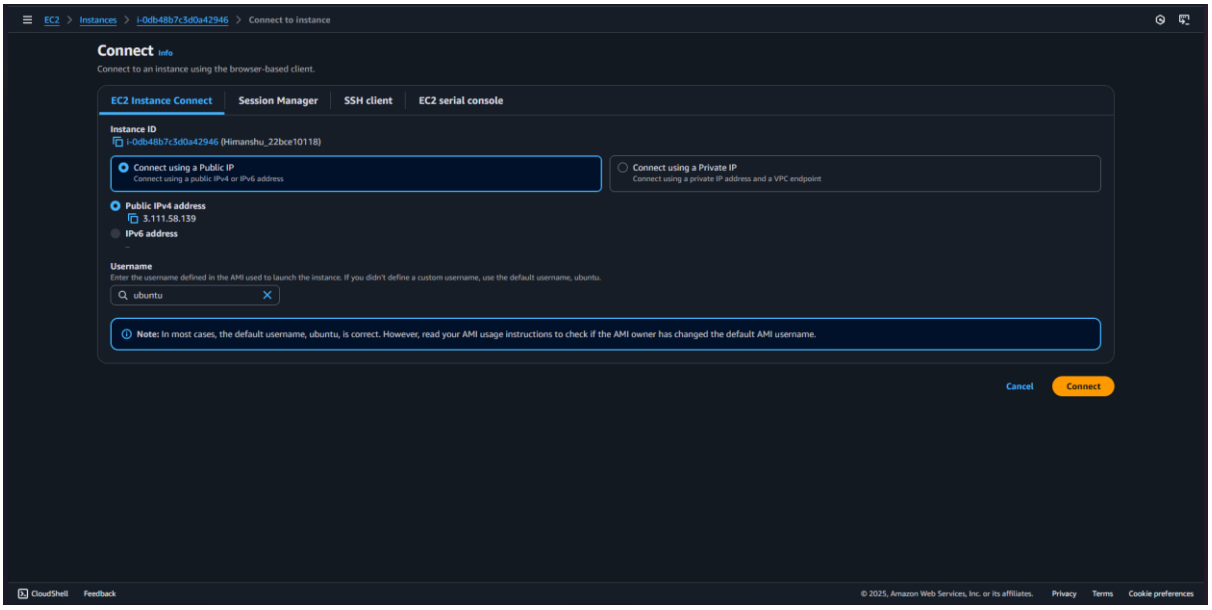
xiv) NOW CLICK ON THE EC2 INSTANCE



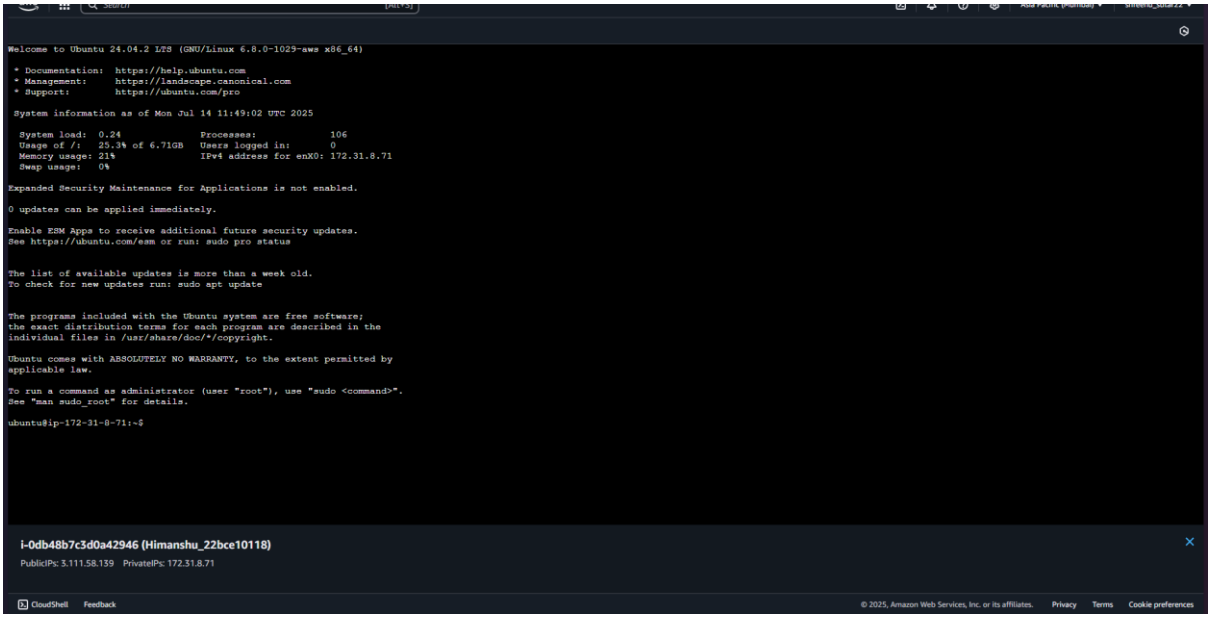

xv) DETAILS OF THE EC2 INSTANCE IS SHOWN, CLICK ON CONNECT



xvi) CLICK ON EC2 INSTANCE CONNECT>CONNECT




xvii) IT WILL LAND YOU TO THE TERMINAL PAGE



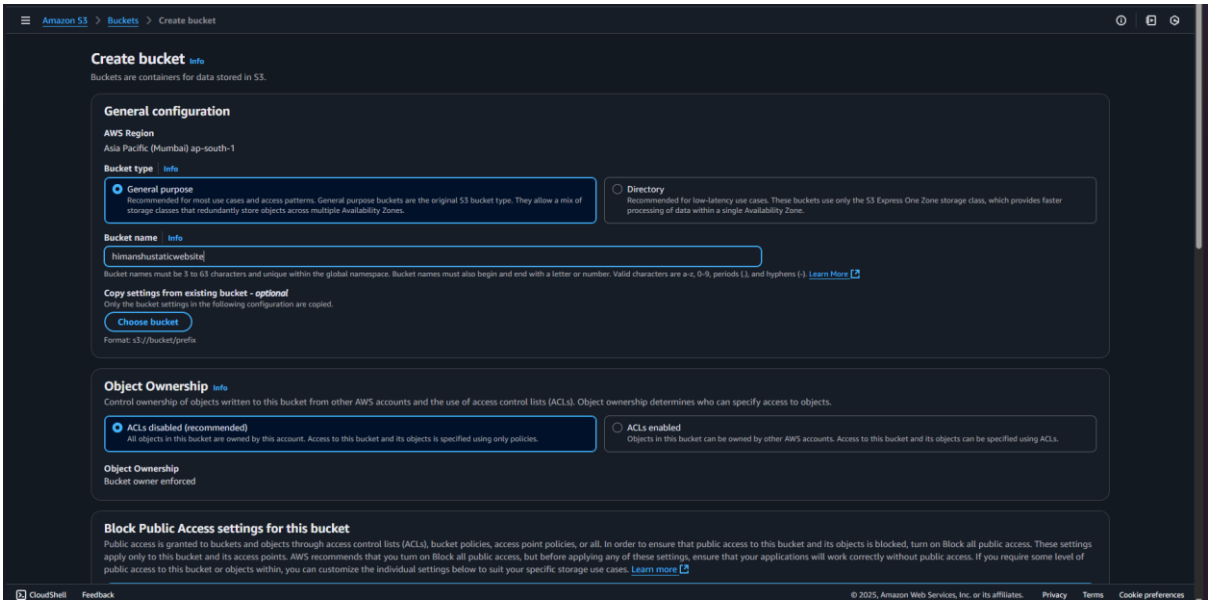
| Date: 25-07-2025 | Title |
|---|---|
| Exp. No: 07 | HOW TO CREATE A STATIC WEBSITE IN S3 |

**AIM OF THE EXPERIMENT:** HOW TO CREATE A STATIC WEBSITE IN S3

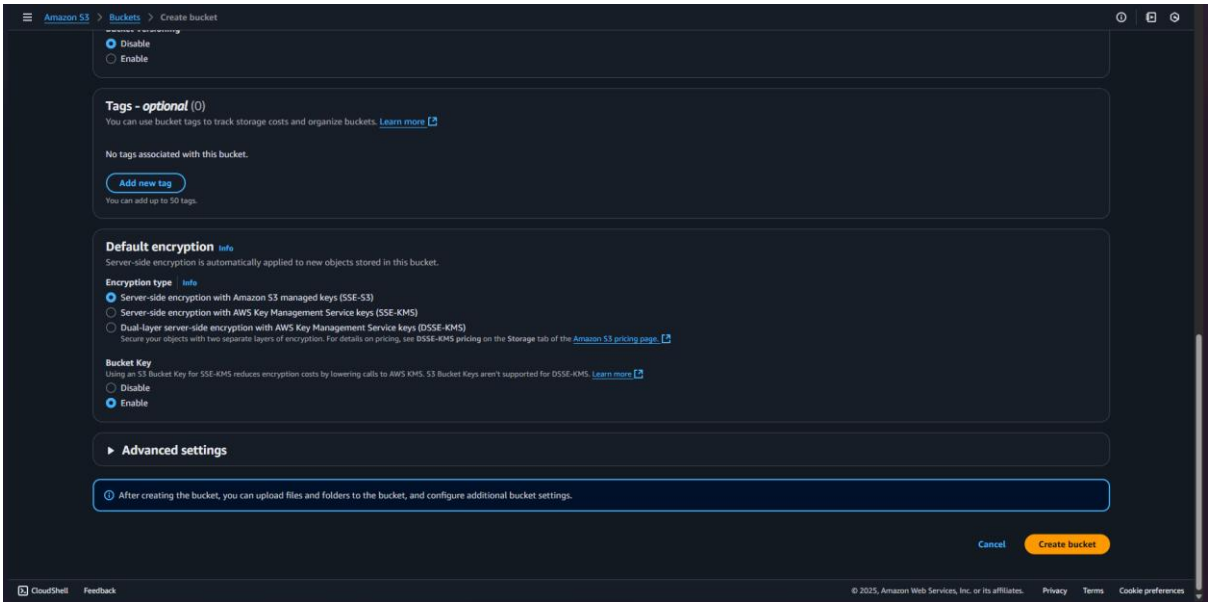
## PROCEDURE:

Follow the below steps to complete the requirements :

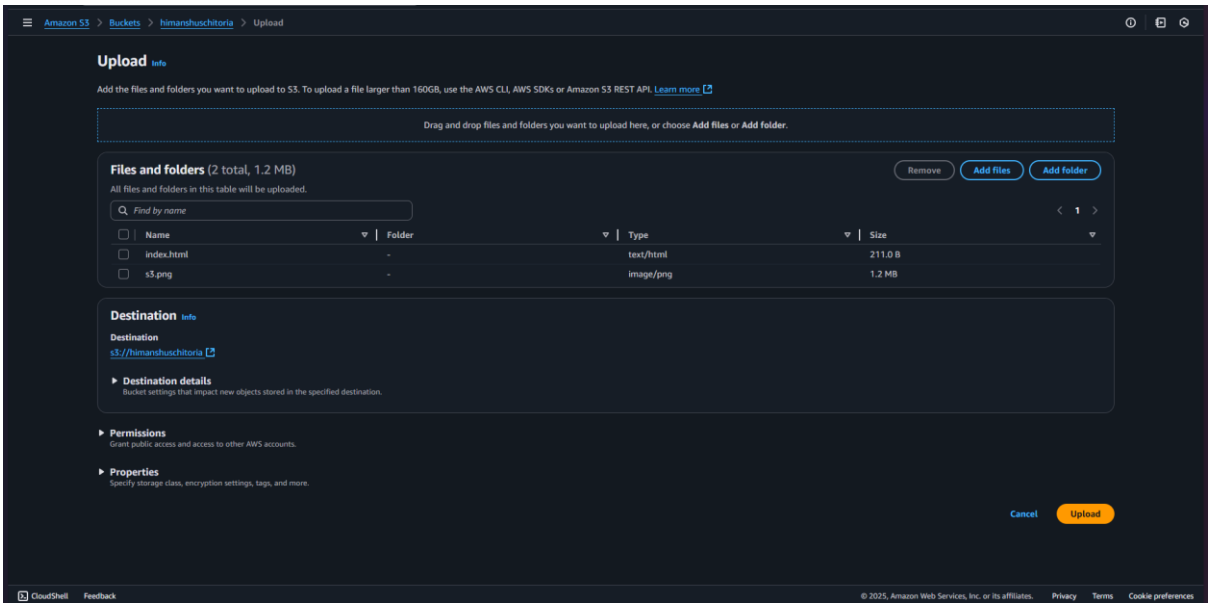
i) GO TO AWS CONSOLE AND SEARCH FOR S3 AND CLICK ON CREATE A BUCKET.



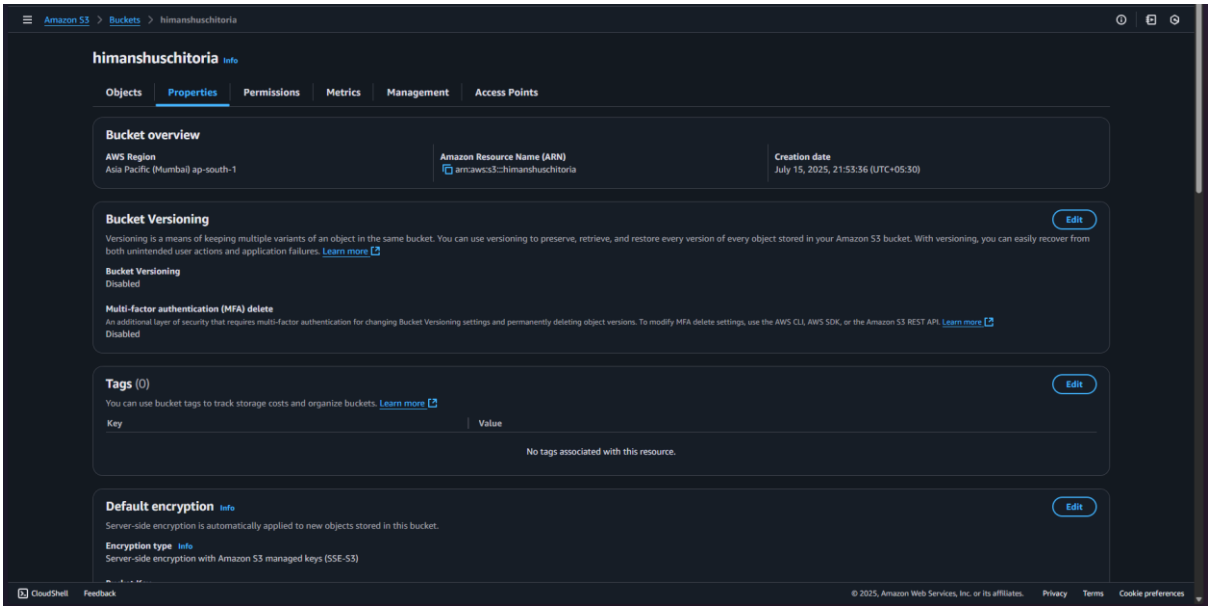
ii) GIVE THE BUCKET NAME AND KEEP THE REMAINING DEFAULT AND CLICK ON CREATE BUCKET .

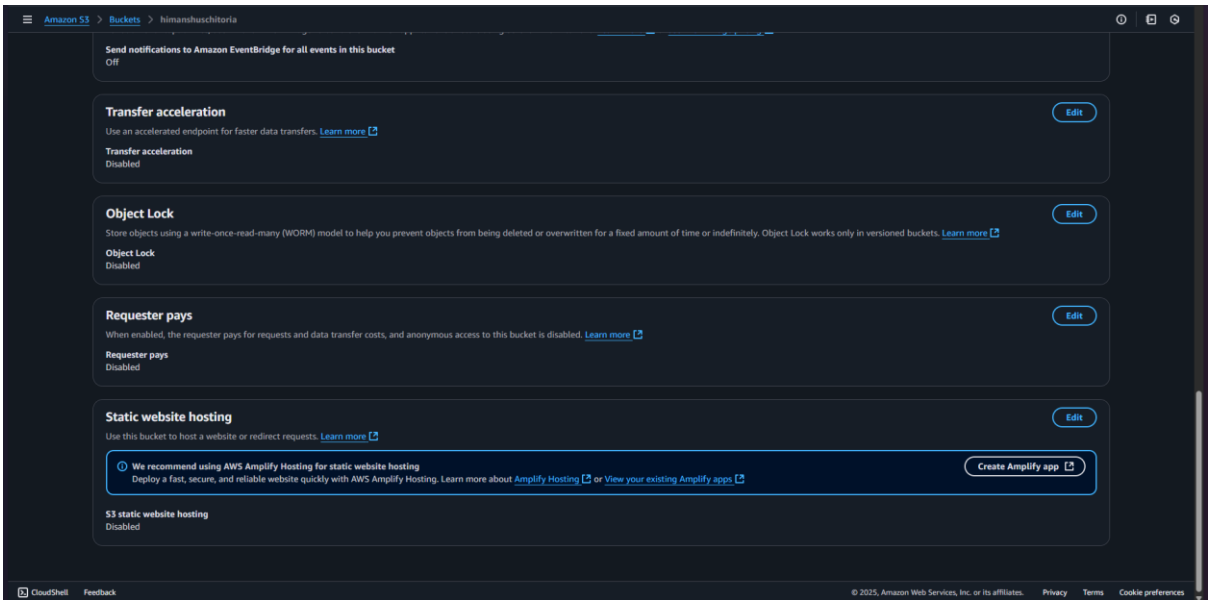



iii) ONCE THE BUCKET IS CREATED CLICK ON THE BUCKET TO UPLOAD FILES. Upload html file and image file.

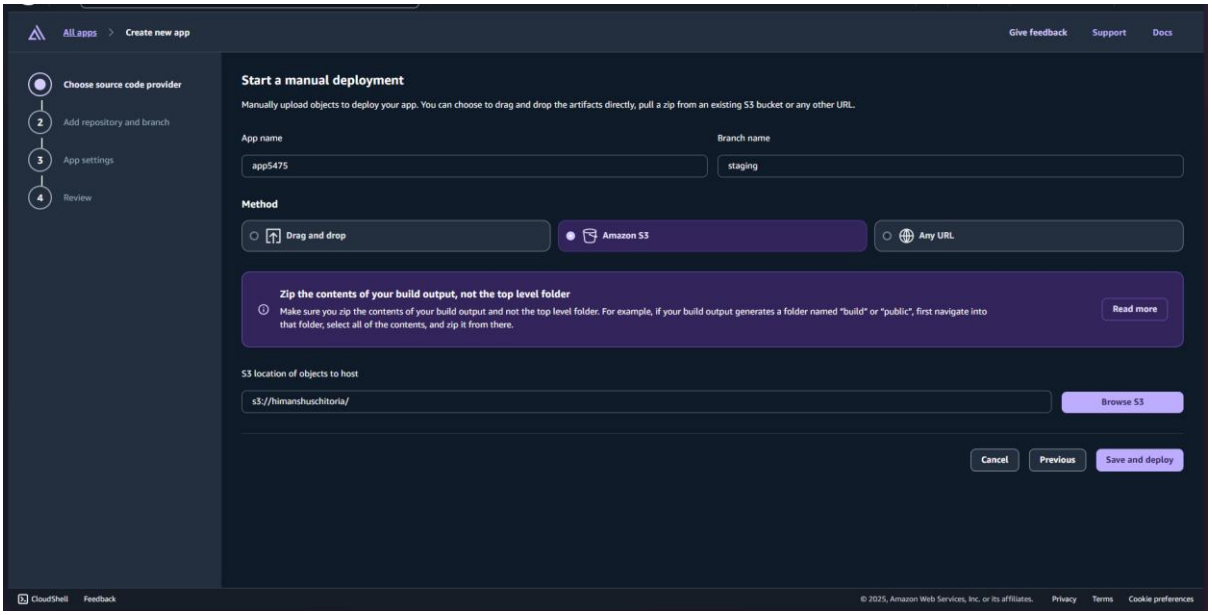


iv) ONCE THE FILES ARE UPLOADED. CLICK ON PROPERTIES AND CREATE AMPLIFY APP

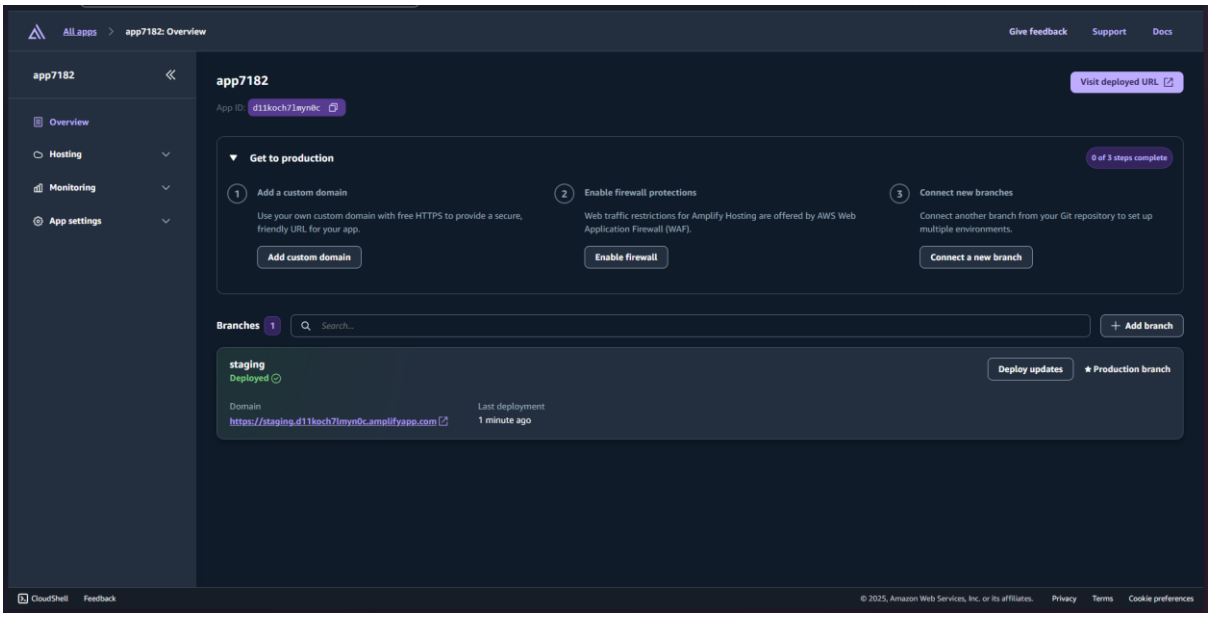


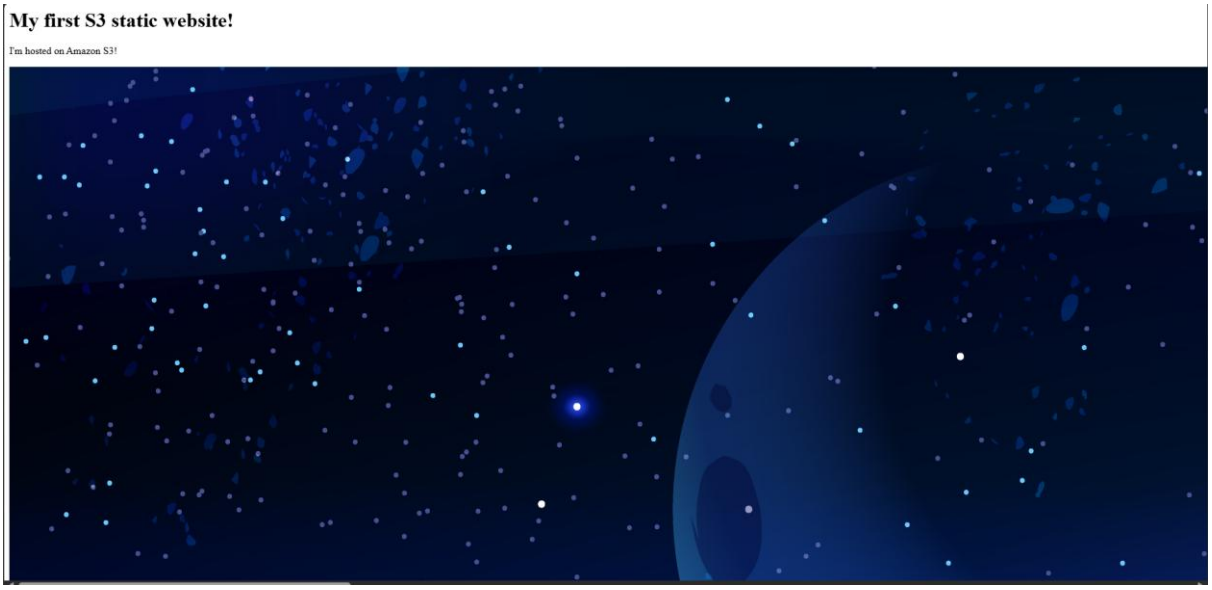
v) IT WILL LAND YOU TO AMPLIFY WINDOW. CLICK ON SAVE AND DEPLOY




vi) CLICK ON THE LINK BELOW.



vii) IT WILL LAND YOU TO YOUR STATIC WEBSITE



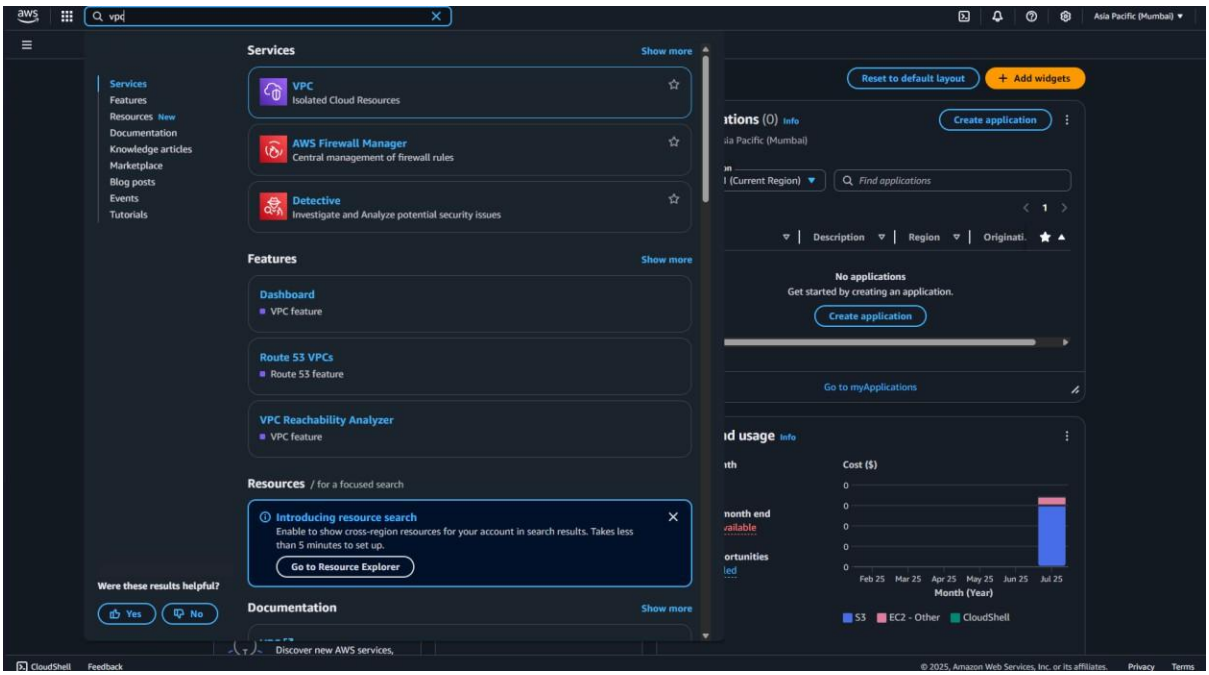
| Date: 28-07-2025 | Title |
|---|---|
| Exp. No: 08 | HOW TO SETUP EC2 INSTANCE IN VPC |

**AIM OF THE EXPERIMENT:** HOW TO SETUP EC2 INSTANCE IN VPC

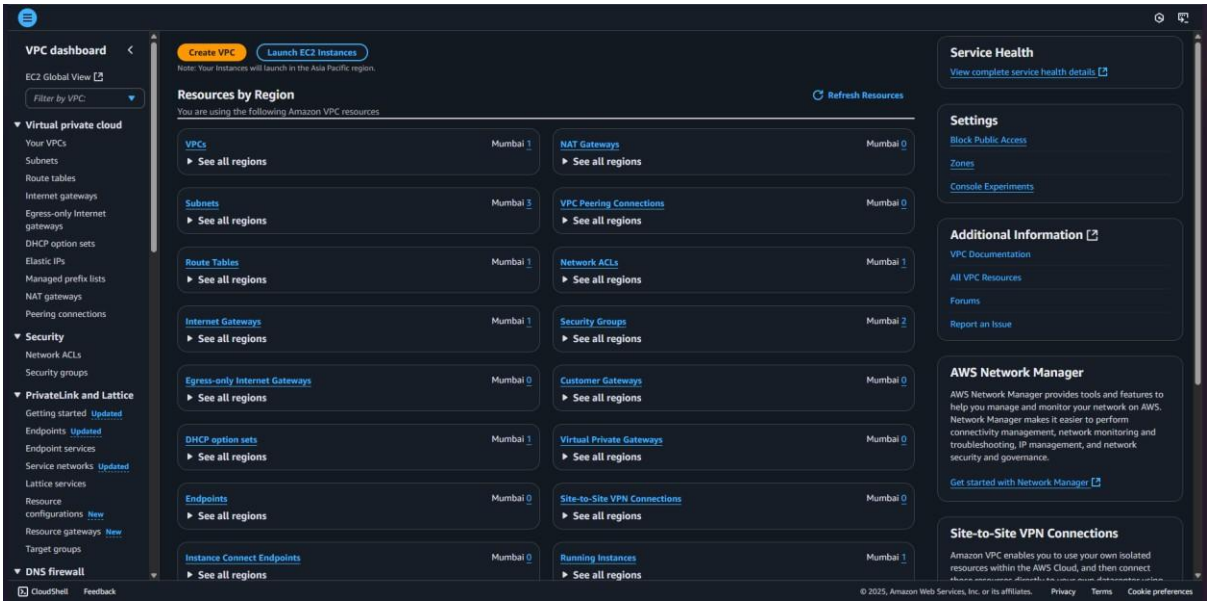
**PROCEDURE:**

Follow the below steps to complete the requirements :

i) LOGIN AS A ROOT USER AND SEARCH FOR VPC IN THE CONSOLE .

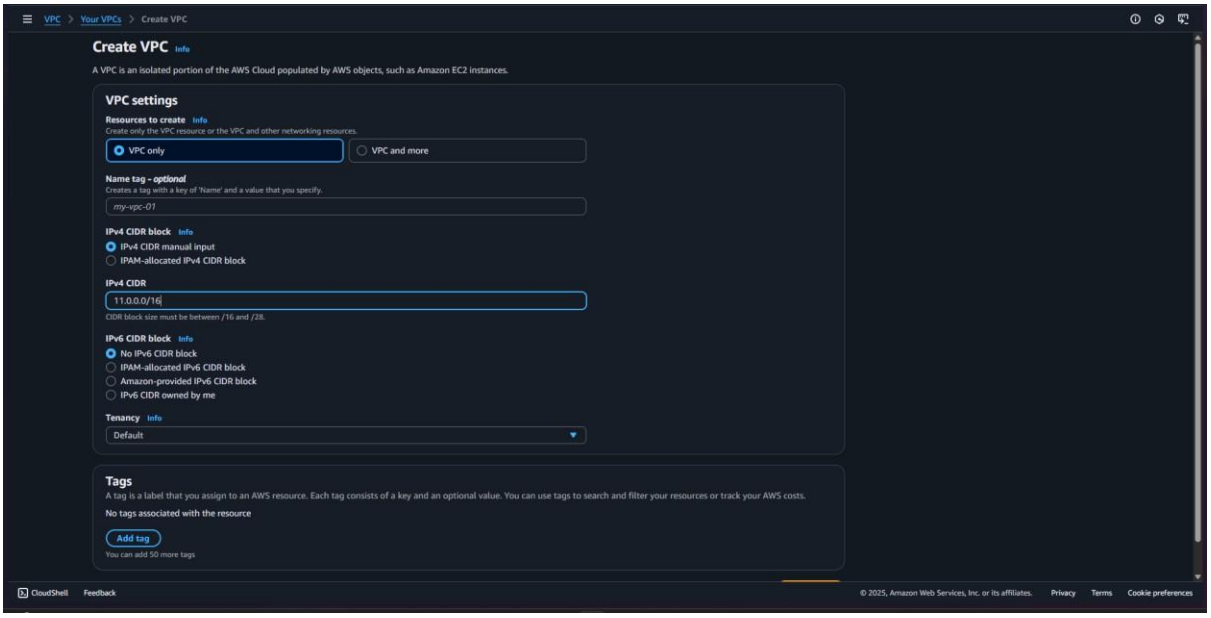


ii) CLICK ON CREATE VPC

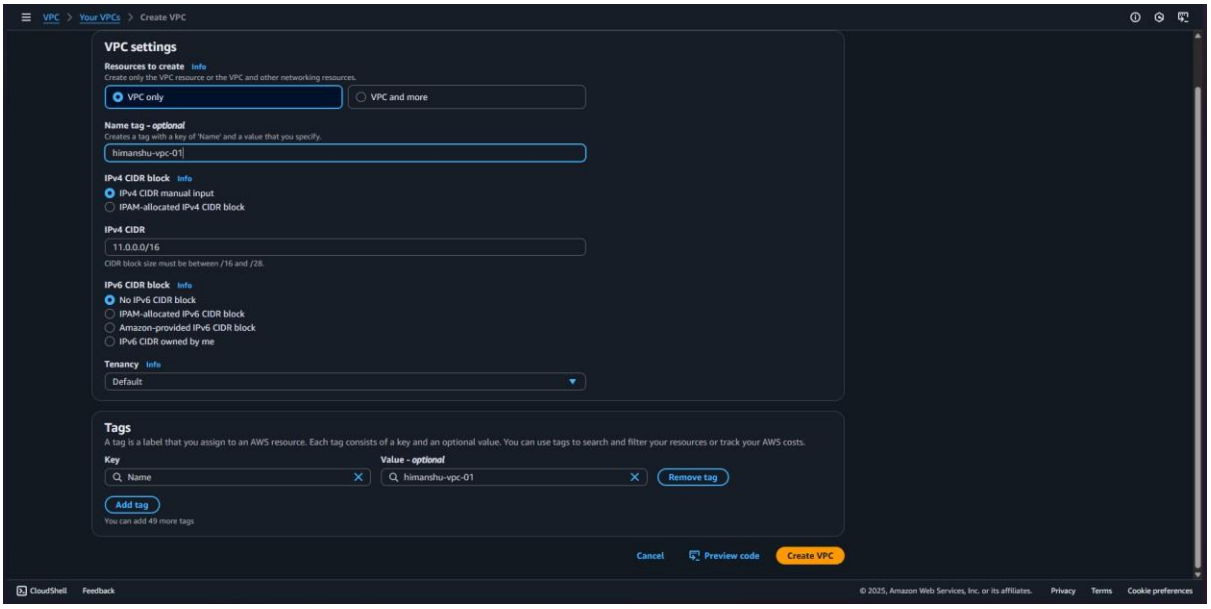



iii) SELECT VPC ONLY> TYPE THE VPC NAME> IPv4CIDR-11.0.0.0/16
NOTE: In AWS a VPC spans a specific IP address range using CIDR (Classless

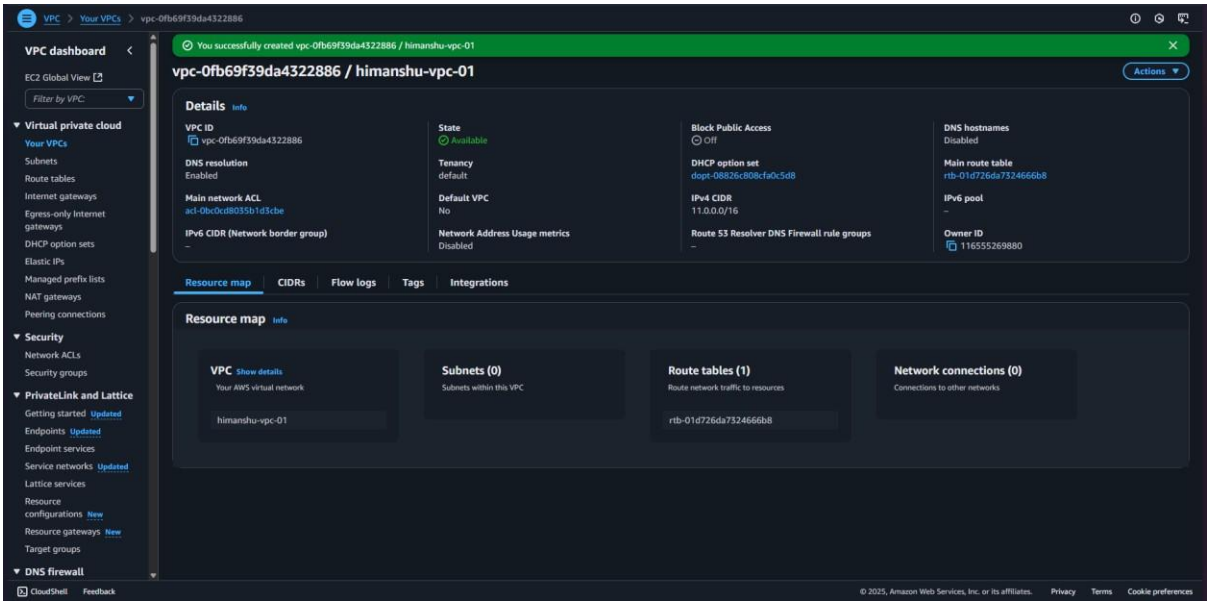
Inter-Domain Routing) blocks. The CIDR block defines the range of IP addresses that can be assigned to resources within the VPC



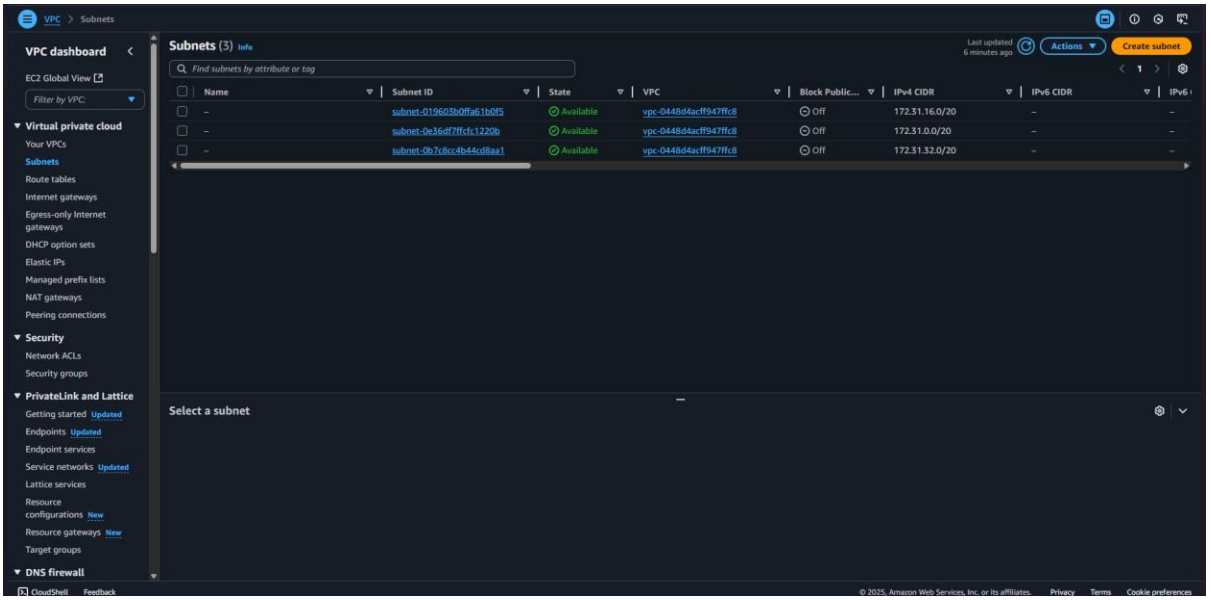
iv) CLICK ON CREATE VPC



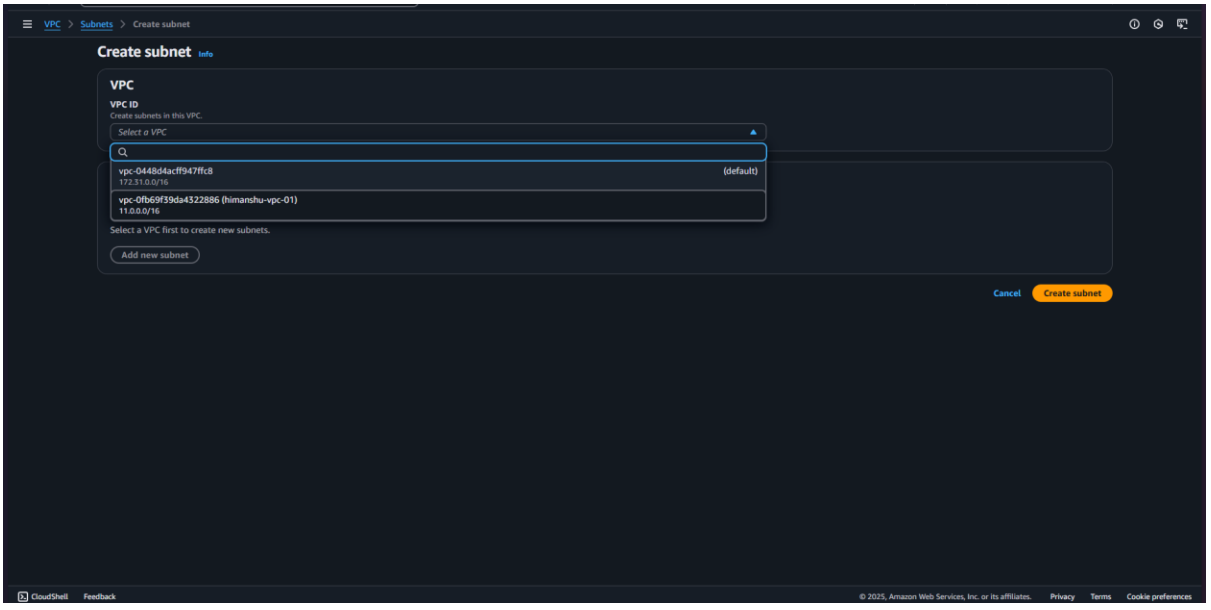

v) VPC CREATED



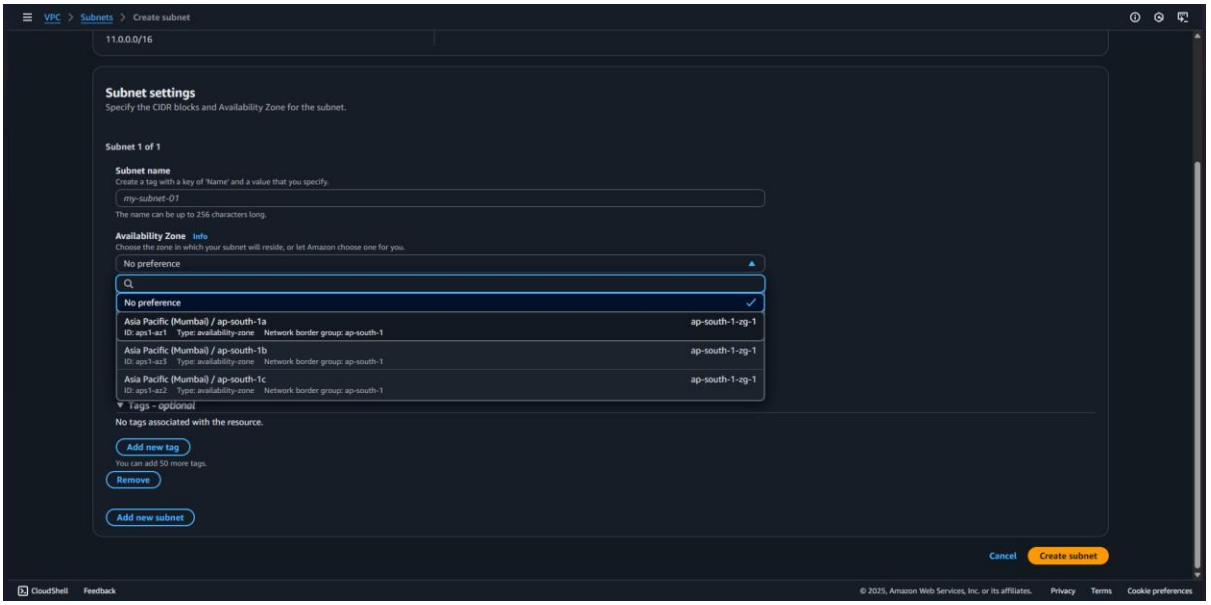
vi) CLICK ON SUBNET>CREATE SUBNET



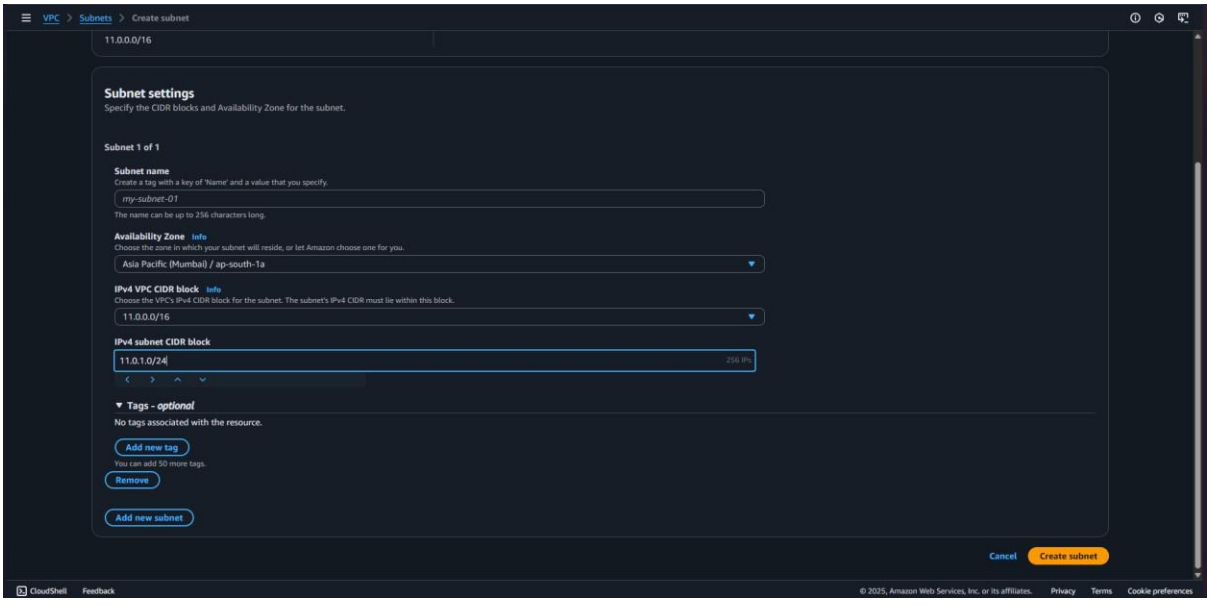

vii) SELECT THE VPC THAT YOU HAVE CREATED EARLIER



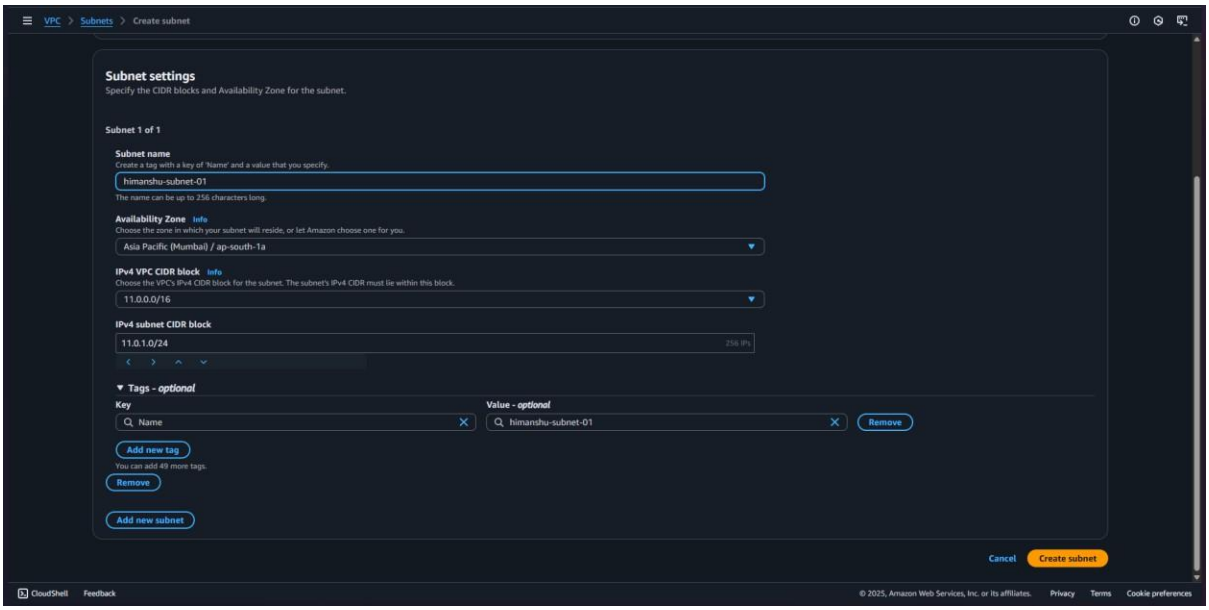
viii) SELECT ap-south-1a in the Availability Zone



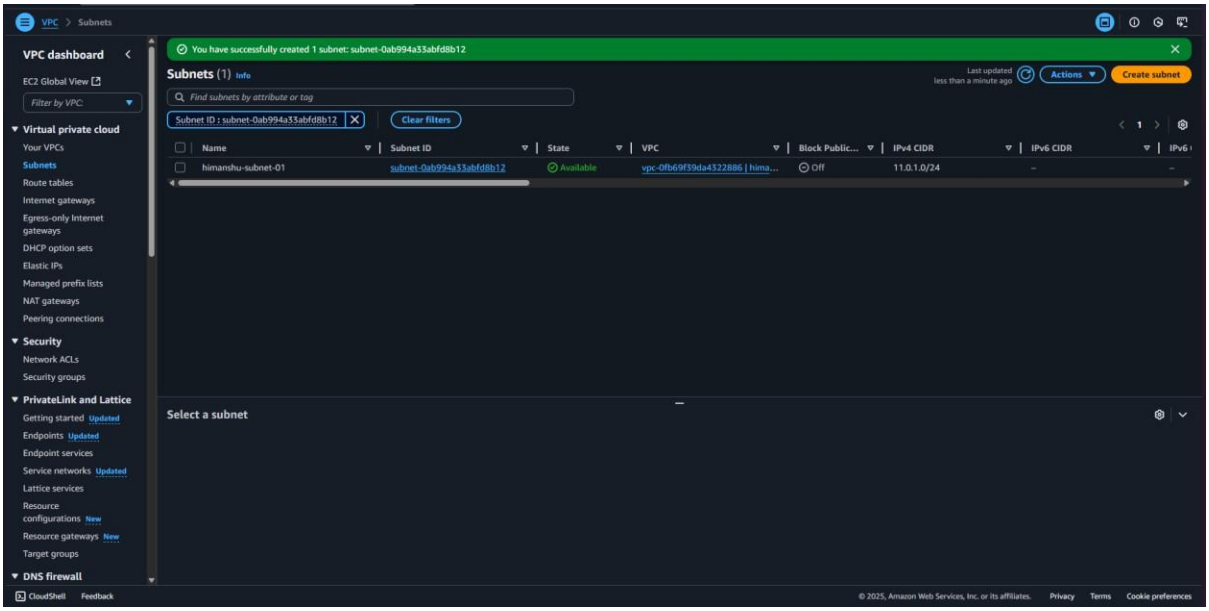

ix) ENTER IPv4 SUBNET CIDR BLOCK-11.0.1.0/24> CLICK ON ADD NEW SUBNET



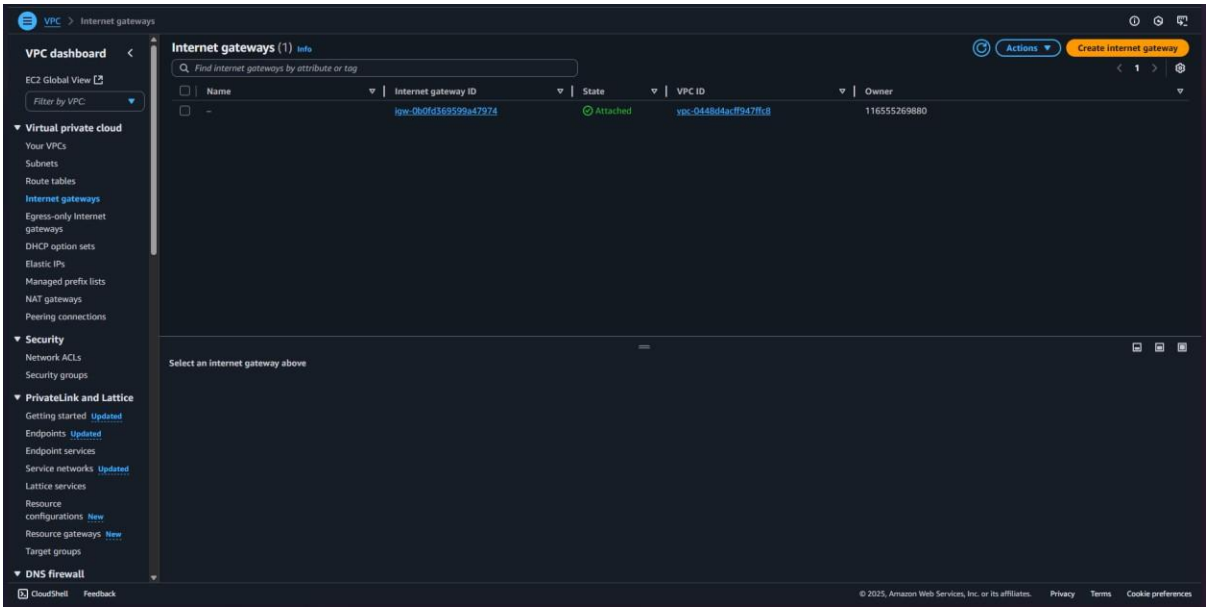
x) ENTER THE NAME OF THE PRIVATE SUBNET> AVAILABILITY ZONE:ap-south-1b> IPv4 subnet CIDR Block-11.0.2.0/24> CLICK ON CREATE SUBNET



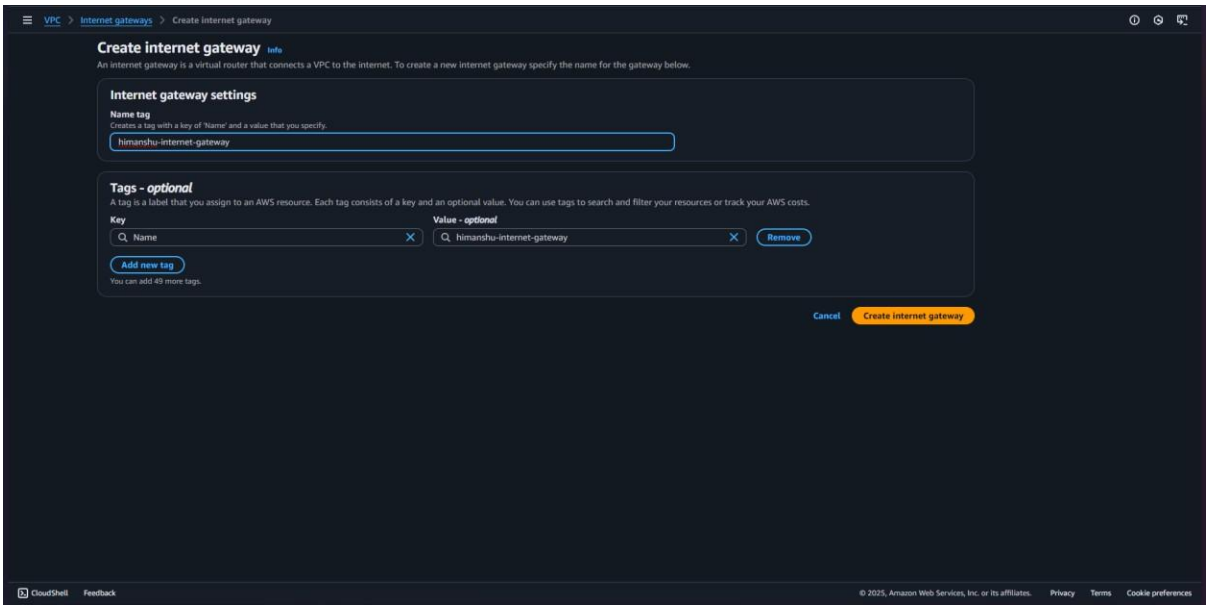

xi) BOTH THE PUBLIC AND PRIVATE SUBNET IS CREATED



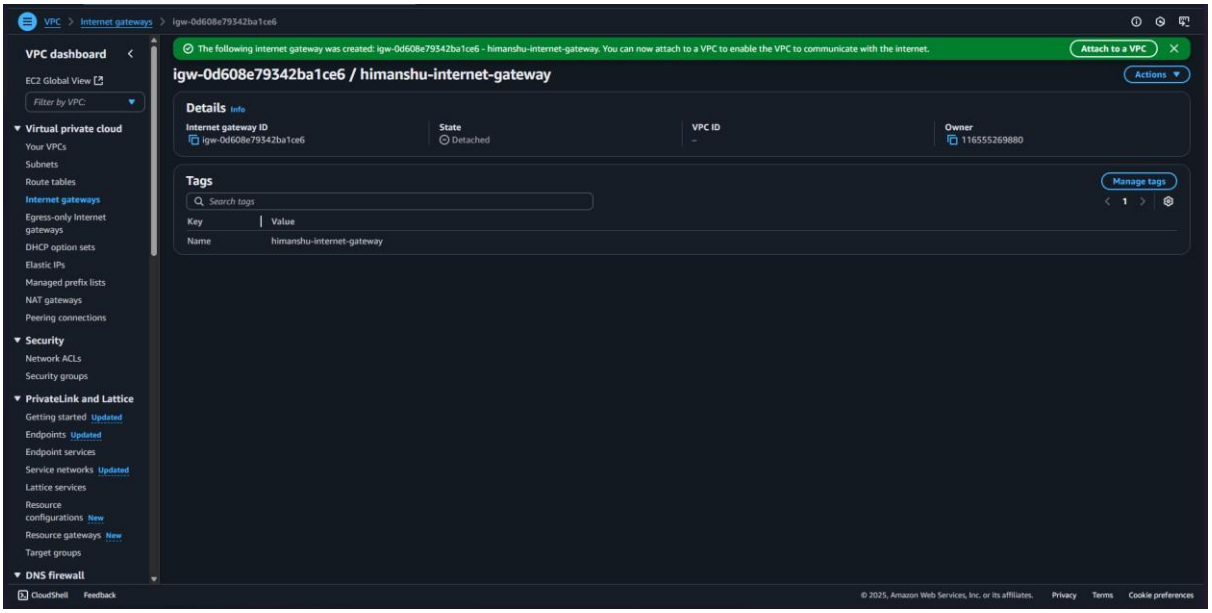
xii) NOW CREATE AN INTERNET GATEWAY FOR PUBLIC SUBNET. CLICK ON INTERNET GATEWAY FROM THE DASHBOARD> CLICK ON CREATE INTERNET GATEWAY



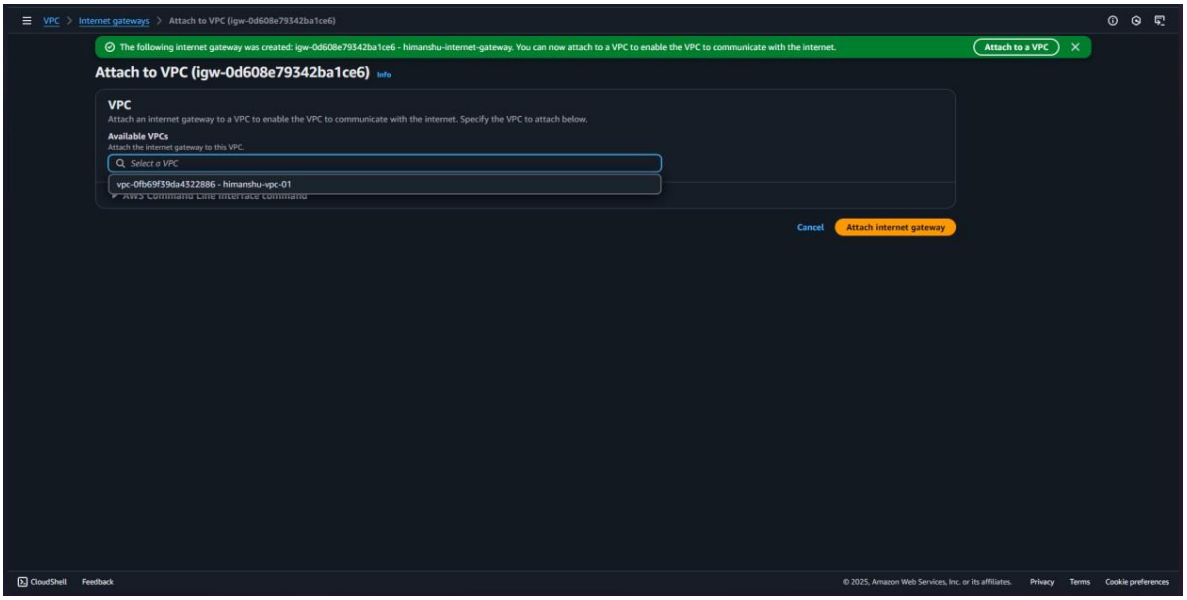

xiii) TYPE THE NAME OF THE GATEWAY



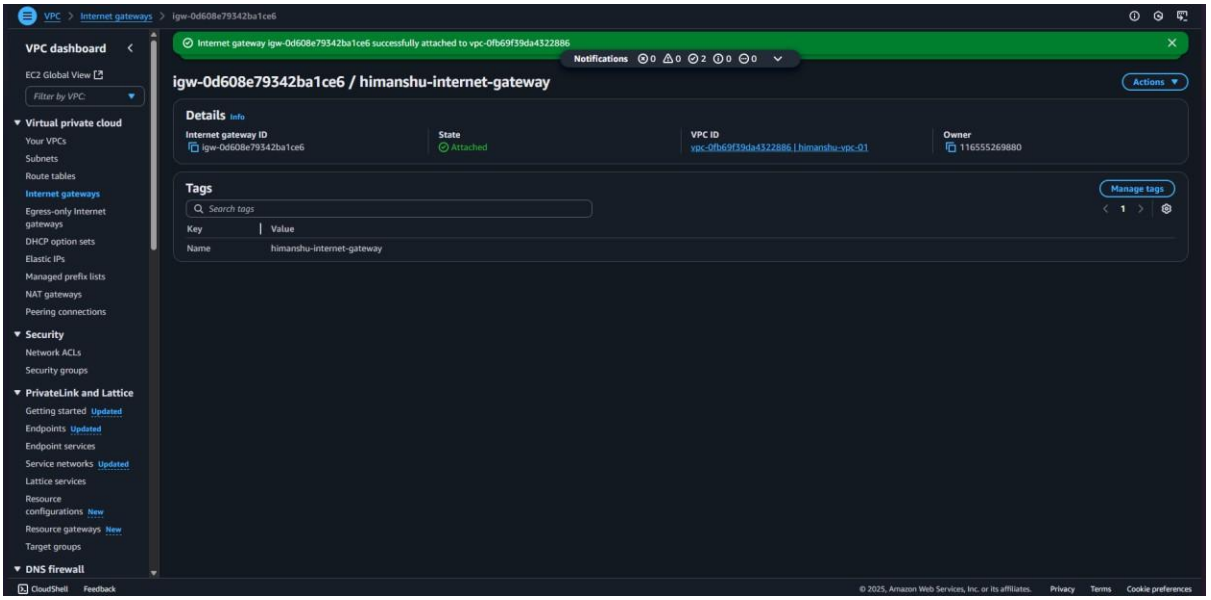
xiv) INTERNET GATEWAY IS CREATED




xv) CLICK ON ATTACH TO VPC> SELECT THE VPC CREATED EARLIER> CLICK ON ATTACH INTERNET GATEWAY

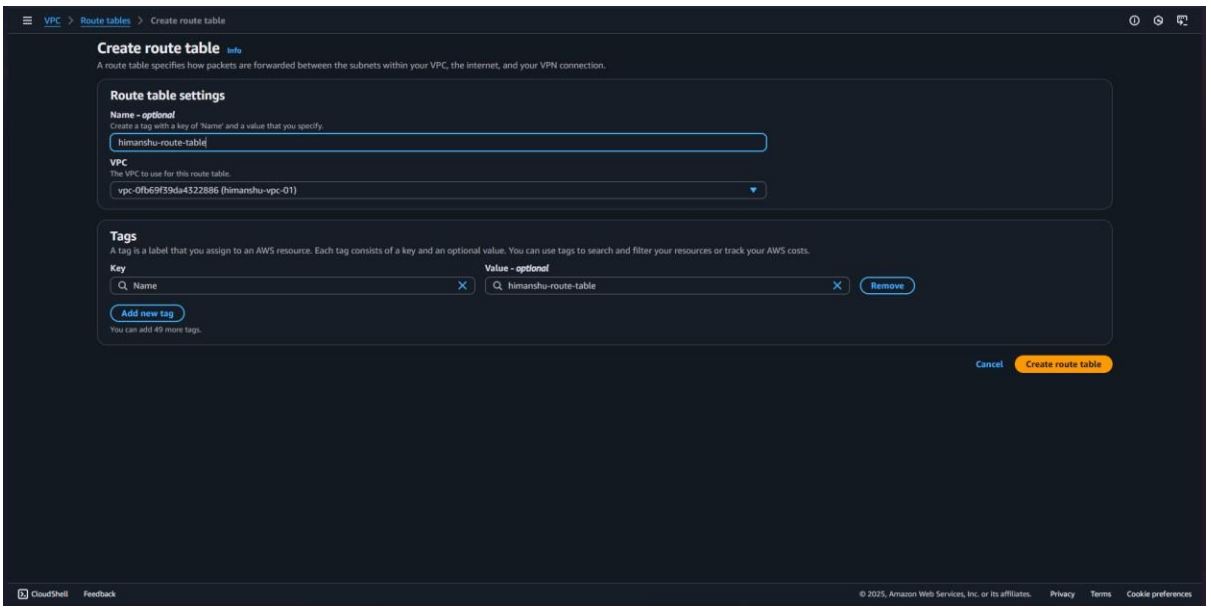


xvi) INTERNET GATEWAY IS ATTACHED TO THE VPC

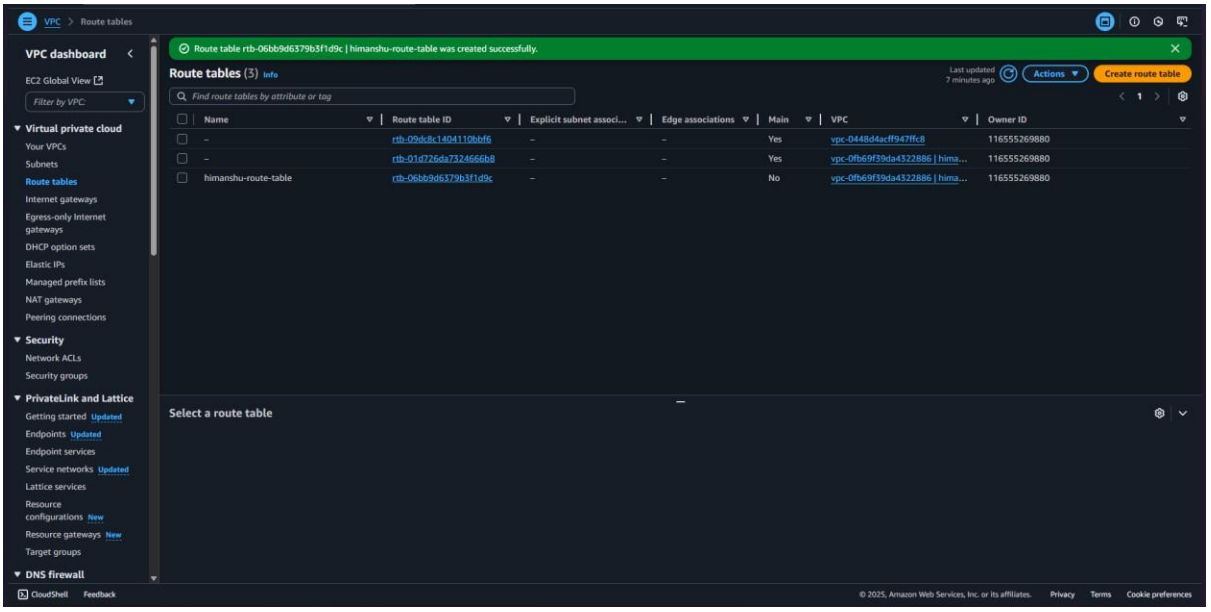



xvii) NEXT CREATE TWO ROUTE TABLES (PRIVATE AND PUBLIC) FOR THE SUBNETS.

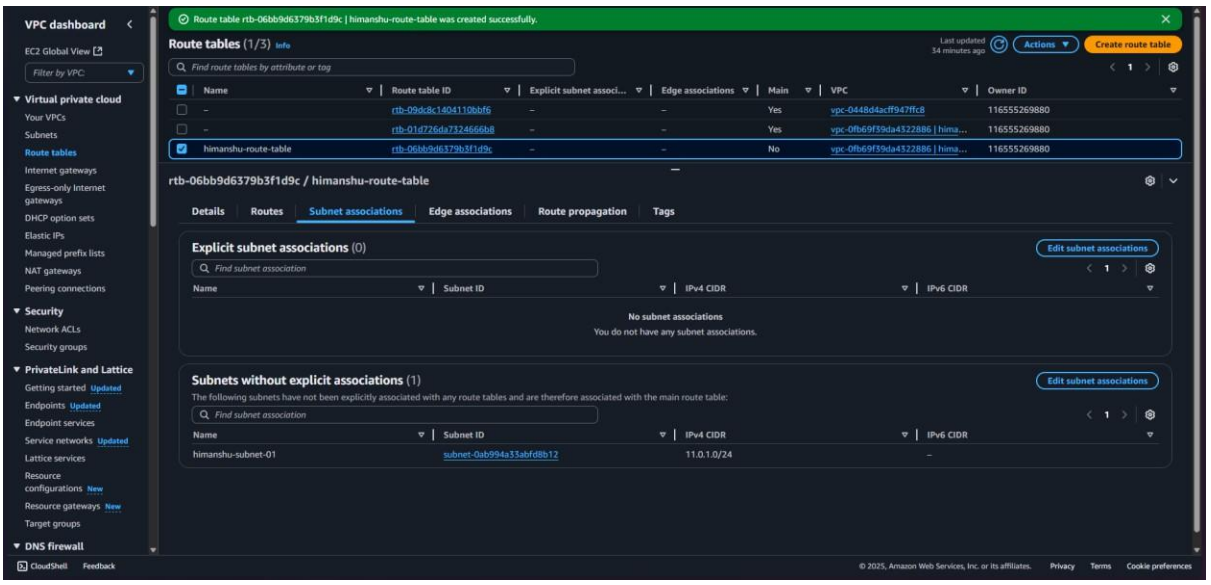
xviii) TO CREATE A PUBLIC ROUTE TABLE: CLICK ON ROUTE TABLES>CREATE A ROUTE TABLE> WRITE A SUITABLE NAME FOR THE ROUTE TABLE>CHOOSE THE VPC>CLICK ON CREATE ROUTE TABLE



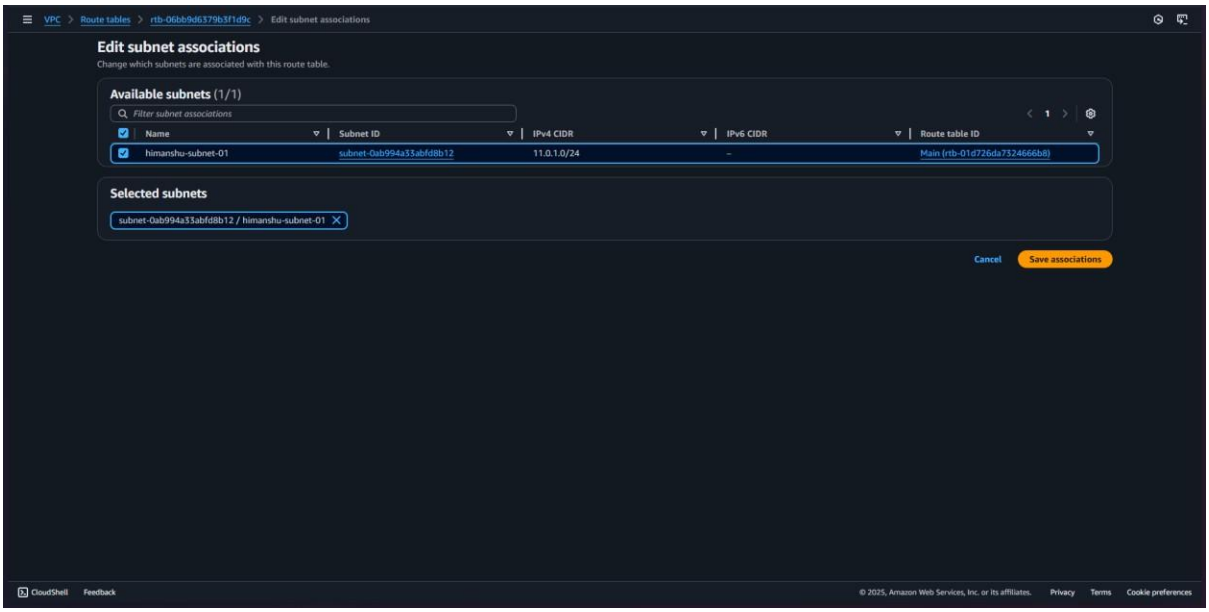
xix) BOTH THE PUBLIC AND PRIVATE ROUTE TABLES ARE CREATED AS SHOWN BELOW NOW WE NEED TO CONNECT BOTH THE ROUTE TABLES WITH THEIR CORRESPONDING SUBNETS.



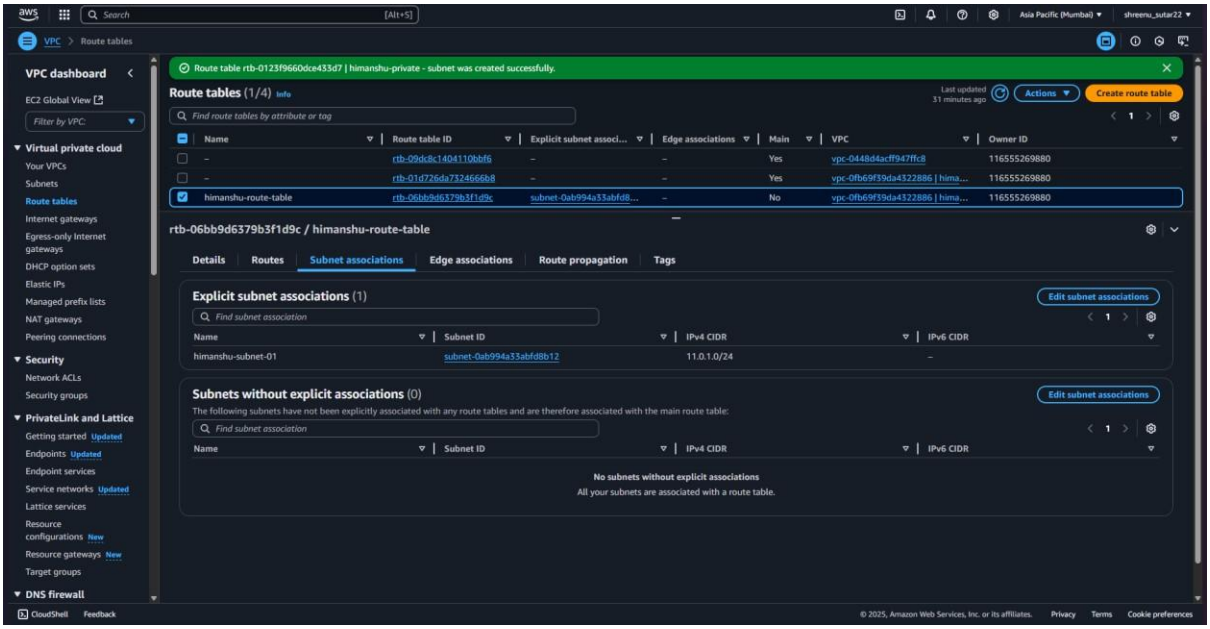

xx) CLICK ON THE PUBLIC ROUTE TABLE>CLICK ON SUBNET ASSOCIATIONS



xxi) CLICK ON EDIT SUBNET ASSOCIATIONS > CHOOSE PUBLIC SUBNET FROM THE OPTIONS> CLICK ON SAVE ASSOCIATIONS

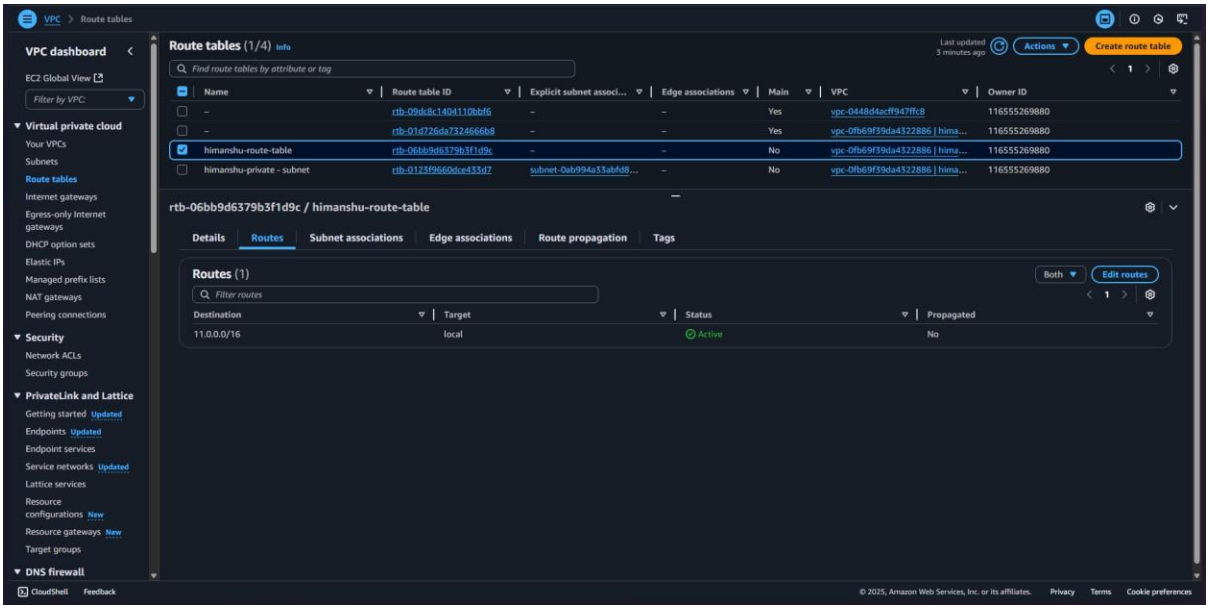



xxii) SUBNET ASSOCIATION IS DONE. REPEAT THE SAME STEP FOR PRIVATE SUBNET ASSOCIATION.

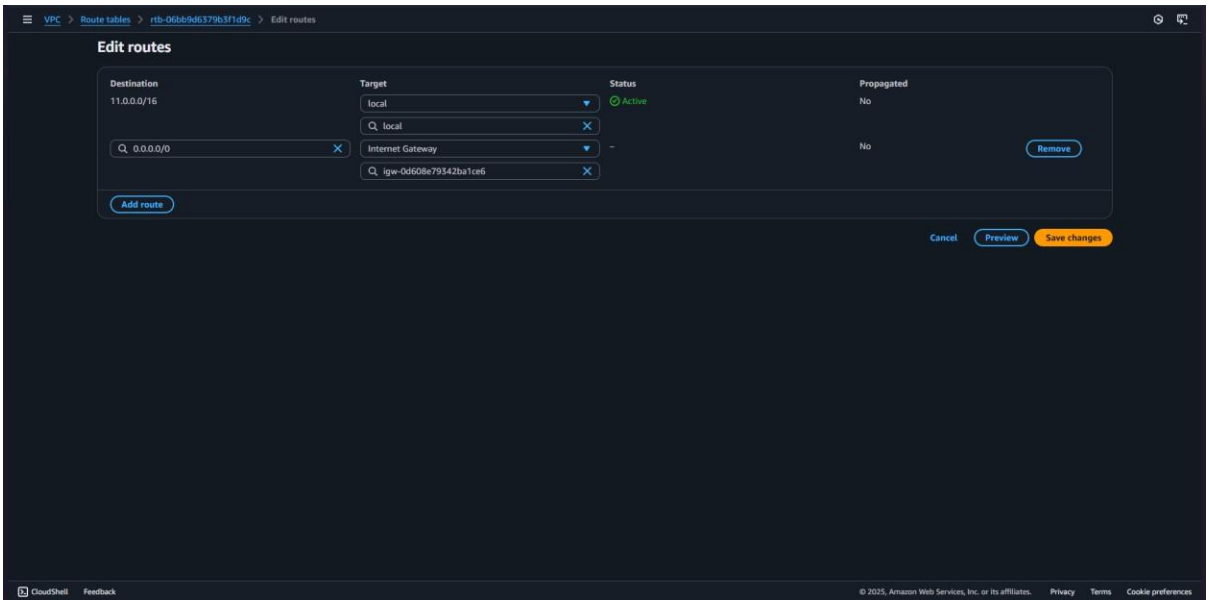


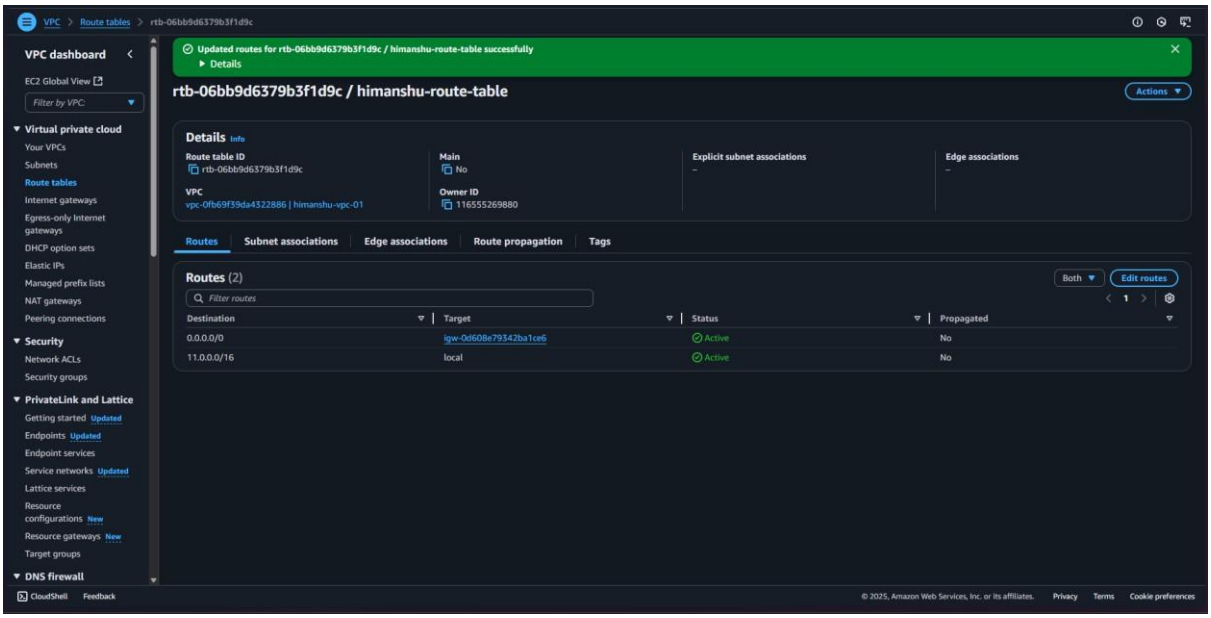
xxiii) NEXT WE NEED TO CREATE THE ROUTE SO THAT INTERNET CAN BE ACCESSED WITH THE HELP OF INTERNET GATEWAY THROUGH THESE ROUTE TABLES.

xxiv) GO TO PUBLIC ROUTE TABLE FROM THE AWS CONSOLE> CLICK ON ROUTES>CLICK ON EDIT ROUTES



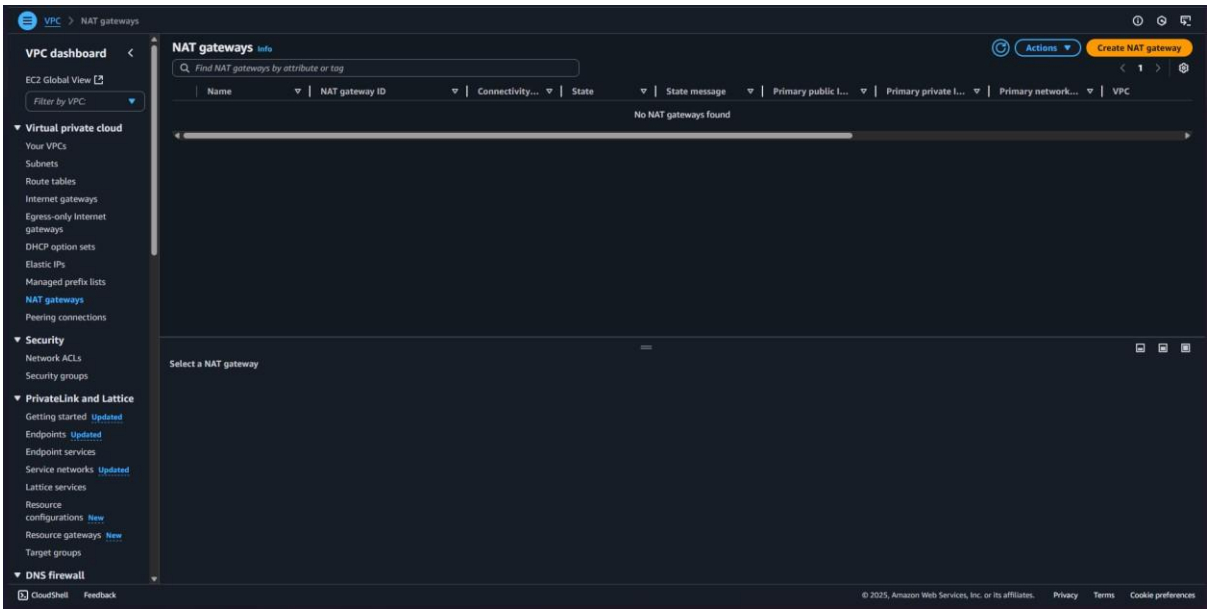

xxv) CLICK ON ADD ROUTE>SELECT THE IP-0.0.0.0/0>CHOOSE INTERNET GATEWAY> SELECT THE INTERNET GATEWAY THAT YOU HAVE CREATED> CLICK ON SAVE CHANGES (NOTE:0.0.0.0/0 means it allows all the IP addresses to access the resources present in the public subnet).



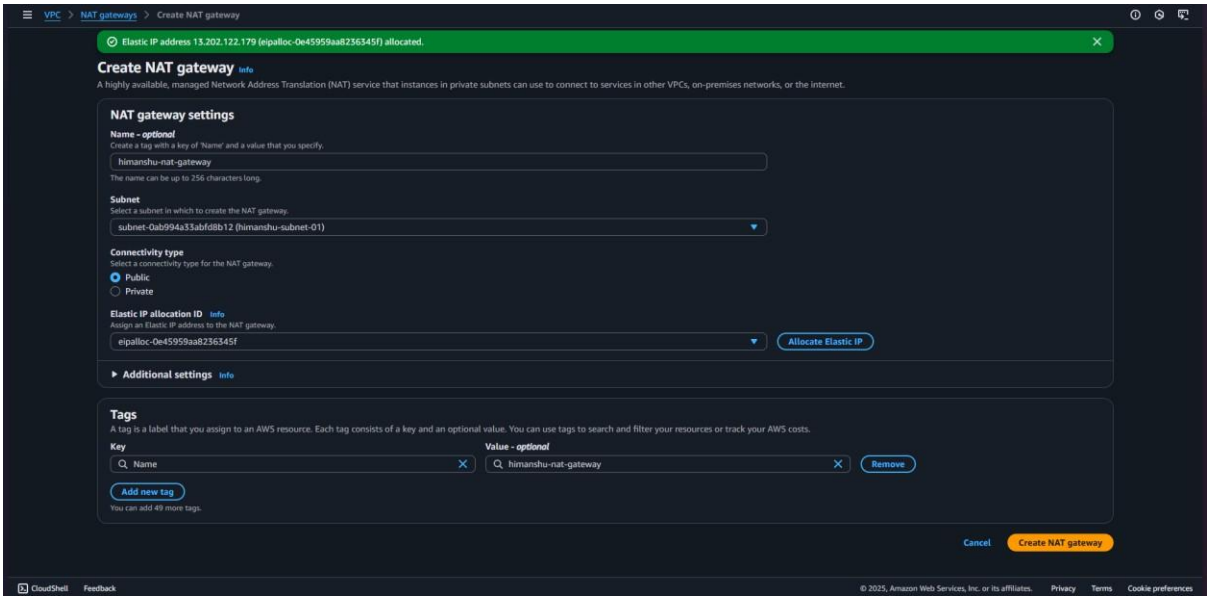


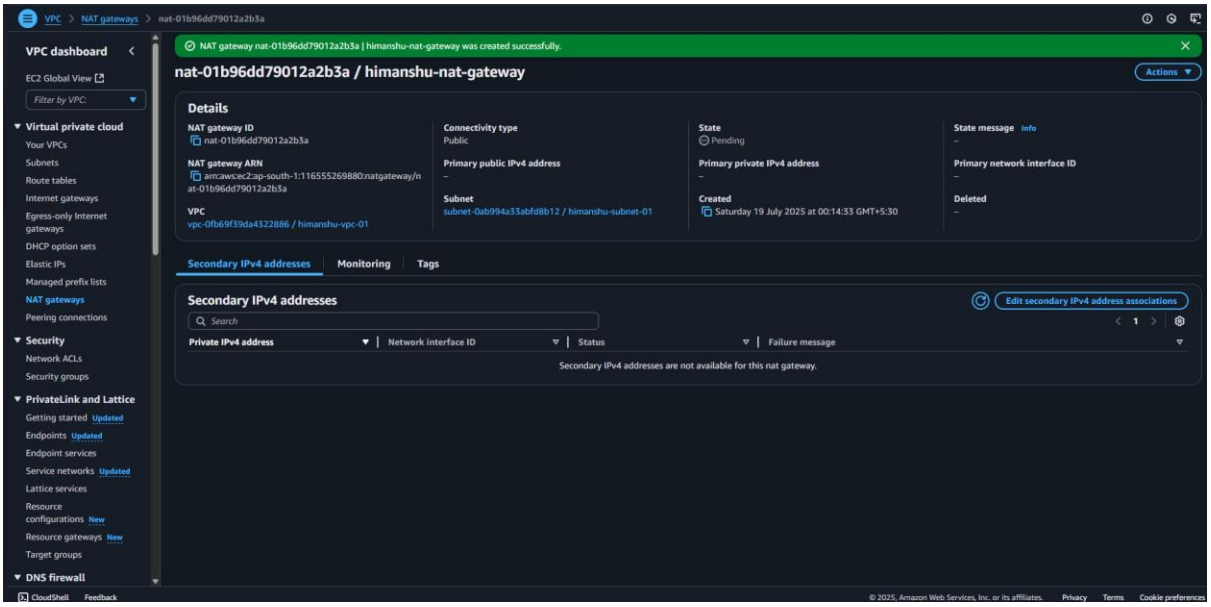

xxvi) WE NEED TO CREATE THE NAT GATEWAY FOR THE PRIVATE SUBNET SO THATRESOURCES PRESENT INSIDE THE PRIVATE SUBNET CAN ACCESS THE INTERNET WITH THE HELP OF INTERNET GATEWAY.

xxvii) CLICK ON NAT GATEWAYS FROM THE DASHBOARD> CLICK ON CREATE NAT GATEWAY.

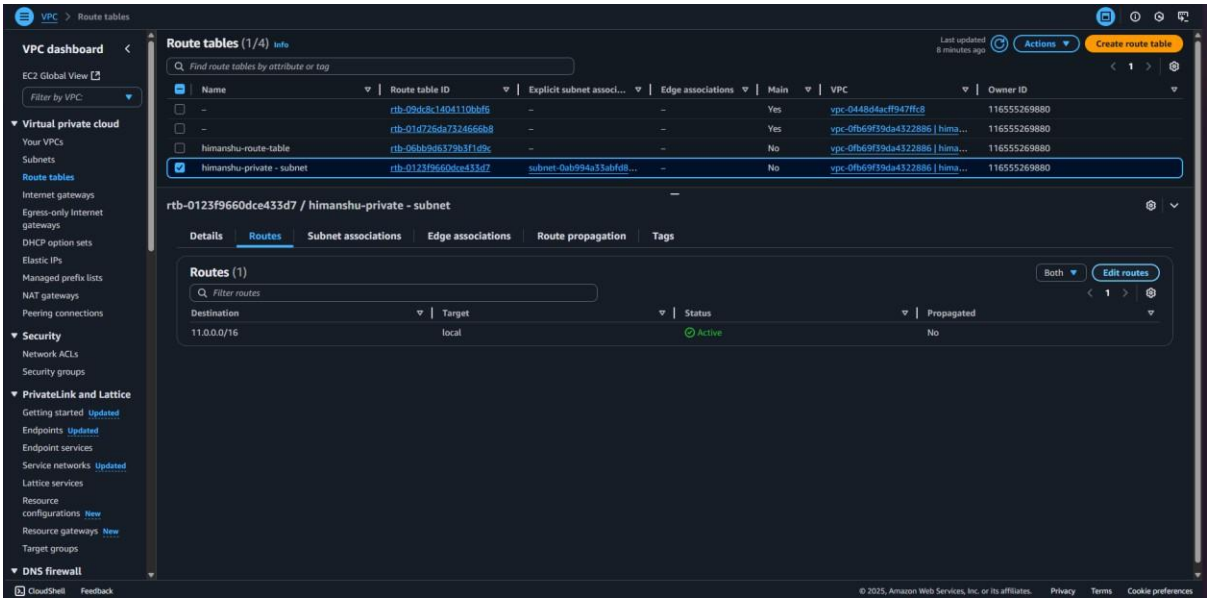


xxviii) GIVE A NAME TO THE NAT GATEWAY>CHOOSE THE PUBLIC SUBNET>ALLOCATE ELASTIC IP> CLICK ON CREATE NAT GATEWAY.

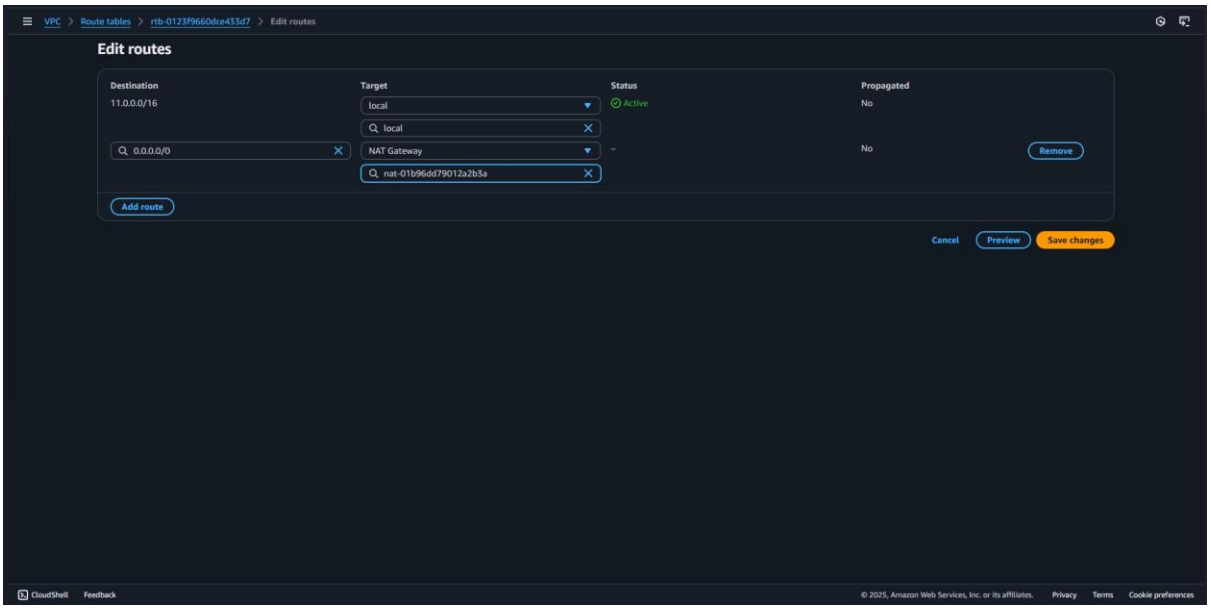


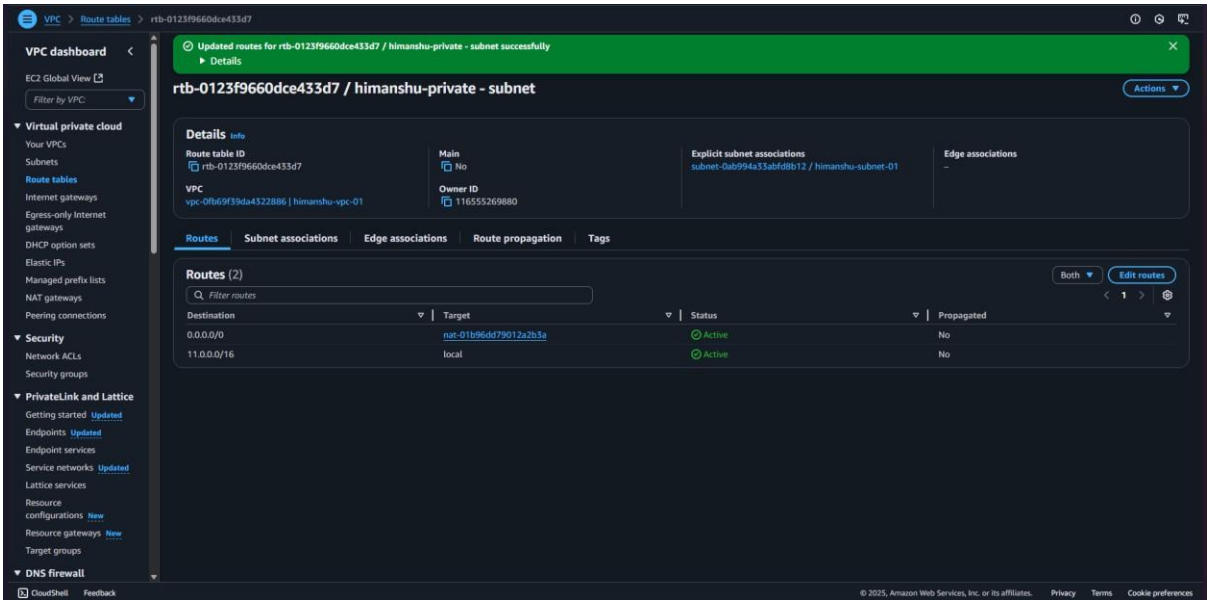
xxix) NOW UPDATE THE PRIVATE ROUTE TABLE: CLICK ON THE ROUTE TABLES>CLICK ON THE PRIVATE ROUTE TABLE>CLICK ON ROUTES>CLICK ON EDIT ROUTES.



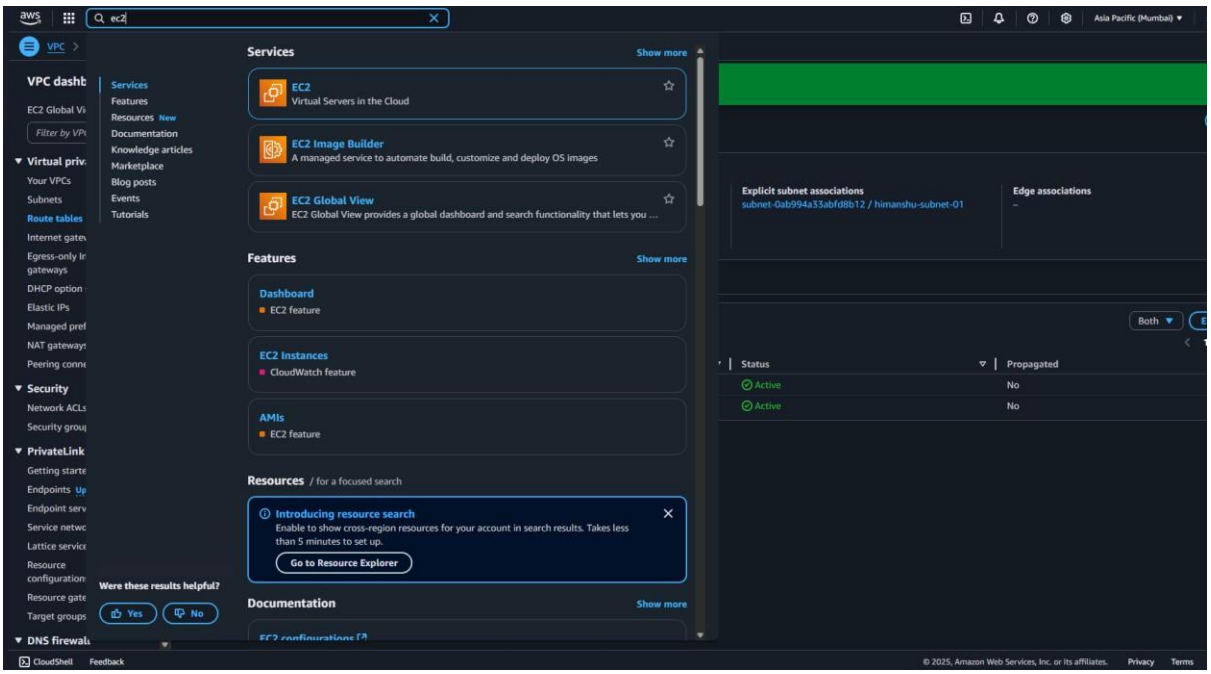

xxx) CLICK ON ADD ROUTE>SELECT IP ADDRESS :0.0.0.0/0>SELECT NAT GATEWAY>CHOOSE THE NAT GATEWAY THAT YOU HAVE CREATED>CLICK ON SAVE CHANGES.



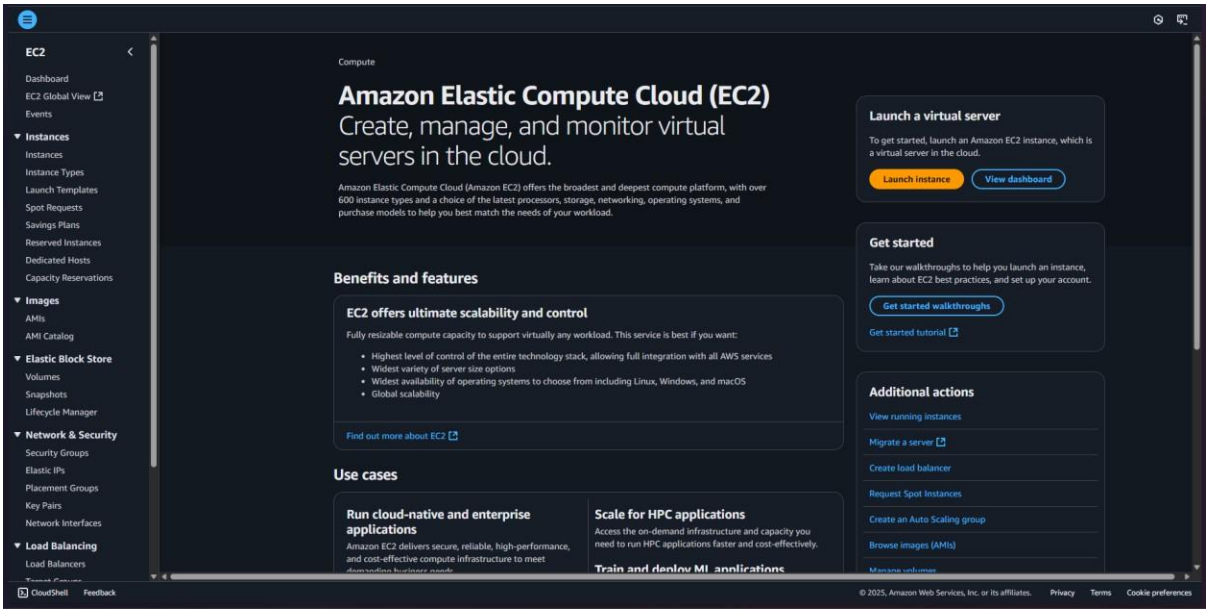
xxxi) PRIVATE SUBNET IS UPDATED WITH NAT GATEWAY



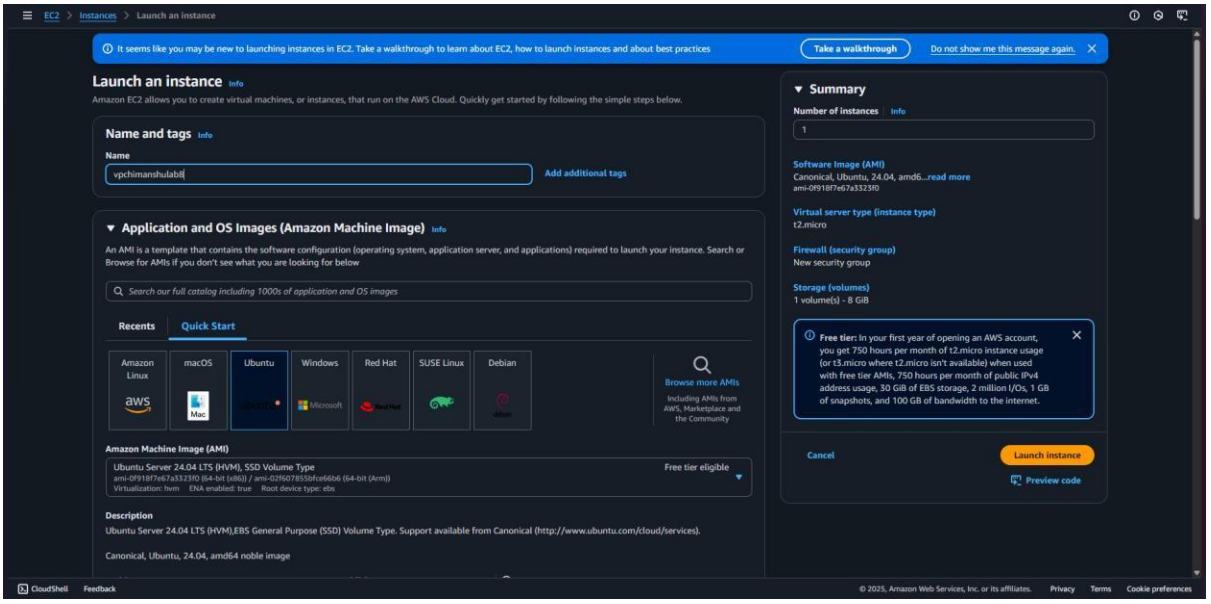

xxxii) WHOLE NETWORK SET UP IS READY, NOW WE HAVE TO CREATE EC2 INSTANCES FOR BOTH PUBLIC AND PRIVATE SUBNET. SEARCH FOR EC2>CLICK ON EC2



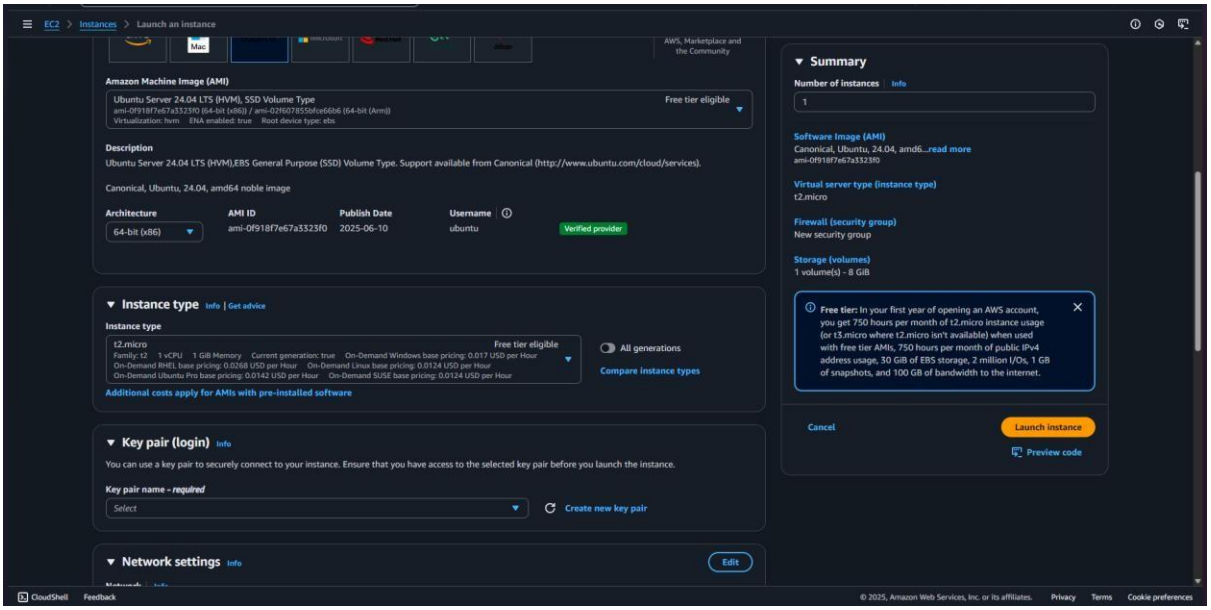
xxxiii) CLICK ON LAUNCH INSTANCE



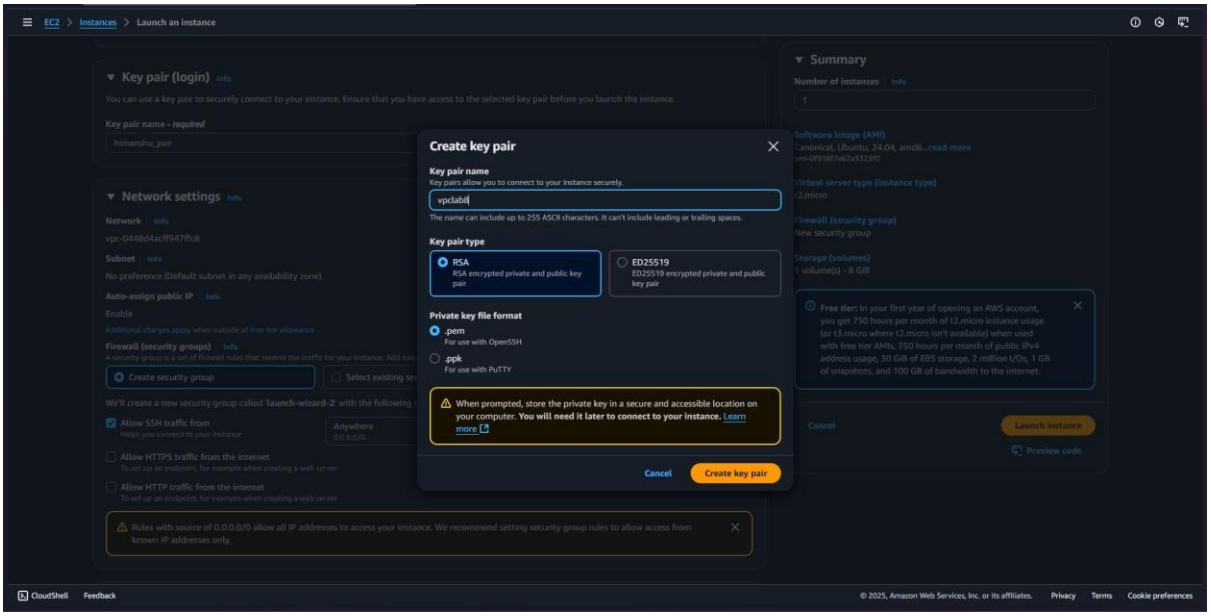

xxxiv) GIVE A SUITABLE INSTANCE NAME>CHOOSE OS:UBUNTU



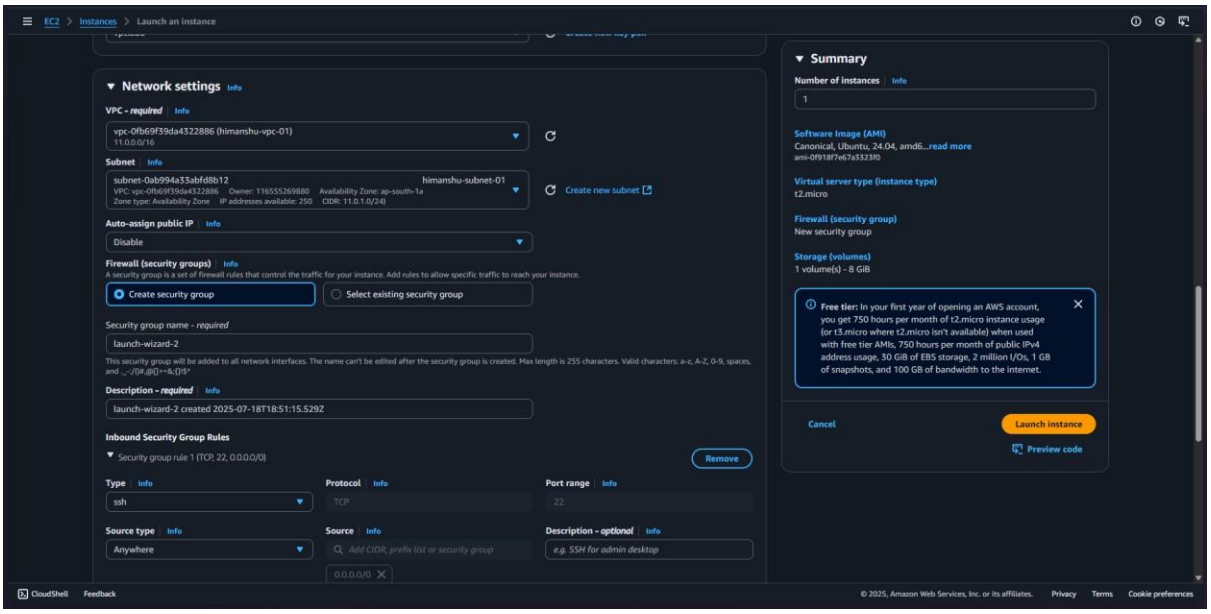
xxxv) CHOOSE THE DEFAULT ARCHITECTURE> FREE TIER INSTANCE TYPE



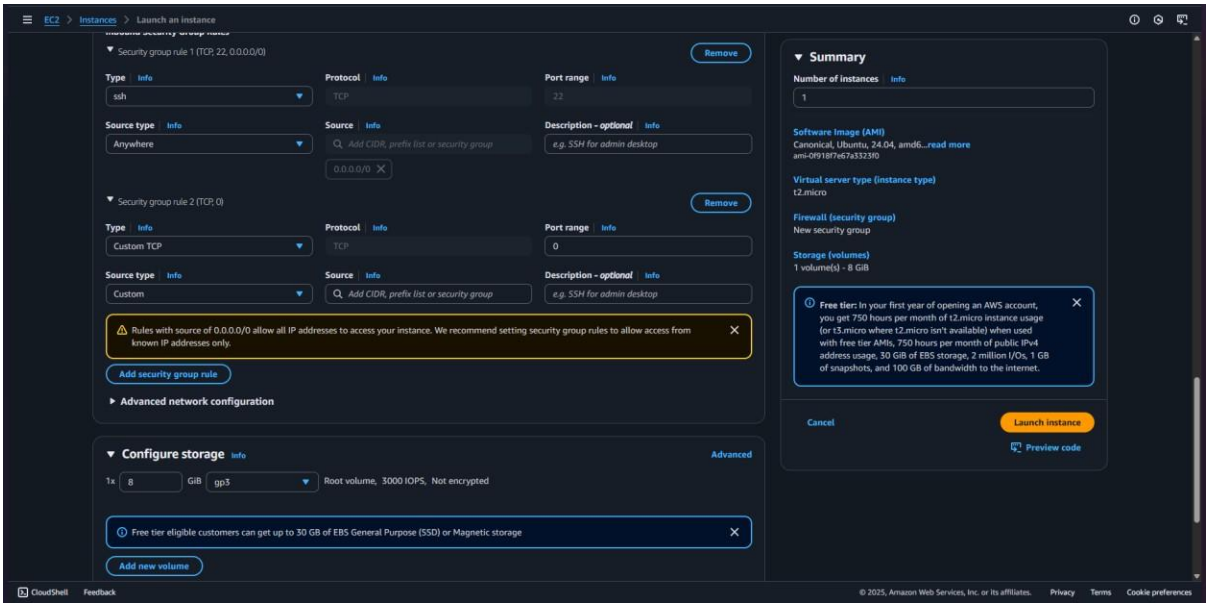

xxxvi) CREATE KEY PAIR



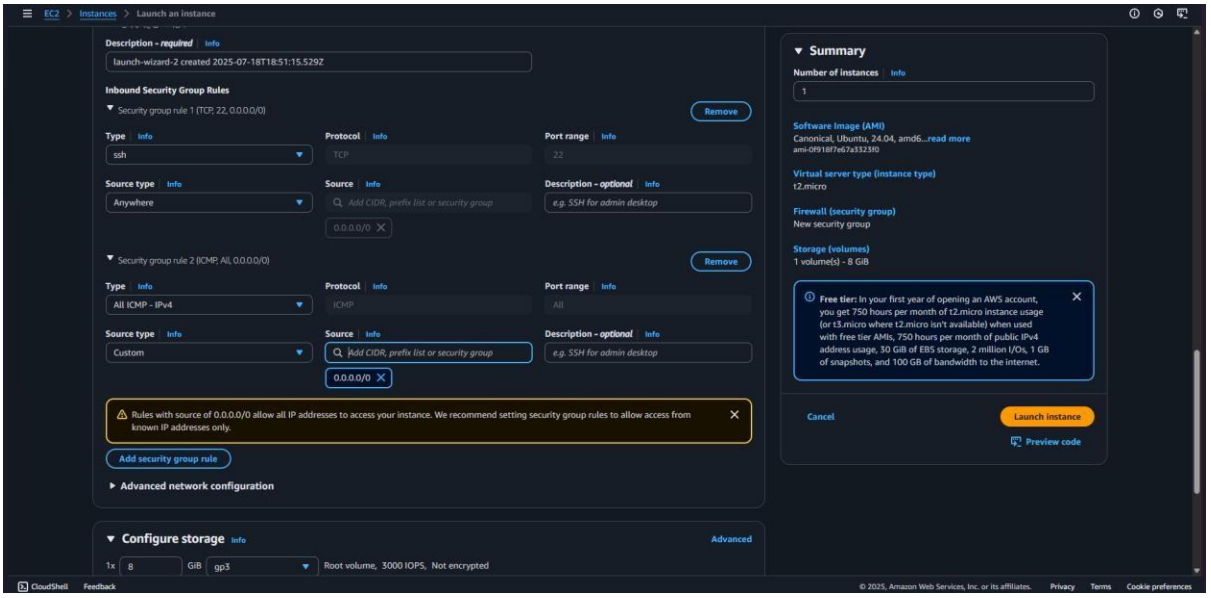
xxxvii) EDIT THE NETWORK SETTING>CHOOSE THE VPC CREATED EARLIER>SELECT THE PUBLIC SUBNET> ENABLE THE AUTO-ASSIGN PUBLIC IP>CHOOSE CREATE SECURITY GROUP



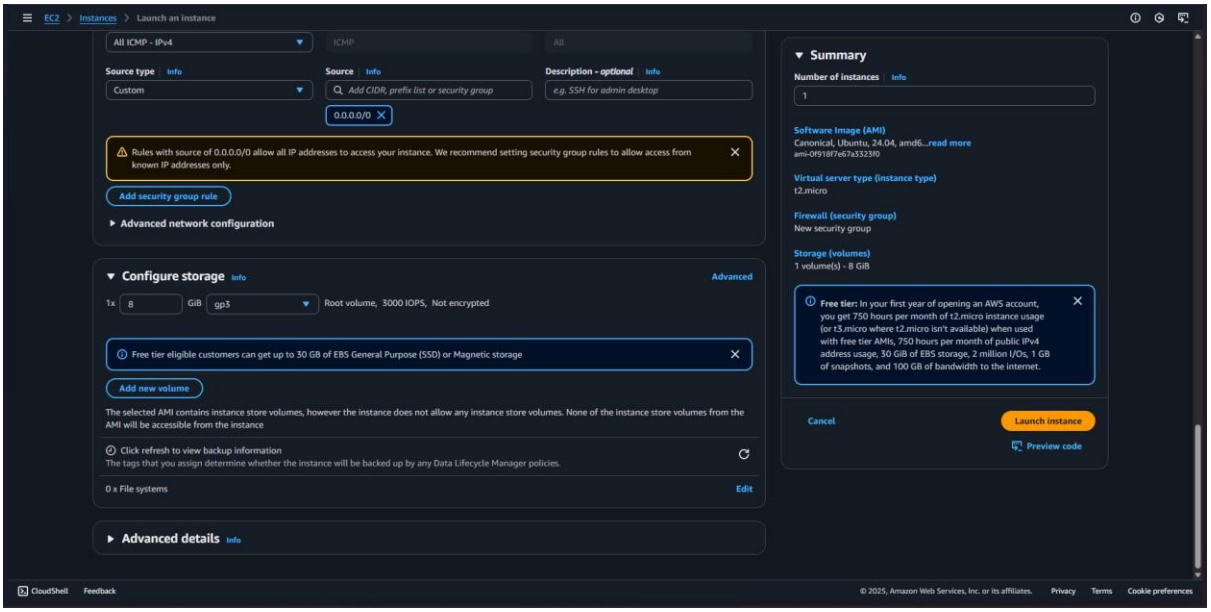

xxxviii) SECURITY GROUP RULE-1 IS DEFAULT> CLICK ON ADD SECURITY GROUP RULE



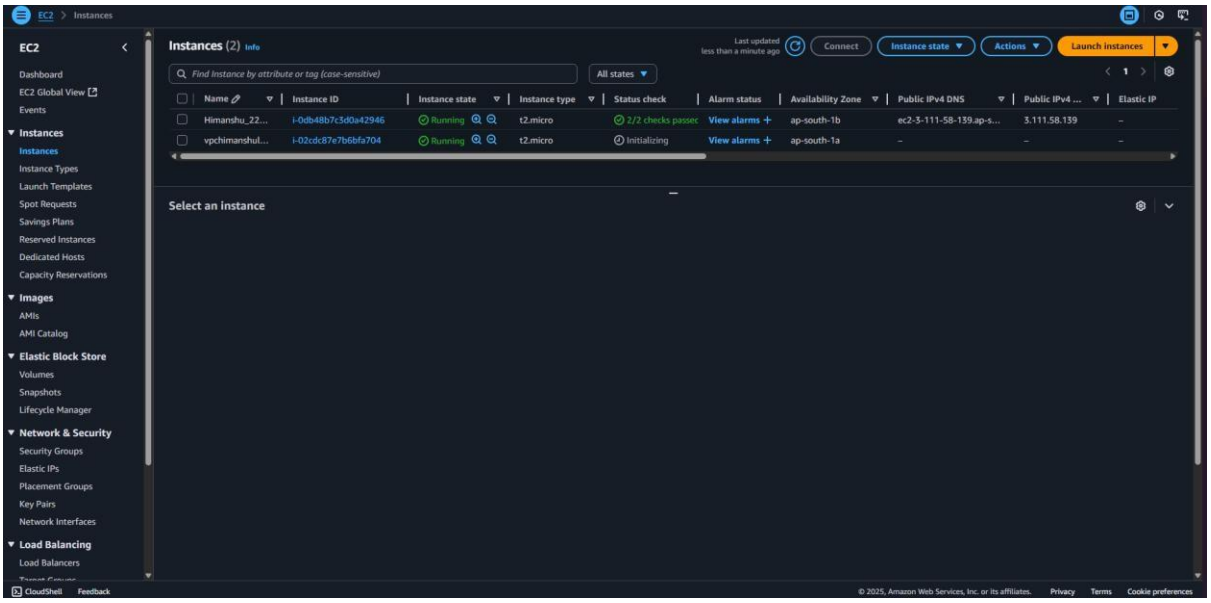
xxxix) CHOOSE ALL ICMP-IPV4> SOURCE:0.0.0.0/0



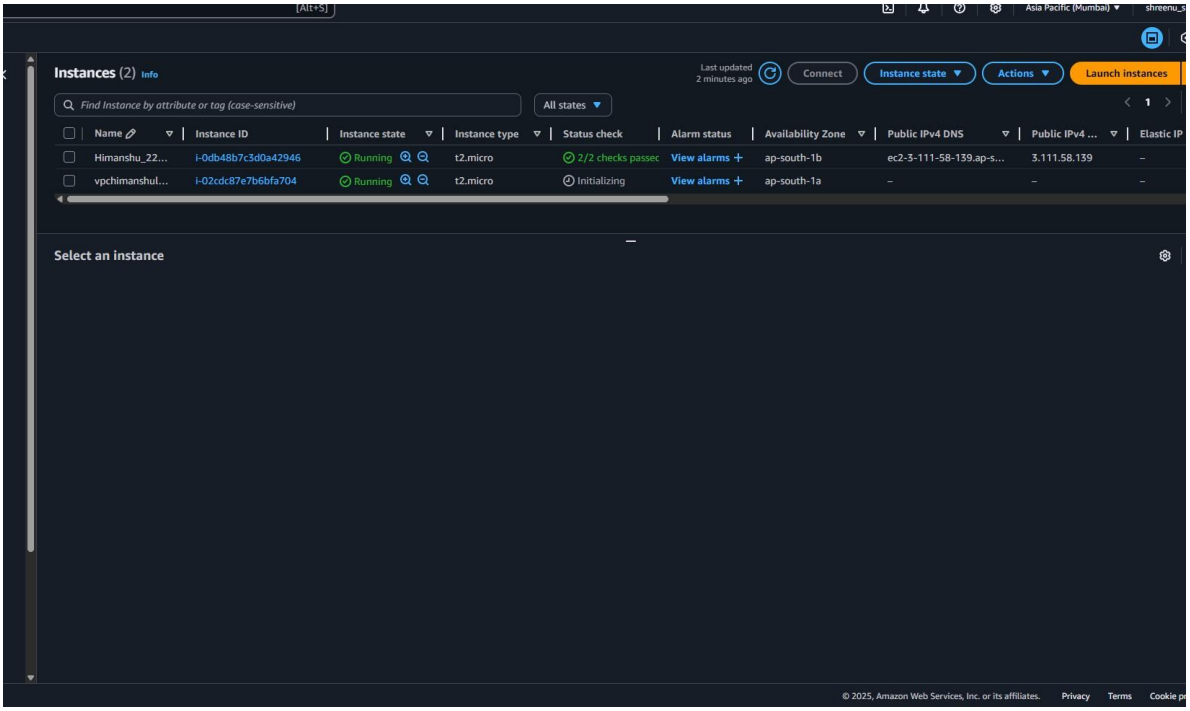

xl) CHOOSE DEFAULT CONFIGURE STORAGE: 8GB>CLICK ON LAUNCH INSTANCE



xli) PUBLIC INSTANCE CREATED

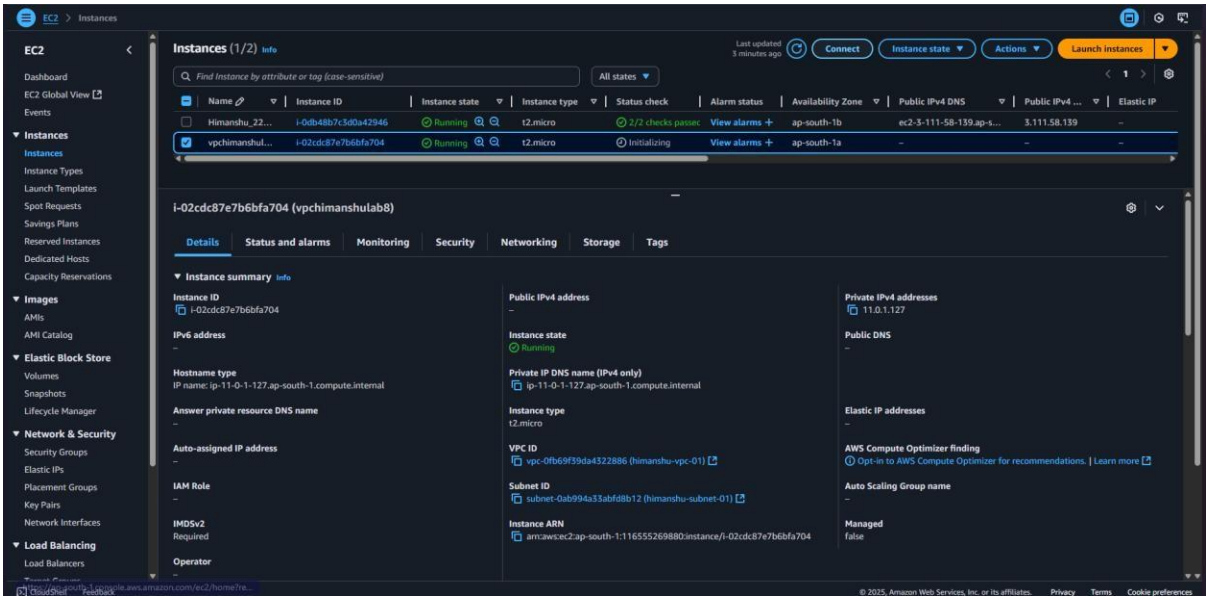



xlii) CREATE EC2 INSTANCE FOR PRIVATE SUBNET WITH THE SAME STEPS

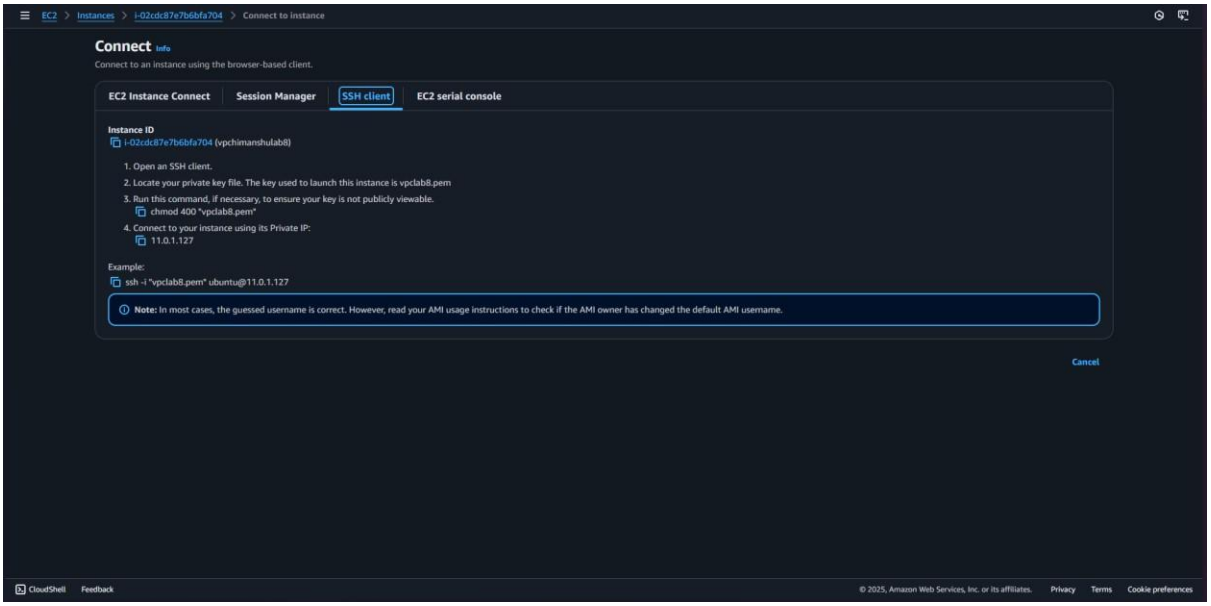


xliii) PRIVATE EC2 INSTANCE IS CREATED

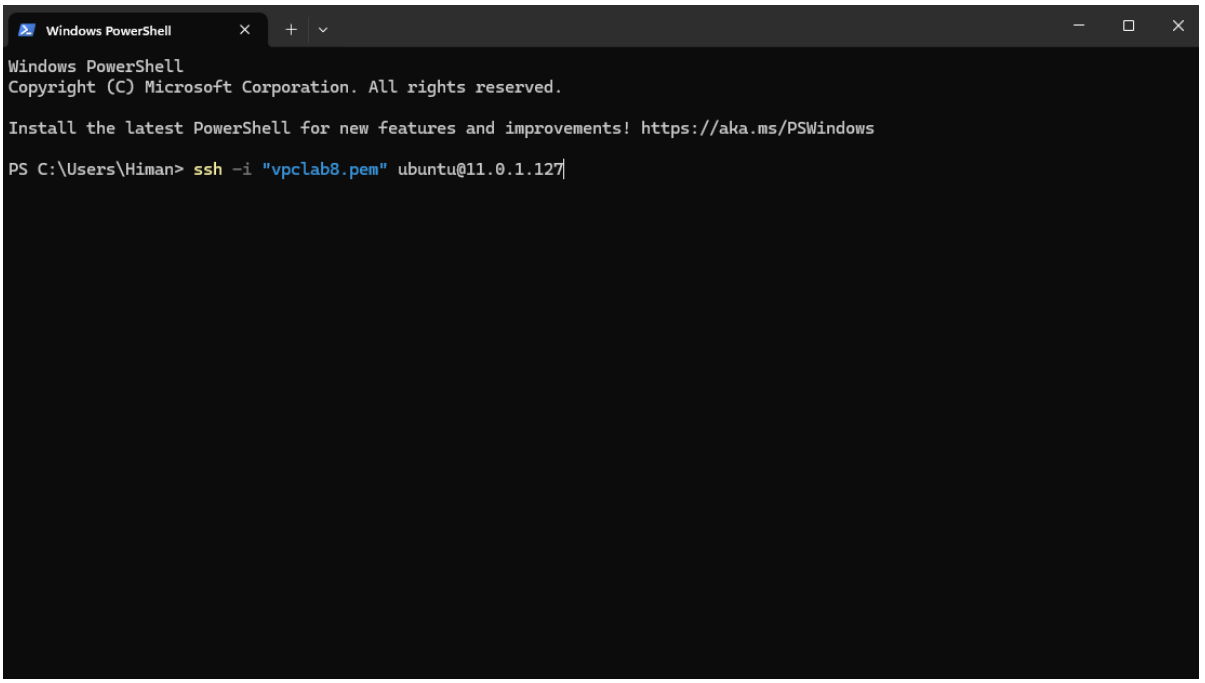
xliv) NOW CONNECT THE PUBLIC EC2 INSTANCE.CLICK ON THE PUBLIC INSTANCE> CLICK ON CONNECT



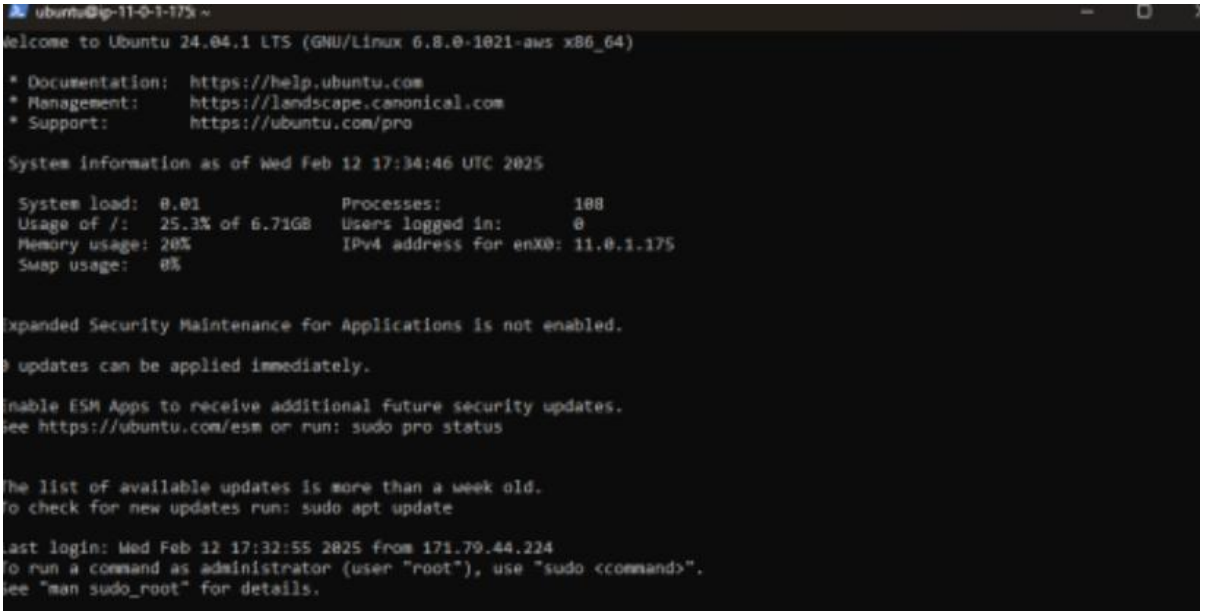

xlv) CLICK ON SSH CLIENT> COPY THE EXAMPLE AND PASTE IN TERMINAL TO
CONNECT



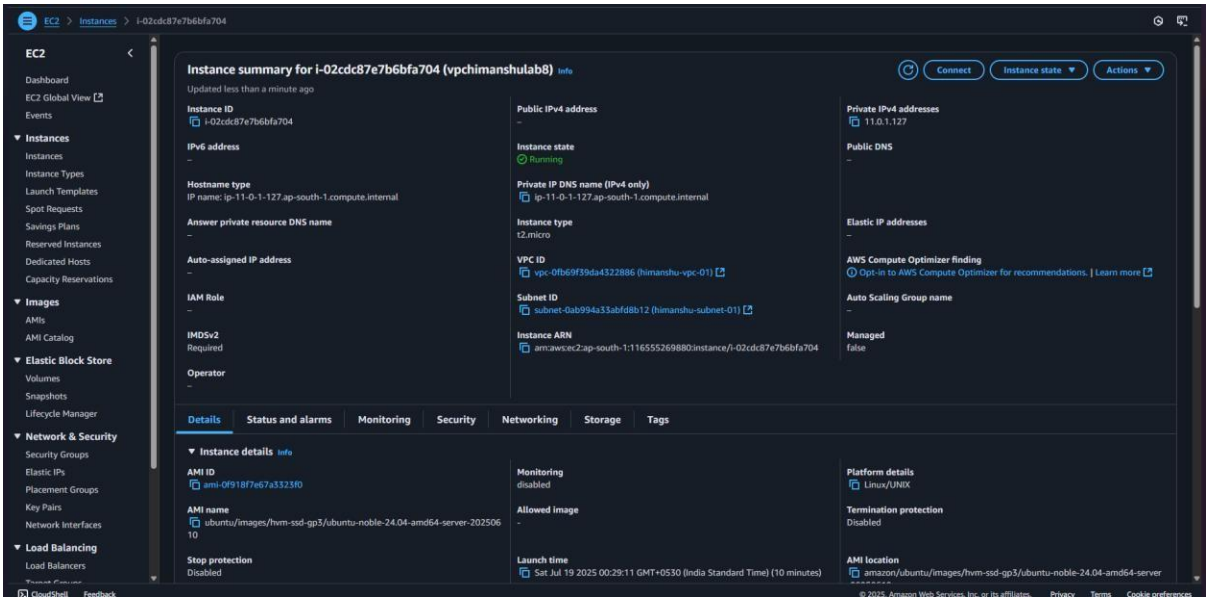
xlvi) OPEN THE TERMINAL IN YOUR LAPTOP AND TYPE THE FOLLOWING COMMAND> NOW PASTE THE COMMAND HERE FROM THE SSH CLIENT




xlvii) PUBLIC EC2 INSTANCE IS CONNECTED

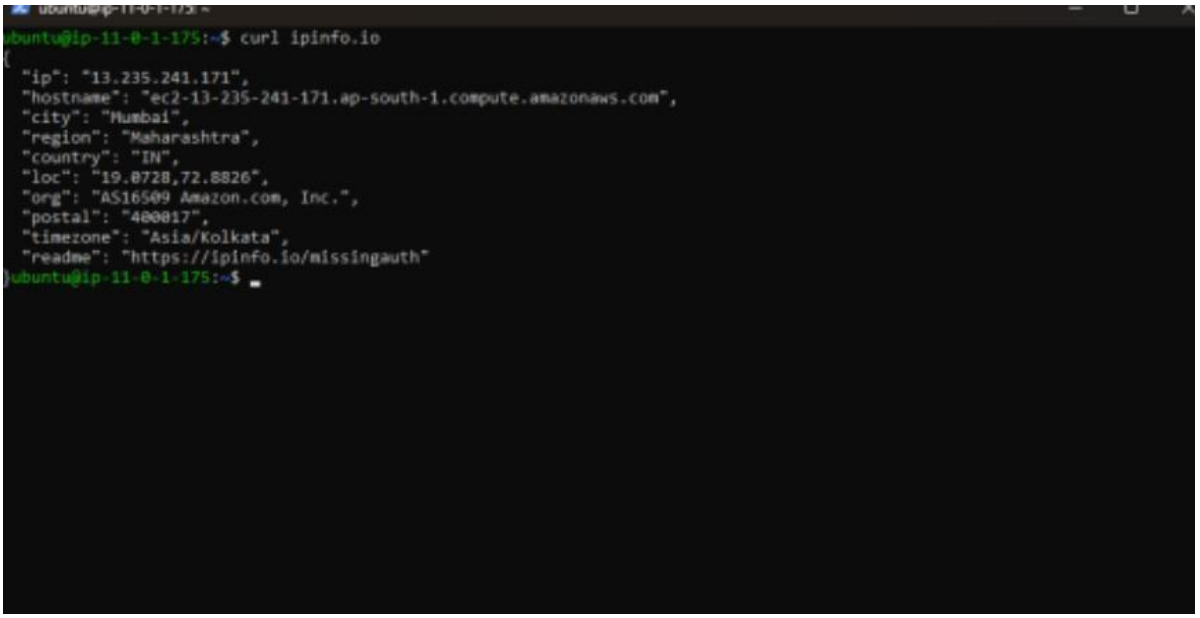


xlviii) NOW PING THE PUBLIC EC2 INSTANCE WITH THE HELP OF YOUR LOCAL TERMINAL. GO TO INSTANCE AND COPY ITS IP ADDRESS AND TYPE THE FOLLOWING COMMAND. (IT MEANS FROM OUTSIDE AWS, WE ARE ABLE TO CONNECT TO THE PUBLIC EC2 INSTANCE)

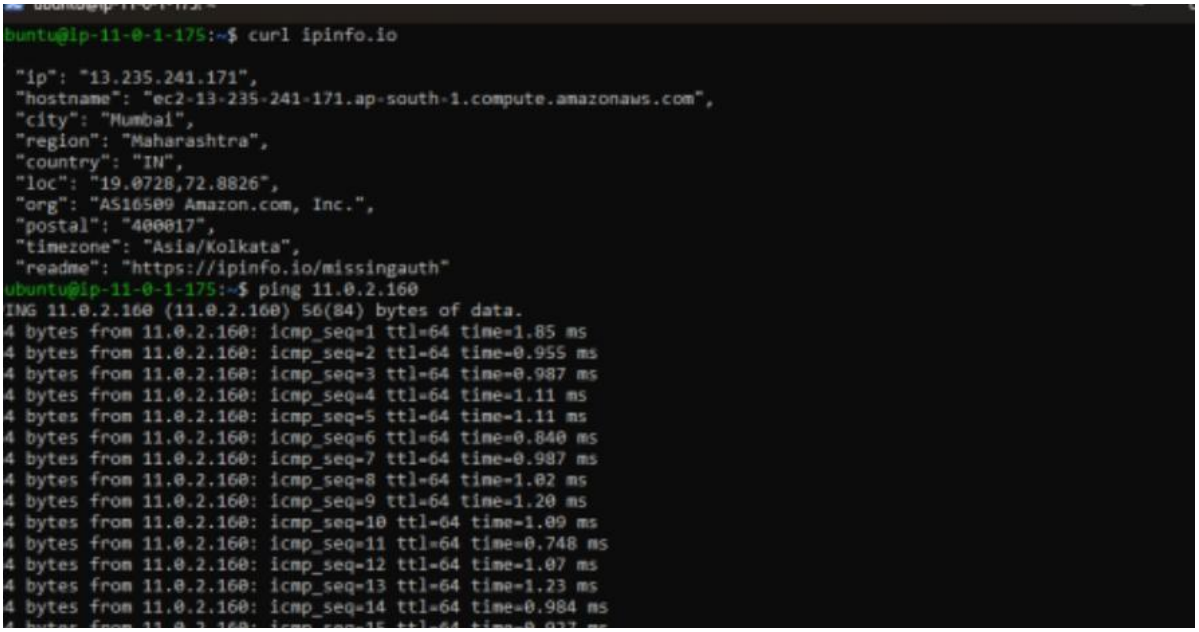



xlix) NOW NEXT FROM PUBLIC EC2 INSTANCE TERMINAL, TYPE THE

FOLLOWING COMMAND TO ACCESS RESOURCE FROM OUTSIDE THE AWS



l) PING PRIVATE EC2 INSTANCE FROM THE LOCAL TERMINAL. COPY THE PRIVATE IP ADDRESS OF THE INSTANCE AND TYPE (PING 11.0.2.160) IN THE LOCAL TERMINAL.

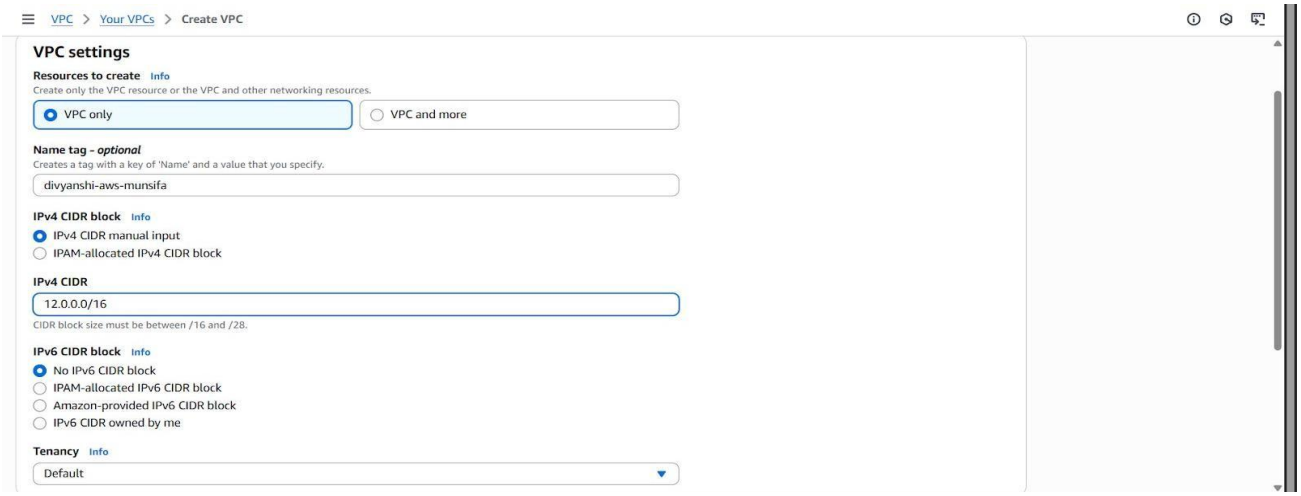


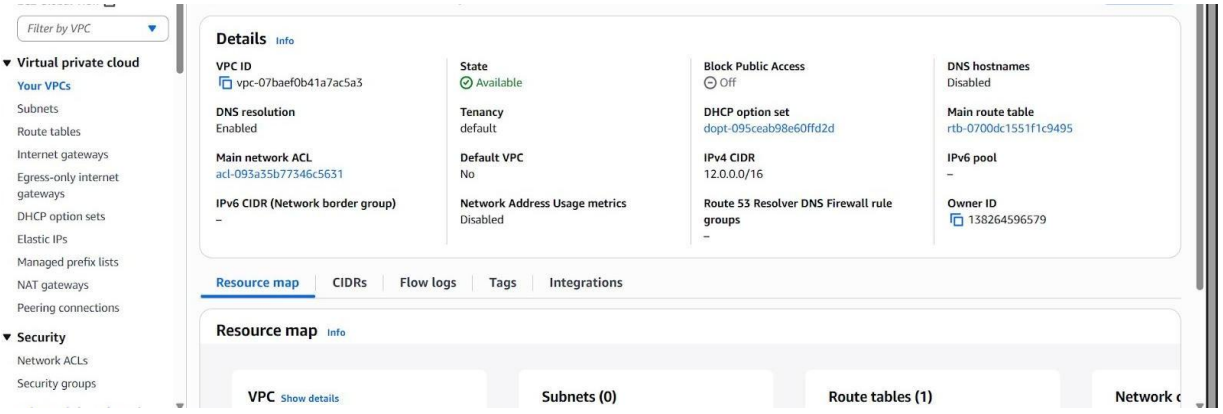
| **Date:** 08-08-2025 | **Title** |
|---|---|
| **Exp. No: 09** | HOW TO IMPLEMENT LOAD BALANCER, TARGET GROUP & AUTO-SCALING GROUP WITH EC2 INSTANCE |

**AIM OF THE EXPERIMENT:** HOW TO IMPLEMENT LOAD BALANCER, TARGET GROUP & AUTO- SCALING GROUP WITH EC2 INSTANCE

**PROCEDURE:**

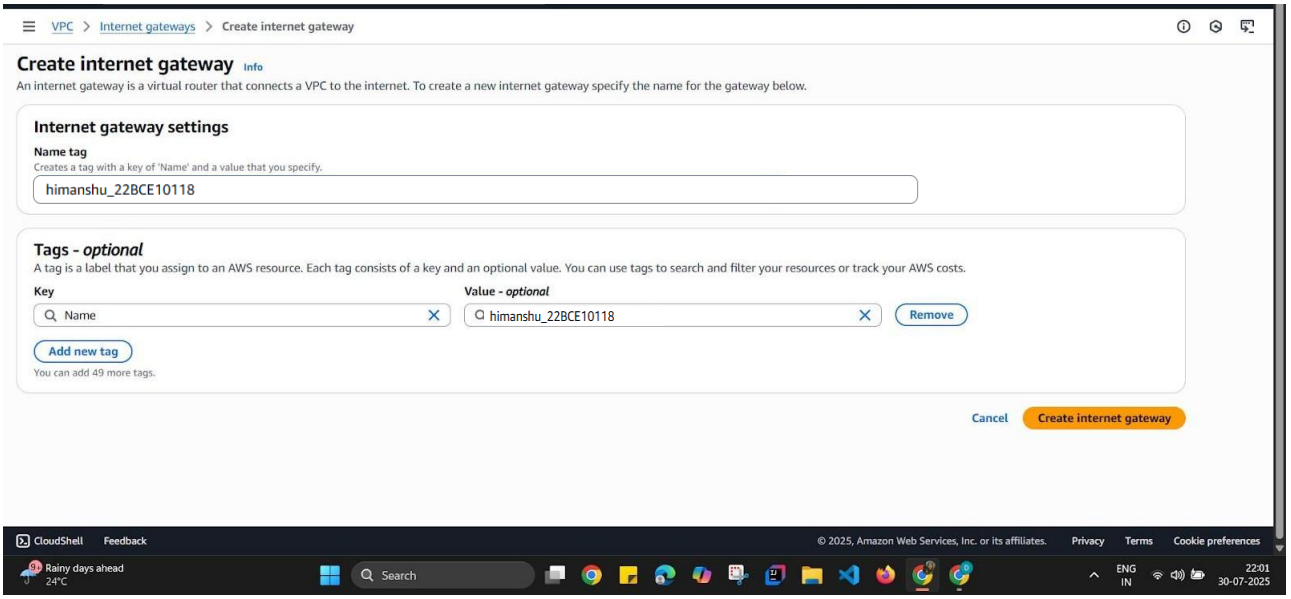
STEP1: CREATE A VPC>WRITE VPC NAME>IPv4 CIDR:12.0.0.0/16>CREATE VPC

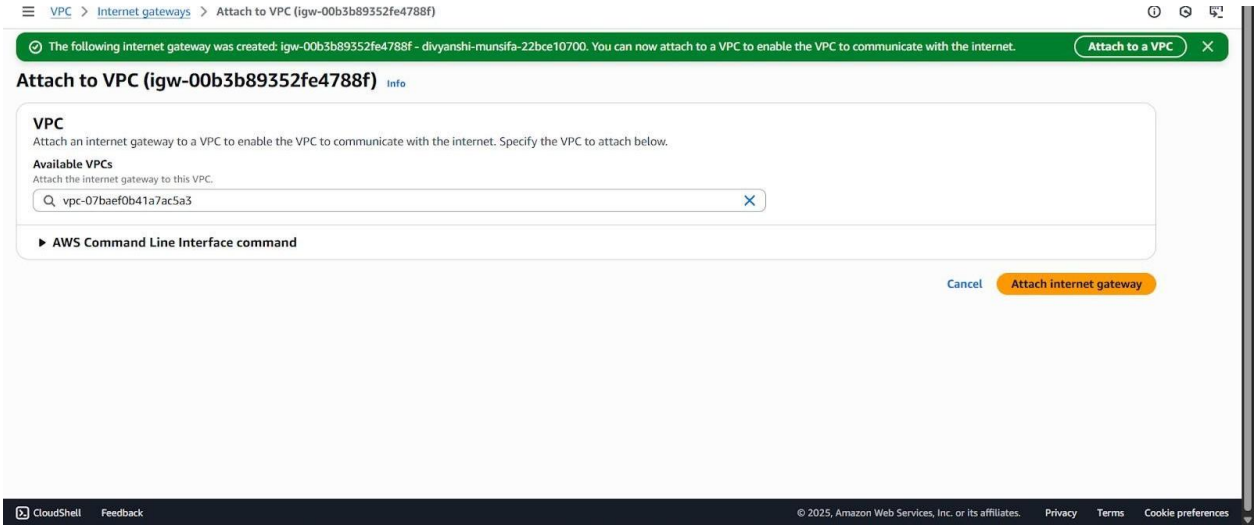


STEP2: NEXT CLICK ON INTERNET GATEWAY> CREATE INTERNET GATEWAY>TYPE NAME> CLICK ON CREATE

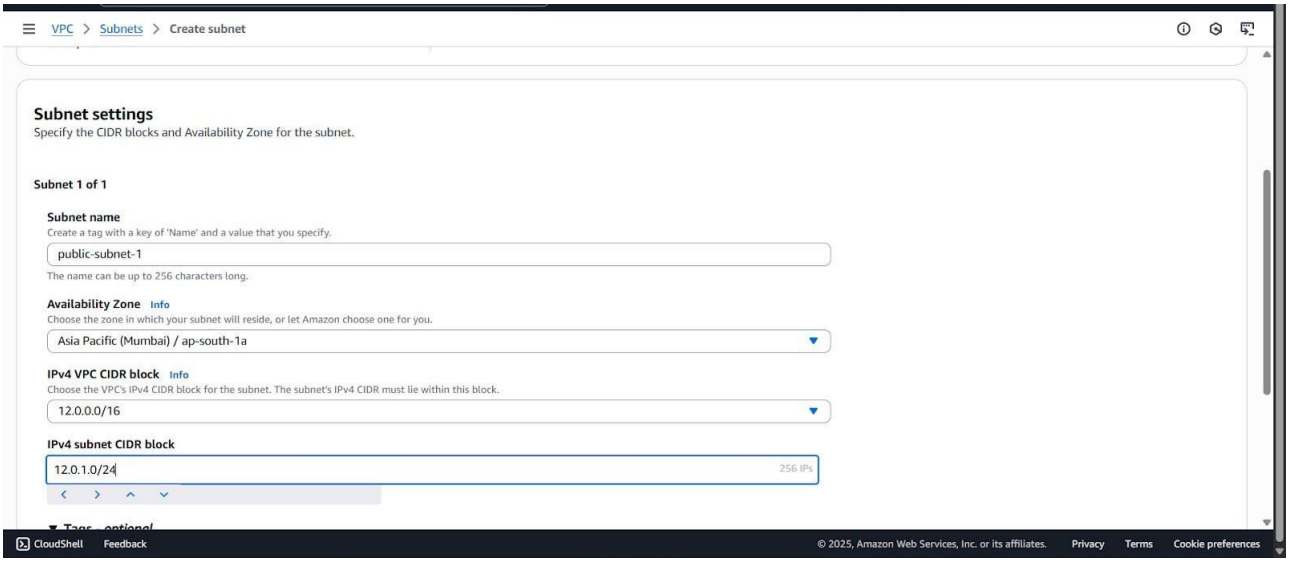
STEP3: NEXT CLICK ON ATTACH TO VPC> CHOOSE THE INTERNET GATEWAY>CLICK ON



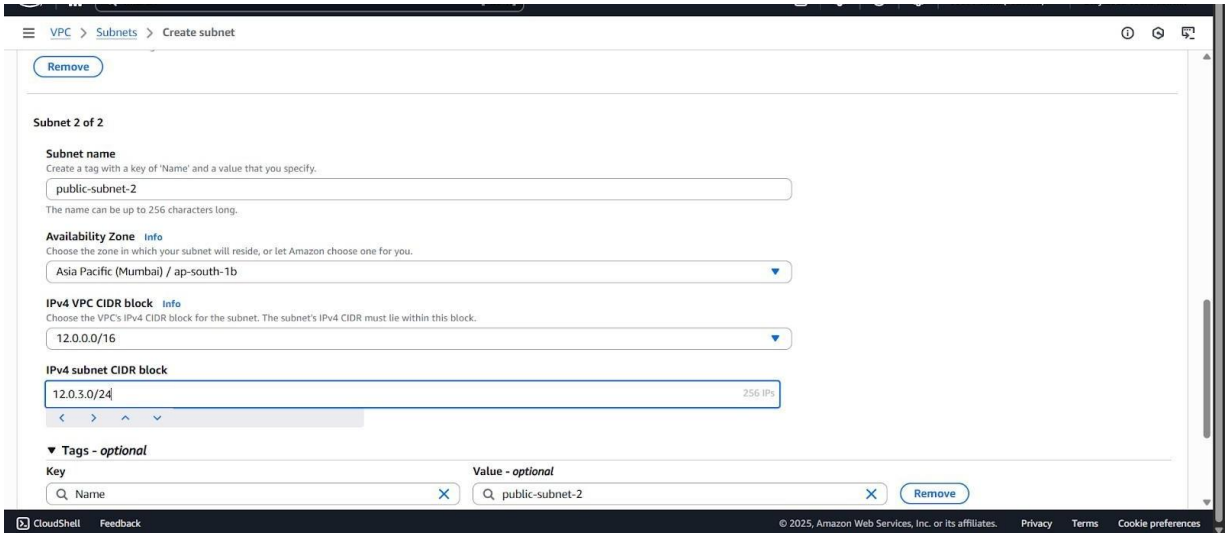



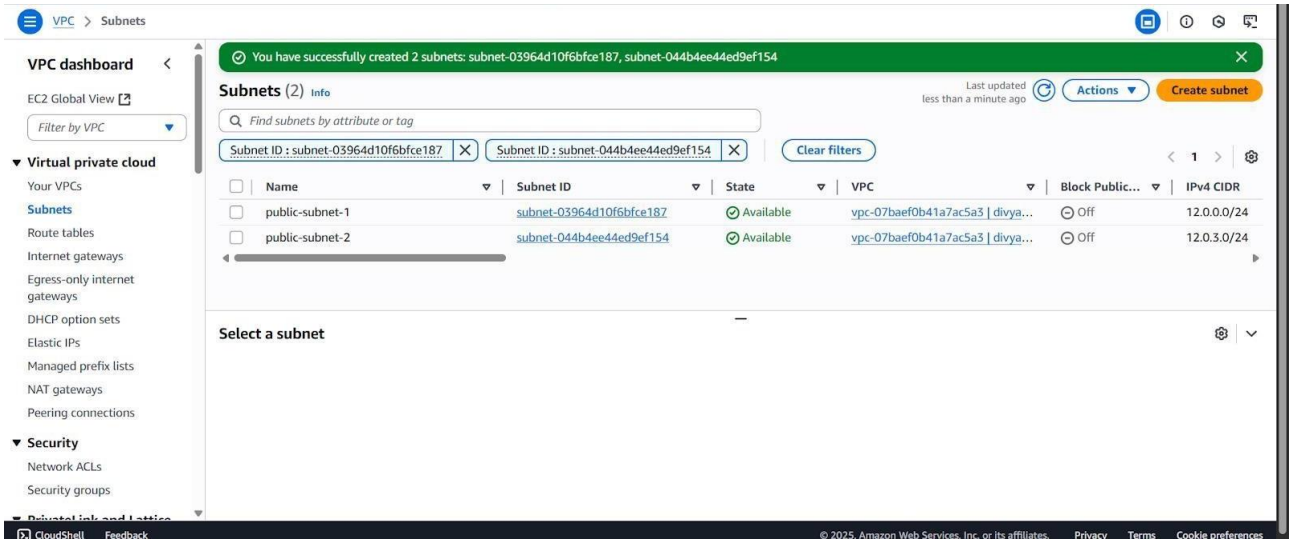
STEP4: CREATE SUBNET> SELECT THE VPC>TYPE THE NAME OF SUBNET_1>AVAILABILITY ZONE:ap south 1a>IPv4 CIDR:12.0.1.0/24

STEP5: CLICK ON ADD SUBNET>TYPE THE NAME ODF SUBNET_2>AVAILABILITY ZONE:ap-



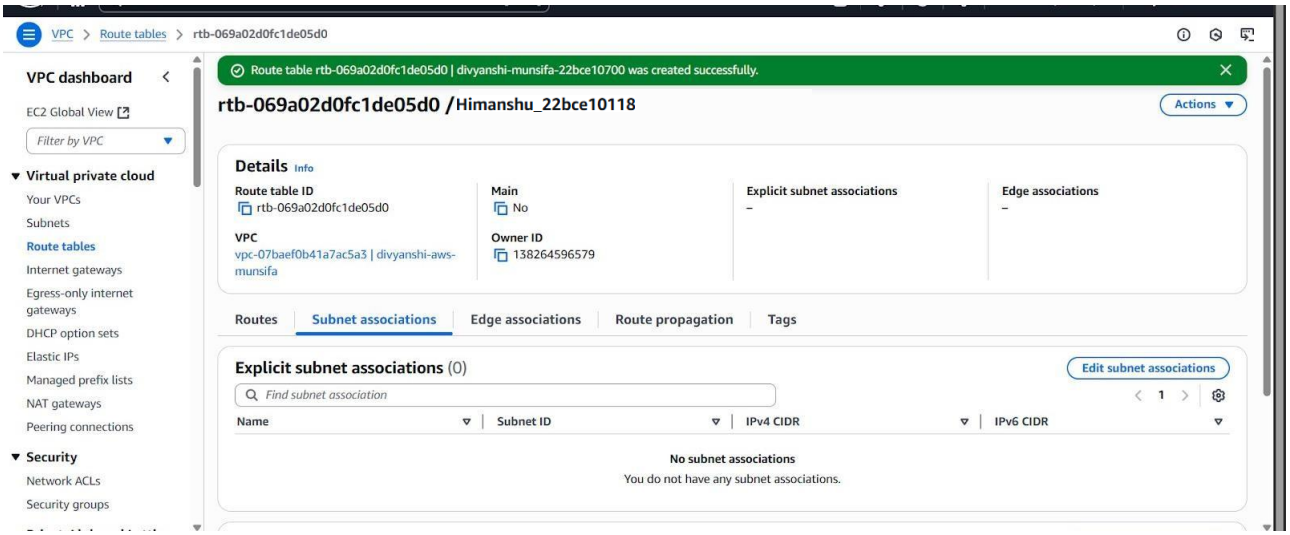

south 1b>IPv4 CIDR:12.0.3.0/24





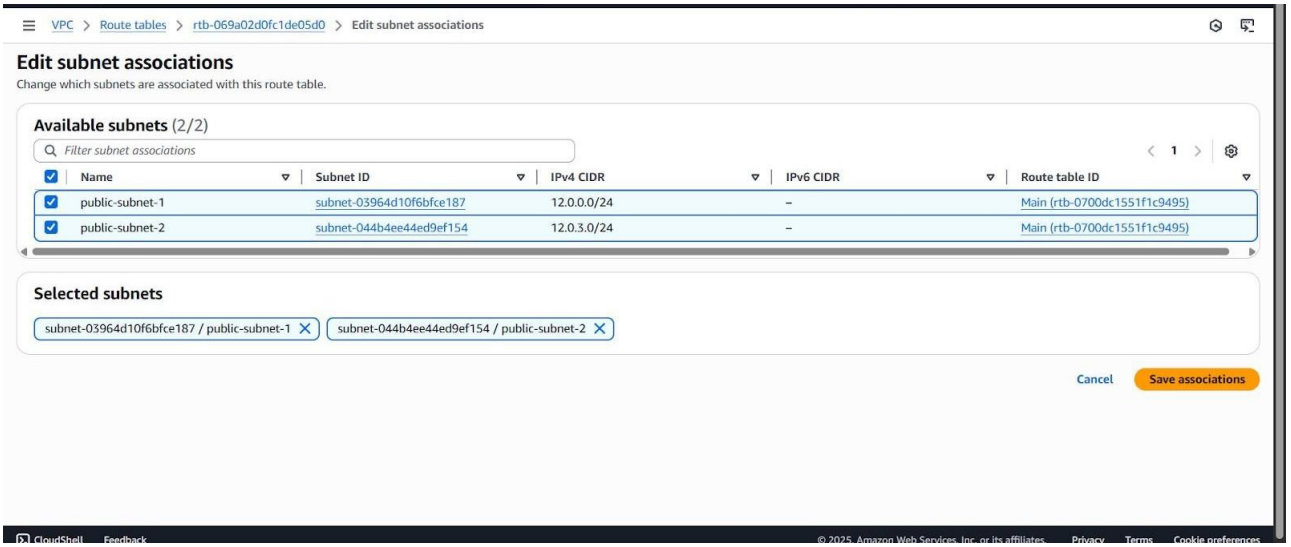

STEP6: NOW CREATE ROUTE TABLE: CLICK ON ROUTE TABLES>CREATE ROUTE TABLE>ROUTE TABLE NAME> CHOOSE VPC>CREATE ROUTE TABLE

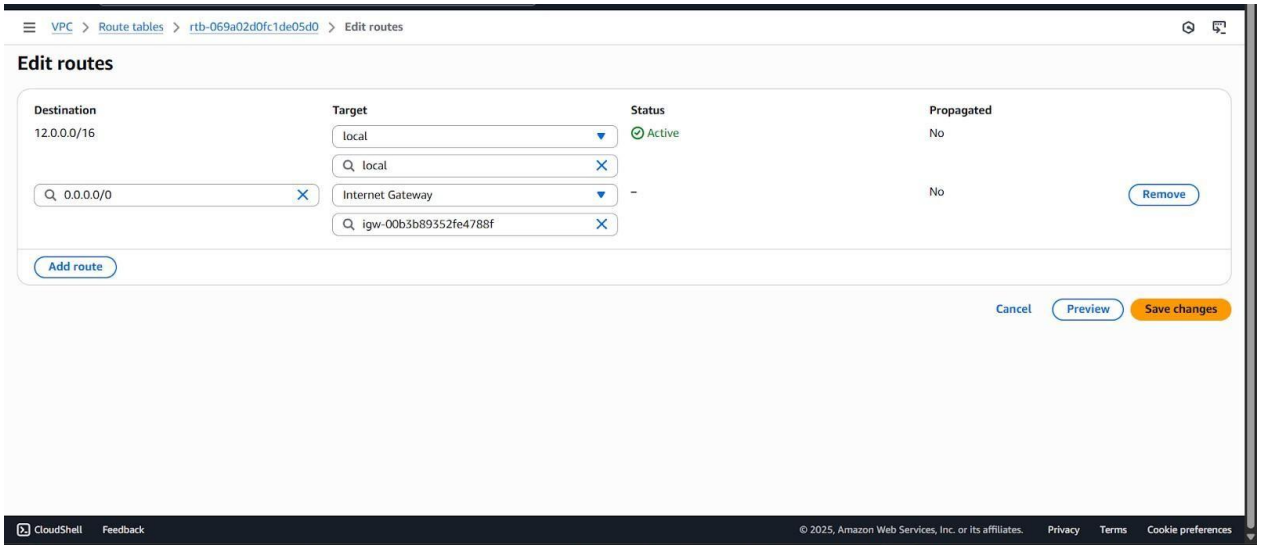
STEP7: NOW ASSOCIATE ROUTE TABLE WITH THE SUBNETS: CLICK ON SUBNET ASSOCIATIONS>EDIT SUBNET ASSOCIATION



STEP8: SELECT BOTH THE SUBNETS>SAVE ASSOCIATIONS

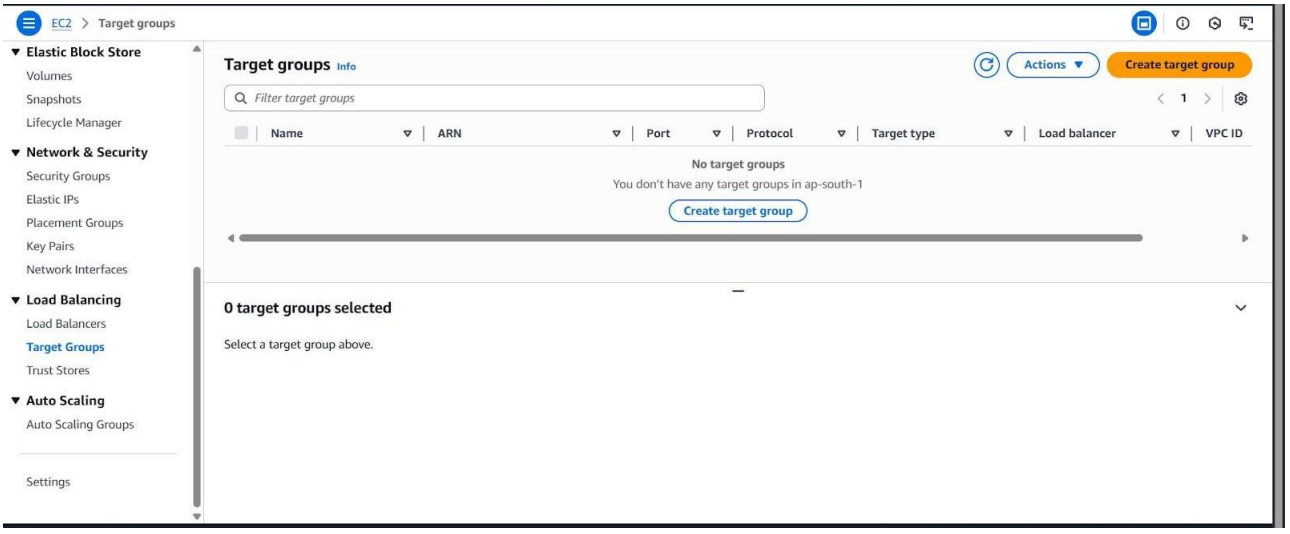
STEP9: CLICK ON ROUTE>EDIT ROUTE>ADD ROUTE> SELECT THE DATA AS SHOWN>SAVE CHANGES

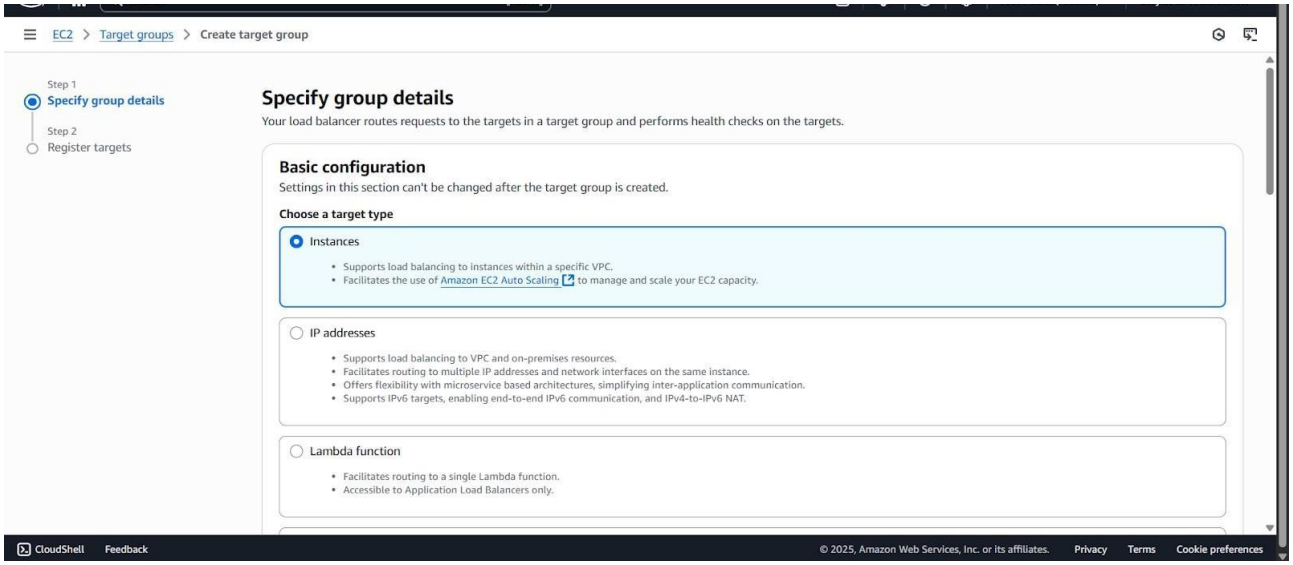




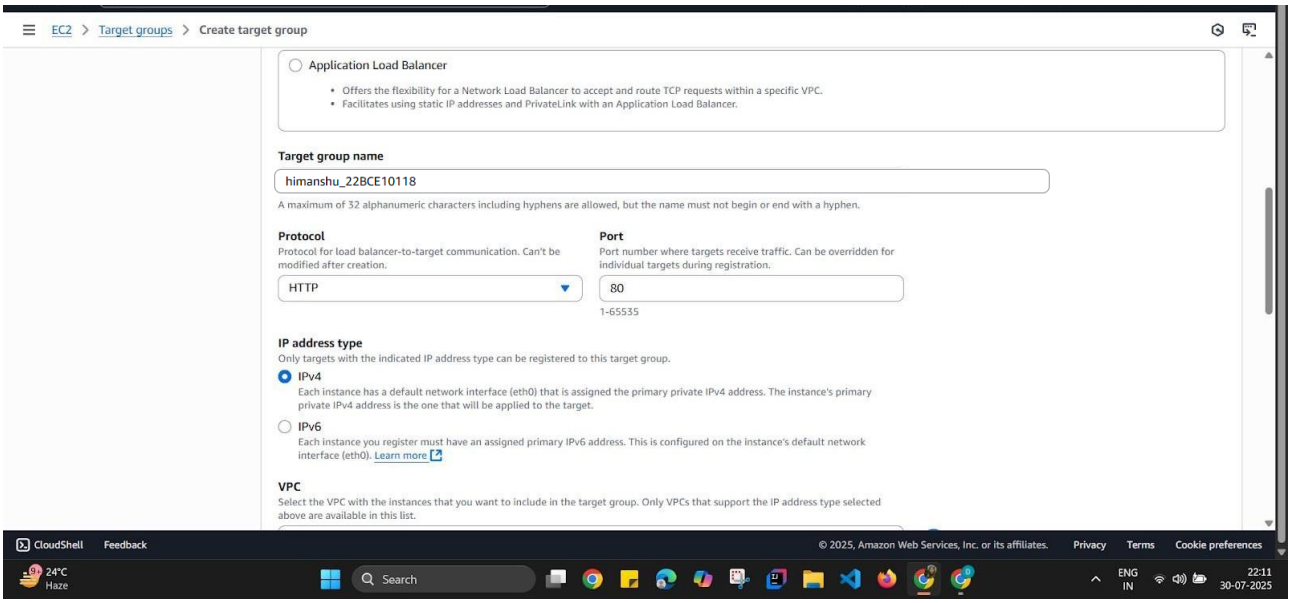

STEP10: GO TO EC2 DASHBOARD>CLICK ON TARGET GROUPS

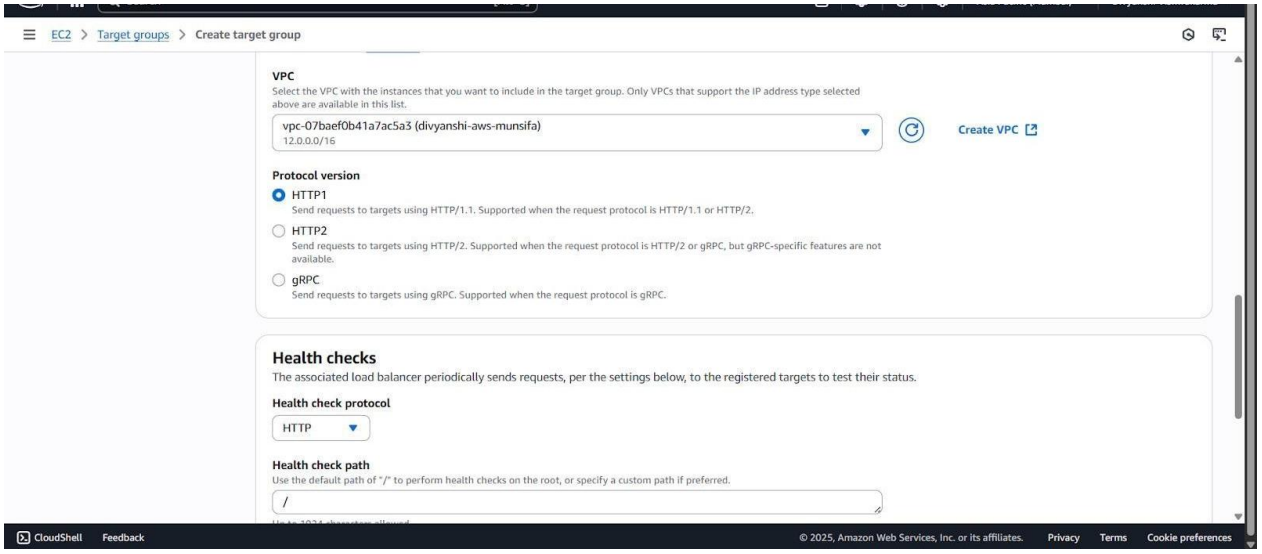
STEP11: CHOOSE INSTANCES





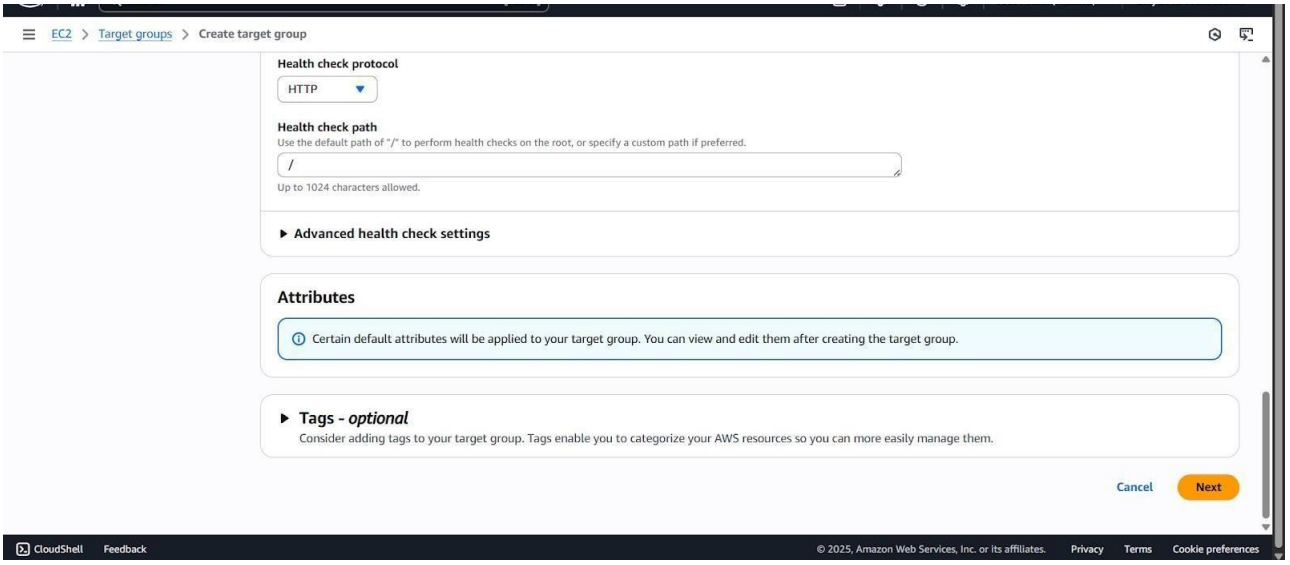

STEP12: WRITE A NAME TO THE TARGET GROUP STEP13: SELECT THE VPC> CLICK ON NEXT

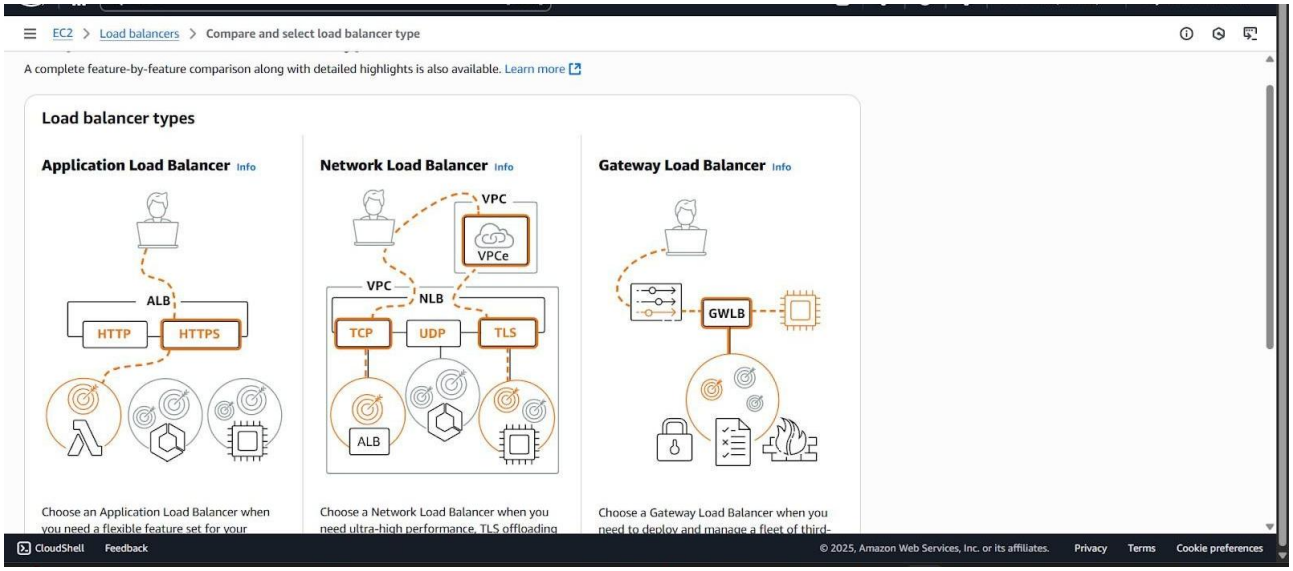




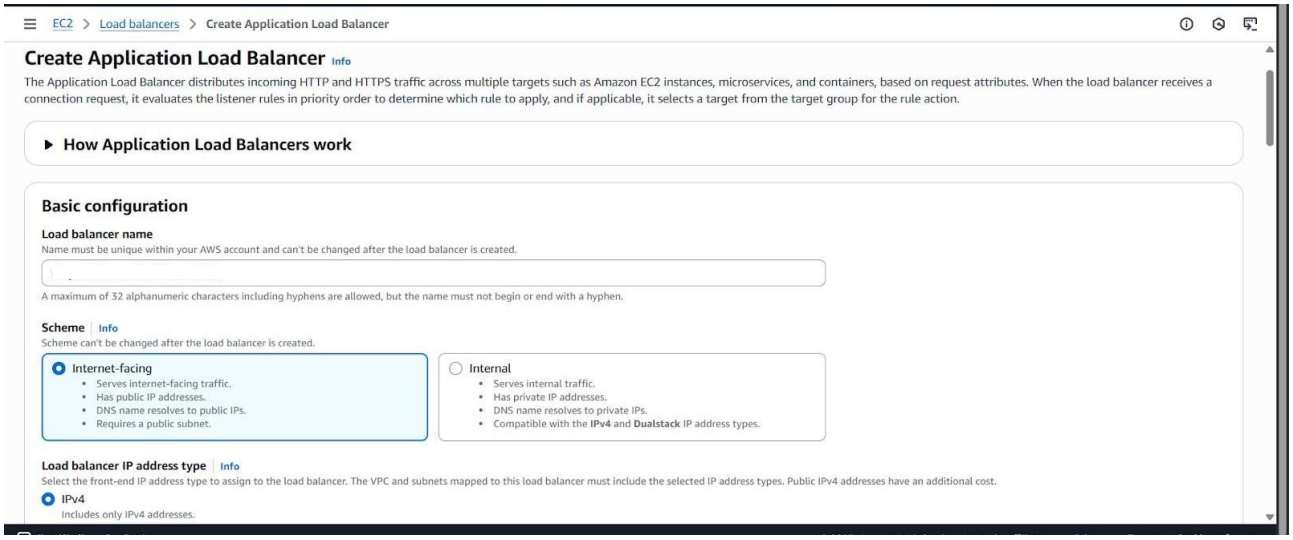

STEP14: CLICK ON CREATE TARGET GROUP

STEP15: CLICK ON APPLICATION LOAD BALANCER

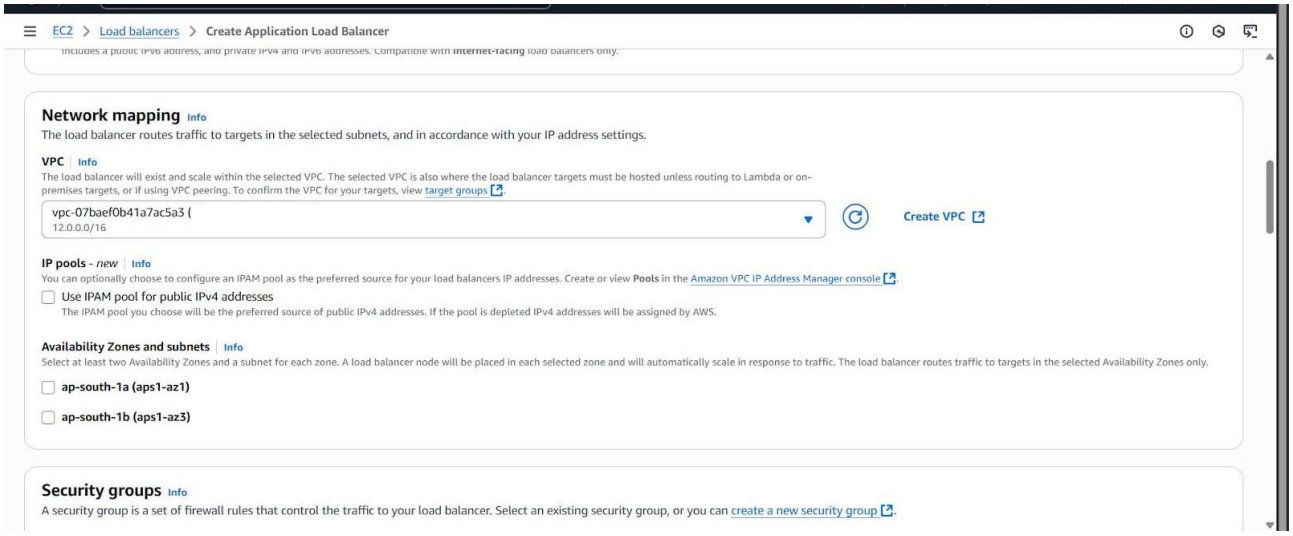




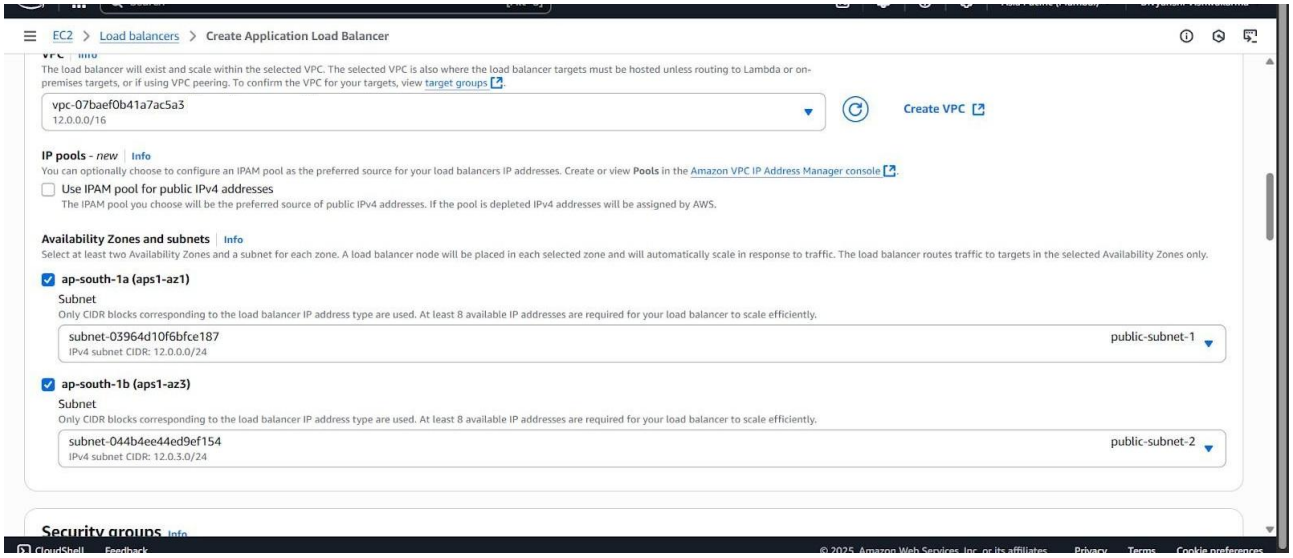

STEP16: WRITE THE NAME OF THE LOAD BALANCER



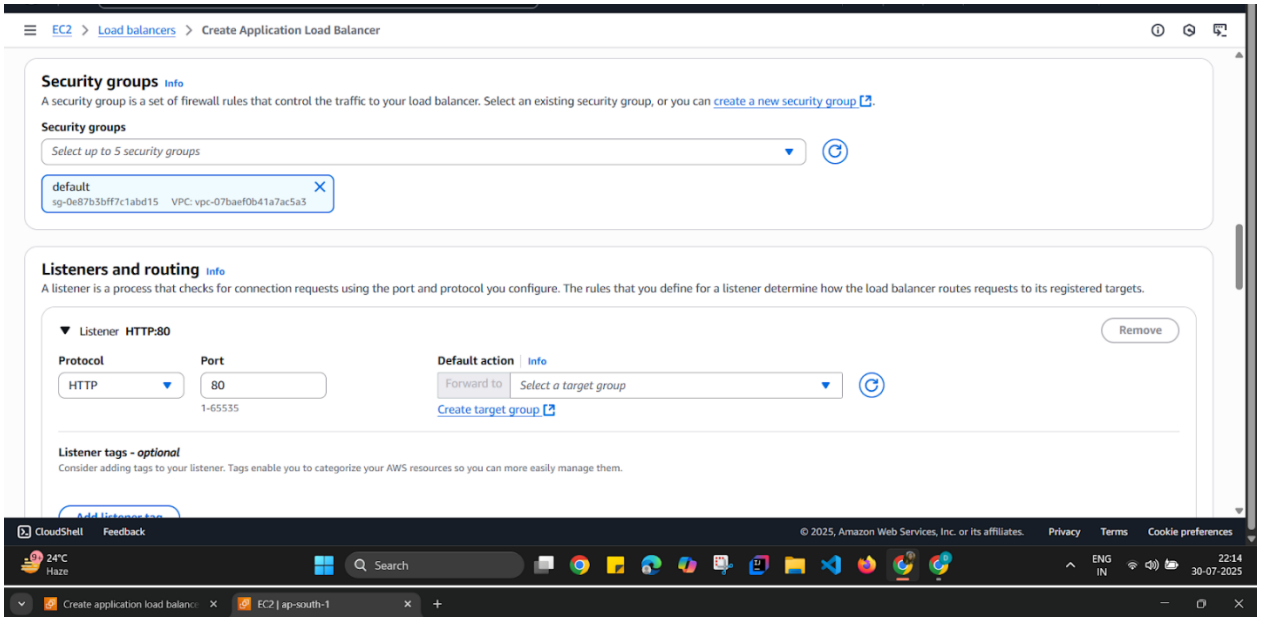

STEP17: SELECT THE VPC CREATED




STEP18: SELECT BOTH THE ZONE(SUBNETS)

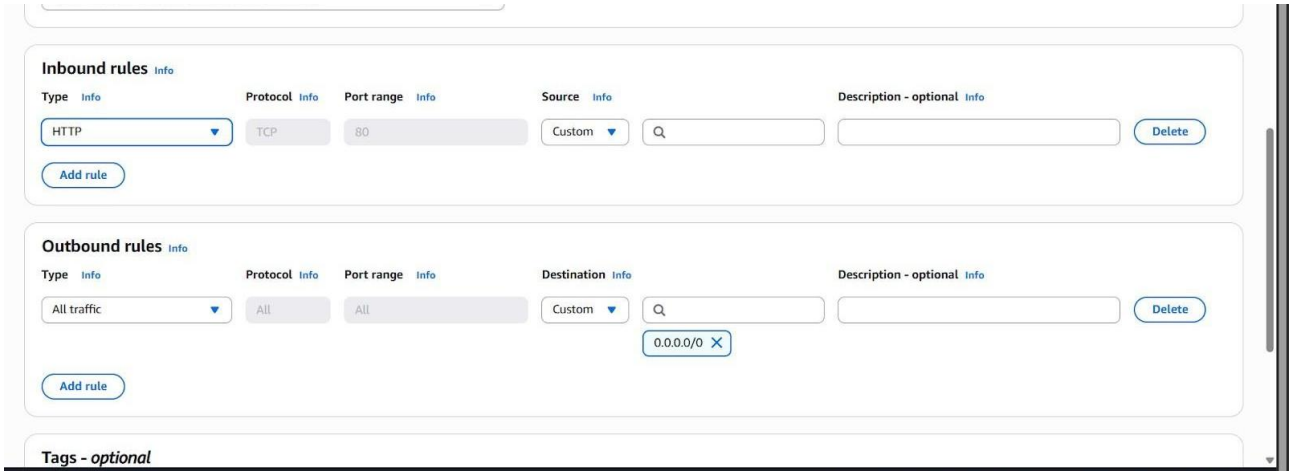



STEP19: CLICK ON CREATE A NEW SECURITY GROUP> TYPE THE NAME AND DESCRIPTON OF THE SECURITY GROUP>SELECT THE VPC



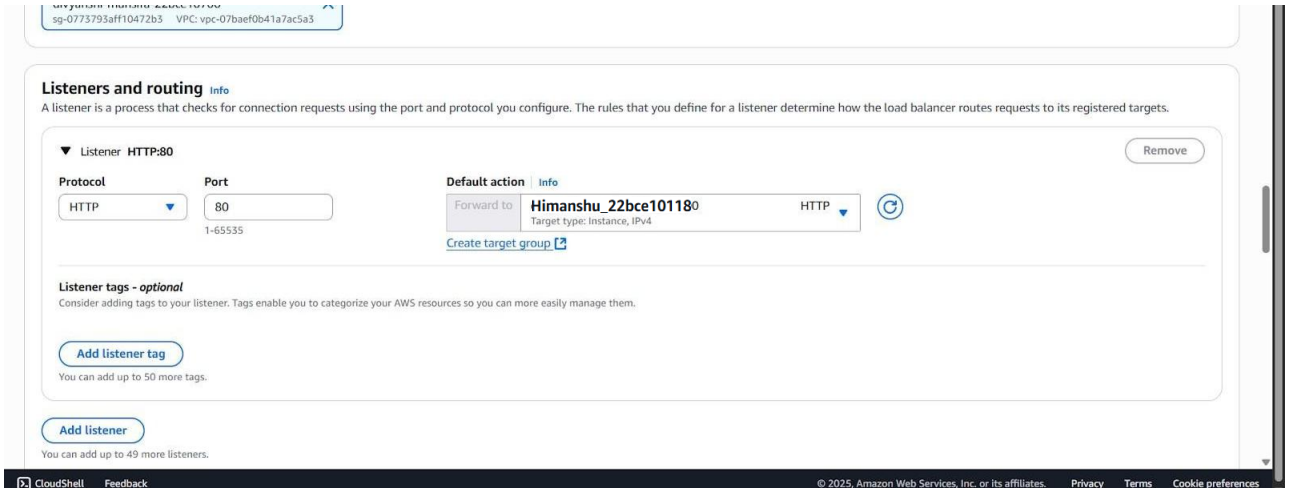

STEP20: SET THE IN BOUND RULE: CLICK ON ADD RULES> SET HTTP>SOURCE:0.0.0.0/0>

CLICK ON CREATE SECURITY GROUP.



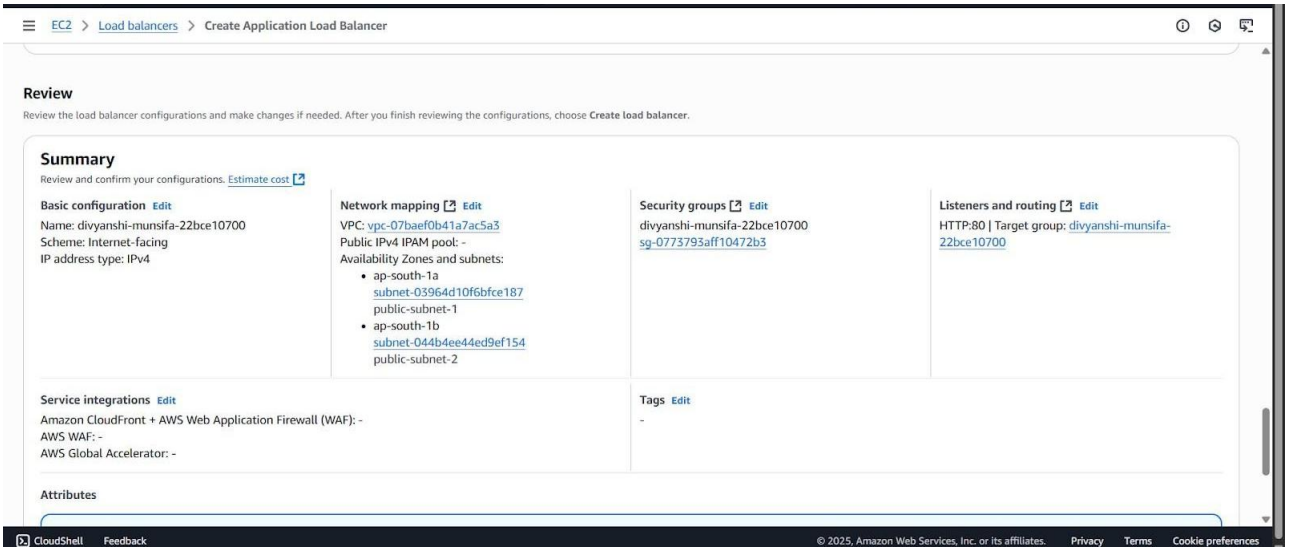

STEP21: NOW SELECT THE SECURITY GROUP THAT YOU HAVE CREATED

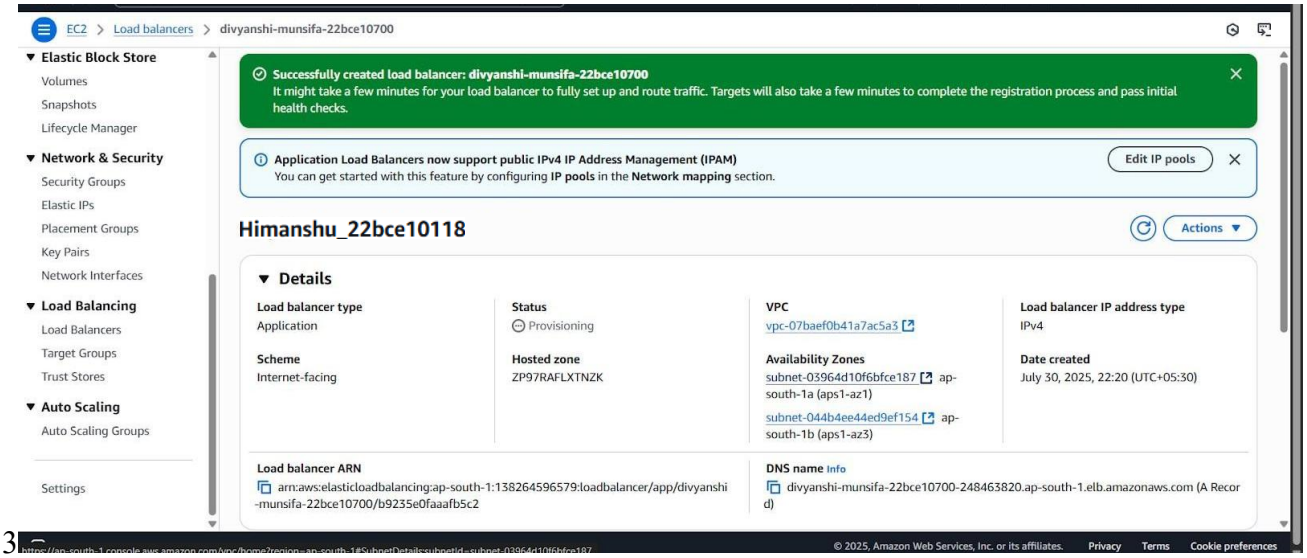
STEP22: LISTENERS & ROUTING SECTION: SELECT TARGET GROUP THAT YOU HAVE CREATED




STEP23: VERIFY THE DETAILS IN THE SUMMARY>CLICK ON CREATE LOAD BALANCER

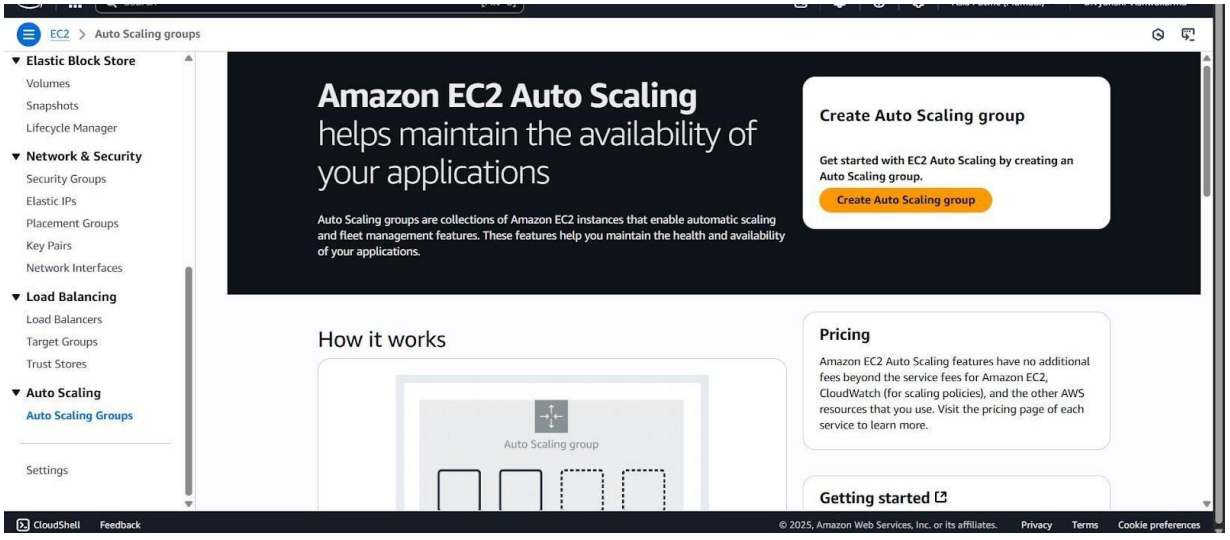
STEP24: LOAD BALANCER IS CREATED



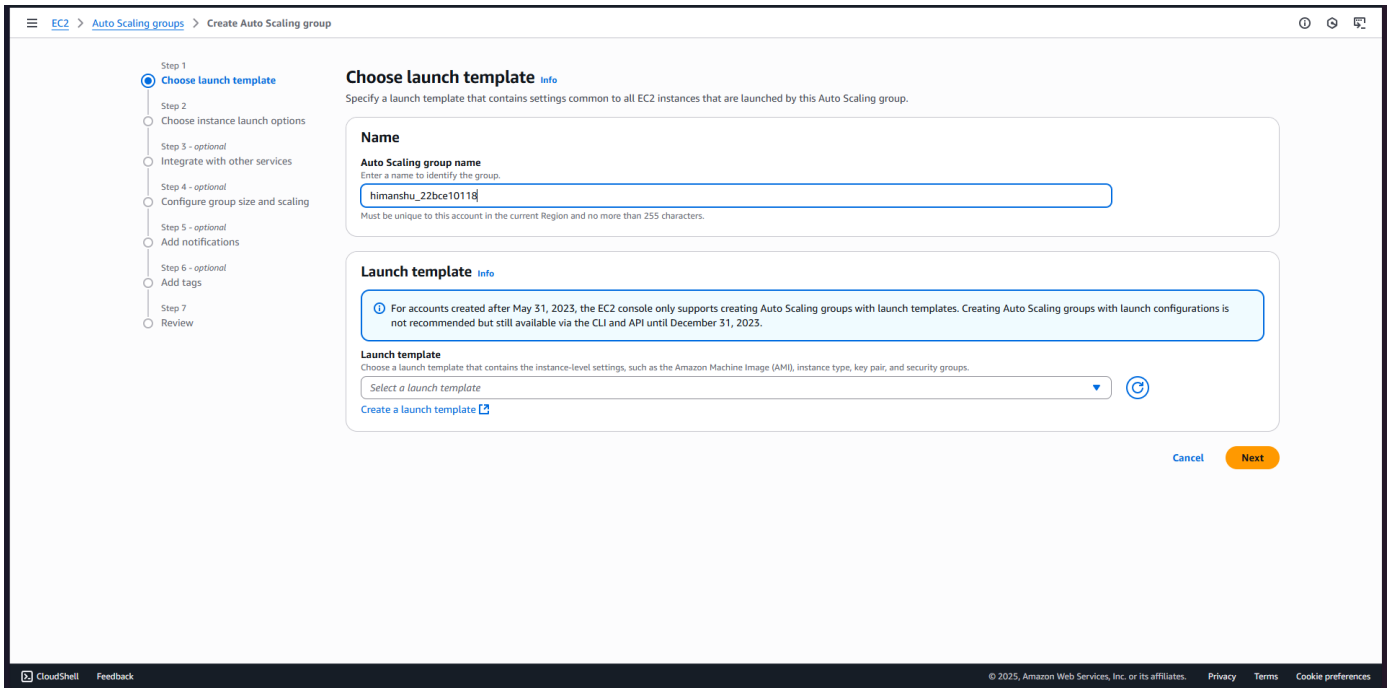



3

STEP25: CLICK ON AUTO-SCALING GROUP> CREATE AUTO-SCALING GROUP

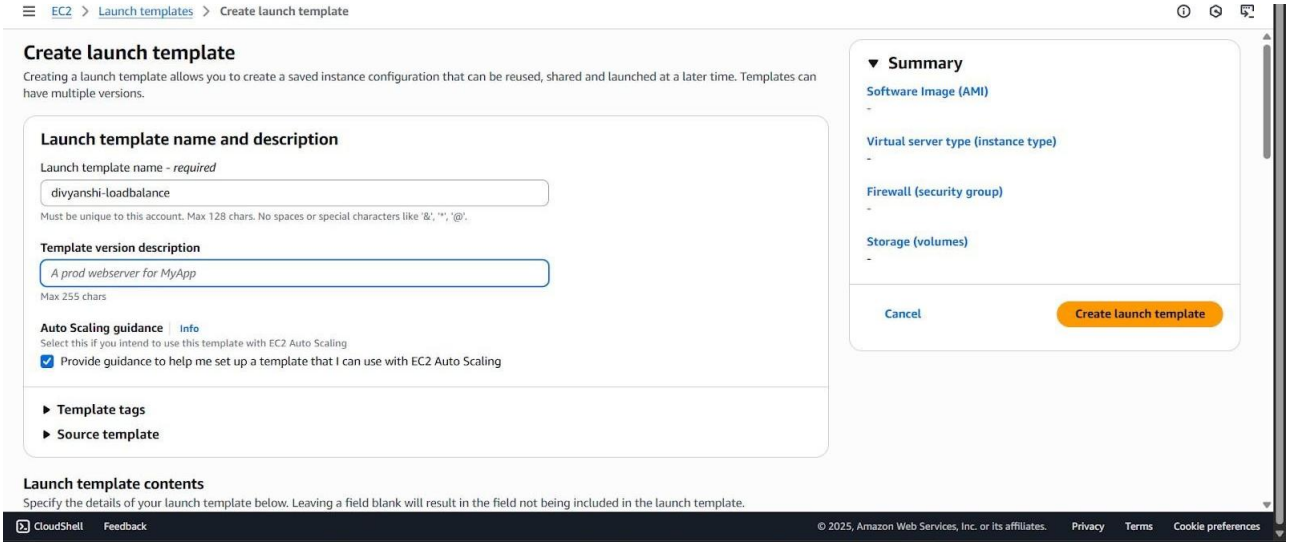


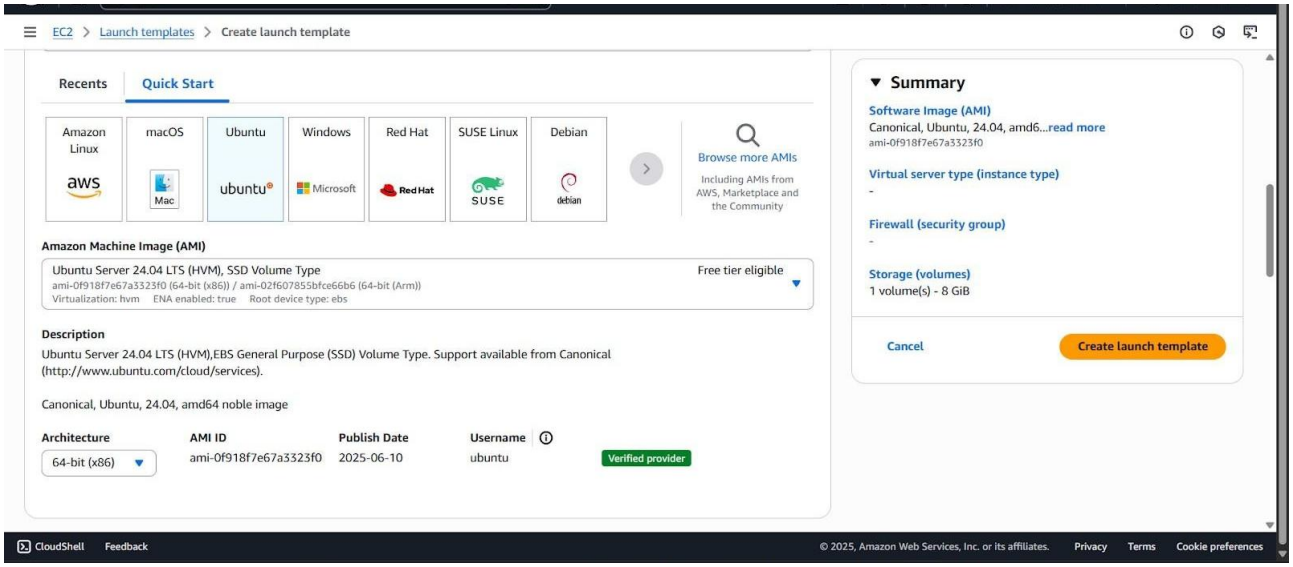
STEP26: GIVE A NAME TO AUTO-SCALING >CLICK ON CREATE A LAUNCH TEMPLATE



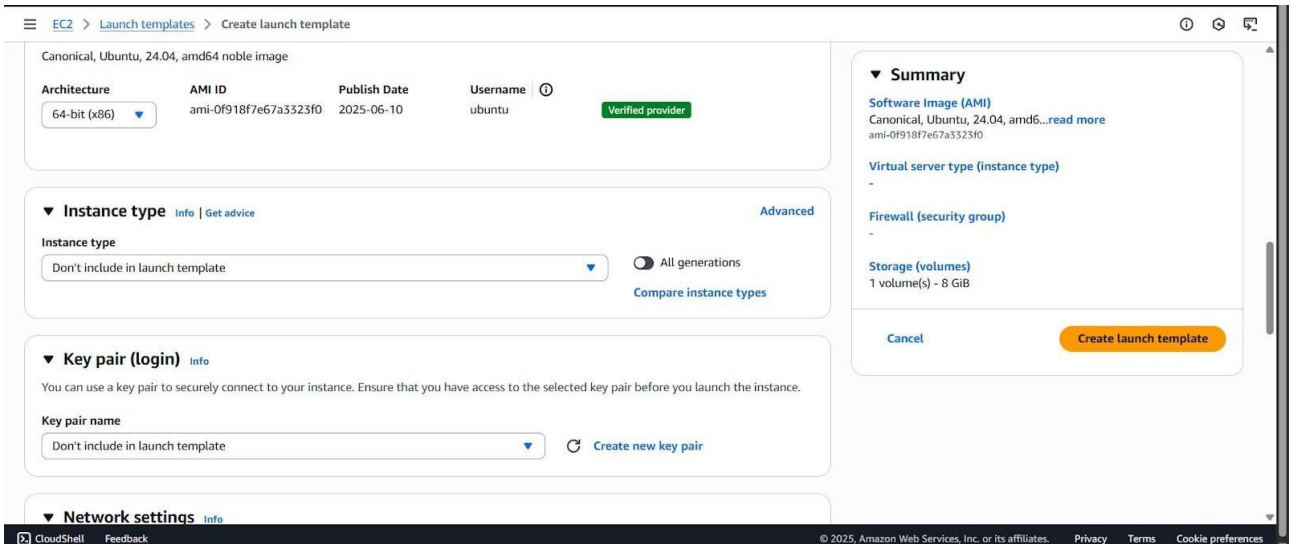

STEP27: GIVE A TEMPLATE NAME

STEP28: SELECT UBUNTU






STEP29: SELECT INSTANCE TYPE

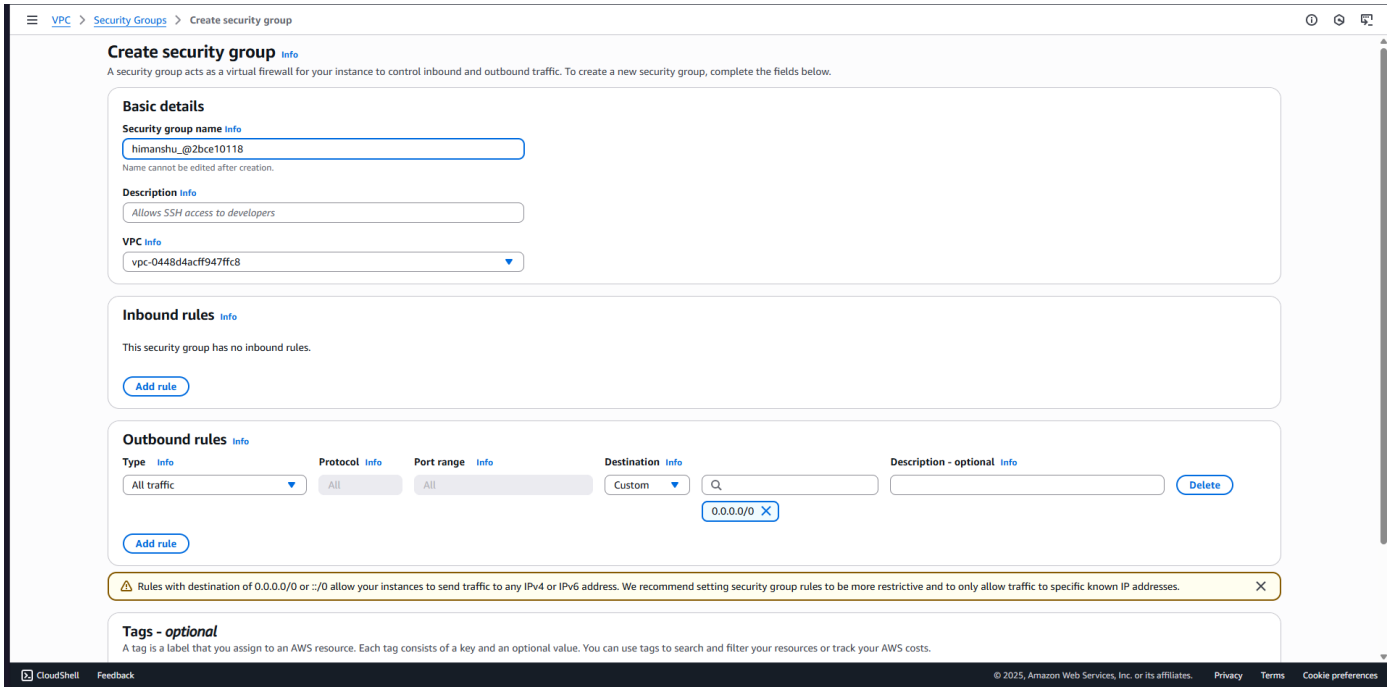



STEP30: CREATE A KEY PAIR

STEP31: NEXT WE HAVE TO CREATE A SECURITY GROUP TO BE ADDED IN THE LAUNCH TEMPLATE

**a.** SEARCH VPC>OPEN VPC IN A NEW TAB>CLICK ON SECURITY GROUP>CREATE SECURITY GROUP

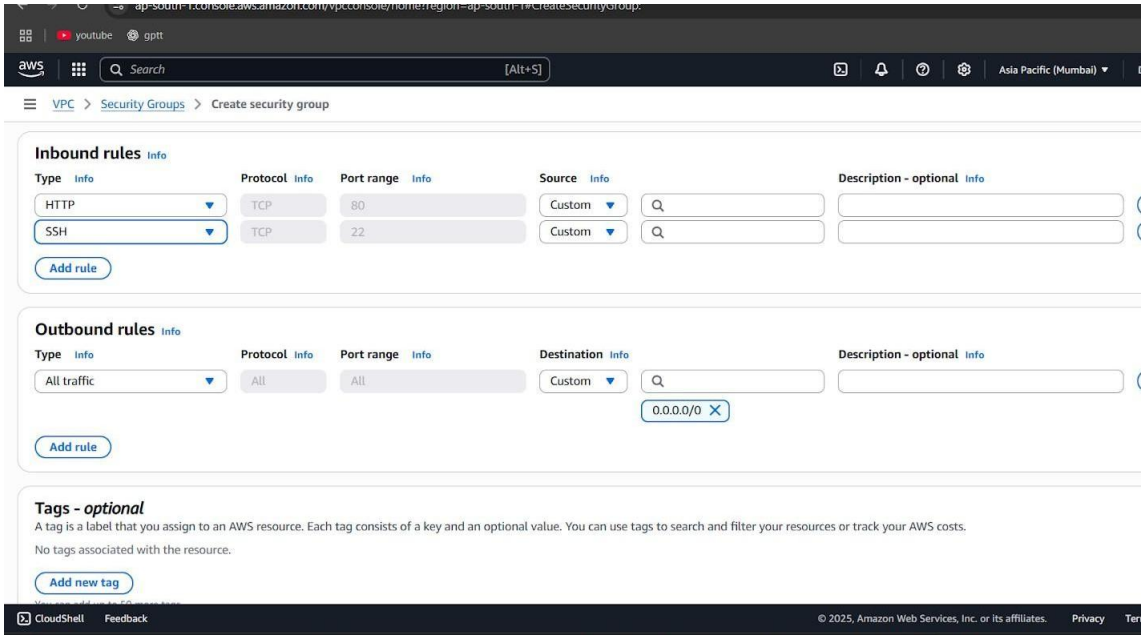
**b.** WRITE A NAME & DESCRIPTION TO THE SECURITY GROUP> CHOOSE THE VPC THAT YOU HAVE CREATED



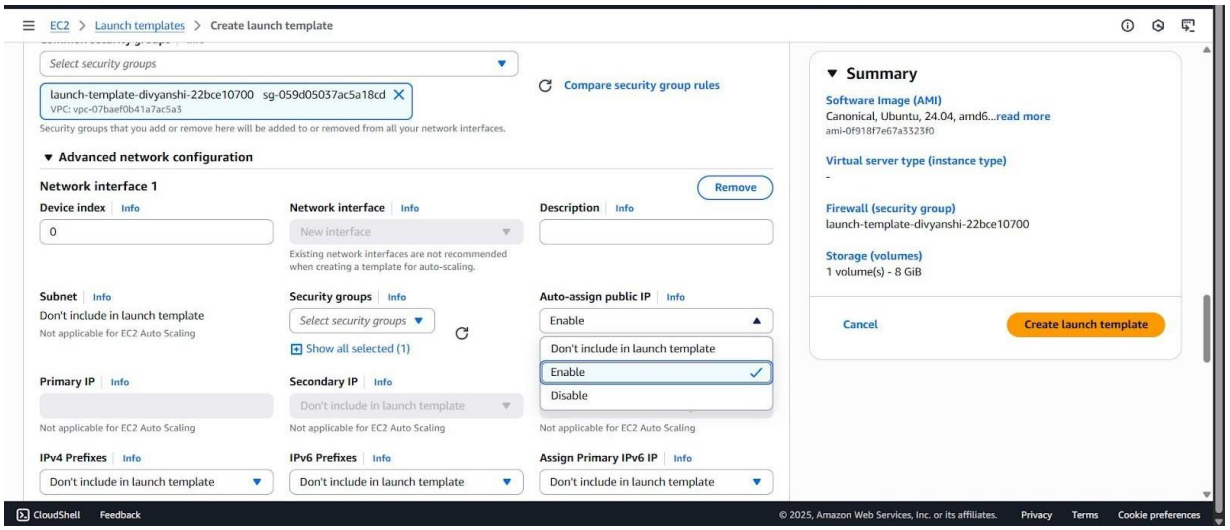

STEP32: SET IN BOUND RULE:

**a.** CLICK ON ADD RULE> SELECT HTTP & SOURCE: ANYWHERE (0.0.0.0/0).

**b.** CLICK ON ADD RULE> SELECT SSH & SOURCE: ANYWHERE (0.0.0.0/0). THEN CLICK ON ADD SECURITY GROUP

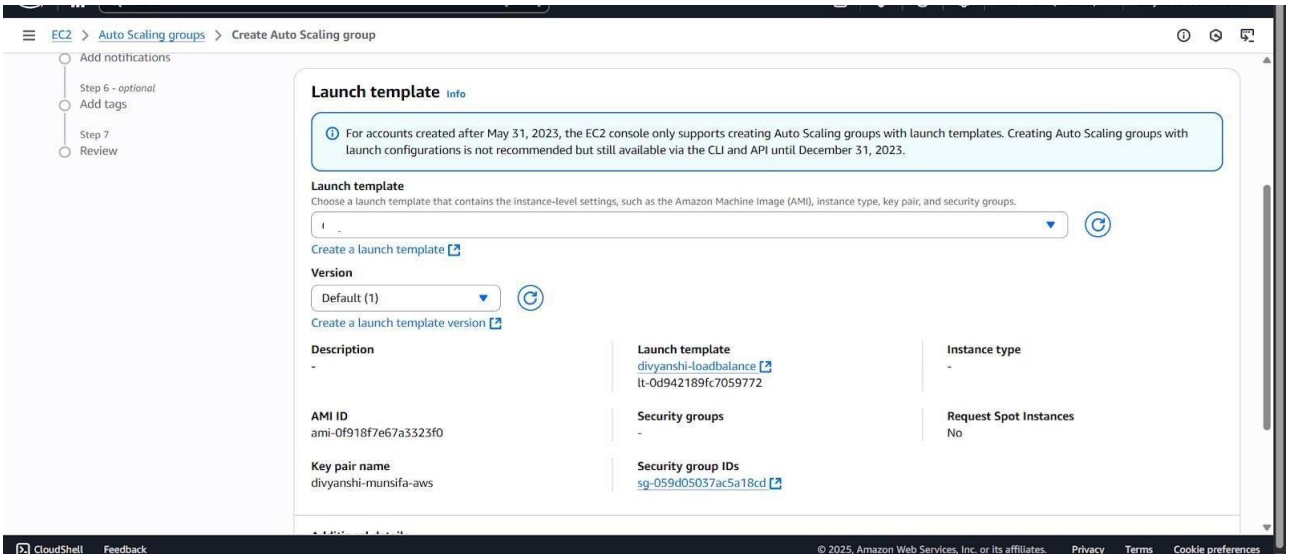



STEP33: NOW SELECT THE SECURITY GROUP THAT YOU HAVE CREATED IN THE LAUNCH TEMPLATE> AUTO ASSIGN PUBLIC IP: ENABLE> KEEP DEFAULT EBS VOLUME>CLICK ON CREATE LAUNCH TEMPLATE

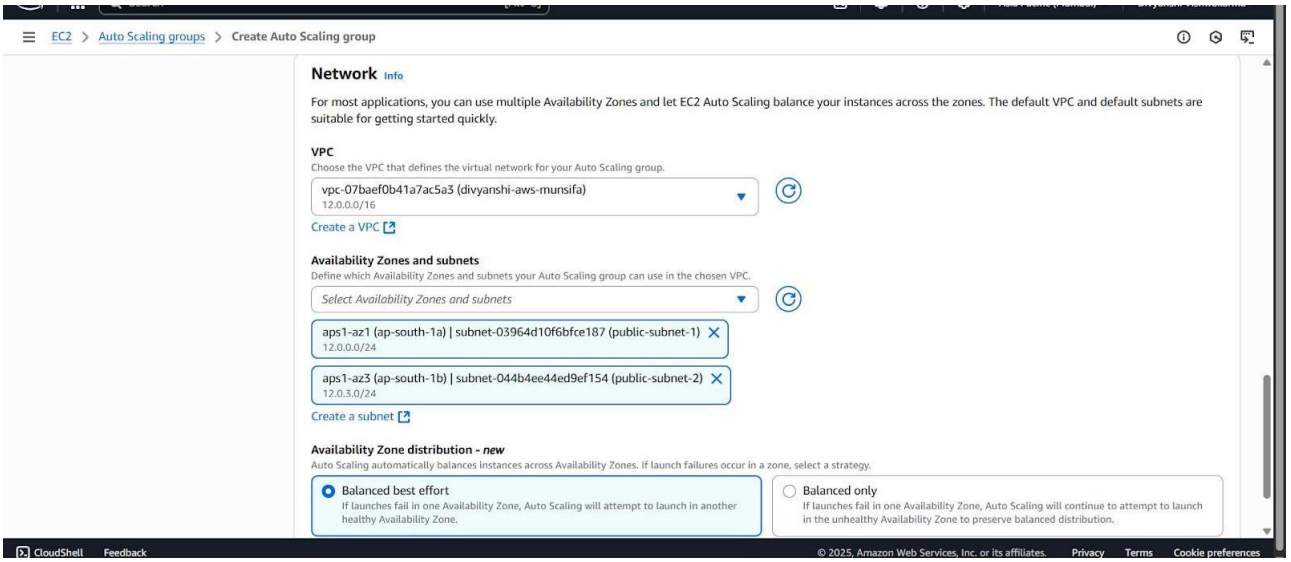


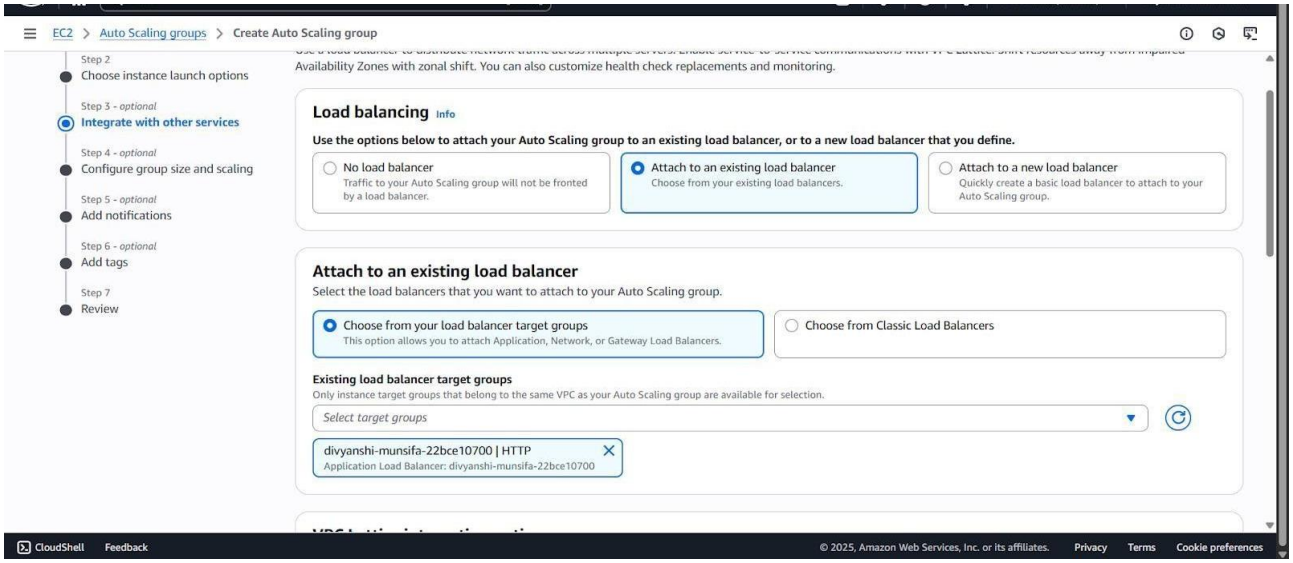
STEP34: NOW SELECT THE LAUNCH TEMPLATE FOR AUTO-SCALING GROUP> CLICK ON NEXT

STEP35: SELECT VPC THAT YOU HAVE CREATED>SELECT BOTH THE AVAILABILITY ZONES>CLICK ON NEXT.

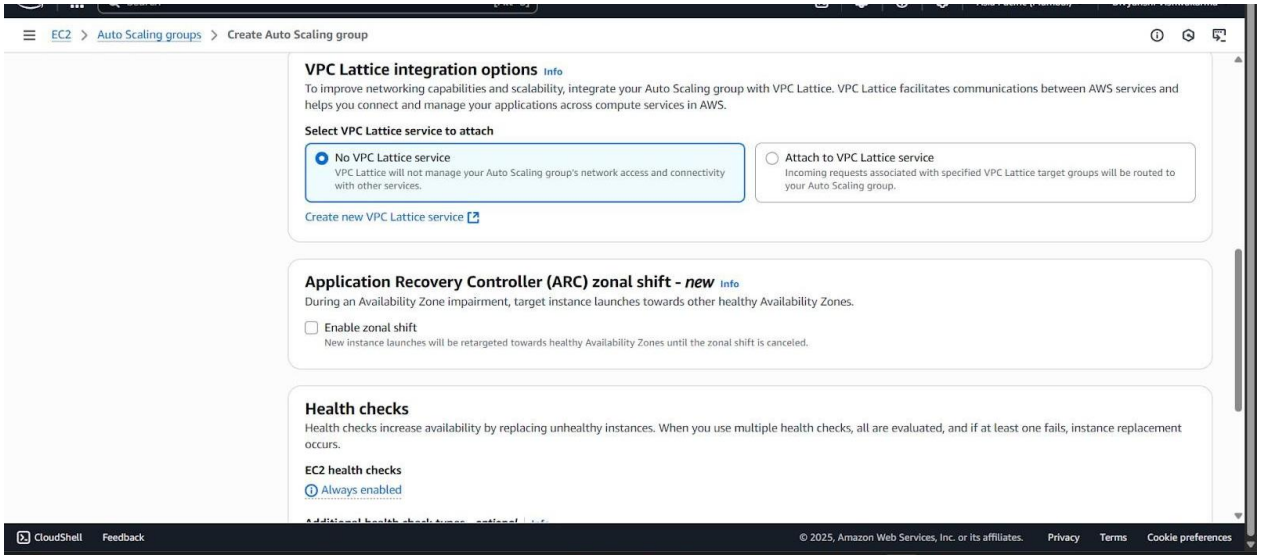



STEP36: SELECT ATTACH TO AN EXISTING LOAD BALANCER>CHOOSE FROM YOUR LOAD BALANCER TARGET GROUPS>CHOOSE THE TARGET GROUP THAT YOU HAVE CREATED

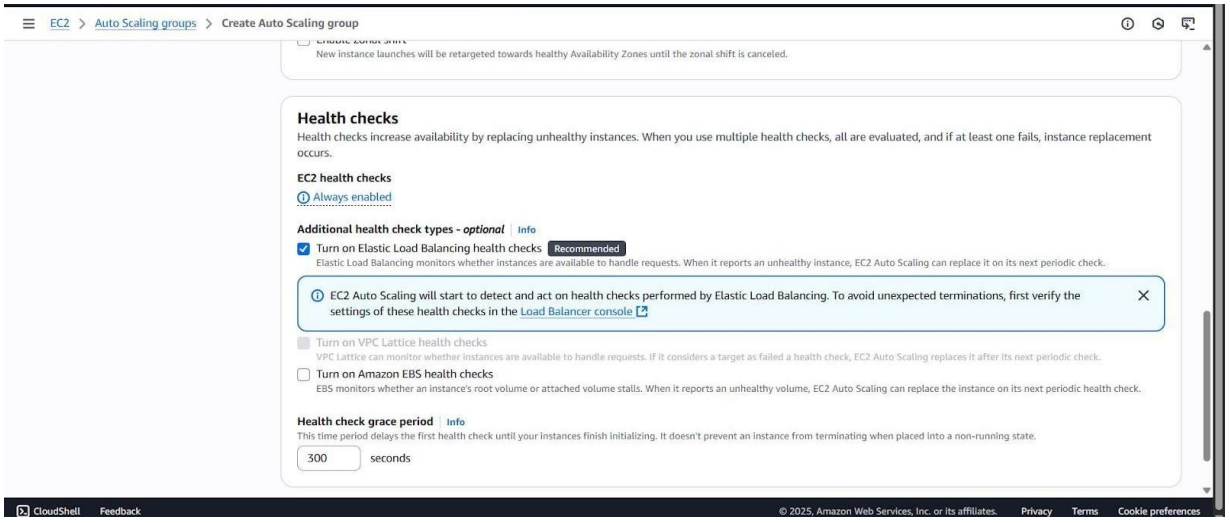





STEP37: SELECT NO VPC LATTICE SERVICE

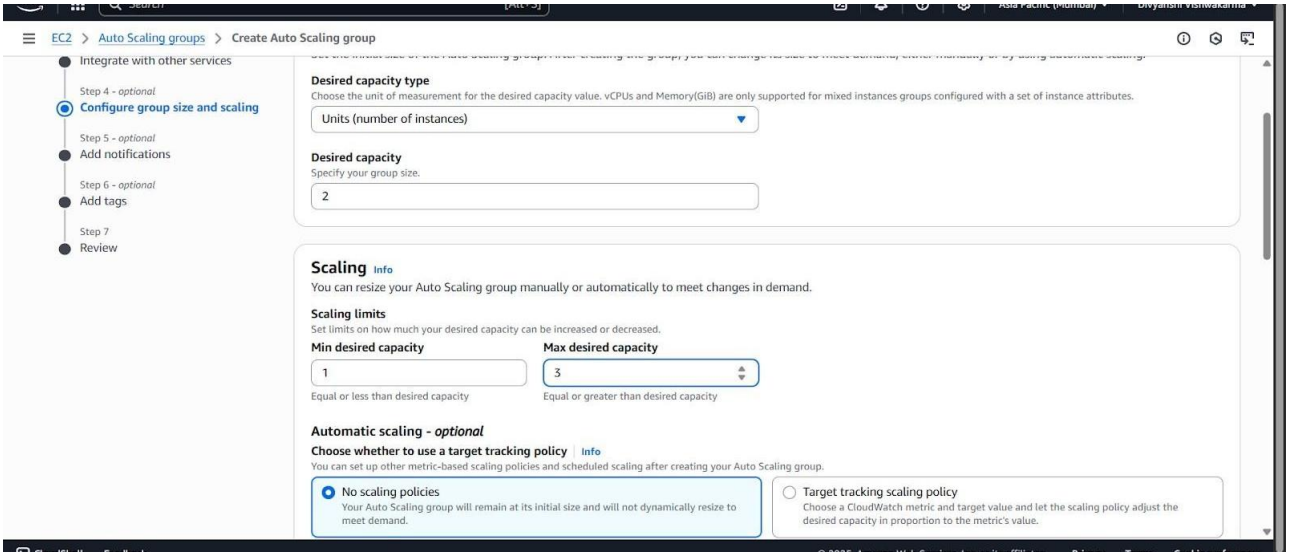



STEP38: SELECT TURN ON ELASTIC LOAD BALANCING>SET 20 SECONDS>CLICK ON NEXT

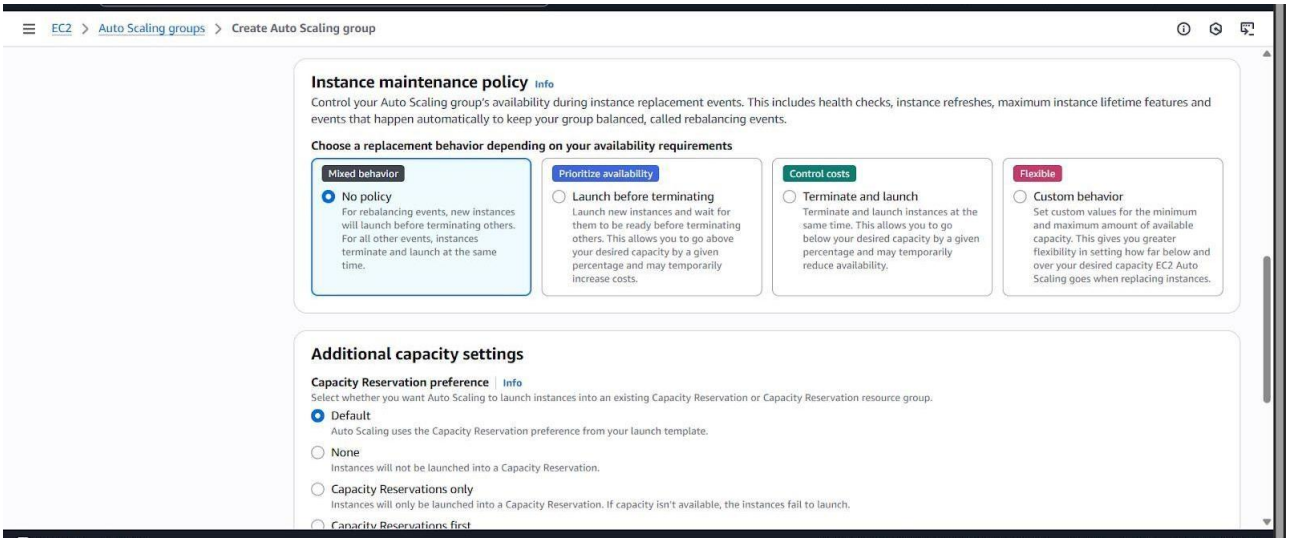


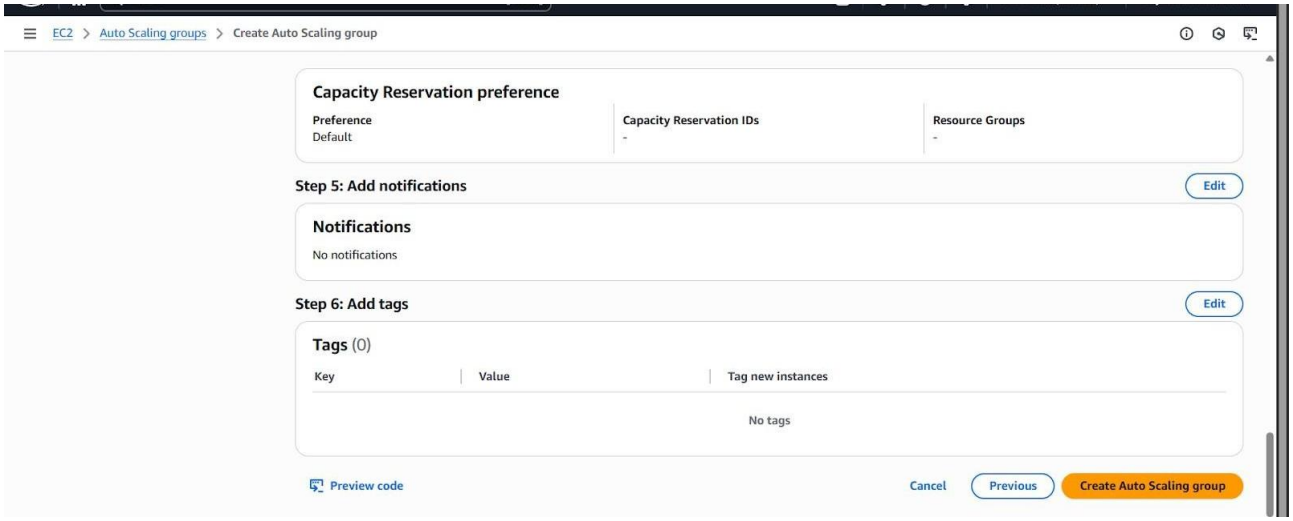
STEP39: SET DESIRED CAPACITY:2, MIN CAPACITY:1 & MAXIMUM CAPACITY:3

STEP40: CLICK ON NEXT

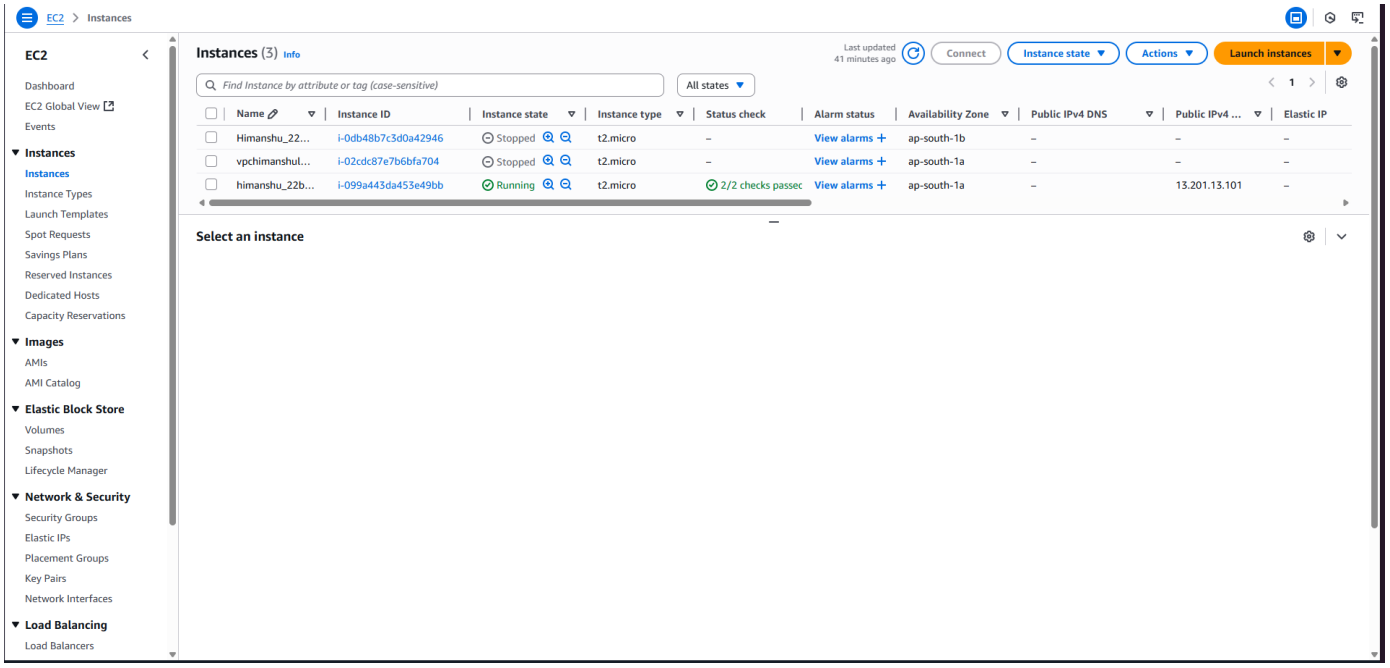



STEP41: CLICK ON AUTO-SCALING GROUP

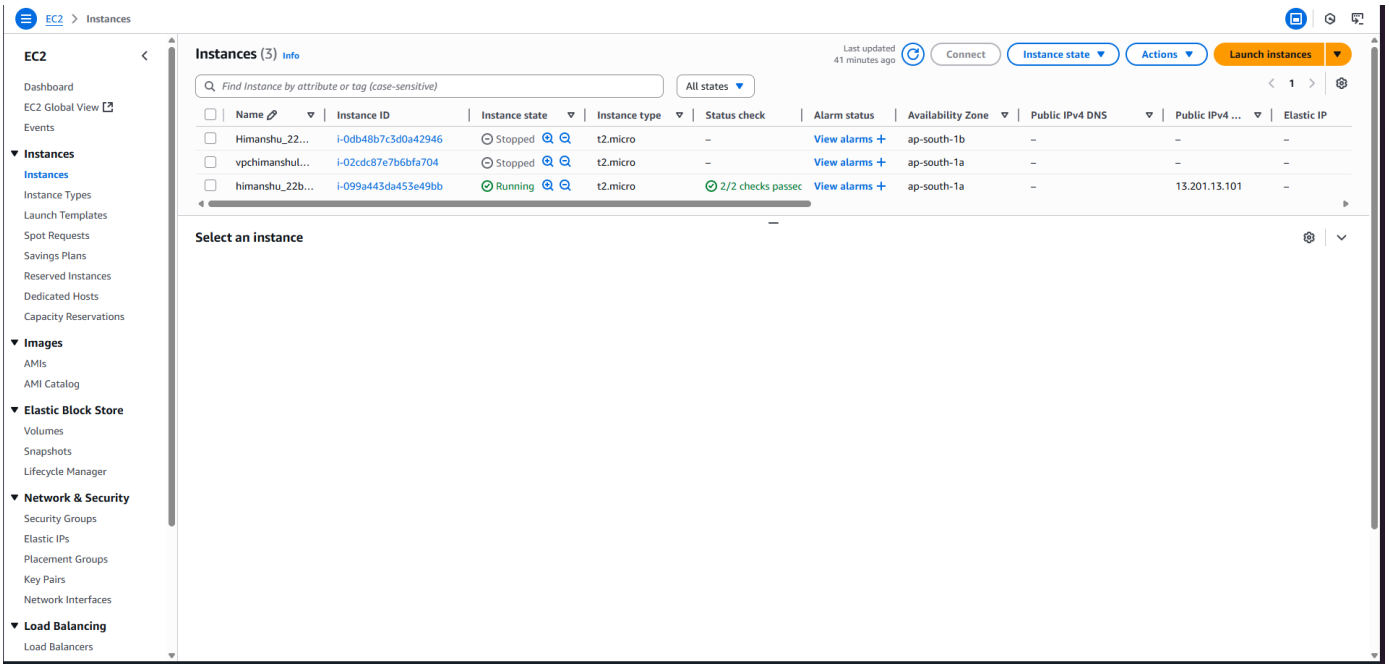




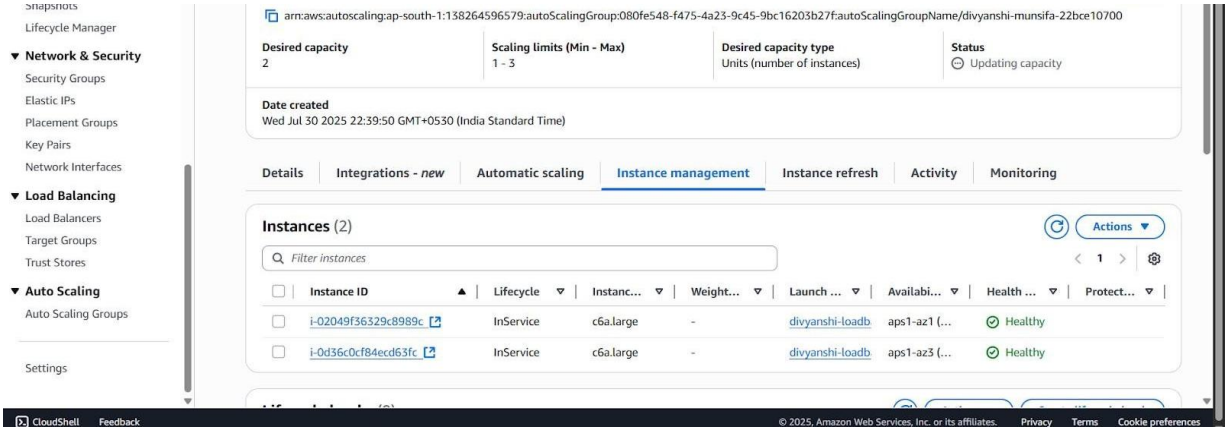

STEP42: NOW CLICK ON EC2>INSTANCES TO CHECK THE NUMBER OF INSTANCES CREATED.




STEP43: NOW TERMINATE ONE OF THE INSTANCES FROM EC2 INSTANCES




STEP44: NOW GO TO AUTO-SCALING GROUPS>INSTANCE MANAGEMENT>HEALTH STATES: UNHEALTHY MEANS DELETED INSTANCE (IT WILL AUTOMATICALLY CREATE ANOTHER INSTANCE AFTER DELETION)

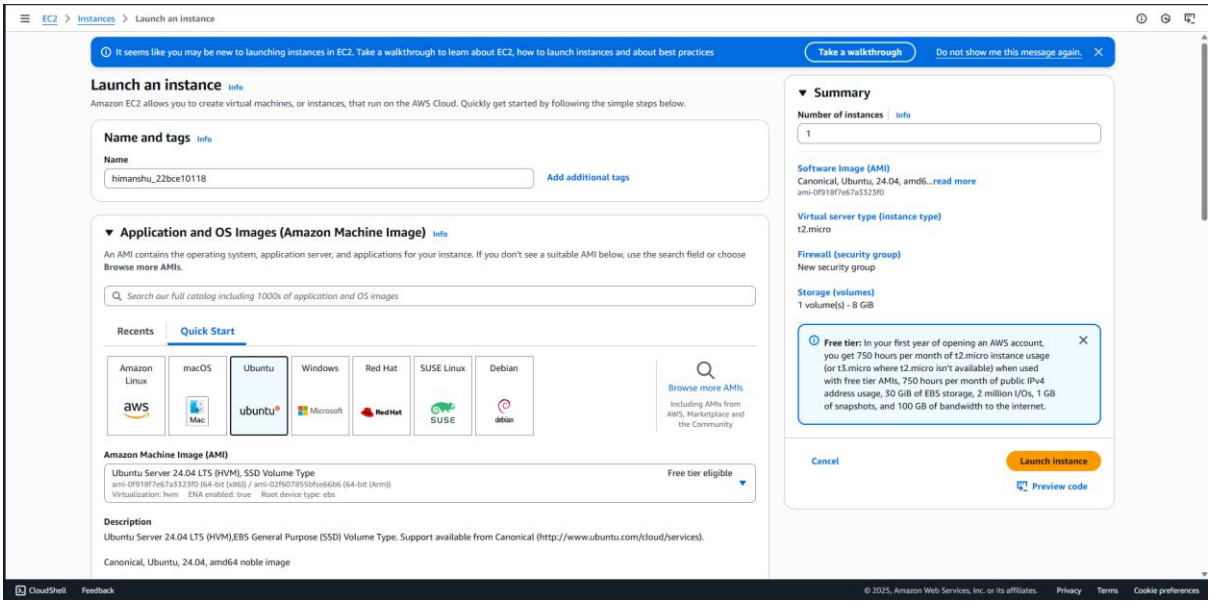


| **Date:** 12-08-2025 | **Title** |
|---|---|
| **Exp. No: 10** | HOW TO CREATE EBS AND ATTACH TO EC2 INSTANCE, MODIFY SIZE AND CREATE A SNAPSHOT |

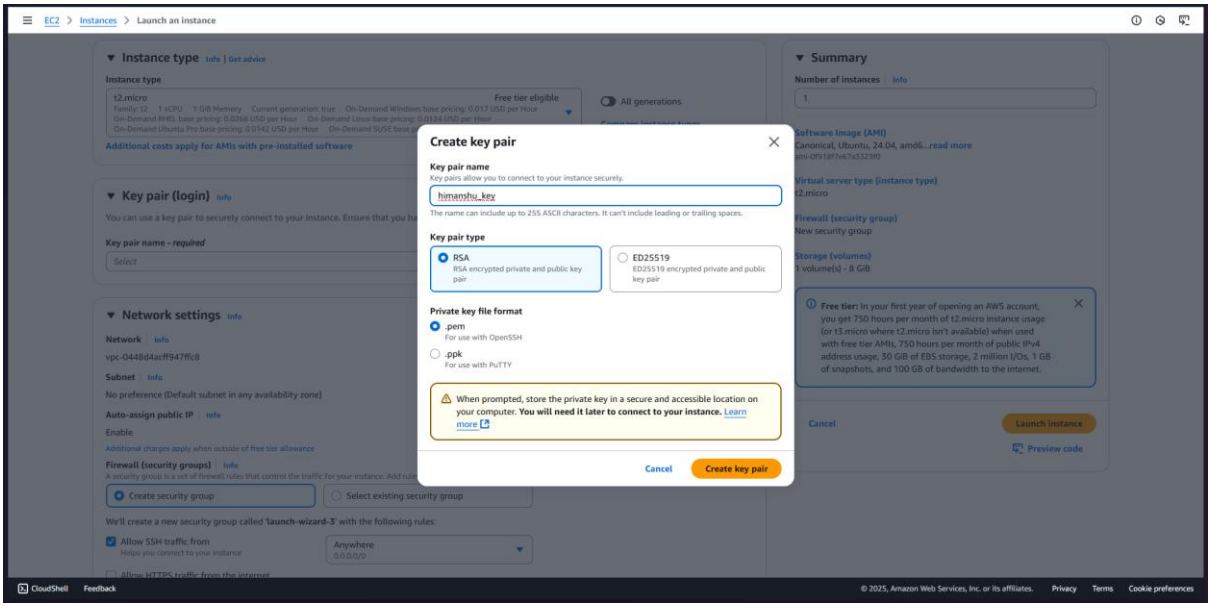
**AIM OF THE EXPERIMENT:** HOW TO CREATE EBS AND ATTACH TO EC2 INSTANCE, MODIFY SIZE AND CREATE A SNAPSHOT

**PROCEDURE:**

i) GO TO EC2 DASHBOARD>CLICK ON INSTANCES>CLICK ON LAUNCH INSTANCE>TYPE THE NAME OF THE INSTANCE>CHOOSE THE UBUNTU

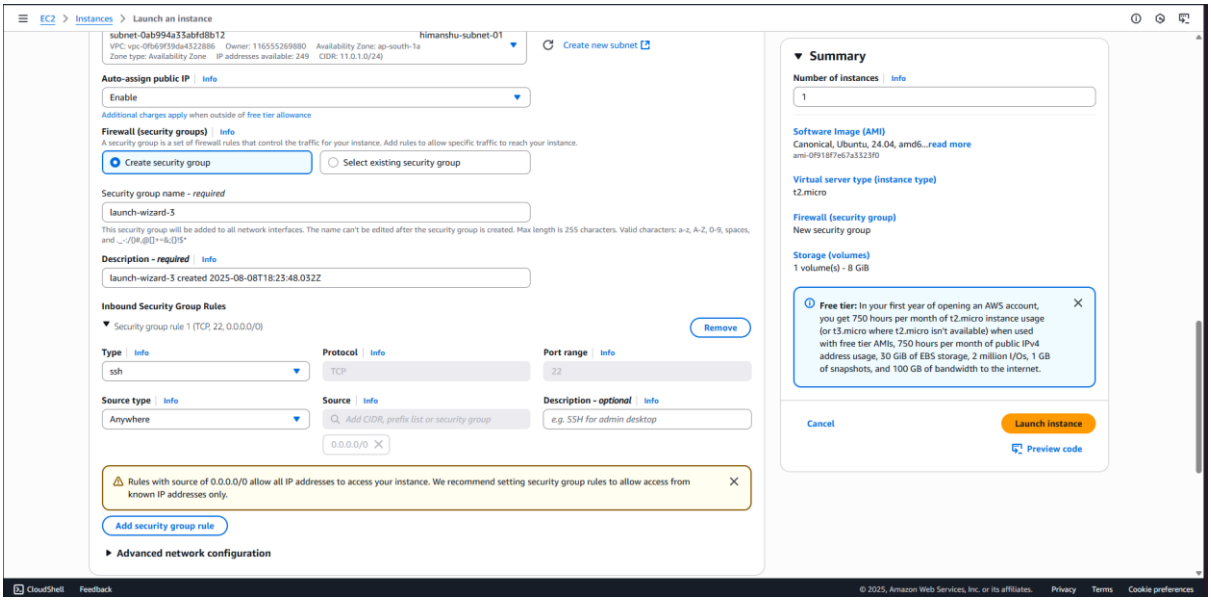


ii) CREATE A KEY PAIR

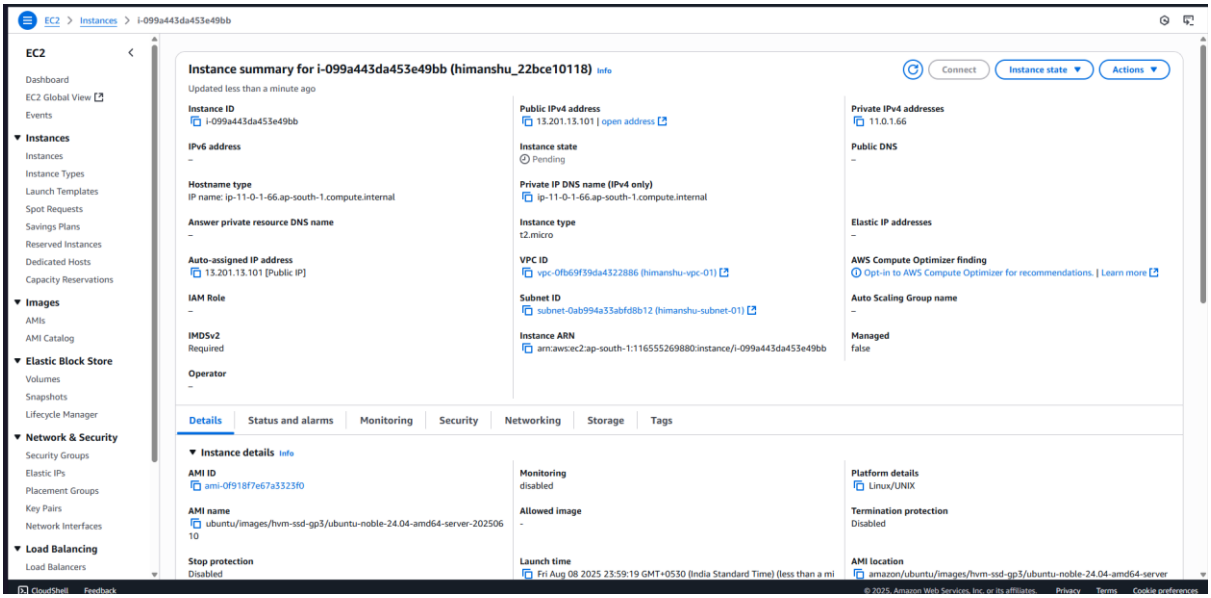



iii) EDIT THE NETWORK SETTING> SELECT THE VPC CREATED>CHOOSE THE PUBLIC SUBNET>ENABLE AUTO-ASSIGN PUBLIC IP>CREATE SECURITY GROUP

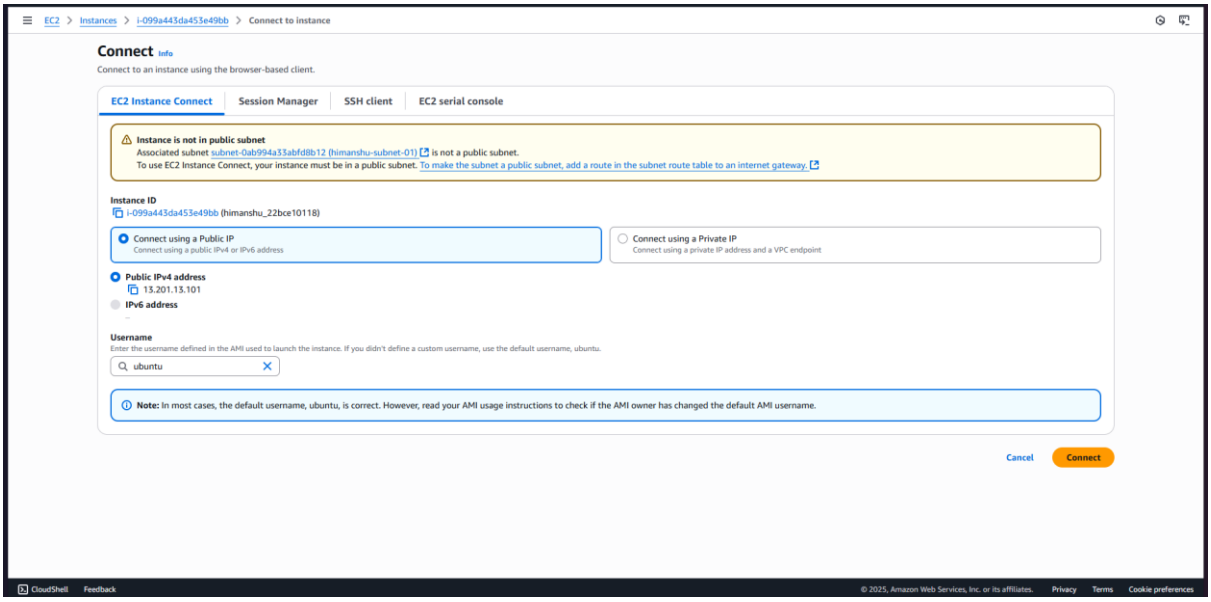
iv) SET TYPE: SSH IN THE SECURITY GROUP>CLICK ON LAUNCH INSTANCE



v) CLICK ON THE EC2 INSTANCE CREATED>CLICK ON CONNECT




vi) CLICK ON EC2 INSTANCE CONNECT

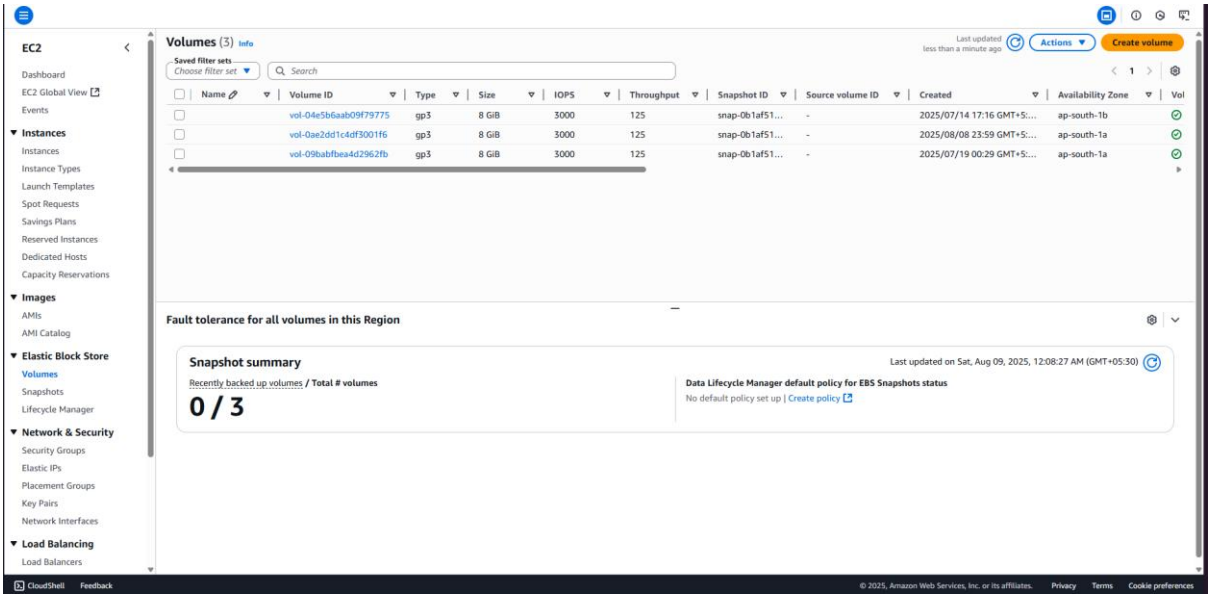


vii) EC2 Instance is connected

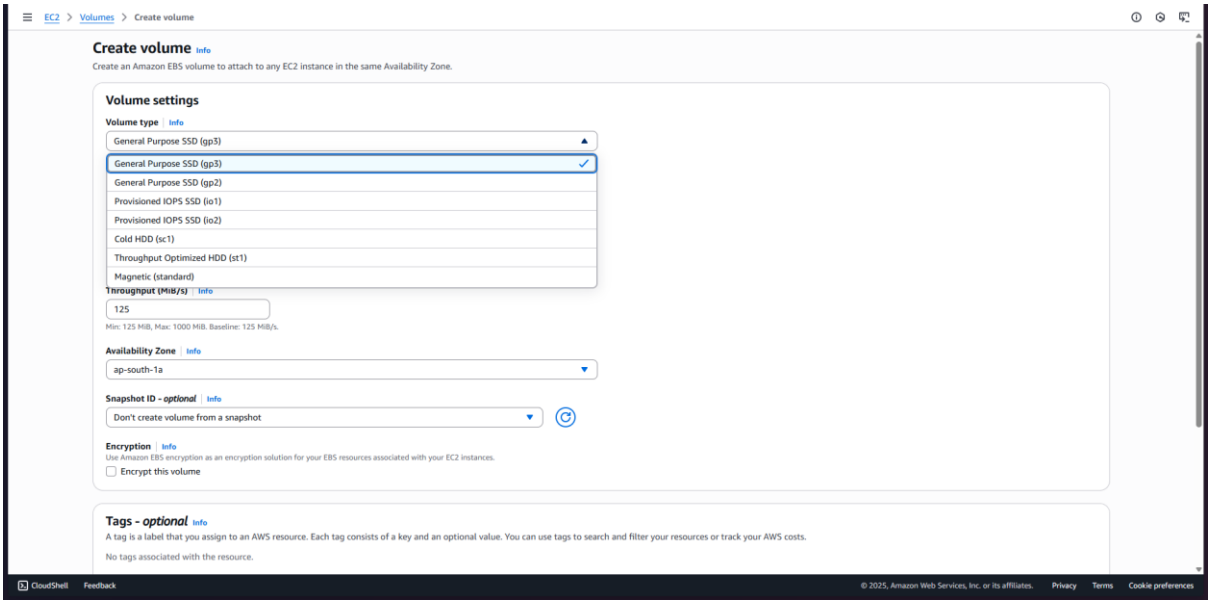

viii) TYPE “lsblk” COMMAND IN THE TERMINAL. IT WILL SHOW YOU HOW MANY VOLUMES ARE ATTACHED TO THE EC2 INSTANCE. IT SHOWS THE DEFAULT 8G VOLUME WHICH WE SET WHILE CREATING EC2 INSTANCE.


EBS Volume created

ix) NOW CREATE EBS VOLUME FROM EC2 DASHBOARD: ELASTIC BLOCK STORE>VOLUMES>CREATE VOLUME

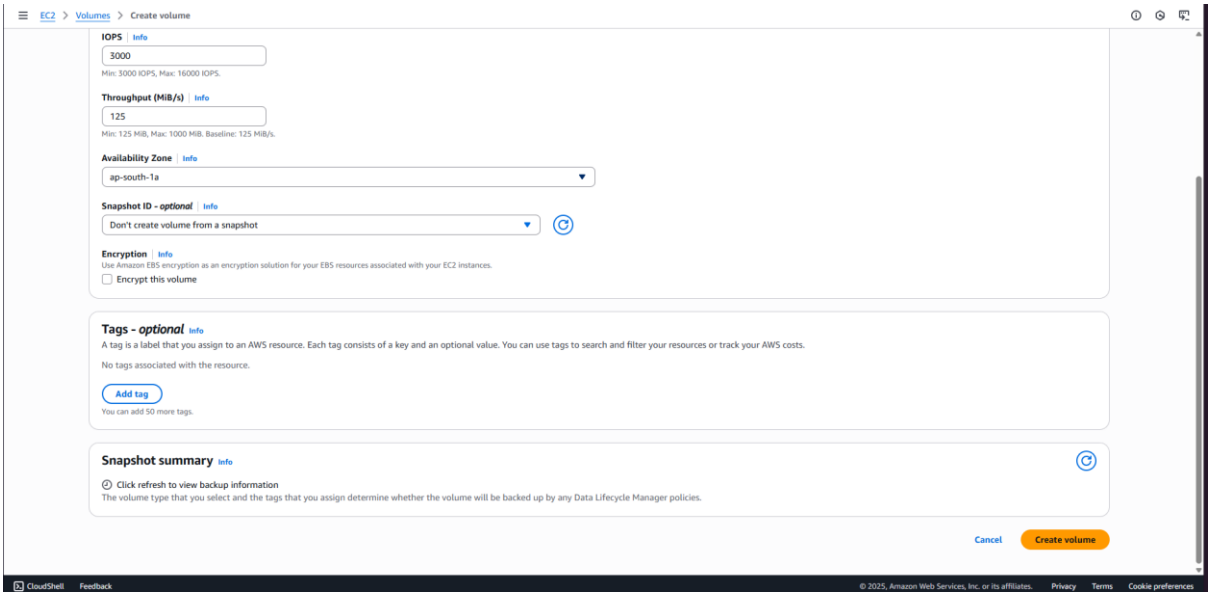



x) YOU CAN CHOOSE ANY OF THE VOLUME TYPES FROM THE DROP-DOWN >SELECT gp3

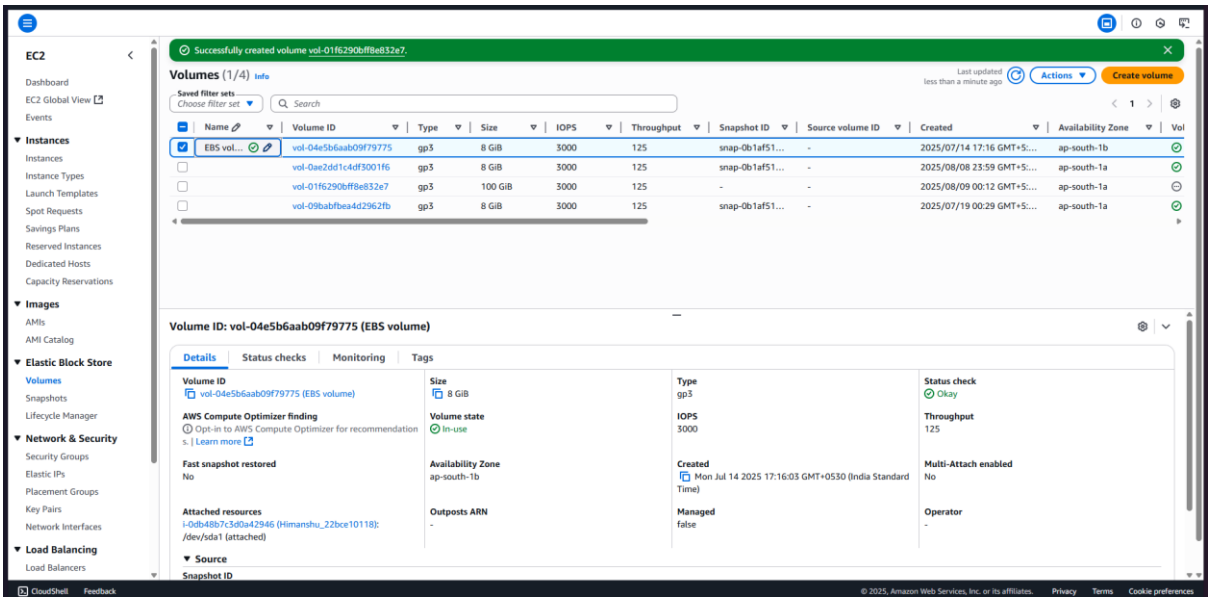


xi) KEEP THE DATA AS SHOWN

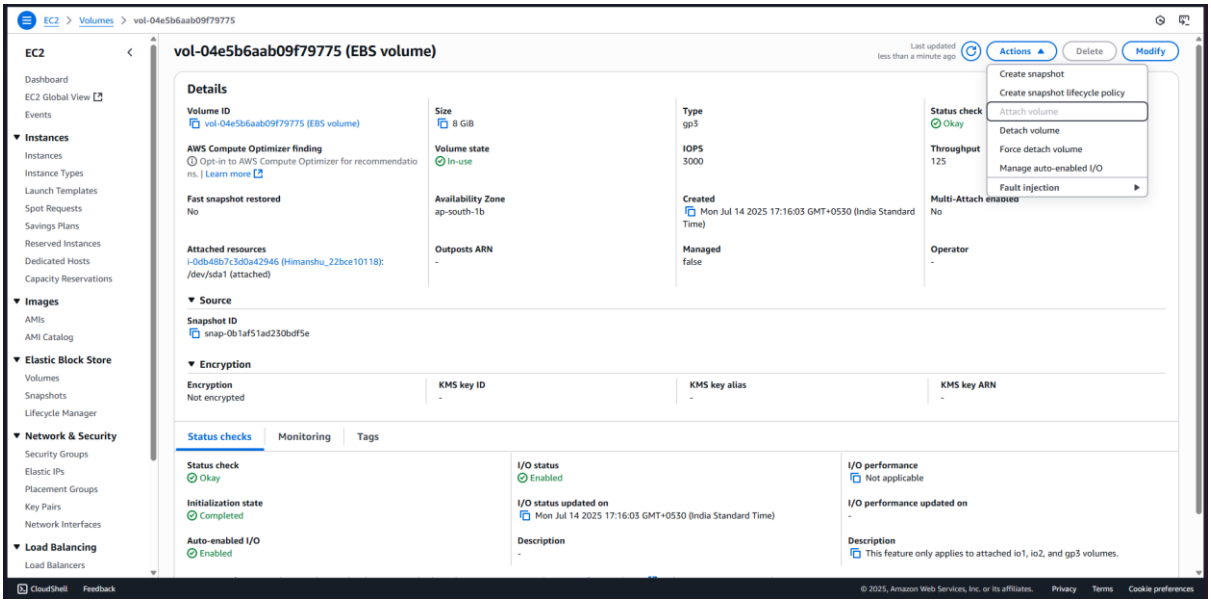
xii) CLICK ON CREATE VOLUME.



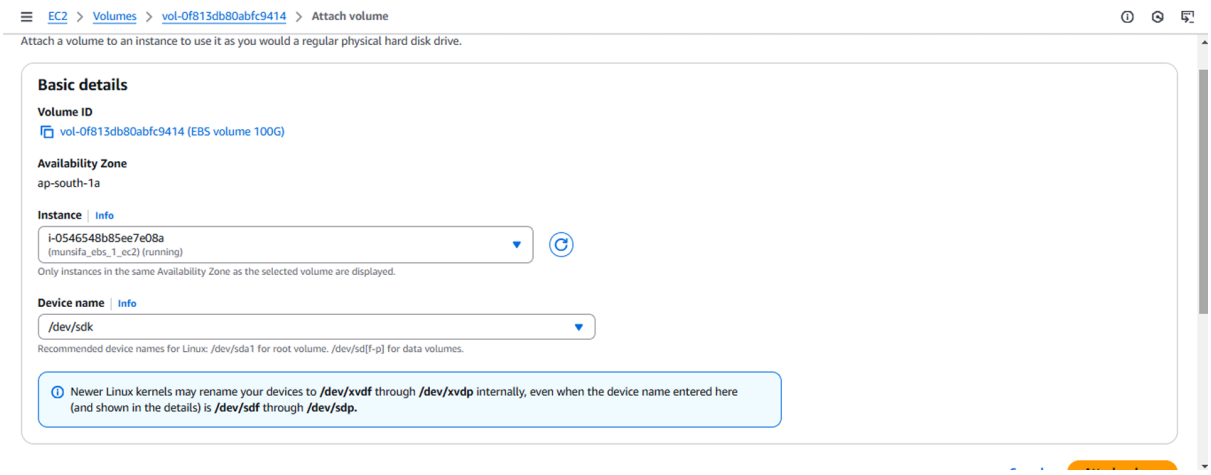

xiii) EDIT THE VOLUME NAME BY CLICKING ON IT>CLICK ON THE VOLUME THAT YOU HAVE CREATED



xiv) CLICK ON ACTIONS>ATTACH VOLUME




xv) SELECT INSTANCE THAT YOU HAVE CREATED>CHOOSE THE DEVICE:/dev/sdk>CLICK ON ATTACH VOLUME

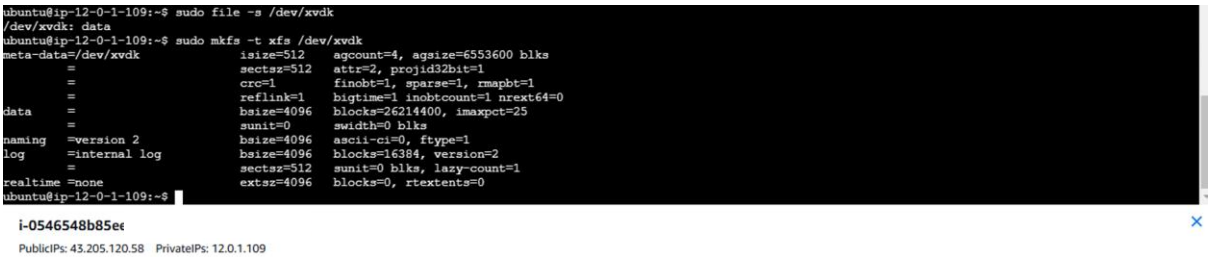


xvi) NOW GO TO EC2 TERMINAL AND TYPE:lsblk>IT WILL LIST ALL THE VOLUME(100G IS SHOWN BELOW)


xvii) TYPE sudo fdisk -l (IT WILL LIST OUT ALL THE DISK PARTITION)


xviii) TYPE sudo file -s /dev/xvdk (IT WILL SHOW “DATA” WHICH MEANS THERE IS NO FILE SYSTEM CREATED FOR THIS EBS VOLUME)

xix) WE NEED TO CREATE FILE SYSTEM FOR EBS VOLUME: TYPE sudo mkfs -t xfs /dev/xvdk (FILE SYSTEM CREATED)

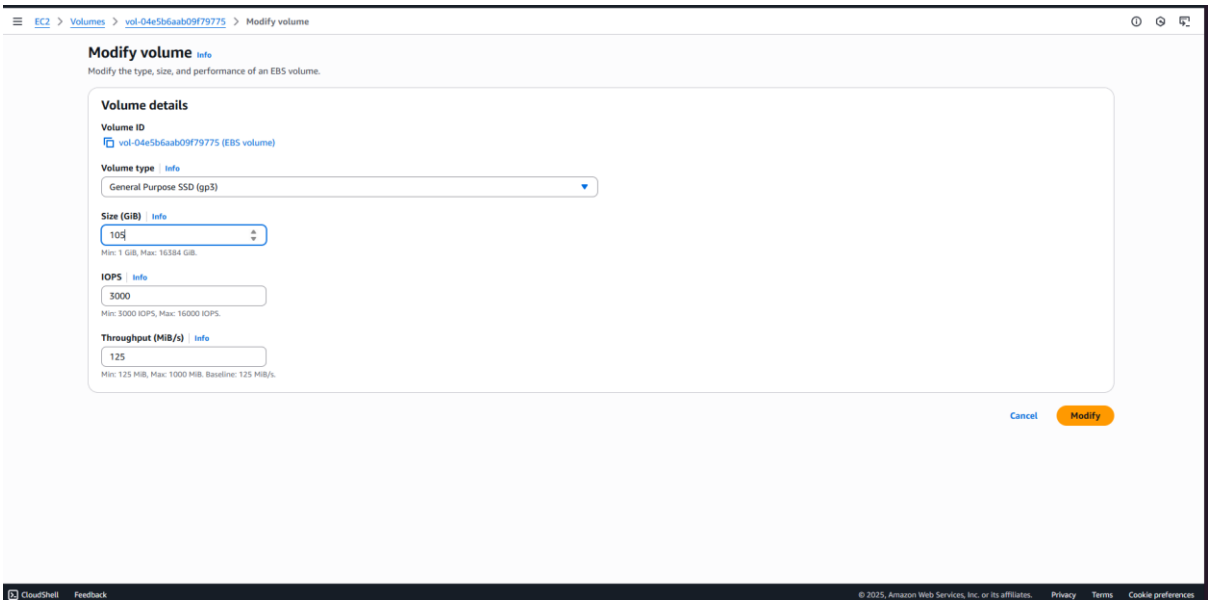



xx) NOW AGAIN TYPE sudo file -s /dev/xvdk TO CHECK THE FILE SYSTEM (ITS SHIWS EBS VOLUME HAS xfs FILESYSTEM)

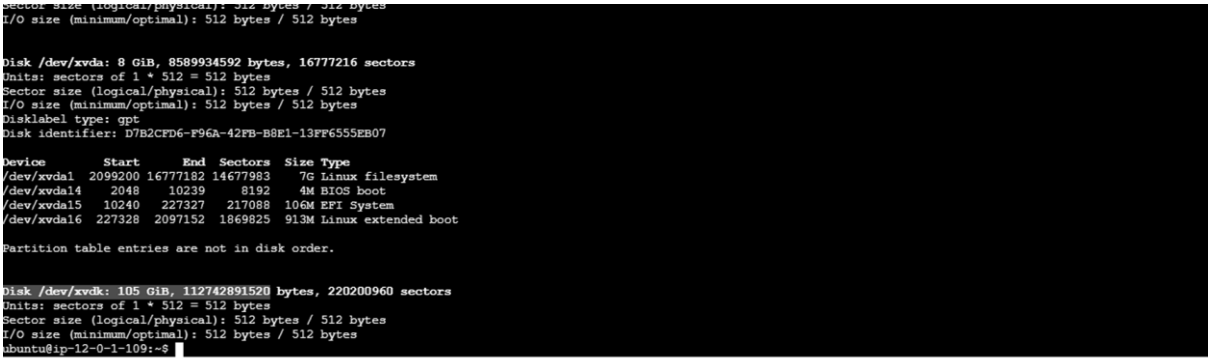

xxi) CREATE A DIRECTORY: a. TYPE sudo mkdir /munsifaebsvol b. NEXT TYPE sudo mount /dev/xvdk / munsifaebsvol c. TYPE ls -lart /munsifaebsvol


xxii) NOW TYPE df -h (IT WILL SHOW THAT EBS VOLUME HAS BEEN MOUNTED TO DIRECTORY “munsifaebsvol”)

xxiii) NOW NEXT GO TO EBS VOLUME TO INCREASE THE VOLUME(NOTE THAT EBS VOLUME CAN BE INCREASED BUT YOU CANNOT REDUCE THE VOLUME SIZE ONCE AN EBS VOLUME IS CREATED BECAUSE THERE IS A PROBABILITY OF DATA LOSS) a. CLICK ON EBS VOLUME>SELECT THE VOLUME THAT YOU HAVE CREATED>CLICK ON MODIFY b. INCREASE THE VOLUME SIZE FROM 100 TO 105>CLICK MODIFY



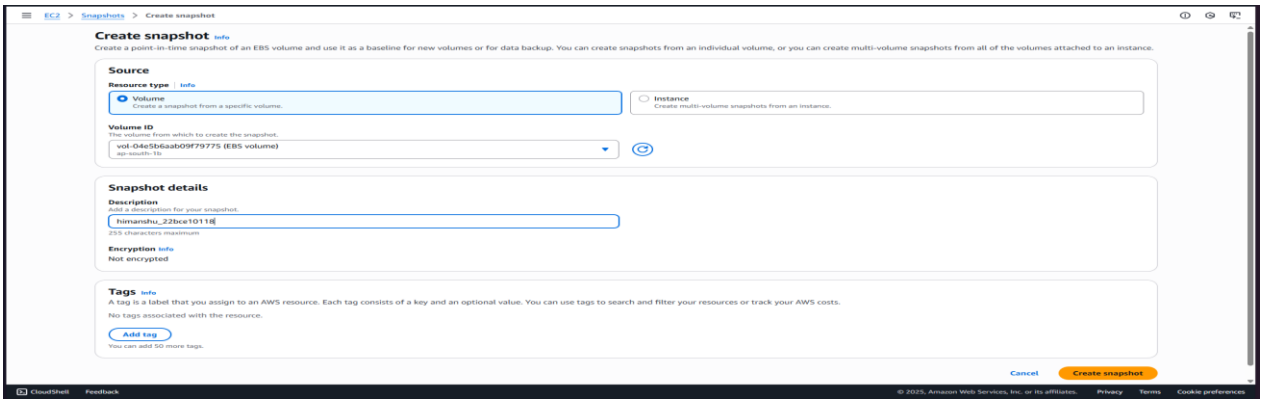

xxiv) NOW GO TO THE EC2 TERMINAL AND VERIFY WHETHER THE DISK SIZE HAS CHANGED OR NOT. (TYPE sudo fdisk -l)



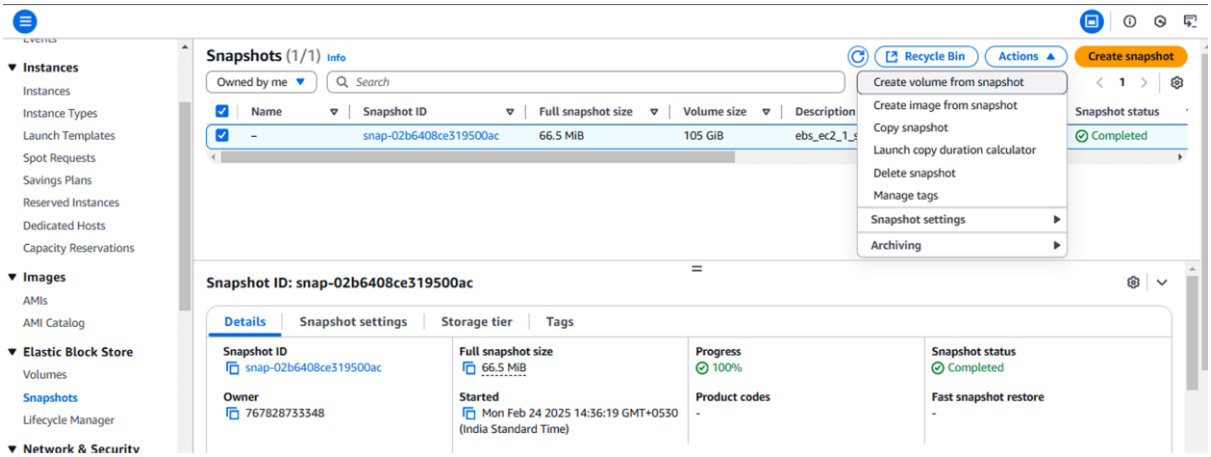
xxv) NOW IN THE EC2 TERMINAL GO TO EBS VOLUME DIRECTORY AND CREATE FILES. a. TYPE cd /munsifaebsvol (GO TO EBS VOLUME DIRECTORY) b. TYPE sudo touch 1.txt (CREATE FILE1) c. TYPE sudo touch 2.txt (CREATE FILE2) d. TYPE ls -lart (TO VERIFY WHETHER FILES ARE THERE OR NOT)


xxvi) CREATE SECOND EC2 INSTANCE (CREATE IN A SIMILAR MANNER LIKE YOU HAVE CREATED FOR EC1 )>CONNECT EC2 INSTANCE. THEN CHECK THE DISK SIZE OF EC2 INSTANCE (TYPE sudo fdisk -l) IT SHOWS THE DEFAULT 8G

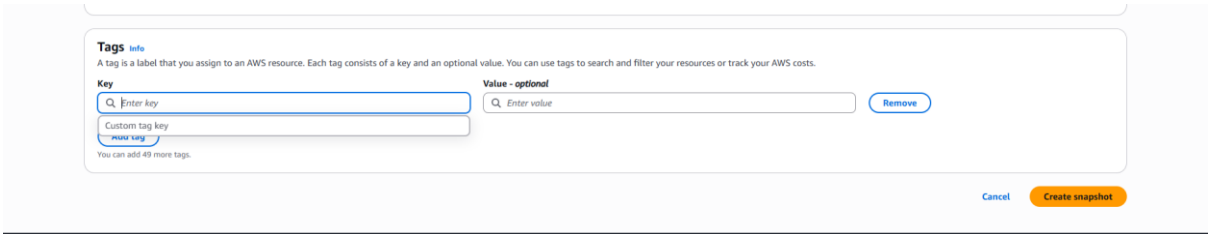

xxvii) NOW TO CREATE A SNAPSHOT GO TO EC2 DASHBOARD: a. EBS VOLUME>CLICK ON THE VOLUME THAT YOU HAVE CREATED>CLICK ON ACTIONS>CLICK ON CREATE SNAPSHOT b. TYPE THE DESCRIPTION>CLICK ON CREATE A SNAPSHOT



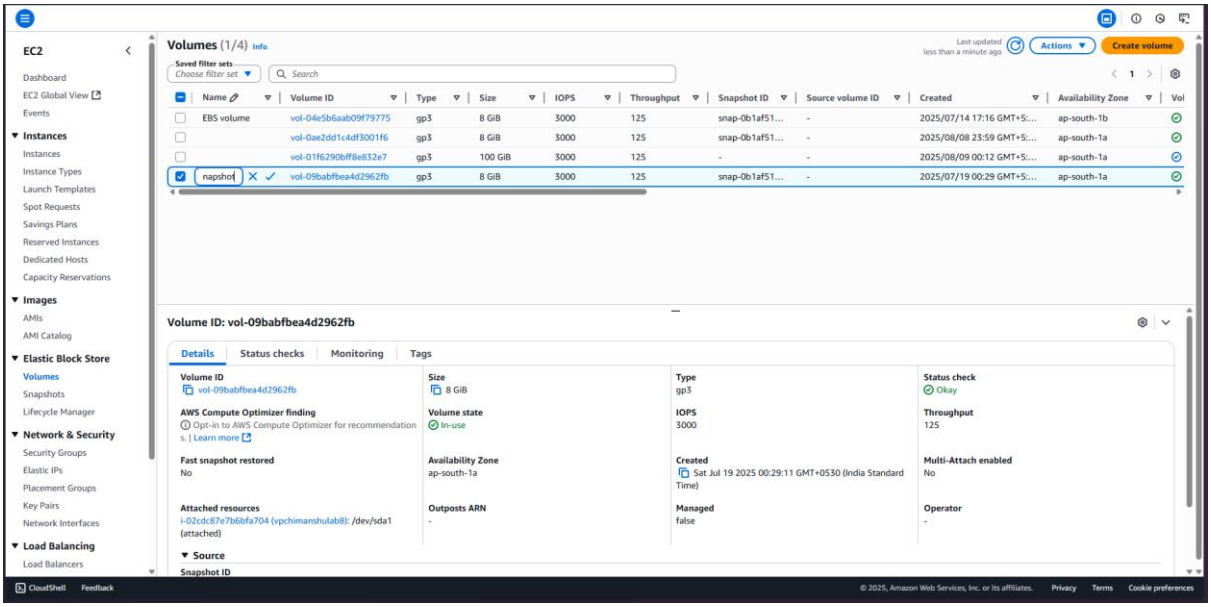

xxviii) NOW GO TO SNAPSHOT>CLICK ON THE SNAPSHOT THAT YOU HAVE CREATED>CLICK ON ACTIONS>CREATE VOLUME FROM SNAPSHOT



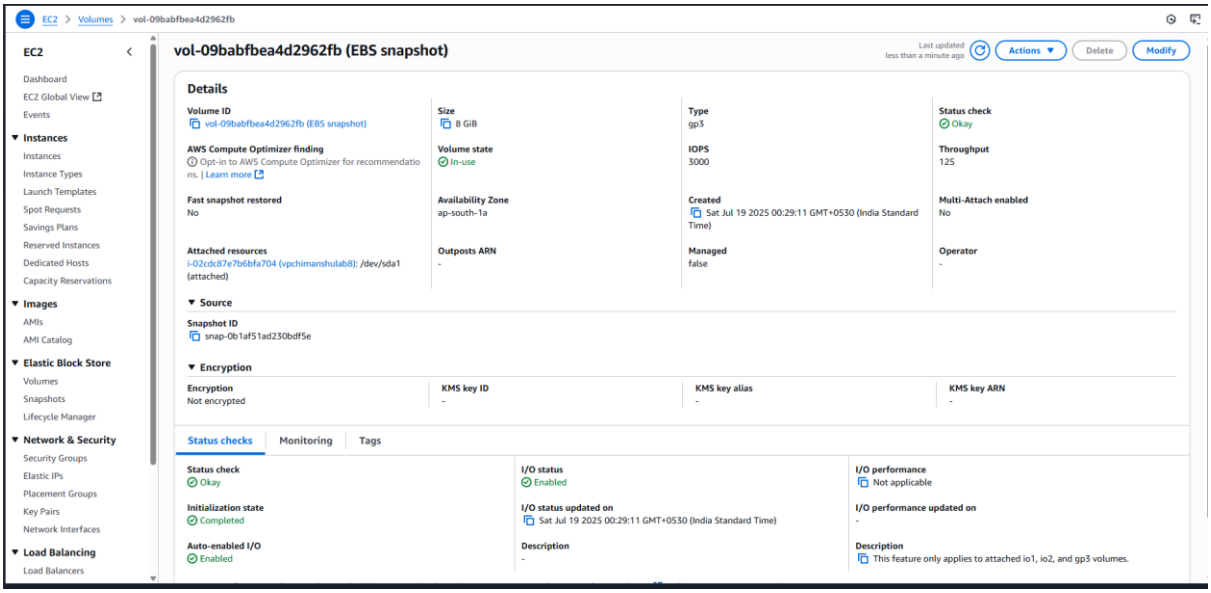

xxix) KEEP THE DATA SAME>CLICK ON TAG>GIVE A NAME>CLICK ON CREATE SNAPSHOT.



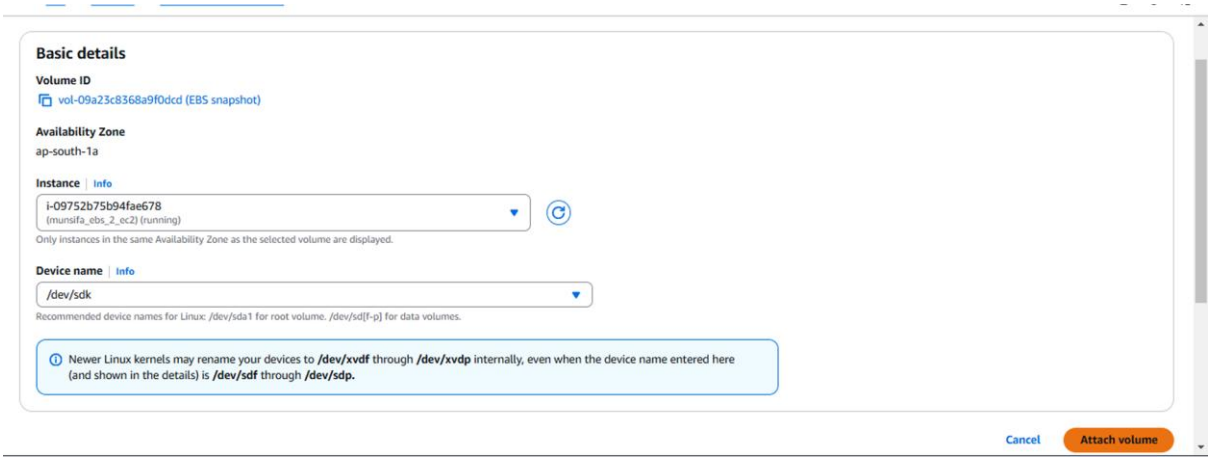
xxx) NOW GO TO VOLUME>MODIFY THE VOLUME NAME



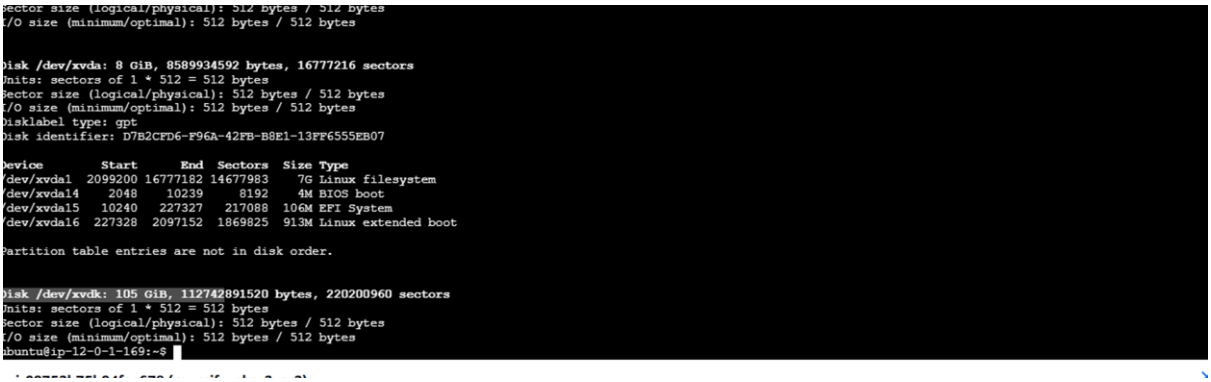

xxxi) CLICK ON THE VOLUME>CLICK ON ACTION>CLICK ON ATTACH VOLUME



xxxii) SELECT EC2 INSTANCE>SELECT sdk IN DEVICE>CLICK ON ATTACH VOLUME



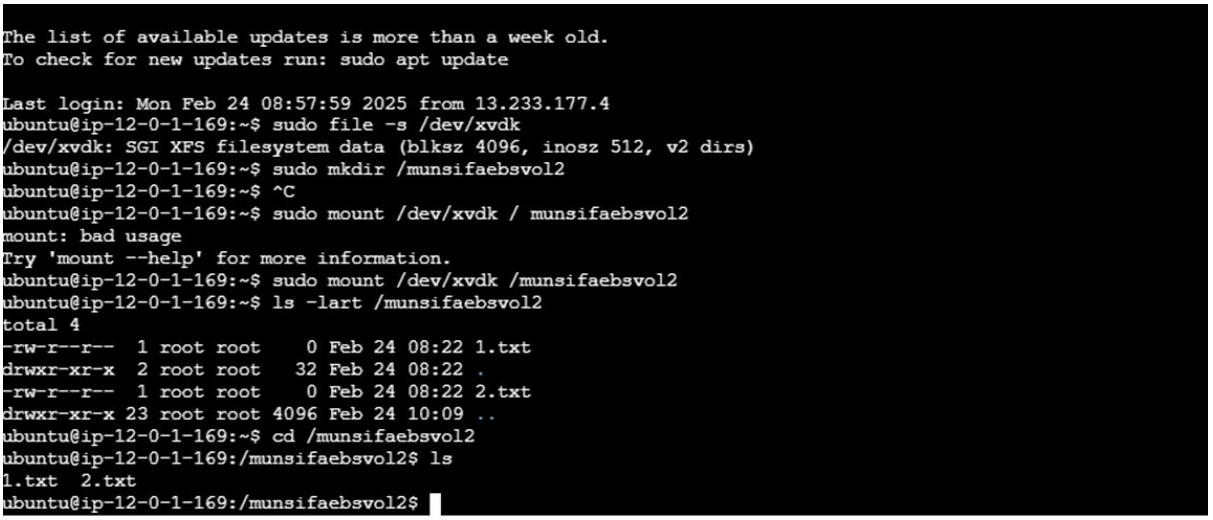

xxxiii) GO TO EC2 TERMINAL>TYPE sudo fdisk -l TO CHECK WHETHER THE NEW VOLUME IS ADDED OR NOT. 105G IS ADDED AS SHOWN BELOW




xxxiv) NOW CHECK WHETHER FILE SYSTEM IS ATTACHED OR NOT. TYPE sudo file -s /dev/xvdk

xxxv) NOW CREATE A DIRECTORY: a. TYPE sudo mkdir /munsifaebsvol2 b. MOUNT THE FILE, TYPE sudo mount /dev/xvdk /munsifaebsvol2 c. TYPE ls -lart /munsifaebsvol2


xxxvi) NOW YOU CAN CHECK IN BOTH EC2 INSTANCES, FILE1 AND FILE2 IS PRESENT a. TYPE ls (EC2 1) b. TYPE cd \munsifaebsvol2 > ls (EC2 2)




xxxvii) IF YOU CREATE ANOTHER FILE IN FIRST EC2 INSTANCE, IT WILL NOT REFLECT IN THE SECOND EC2 INSTANCE. a. TYPE sudo touch 3.txt in FIRST EC2 INSTANCE b. CHECK WITH ls (FIRST EC2 INSTANCE-IT WILL DISPLAY ALL THE THREE TEXT TILES.) c. TYPE ls in SECOND EC2 INSTANCE (IT WILL ONLY DISPLAY TWO TEXT FILES)