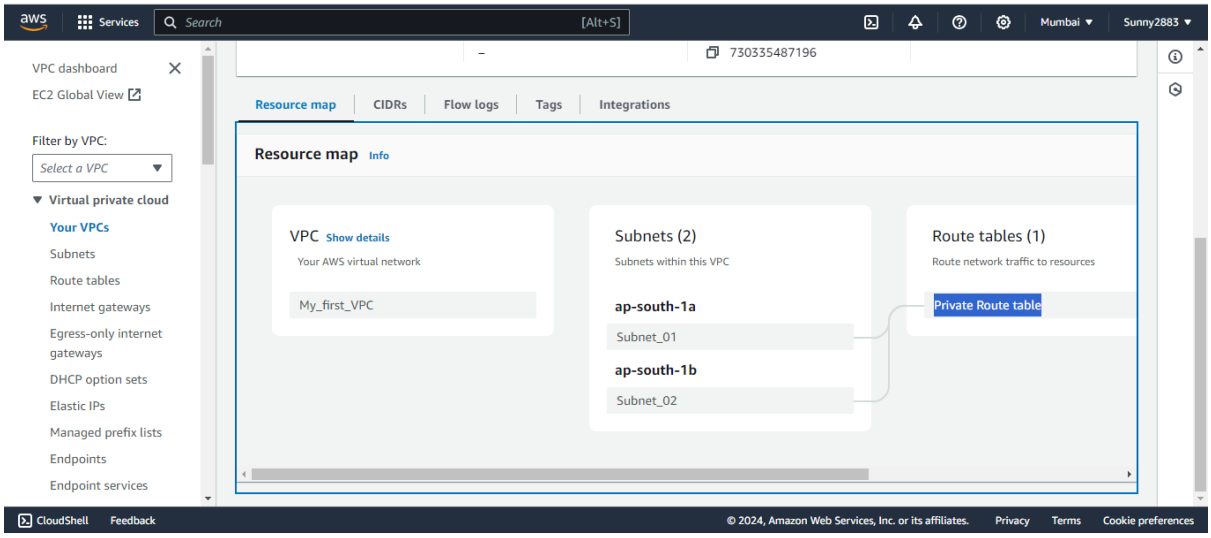
Assignment VPC

Task:2

Subnet Configuration:

Configure one subnet as a public subnet and the other as a private subnet.

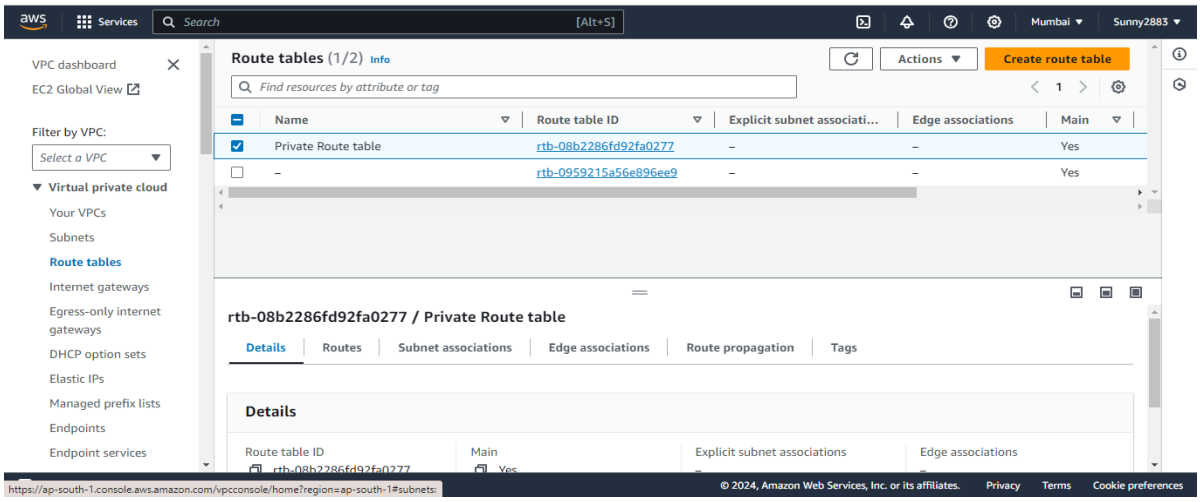
In Task One, I successfully established "My_first_VPC," a Virtual Private Cloud on AWS. Within this VPC, I meticulously crafted two subnets – Subnet_01 and Subnet_02. Both subnets are seamlessly integrated with a dedicated route table named "Private Route table.



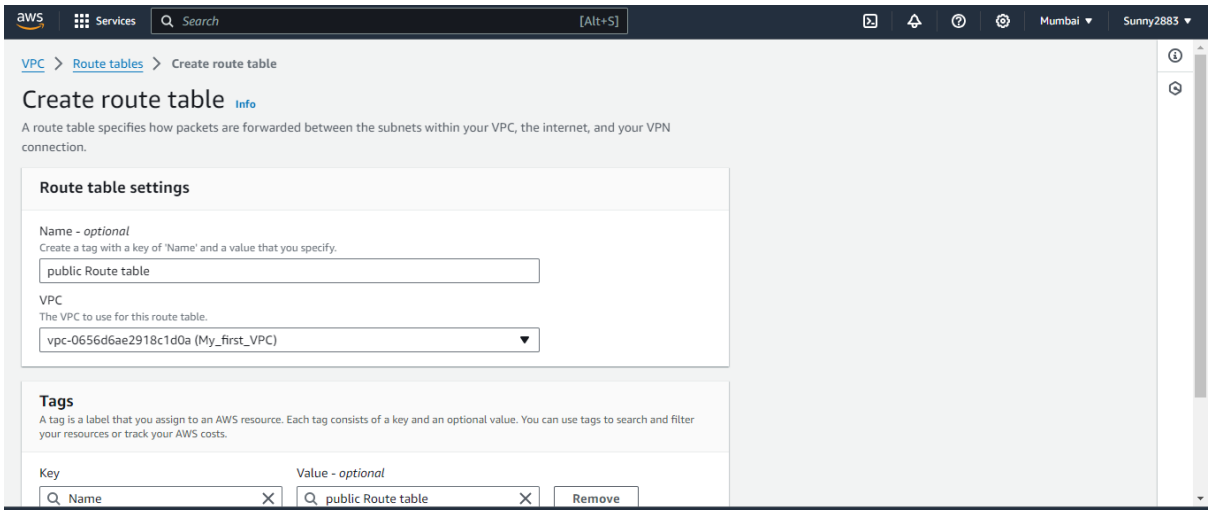
Private Route table

Let's Create one more route table and give the route table and attach with subnet_02 to Make it public .

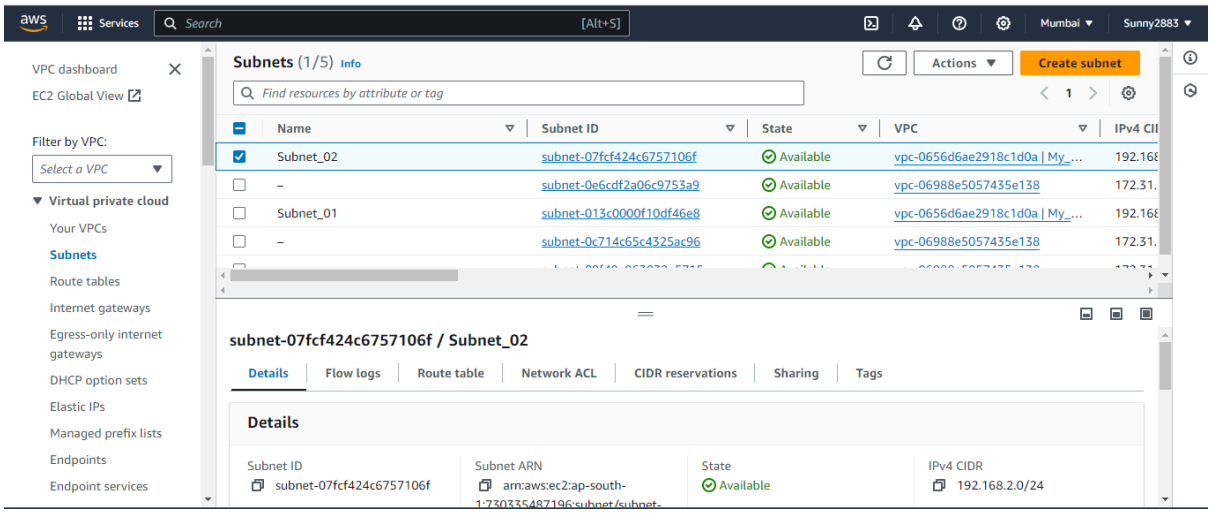
Step1:Create a route table.



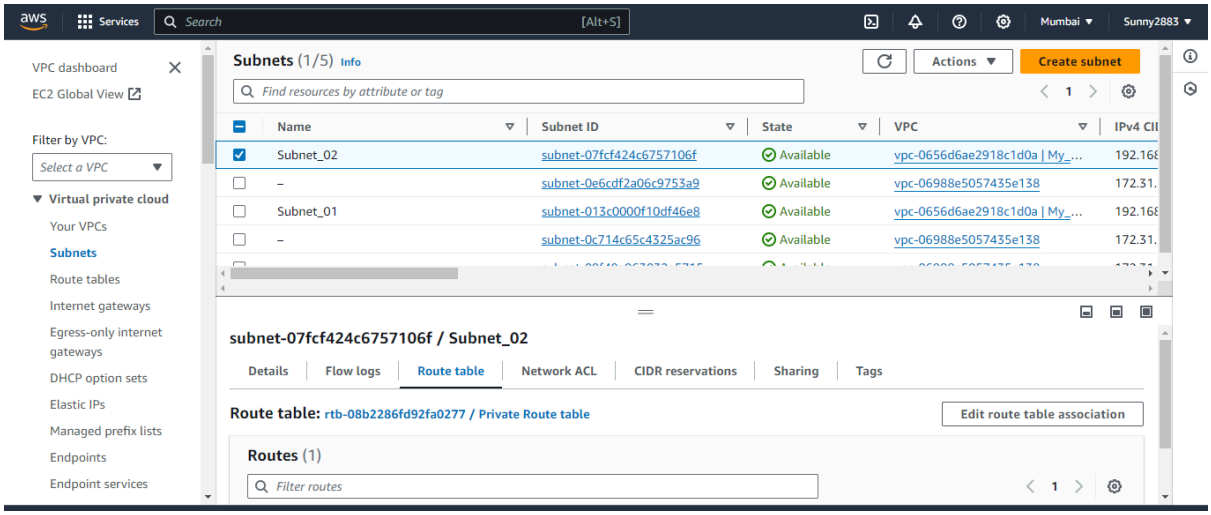
Step2: Go to the AWS VPC dashboard. On the left sidebar, click on "Route Tables."



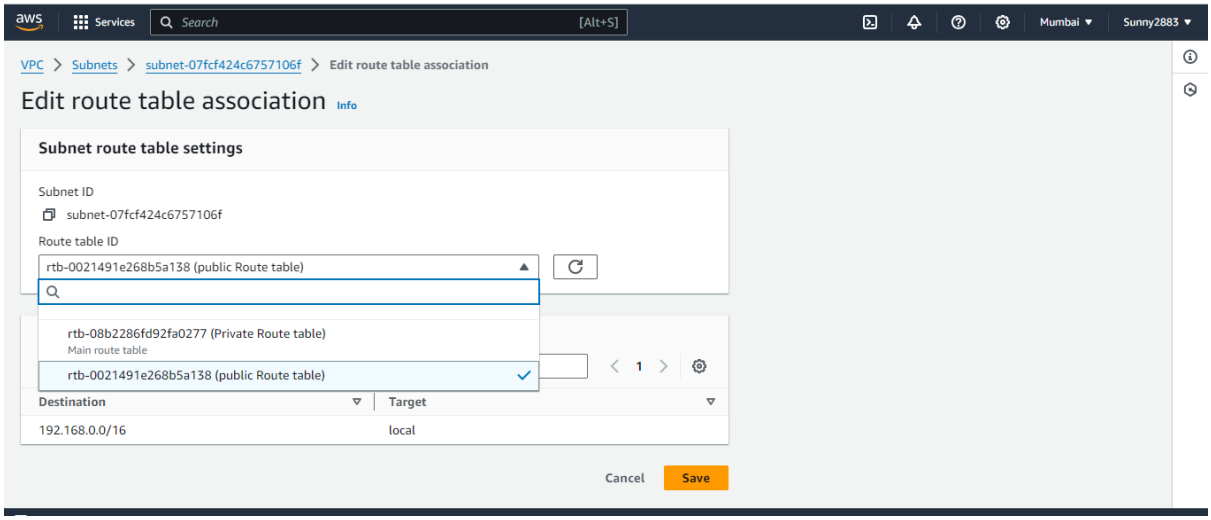
Step2: Click on the "Create Route Table" button.Enter a name for your route table.



Step3: Once the route table is created, select it from the list.In the "Routes" tab, click on "Edit routes.



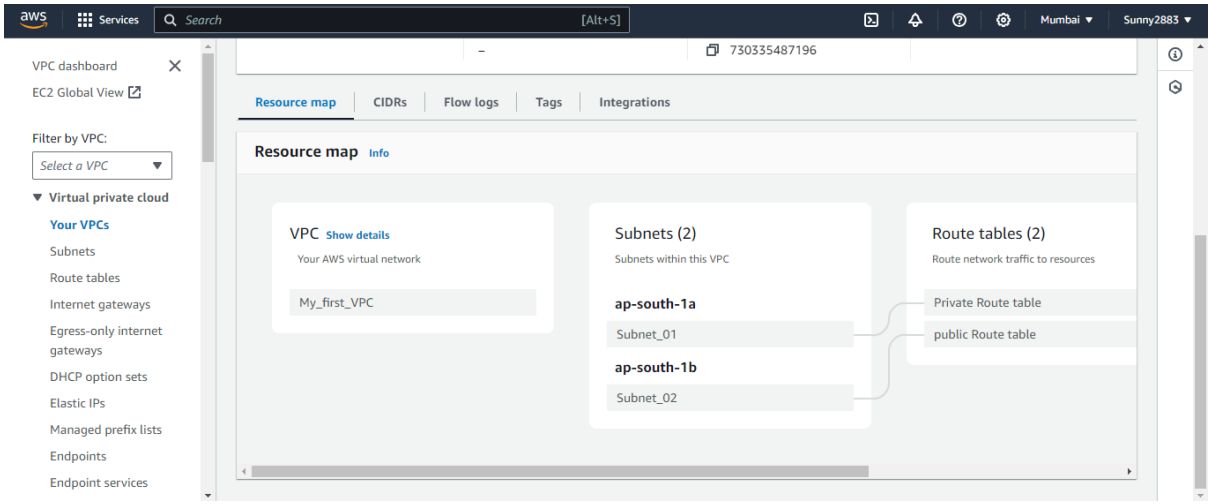
Step4: Change private route table to public route table and save the changes.



Now the both subnets are associated with two different route tables.

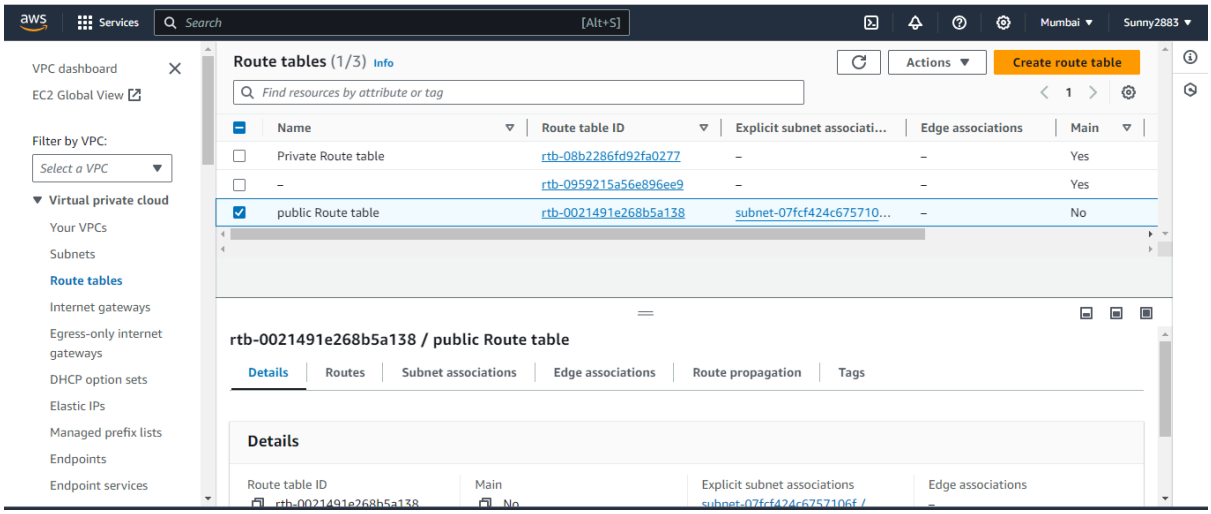
Subnet_01→ private route table. For (private Subnet)

Subnet_02→ public route table. For (Public Subnet)

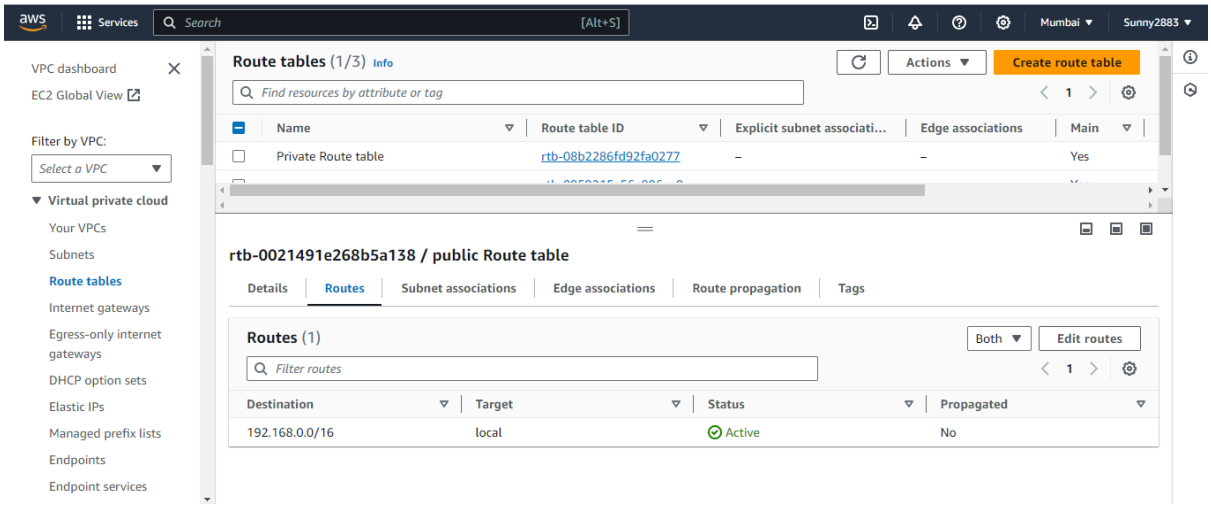


Now make the changes in to public route table.

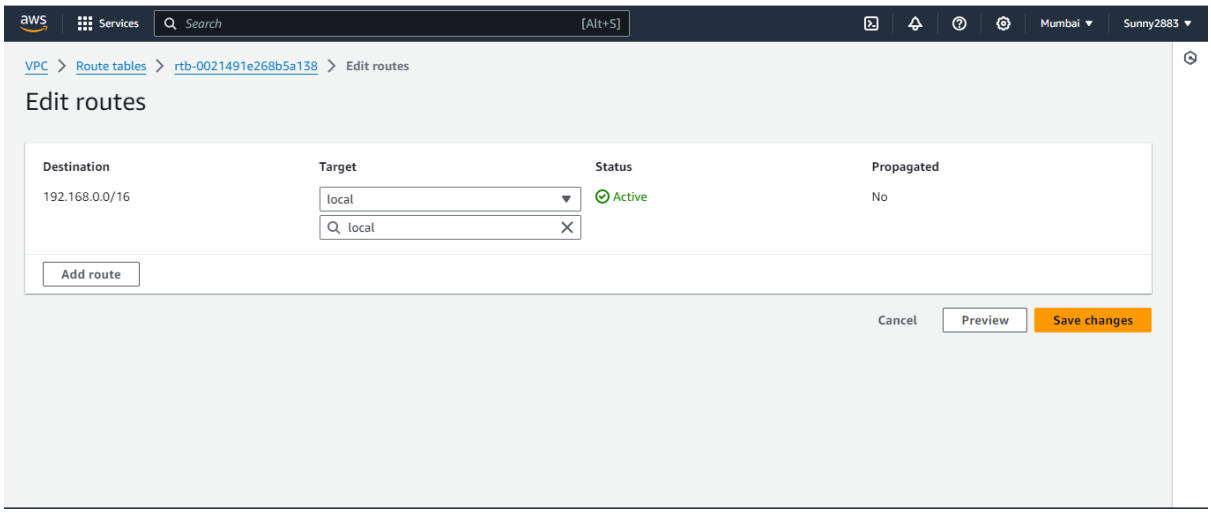
Step1: Goto Route Table and select public route table ;



Step2: In Public Route table Goto route and select edit route.



Step3: Select add route.

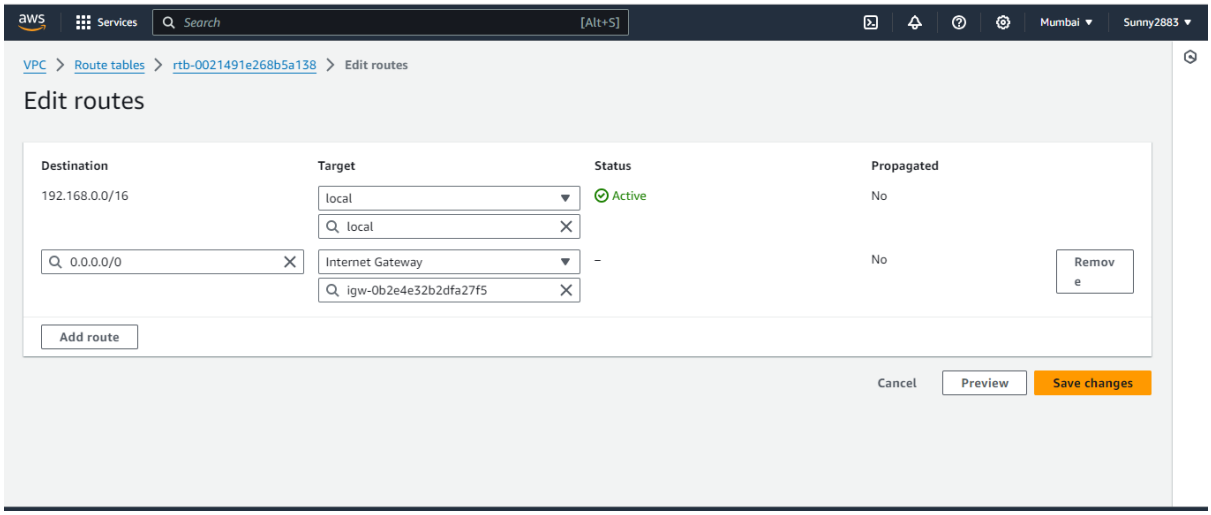


Step4: Make necessary changes to make it public .

Add 0.0.0.0/0 in Destination and select Internet Gateway and choose (igw-0b2e4e32b2dfa27f5 my_first_internet_gateway) and save the changes.

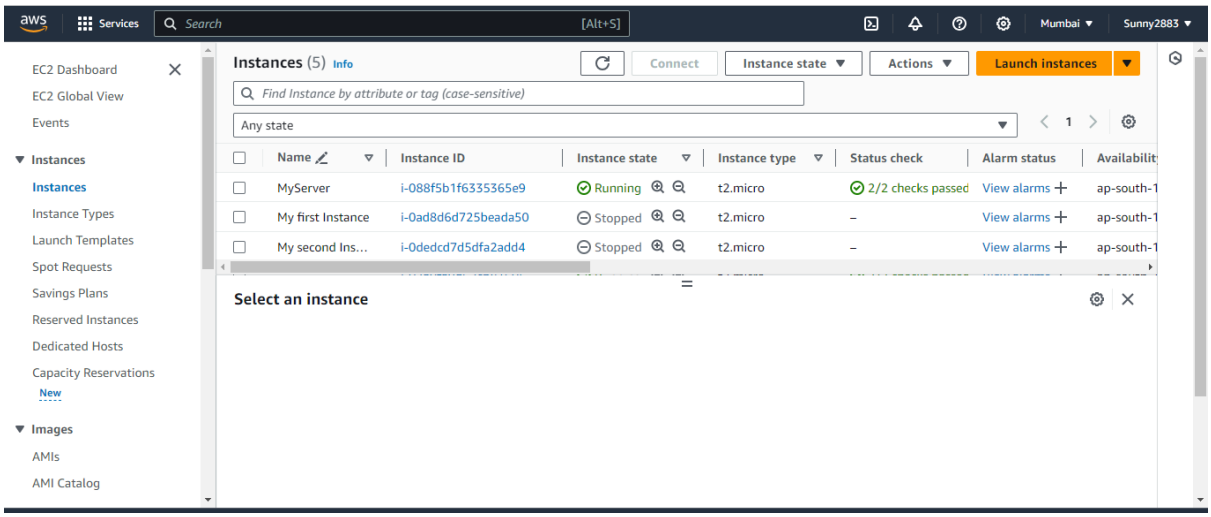
Destination--- 0.0.0.0/0

Target—Internet gateway (igw-0b2e4e32b2dfa27f5 my_first_internet_gateway)

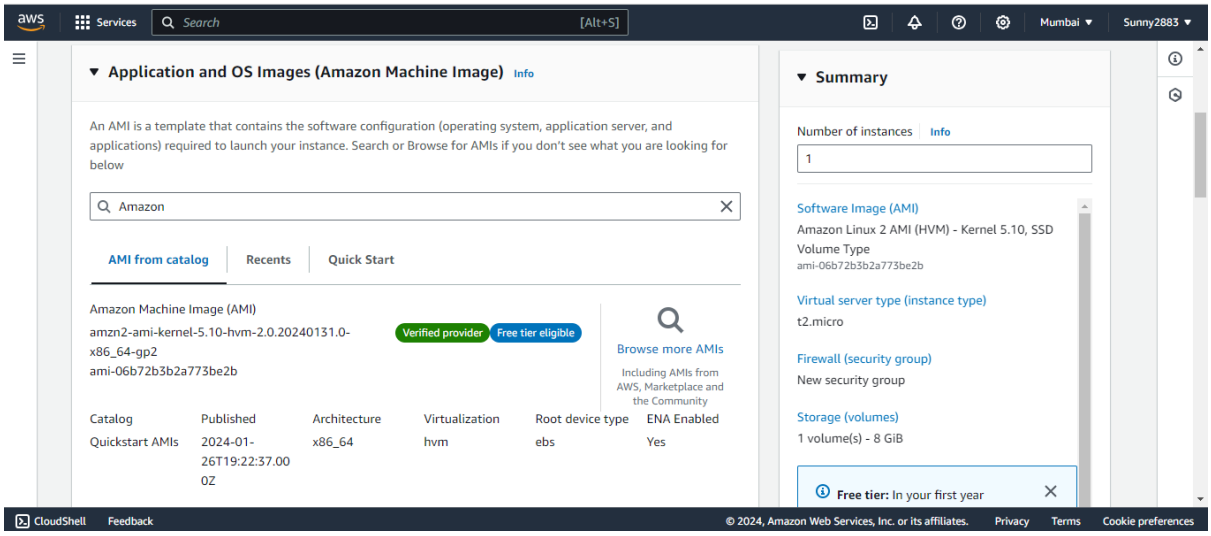


2. Launch an EC2 instance in each subnet. The EC2 instance in the public subnet should be reachable from the Internet.

Step1: Go to the EC2 dashboard. Click on the "Launch Instance" button.

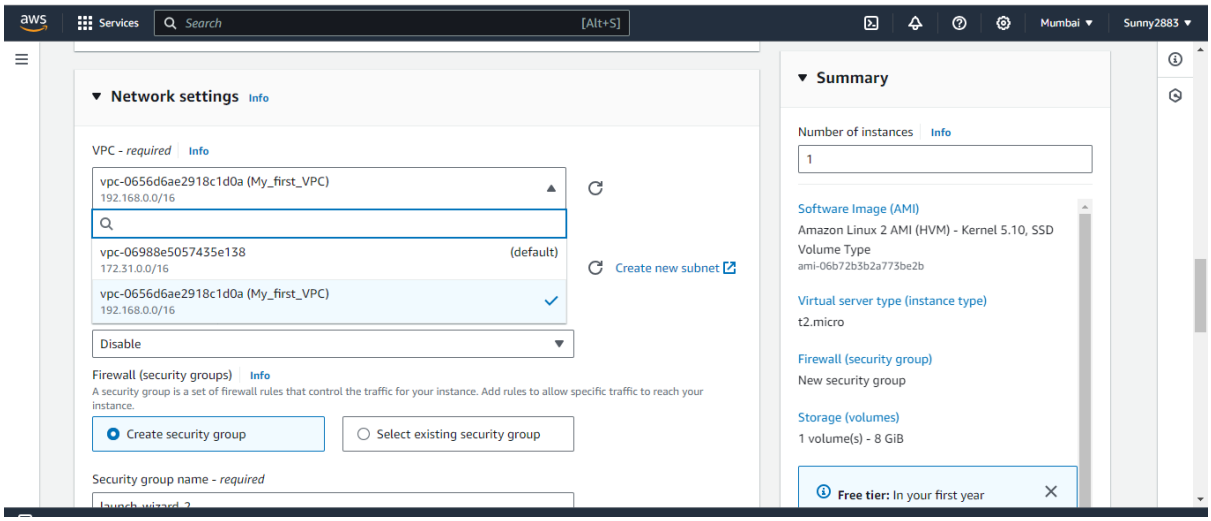


Step2: Choose an Amazon Machine Image (AMI) and select the instance type.



Step3: Configure instance details:

VPC: vpc-0656d6ae2918c1d0a (My_first_VPC)



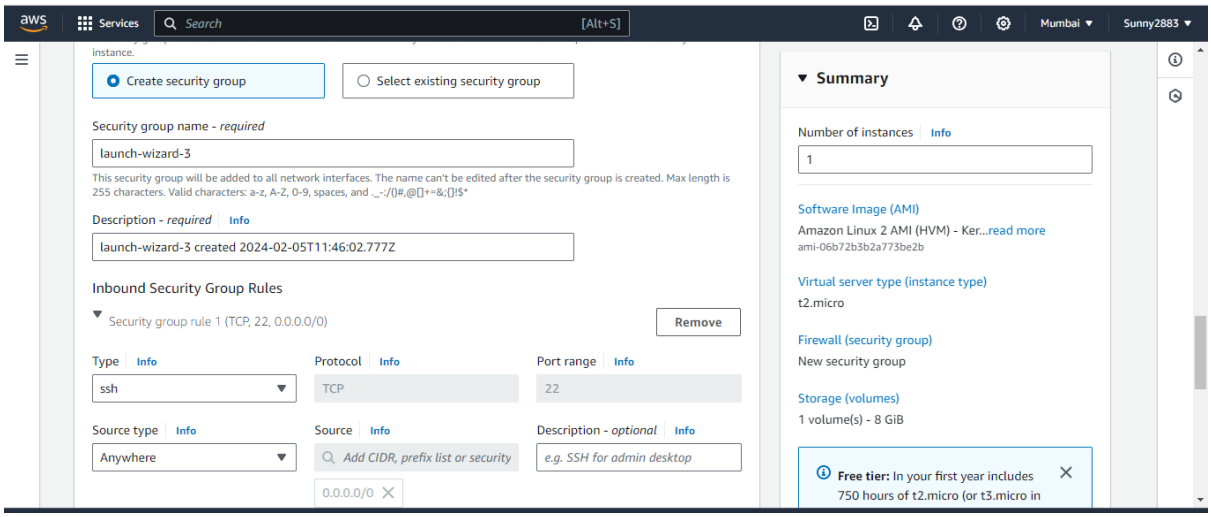
Step4: Select Subnet.

Subnet: Subnet_01.

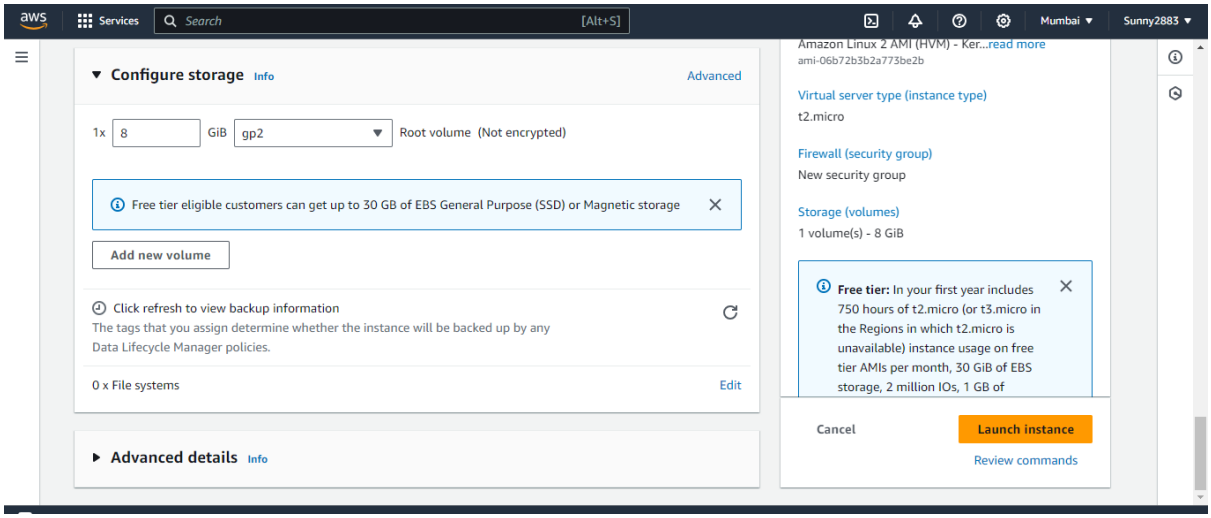
Security group: Create Security Group.

Type: SSH

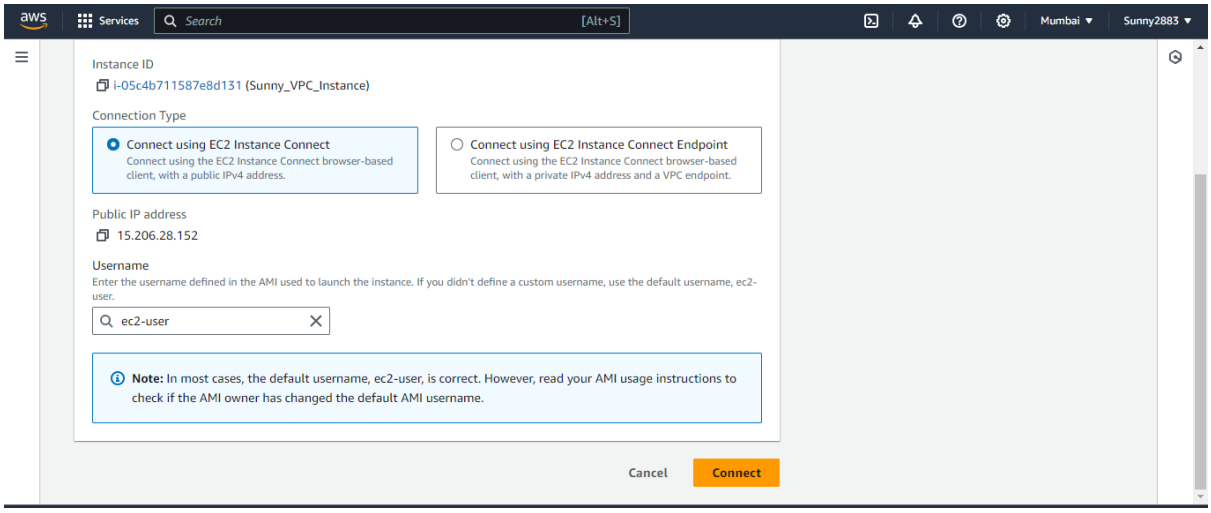
Source type: Anywhere



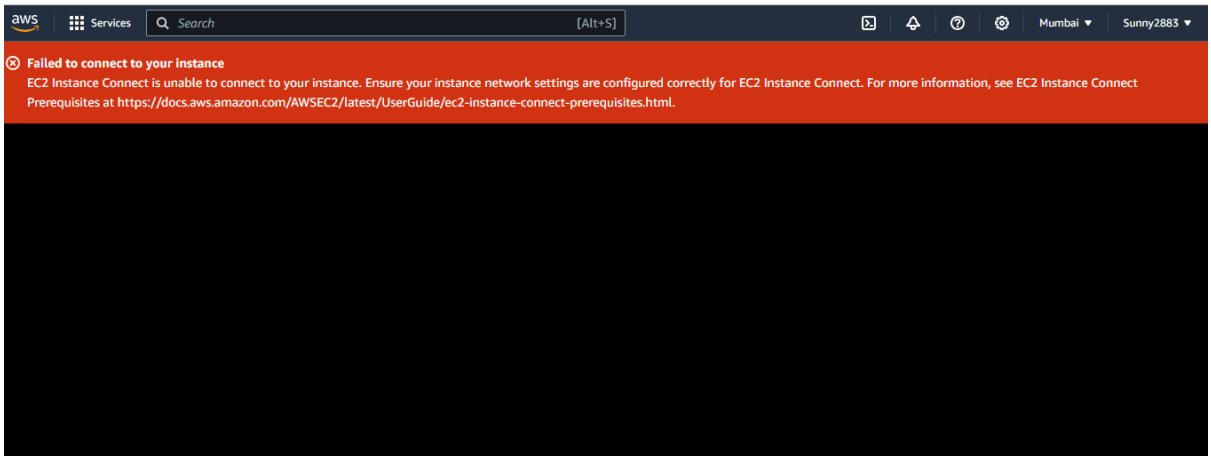
Step5: Review and launch the instance.



Step6: Let’s try to Connect to the enstance.



Step7: We are unable to connect to the instance.



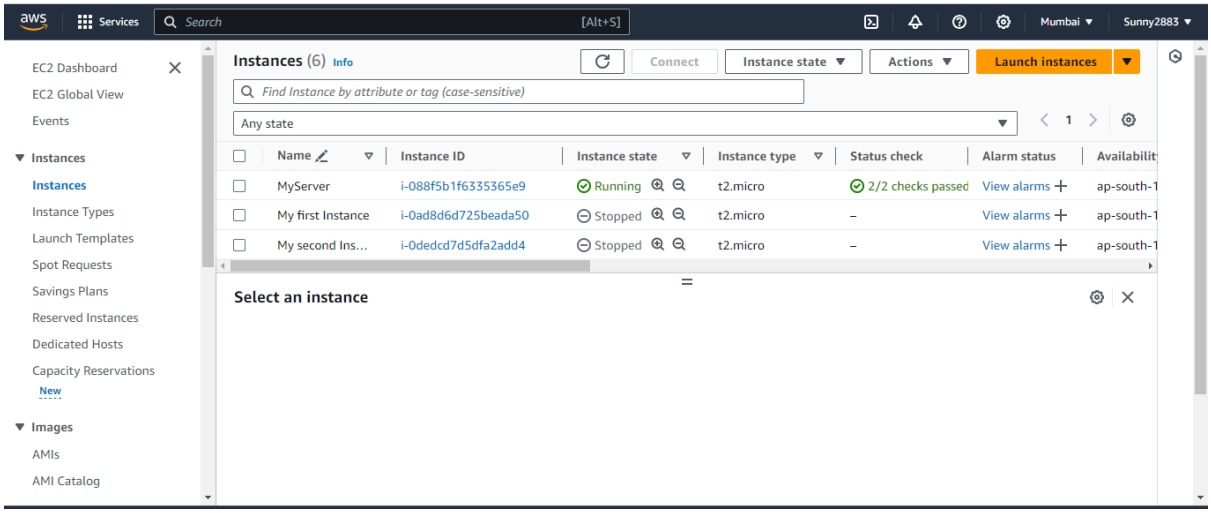
Instance link with private subnet.

Link:https://ap-south-1.console.aws.amazon.com/ec2-instance-connect/ssh?region=ap-south-1&connType=standard&instanceId=i-05c4b711587e8d131&osUser=ec2-user&sshPort=22#/

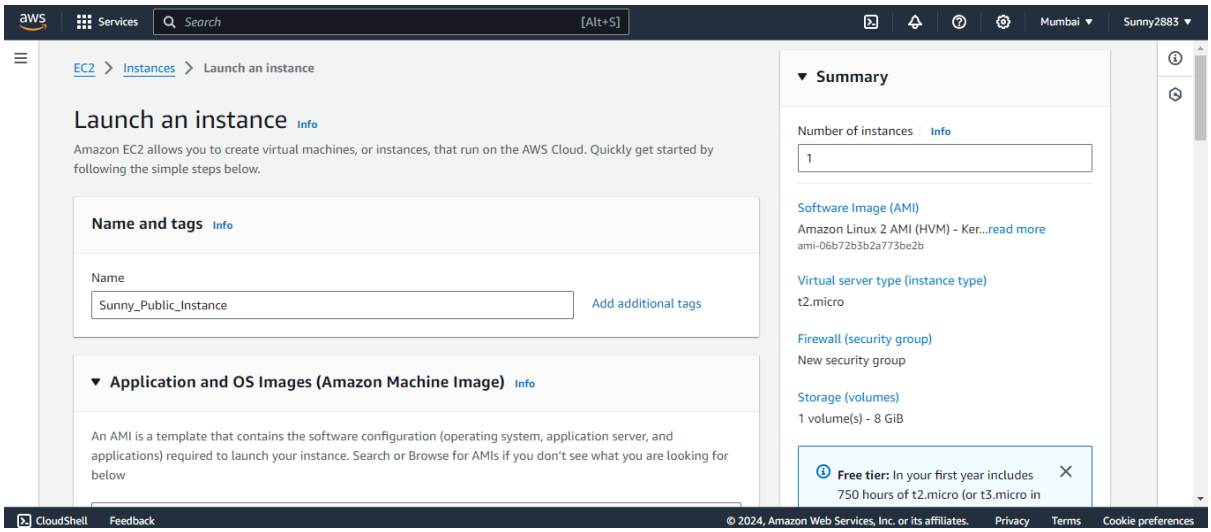
Public Subnet:

Create an instance with public subnet.

Step1: Go to the EC2 dashboard. Click on the "Launch Instance" button.



Step2: Choose an Amazon Machine Image (AMI) and select the instance type.



Step3: Configure instance details:

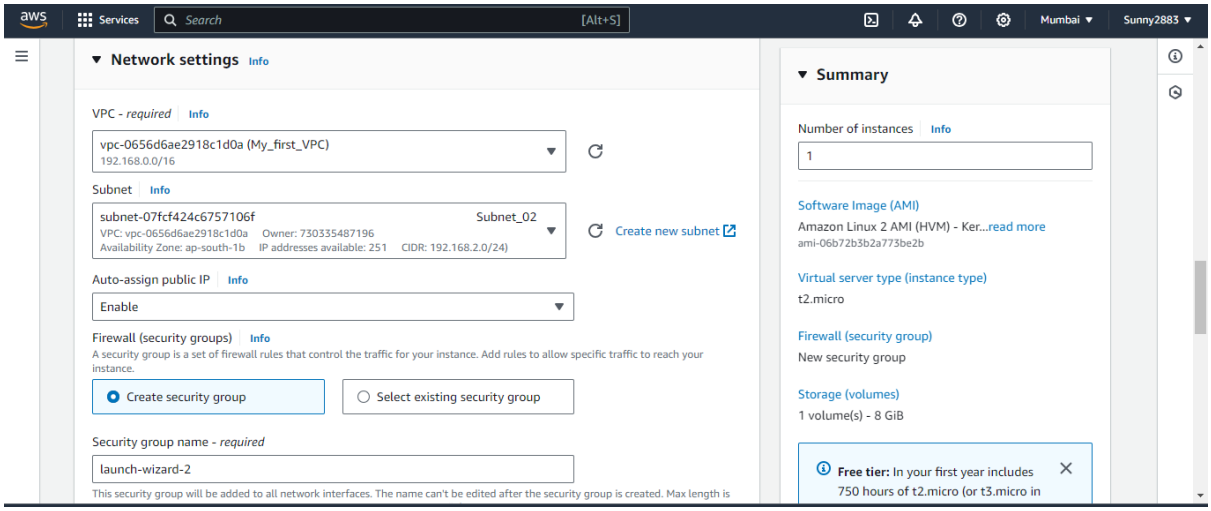
Select the "My_first_VPC" VPC.

Choose the "Subnet_02" public subnet.

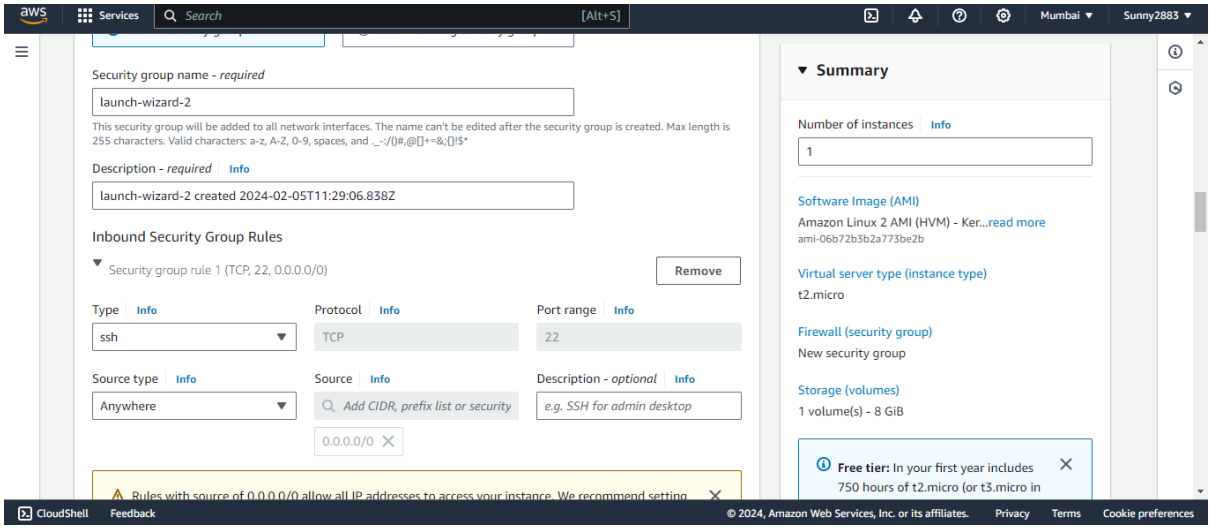
Enable "Auto-assign Public IP" to allow the instance to be reachable from the internet.

VPC: vpc-0656d6ae2918c1d0a (My_first_VPC)

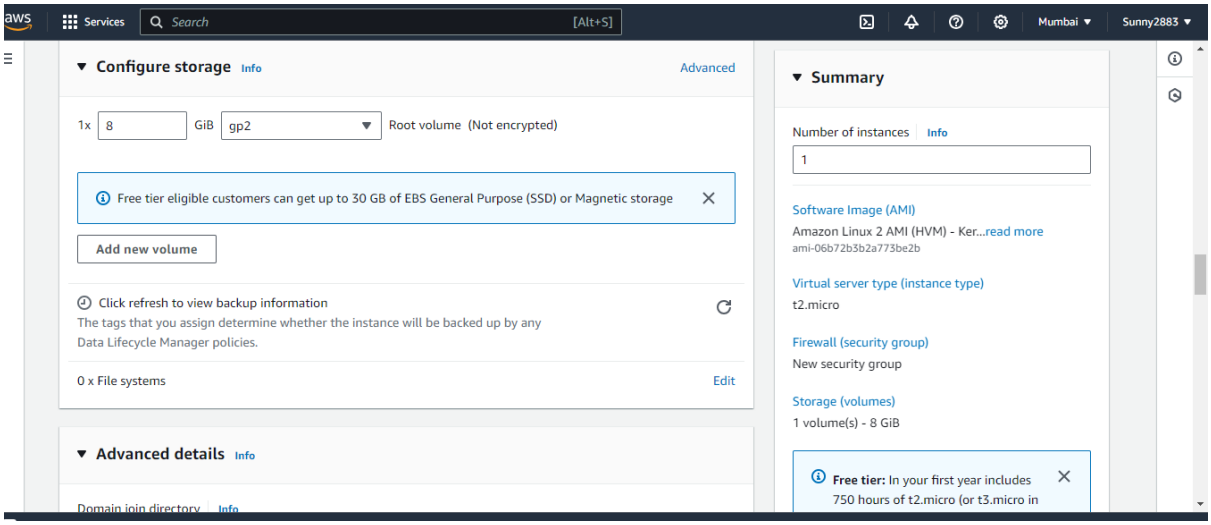
Subnet: Subnet_02



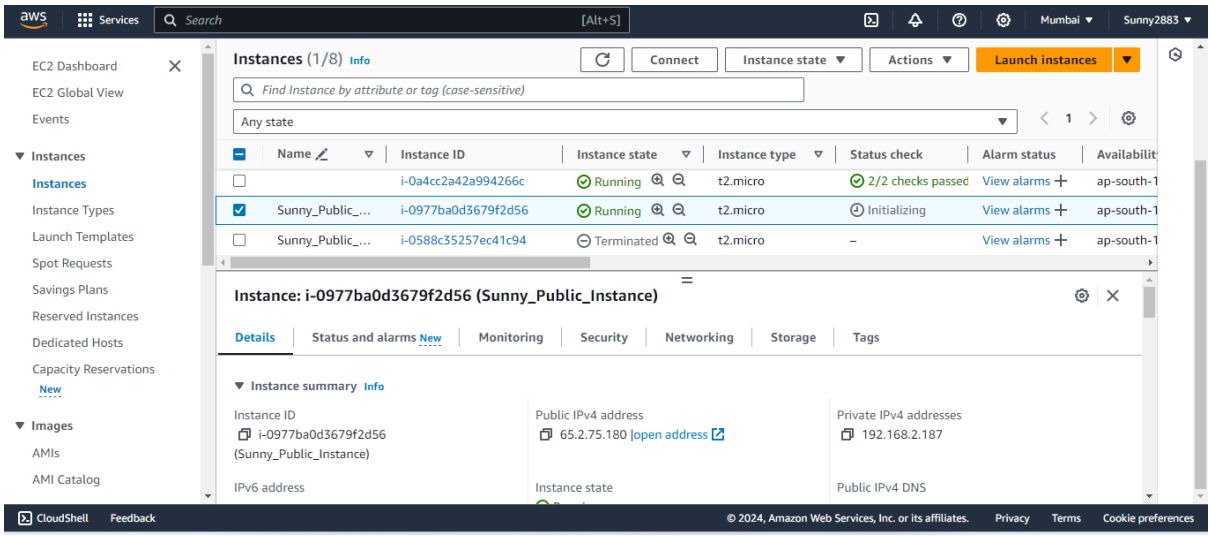
Step4: Add storage, configure tags, and define security groups.



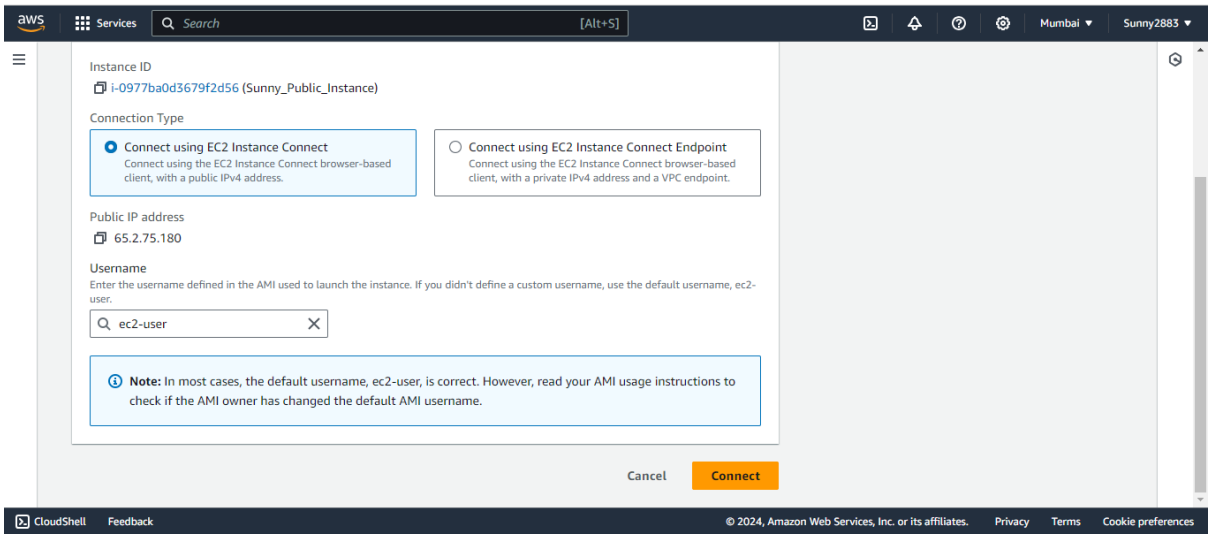
Step5: Review and launch the instance.



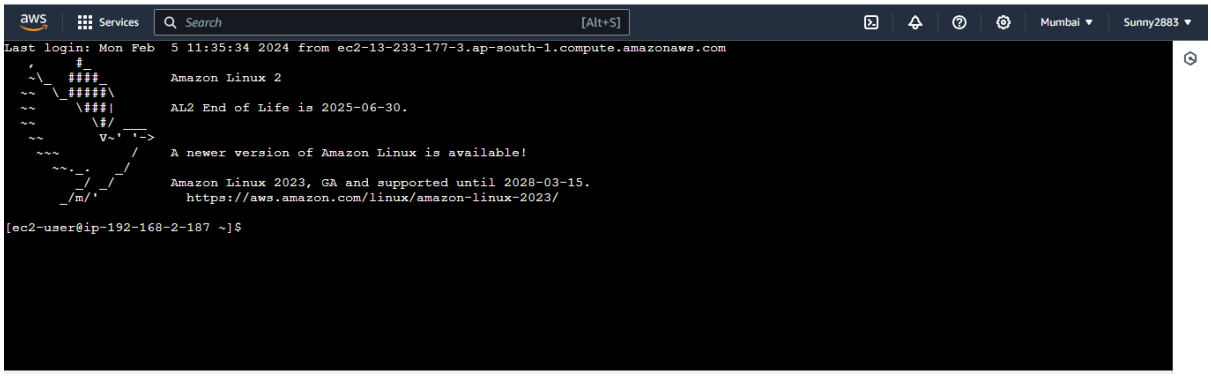
Step6: Once the instances are running, note the public IP of the EC2 instance in the public subnet.

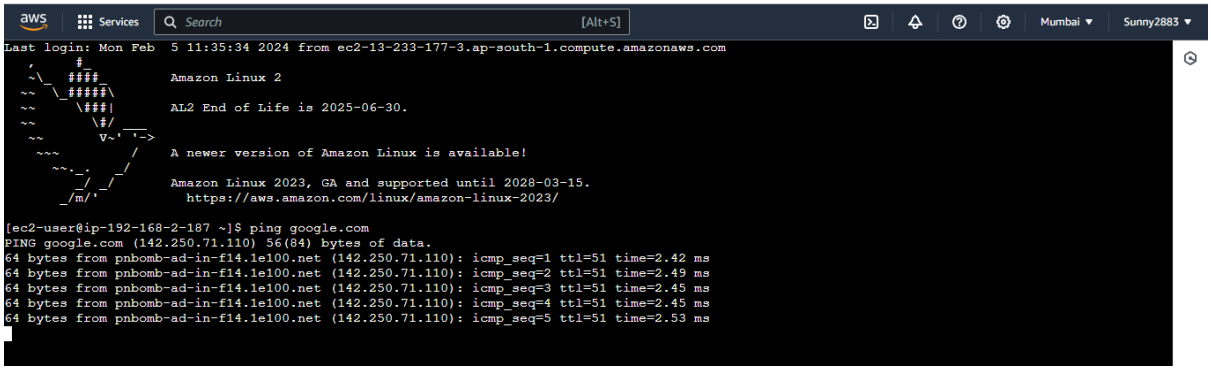


Step7: Connect using EC2 instance connect.



Step8: From the public EC2 instance, run commands like ping or curl to verify internet connectivity.





Link of EC2 Instance with public Subnet

Link:https://ap-south-1.console.aws.amazon.com/ec2-instance-connect/ssh?region=ap-south-1&connType=standard&instanceId=i-0977ba0d3679f2d56&osUser=ec2-user&sshPort=22#/

Ap-south-1b connected to internet gateway(my_first_internet_gateway)