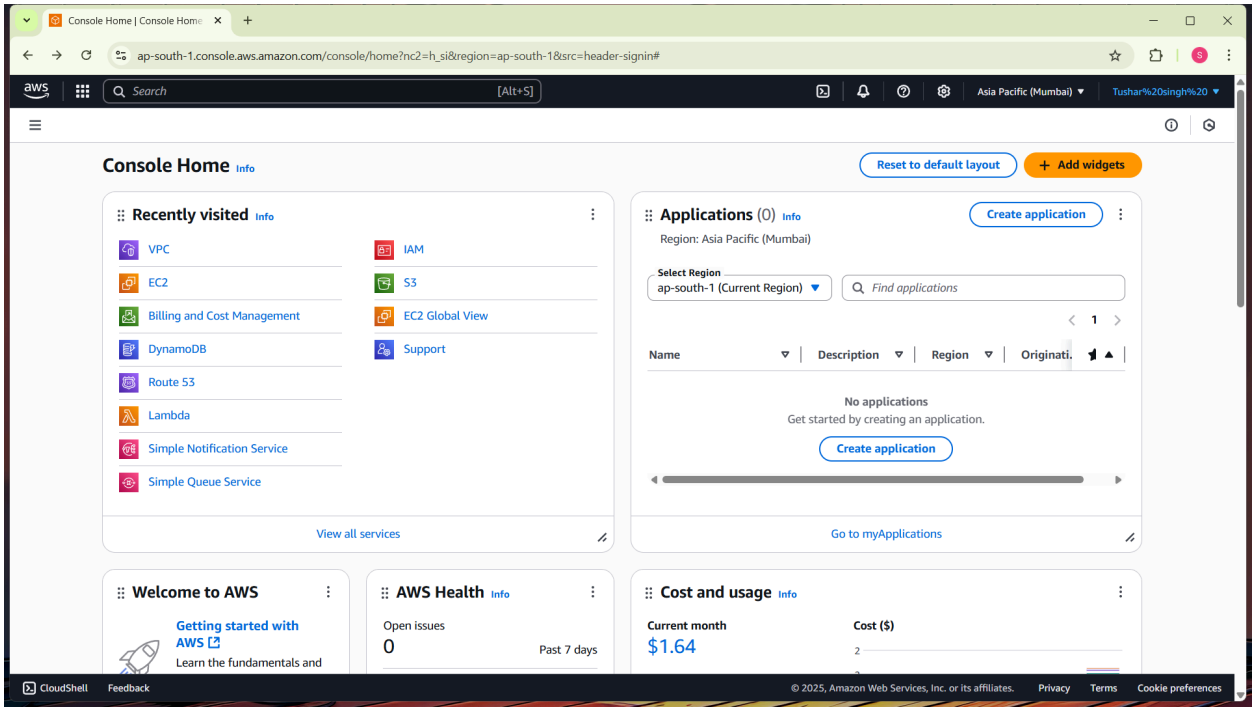
AWS PROJECT-3

VPC (VIRTUAL PRIVATE CLOUD)

INTRODUCTION:
An Amazon Virtual Private Cloud (VPC) is a logically isolated section of the AWS cloud where you can launch AWS resources within a virtual network you define. It provides a way to customize your networking environment, including IP address ranges, subnets, route tables, and network gateways, essentially giving you control over your virtual network similar to a traditional data center.

HOW TO CREAT VPC:

STEP 1:


Console Home | Console Home
ap-south-1.console.aws.amazon.com/console/home?nc2=h_si&region=ap-south-1&src=header-signin#
Search
[Alt+S]
Asia Pacific (Mumbai)
Tushar%20singh%20
Console Home Info
Reset to default layout
+ Add widgets
Recently visited Info
VPC
IAM
EC2
S3
Billing and Cost Management
EC2 Global View
DynamoDB
Support
Route 53
Lambda
Simple Notification Service
Simple Queue Service
View all services
Applications (0) Info
Create application
Region: Asia Pacific (Mumbai)
Select Region
ap-south-1 (Current Region)
Find applications
Name
Description
Region
Originati.
No applications
Get started by creating an application.
Create application
Go to myApplications
Welcome to AWS
Getting started with AWS
Learn the fundamentals and
AWS Health Info
Open issues
0
Past 7 days
Cost and usage Info
Current month
$1.64
Cost ($)
CloudShell
Feedback
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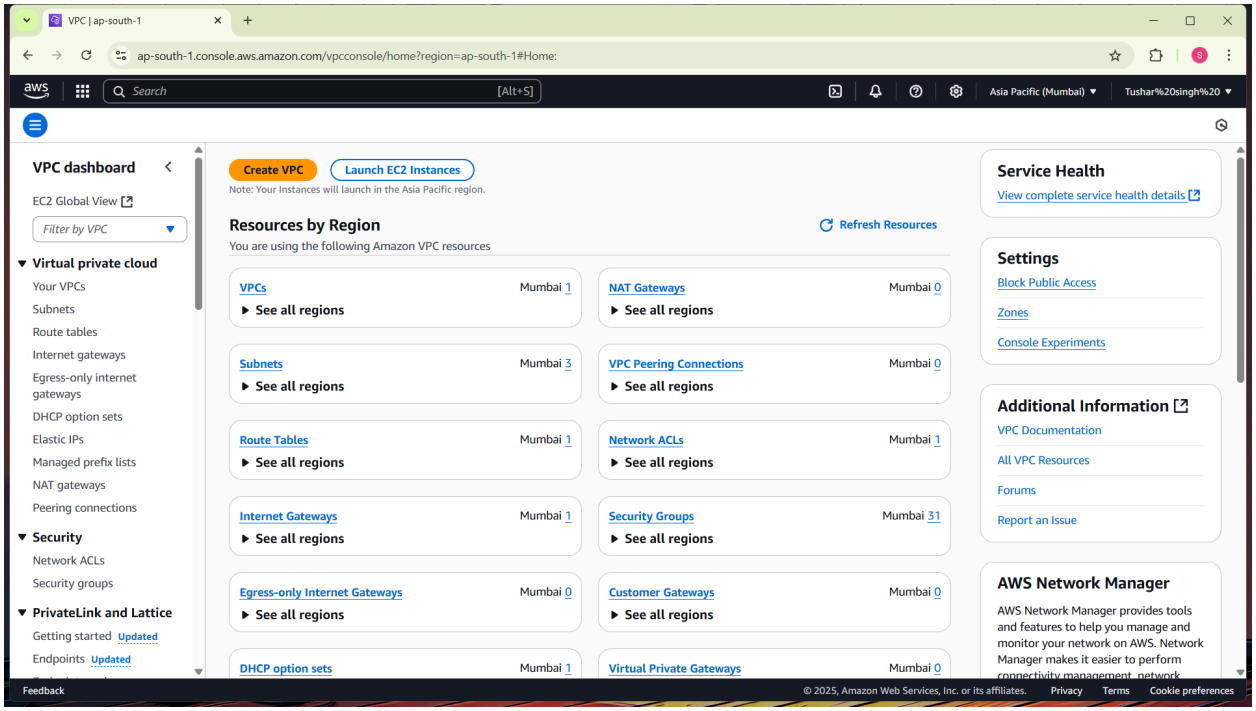
Privacy
Terms
Cookie preferences

STEP2:


VPC | ap-south-1
ap-south-1.console.aws.amazon.com/vpcconsole/home?region=ap-south-1#Home:
Search
[Alt+S]
Asia Pacific (Mumbai)
Tushar%20singh%20
VPC dashboard
EC2 Global View
Filter by VPC
Virtual private cloud
Your VPCs
Subnets
Route tables
Internet gateways
Egress-only internet gateways
DHCP option sets
Elastic IPs
Managed prefix lists
NAT gateways
Peering connections
Security
Network ACLs
Security groups
PrivateLink and Lattice
Getting started Updated
Endpoints Updated
Create VPC
Launch EC2 Instances
Note: Your Instances will launch in the Asia Pacific region.
Resources by Region
Refresh Resources
You are using the following Amazon VPC resources
VPCs Mumbai 1
See all regions
NAT Gateways Mumbai 0
See all regions
Subnets Mumbai 3
See all regions
VPC Peering Connections Mumbai 0
See all regions
Route Tables Mumbai 1
See all regions
Network ACLs Mumbai 1
See all regions
Internet Gateways Mumbai 1
See all regions
Security Groups Mumbai 31
See all regions
Egress-only Internet Gateways Mumbai 0
See all regions
Customer Gateways Mumbai 0
See all regions
DHCP option sets Mumbai 1
Virtual Private Gateways Mumbai 0
Service Health
View complete service health details
Settings
Block Public Access
Zones
Console Experiments
Additional Information
VPC Documentation
All VPC Resources
Forums
Report an Issue
AWS Network Manager
AWS Network Manager provides tools and features to help you manage and monitor your network on AWS. Network Manager makes it easier to perform
Feedback
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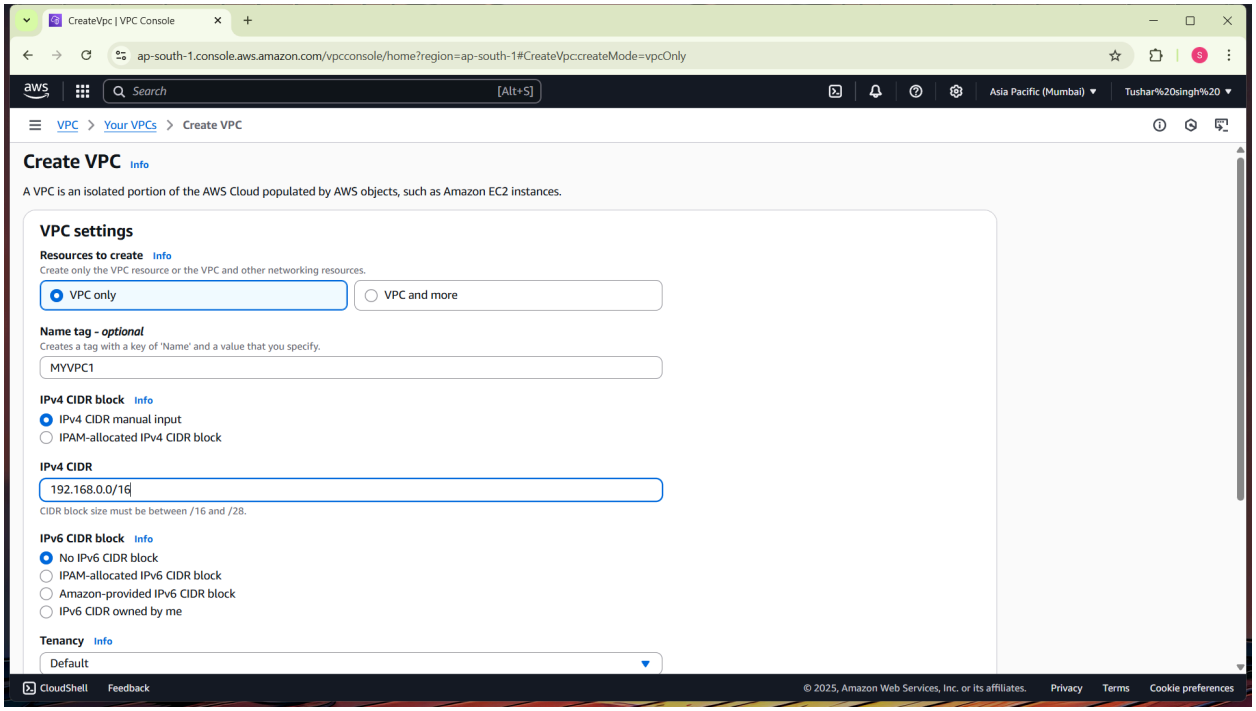
Cookie preferences

STEP3:


CreateVpc | VPC Console
ap-south-1.console.aws.amazon.com/vpcconsole/home?region=ap-south-1#CreateVpc:createMode=vpcOnly
Search
[Alt+S]
Asia Pacific (Mumbai)
Tushar%20singh%20
VPC > Your VPCs > Create VPC
Create VPC Info
A VPC is an isolated portion of the AWS Cloud populated by AWS objects, such as Amazon EC2 instances.
VPC settings
Resources to create Info
Create only the VPC resource or the VPC and other networking resources.
VPC only
VPC and more
Name tag - optional
Creates a tag with a key of 'Name' and a value that you specify.
MYVPC1
IPv4 CIDR block Info
IPv4 CIDR manual input
IPAM-allocated IPv4 CIDR block
IPv4 CIDR
192.168.0.0/16
CIDR block size must be between /16 and /28.
IPv6 CIDR block Info
No IPv6 CIDR block
IPAM-allocated IPv6 CIDR block
Amazon-provided IPv6 CIDR block
IPv6 CIDR owned by me
Tenancy Info
Default
CloudShell
Feedback
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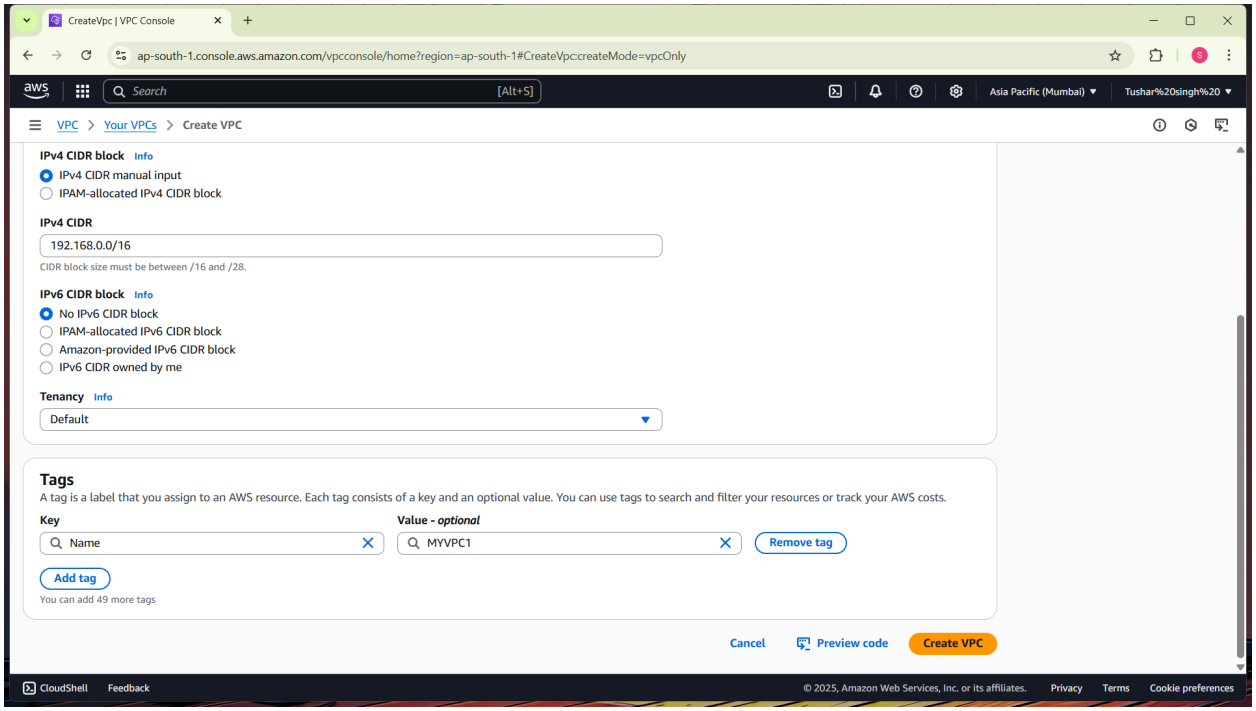
STEP4:


CreateVpc | VPC Console
ap-south-1.console.aws.amazon.com/vpcconsole/home?region=ap-south-1#CreateVpc:createMode=vpcOnly
Search
[Alt+S]
Asia Pacific (Mumbai)
Tushar%20singh%20
VPC > Your VPCs > Create VPC
IPv4 CIDR block Info
IPv4 CIDR manual input
IPAM-allocated IPv4 CIDR block
IPv4 CIDR
192.168.0.0/16
CIDR block size must be between /16 and /28.
IPv6 CIDR block Info
No IPv6 CIDR block
IPAM-allocated IPv6 CIDR block
Amazon-provided IPv6 CIDR block
IPv6 CIDR owned by me
Tenancy Info
Default
Tags
A tag is a label that you assign to an AWS resource. Each tag consists of a key and an optional value. You can use tags to search and filter your resources or track your AWS costs.
Key
Value - optional
Name
MYVPC1
Remove tag
Add tag
You can add 49 more tags
Cancel
Preview code
Create VPC
CloudShell
Feedback
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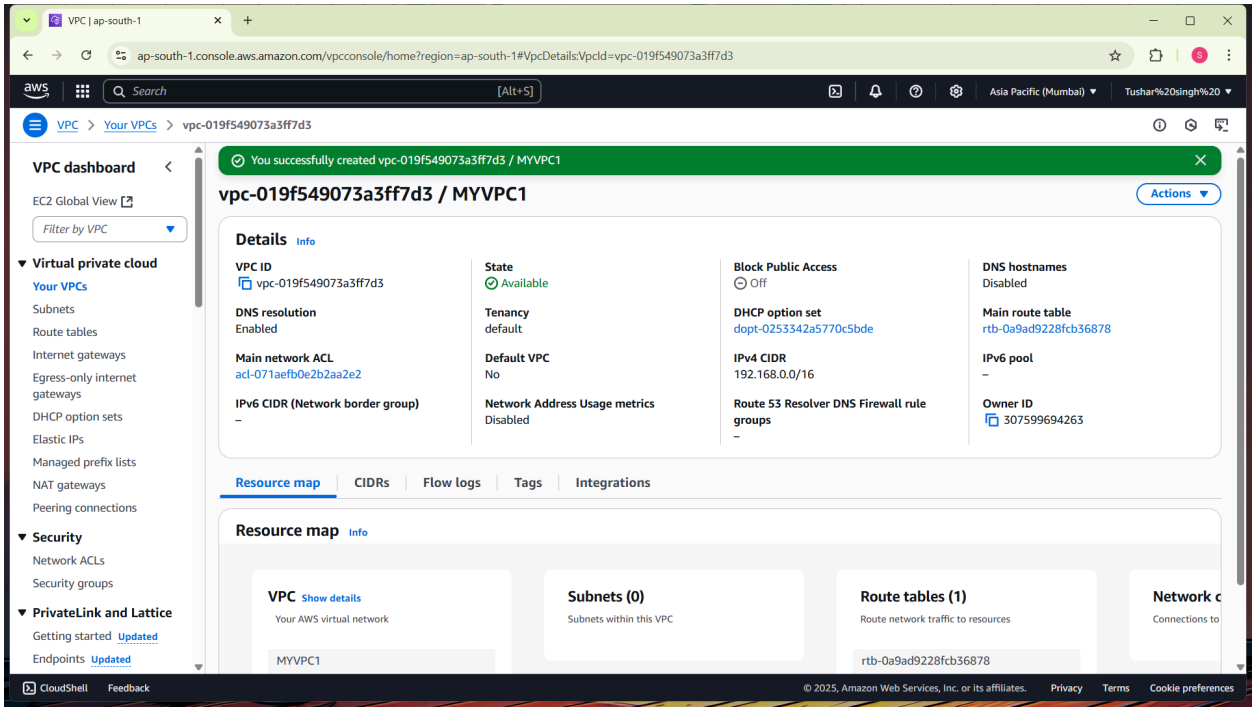
Cookie preferences

STEP5:


VPC | ap-south-1
ap-south-1.console.aws.amazon.com/vpcconsole/home?region=ap-south-1#VpcDetails:VpcId=vpc-019f549073a3ff7d3
Search [Alt+S]
Asia Pacific (Mumbai)
Tushar%20singh%20
VPC > Your VPCs > vpc-019f549073a3ff7d3
VPC dashboard
EC2 Global View
Filter by VPC
Virtual private cloud
Your VPCs
Subnets
Route tables
Internet gateways
Egress-only internet gateways
DHCP option sets
Elastic IPs
Managed prefix lists
NAT gateways
Peering connections
Security
Network ACLs
Security groups
PrivateLink and Lattice
Getting started Updated
Endpoints Updated
You successfully created vpc-019f549073a3ff7d3 / MYVPC1
vpc-019f549073a3ff7d3 / MYVPC1
Actions
Details Info
VPC ID
vpc-019f549073a3ff7d3
State
Available
Block Public Access
Off
DNS hostnames
Disabled
DNS resolution
Enabled
Tenancy
default
DHCP option set
dopt-0253342a5770c5bde
Main route table
rtb-0a9ad9228fcb36878
Main network ACL
acl-071aefb0e2b2aa2e2
Default VPC
No
IPv4 CIDR
192.168.0.0/16
IPv6 pool
–
IPv6 CIDR (Network border group)
–
Network Address Usage metrics
Disabled
Route 53 Resolver DNS Firewall rule groups
–
Owner ID
307599694263
Resource map
CIDRs
Flow logs
Tags
Integrations
Resource map Info
VPC Show details
Your AWS virtual network
MYVPC1
Subnets (0)
Subnets within this VPC
Route tables (1)
Route network traffic to resources
rtb-0a9ad9228fcb36878
CloudShell
Feedback
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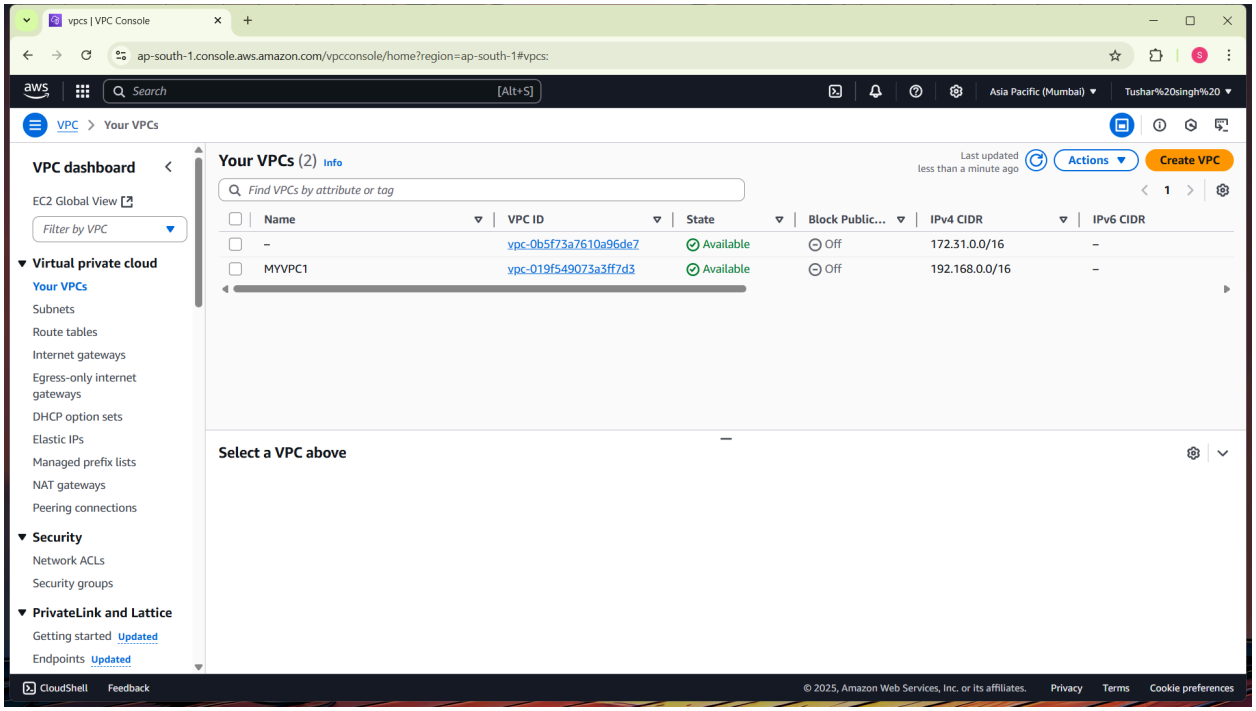
STEP6:


vpcs | VPC Console
ap-south-1.console.aws.amazon.com/vpcconsole/home?region=ap-south-1#vpcs:
Search [Alt+S]
Asia Pacific (Mumbai)
Tushar%20singh%20
VPC > Your VPCs
VPC dashboard
EC2 Global View
Filter by VPC
Virtual private cloud
Your VPCs
Subnets
Route tables
Internet gateways
Egress-only internet gateways
DHCP option sets
Elastic IPs
Managed prefix lists
NAT gateways
Peering connections
Security
Network ACLs
Security groups
PrivateLink and Lattice
Getting started Updated
Endpoints Updated
Your VPCs (2) Info
Last updated less than a minute ago
Actions
Create VPC
Find VPCs by attribute or tag
Name
VPC ID
State
Block Public...
IPv4 CIDR
IPv6 CIDR
–
vpc-0b5f73a7610a96de7
Available
Off
172.31.0.0/16
–
MYVPC1
vpc-019f549073a3ff7d3
Available
Off
192.168.0.0/16
–
Select a VPC above
CloudShell
Feedback
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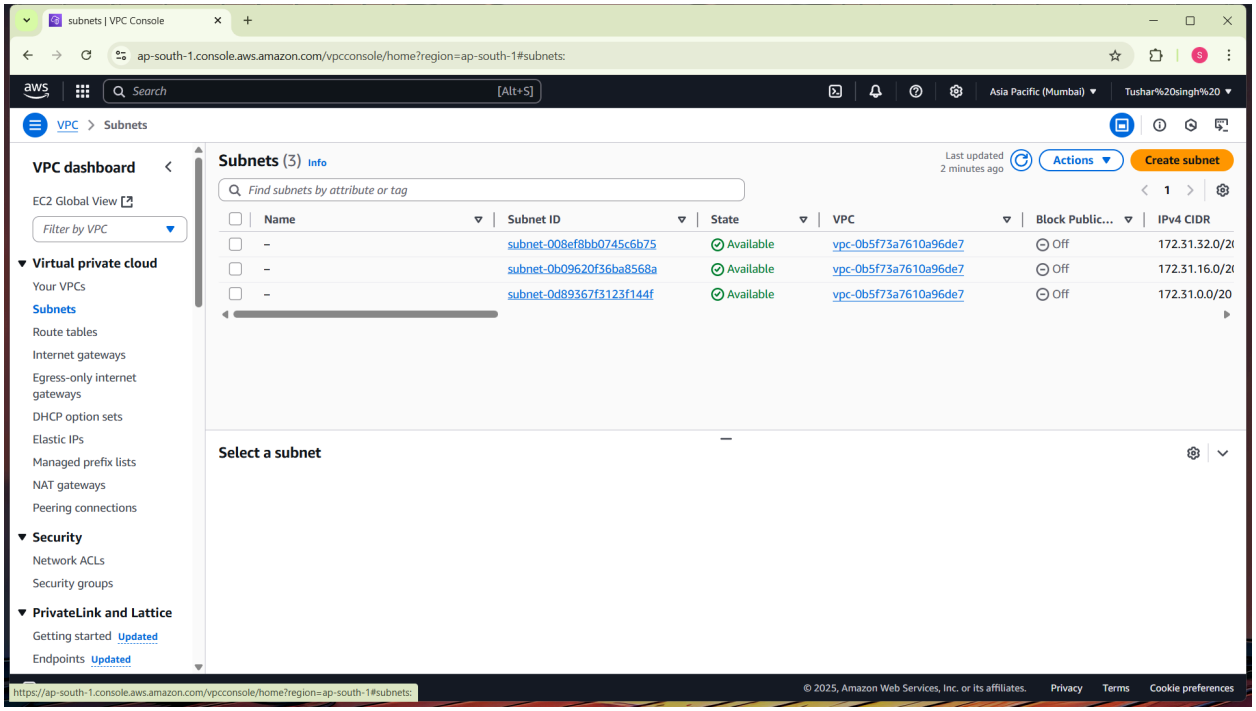
Terms
Cookie preferences

STEP7:


subnets | VPC Console
ap-south-1.console.aws.amazon.com/vpcconsole/home?region=ap-south-1#subnets:
Search
[Alt+S]
Asia Pacific (Mumbai)
Tushar%20singh%20
VPC > Subnets
VPC dashboard
EC2 Global View
Filter by VPC
Virtual private cloud
Your VPCs
Subnets
Route tables
Internet gateways
Egress-only internet gateways
DHCP option sets
Elastic IPs
Managed prefix lists
NAT gateways
Peering connections
Security
Network ACLs
Security groups
PrivateLink and Lattice
Getting started Updated
Endpoints Updated
Subnets (3) Info
Last updated 2 minutes ago
Actions
Create subnet
Find subnets by attribute or tag
Name
Subnet ID
State
VPC
Block Public...
IPv4 CIDR
subnet-008ef8bb0745c6b75
subnet-0b09620f36ba8568a
subnet-0d89367f3123f144f
Available
vpc-0b5f73a7610a96de7
Off
172.31.32.0/2
172.31.16.0/2
172.31.0.0/20
Select a subnet
https://ap-south-1.console.aws.amazon.com/vpcconsole/home?region=ap-south-1#subnets:
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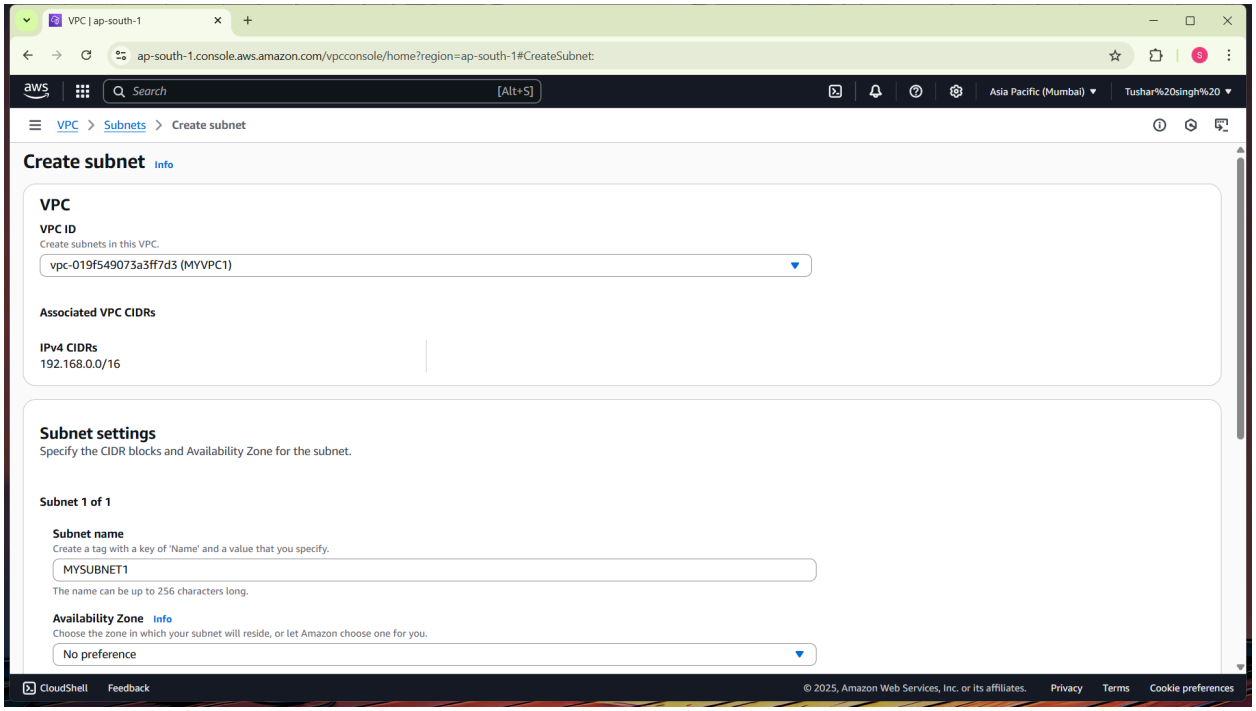
STEP8:


VPC | ap-south-1
ap-south-1.console.aws.amazon.com/vpcconsole/home?region=ap-south-1#CreateSubnet:
Search
[Alt+S]
Asia Pacific (Mumbai)
Tushar%20singh%20
VPC > Subnets > Create subnet
Create subnet Info
VPC
VPC ID
Create subnets in this VPC.
vpc-019f549073a3ff7d3 (MYVPC1)
Associated VPC CIDRs
IPv4 CIDRs
192.168.0.0/16
Subnet settings
Specify the CIDR blocks and Availability Zone for the subnet.
Subnet 1 of 1
Subnet name
Create a tag with a key of 'Name' and a value that you specify.
MYSUBNET1
The name can be up to 256 characters long.
Availability Zone Info
Choose the zone in which your subnet will reside, or let Amazon choose one for you.
No preference
CloudShell
Feedback
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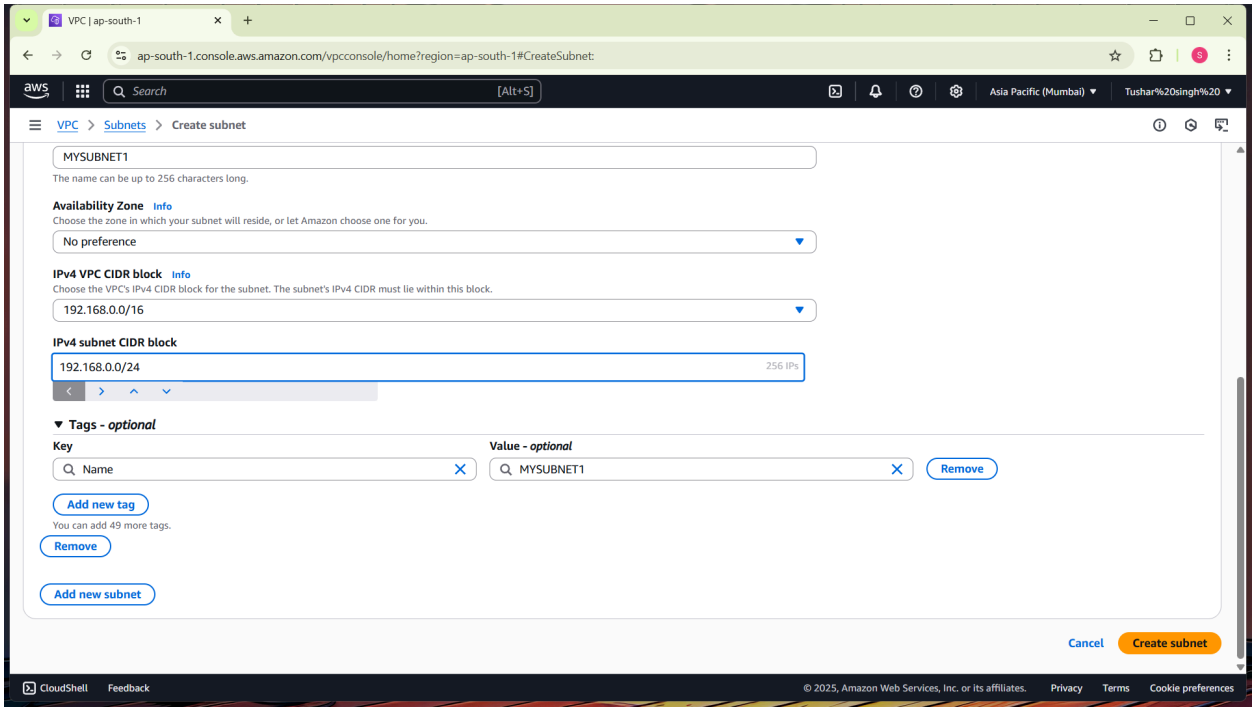
Cookie preferences

STEP9:



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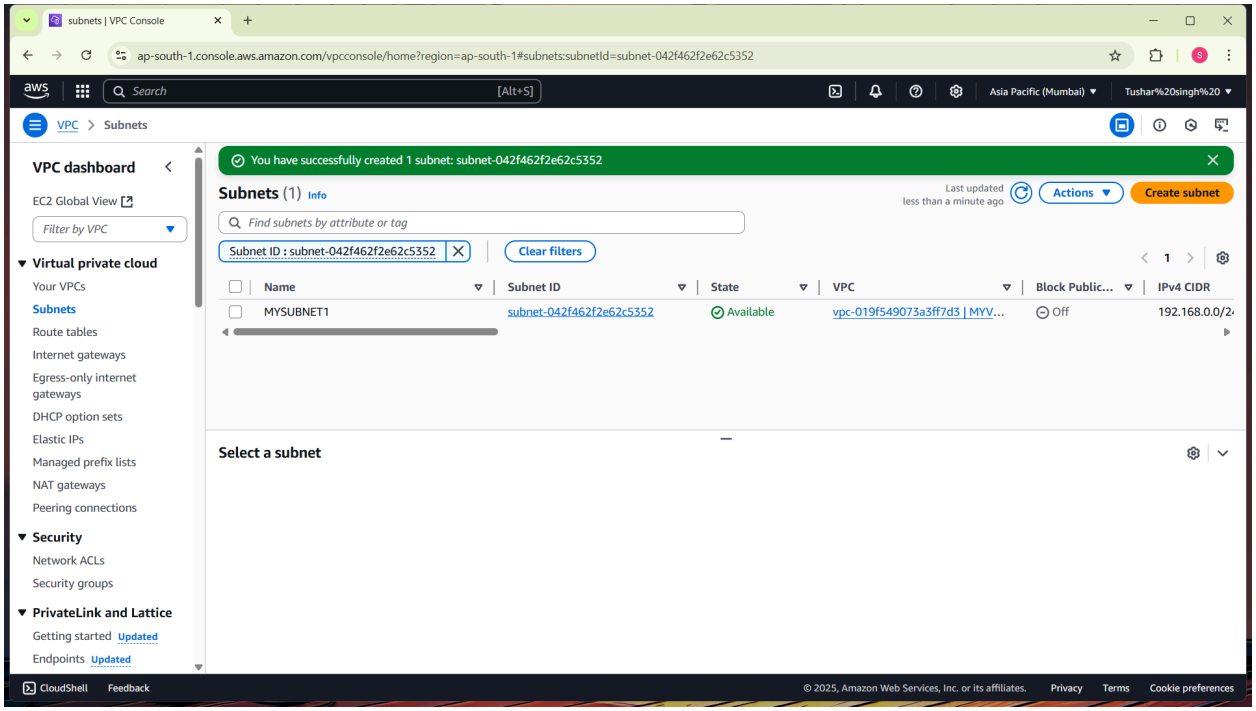
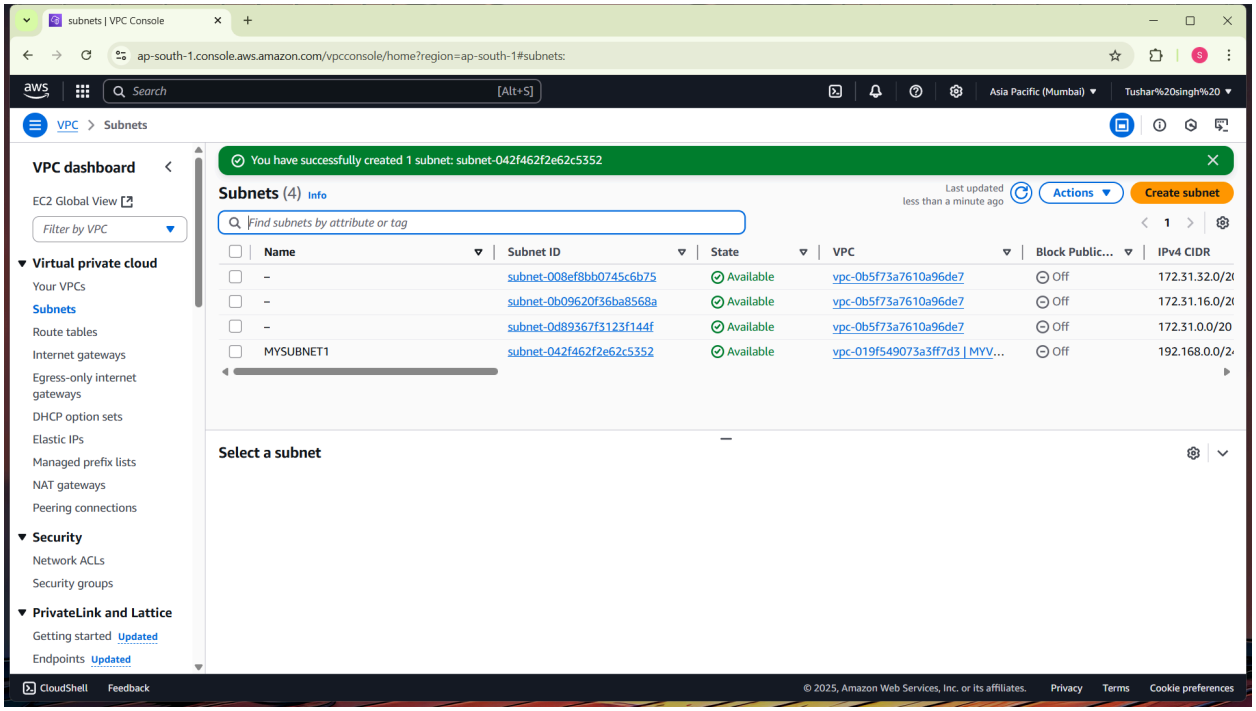
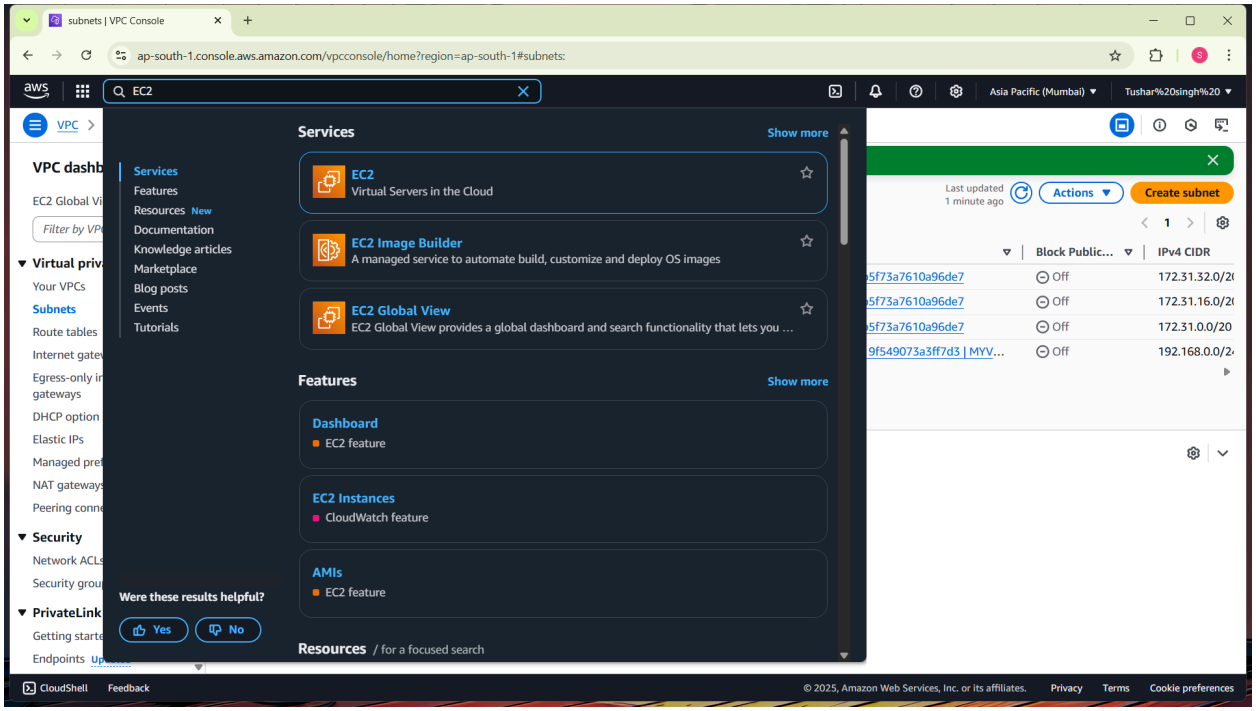


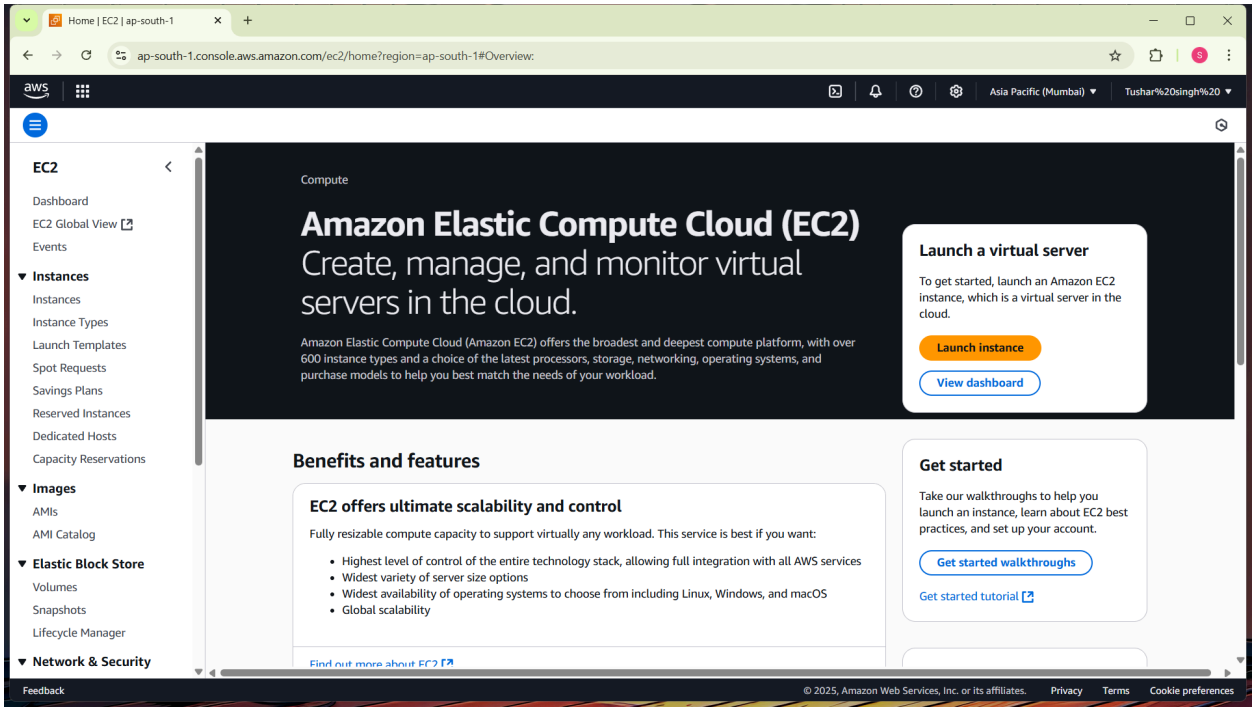
STEP11:



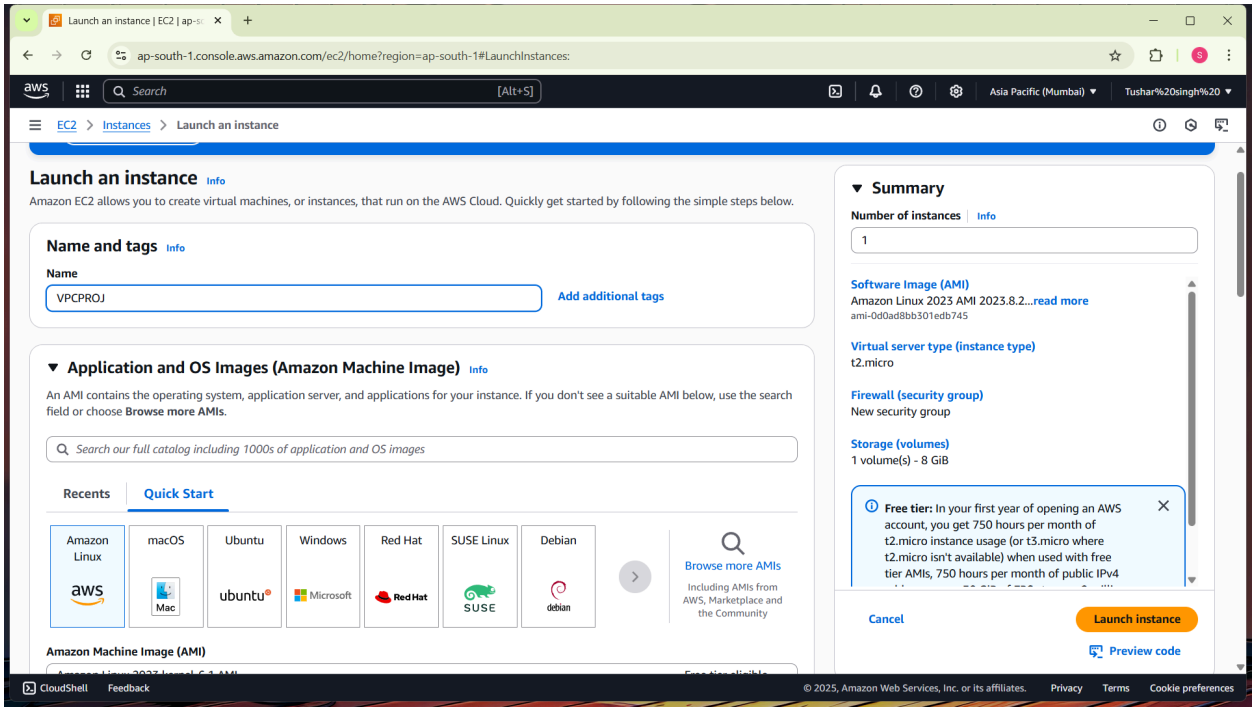
STEP12:



STEP13:



STEP14:



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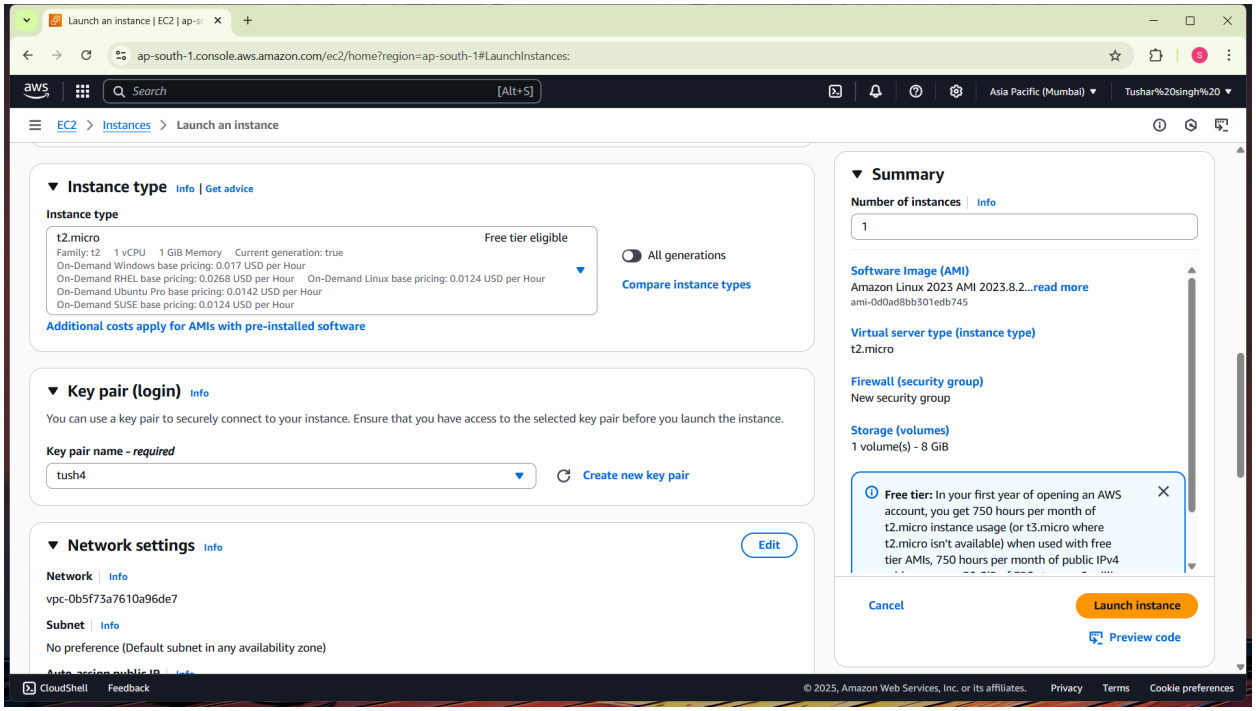

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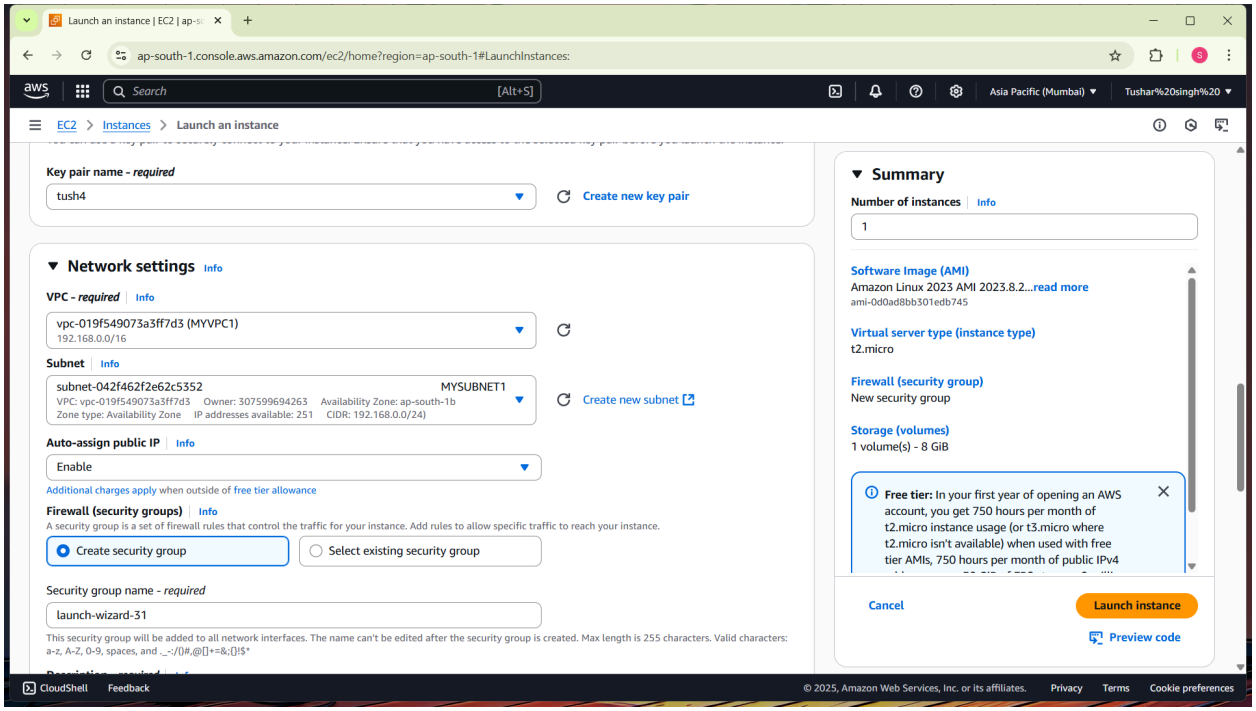

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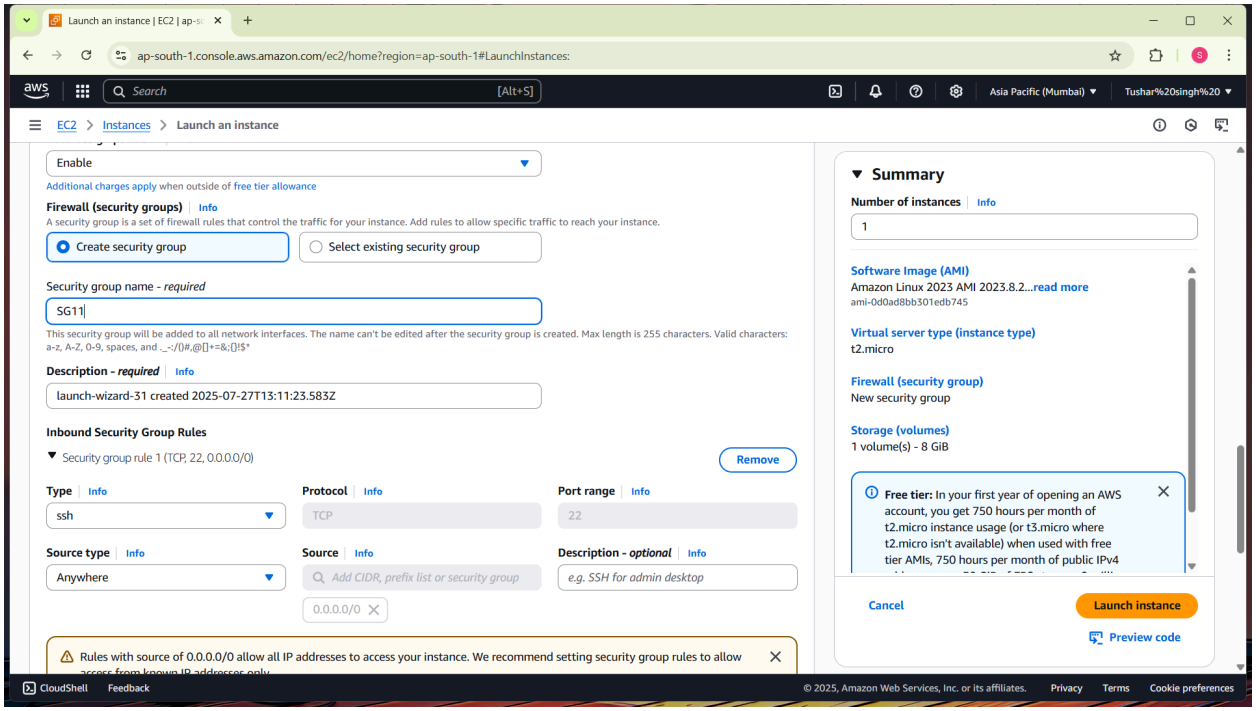

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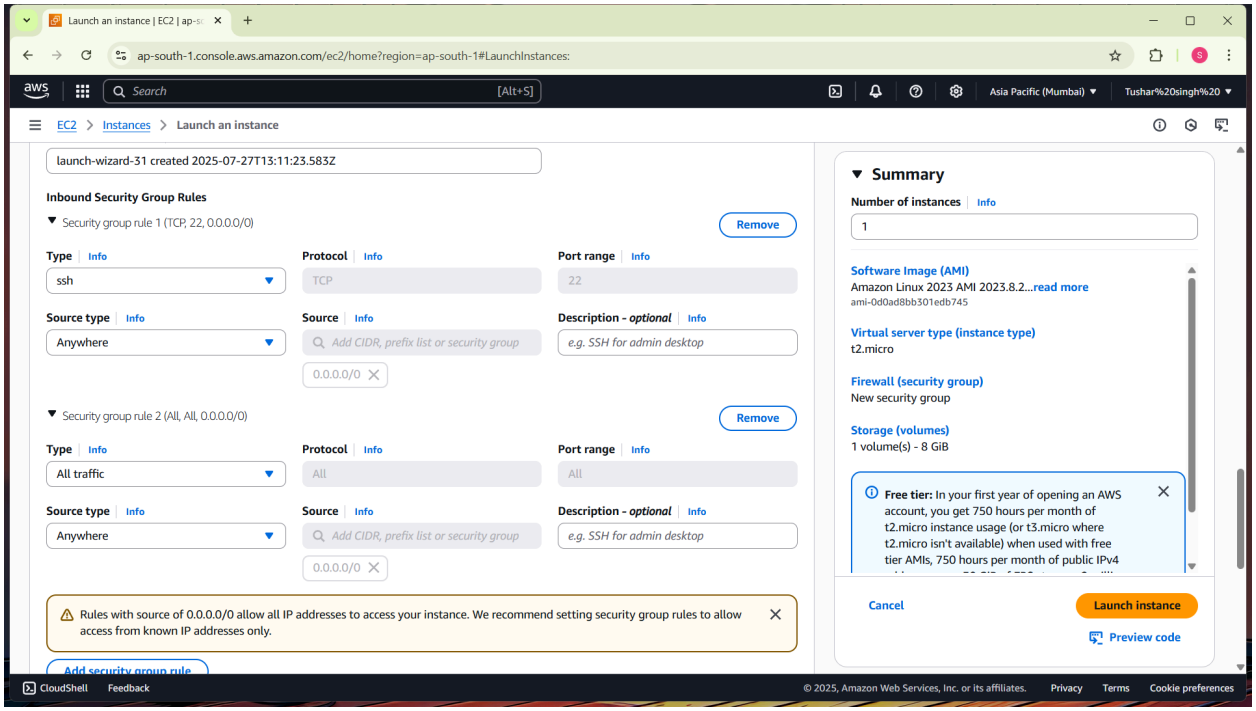

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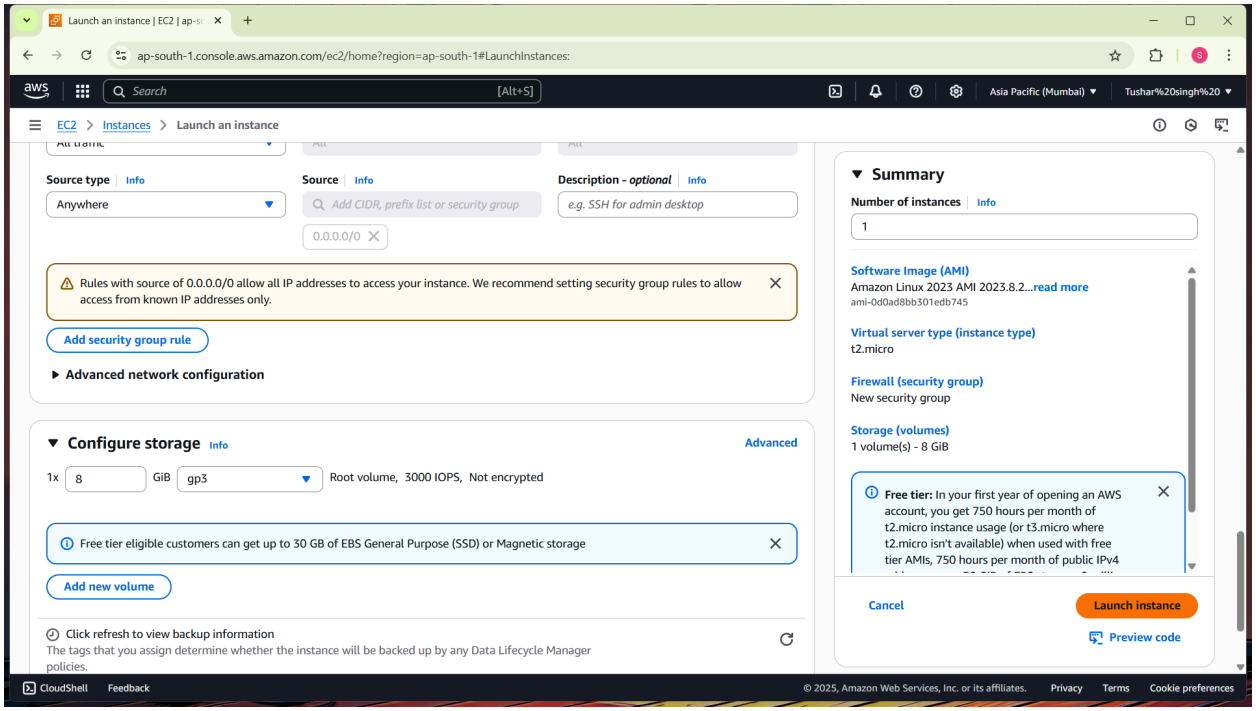

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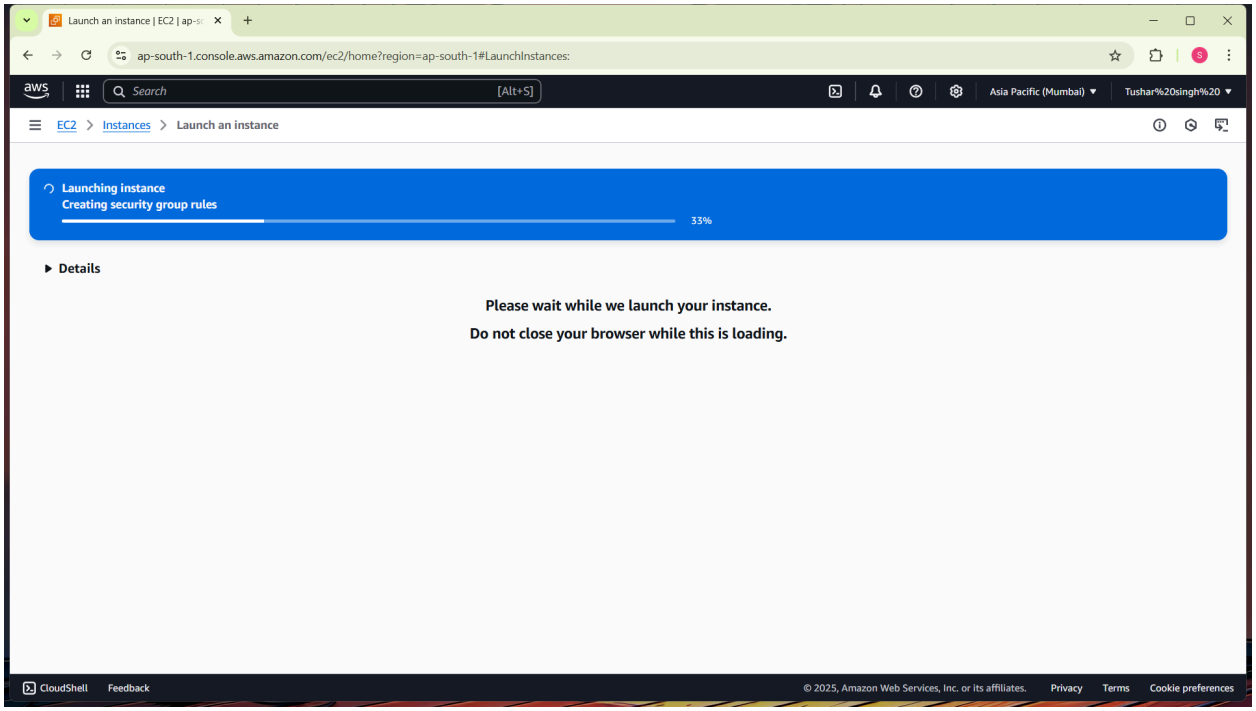

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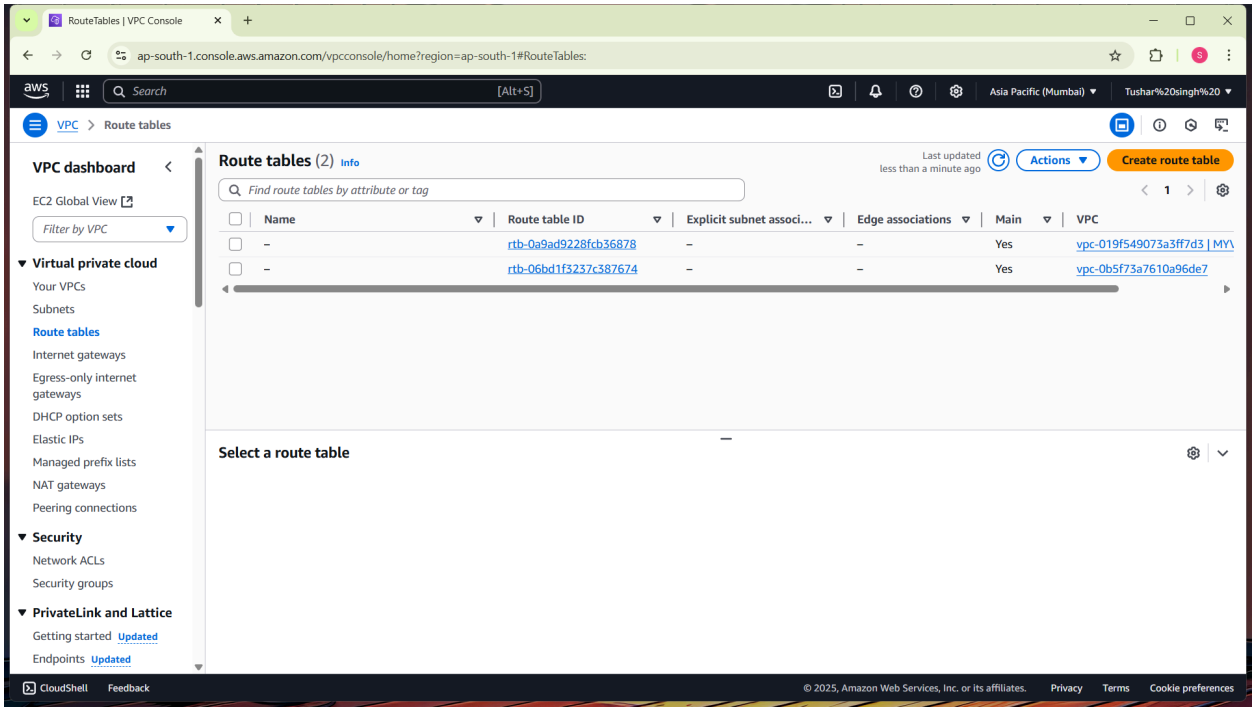
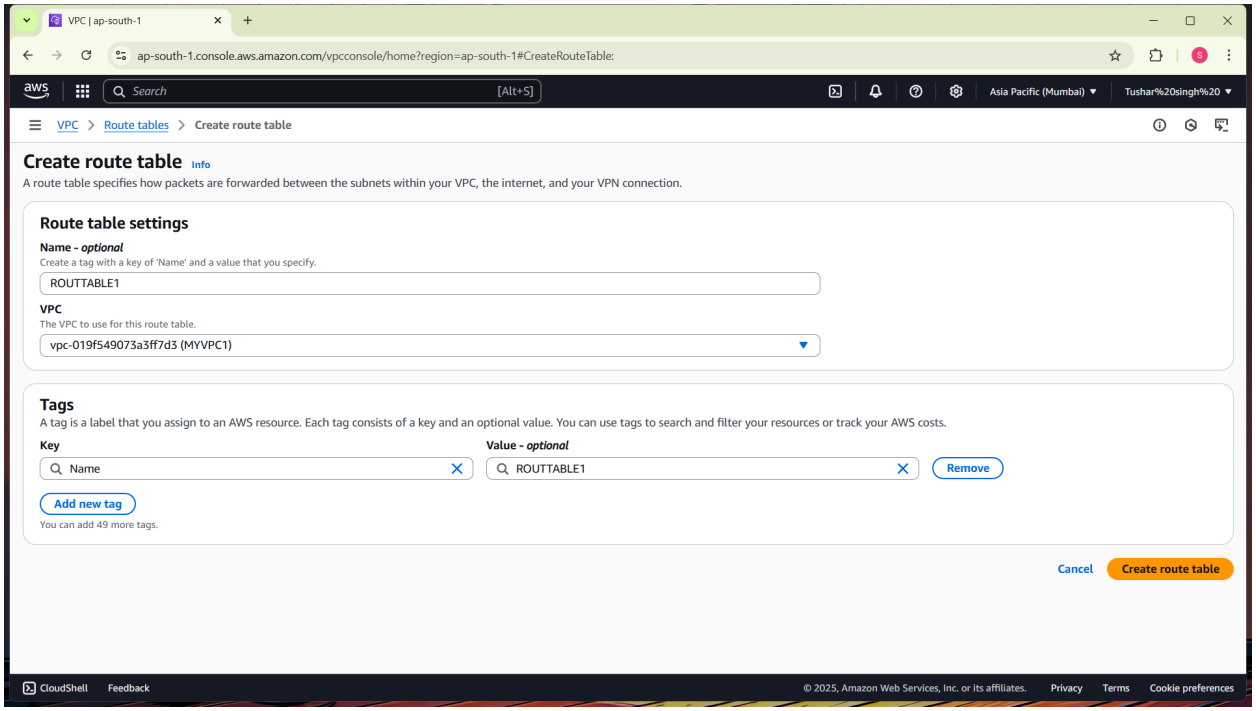
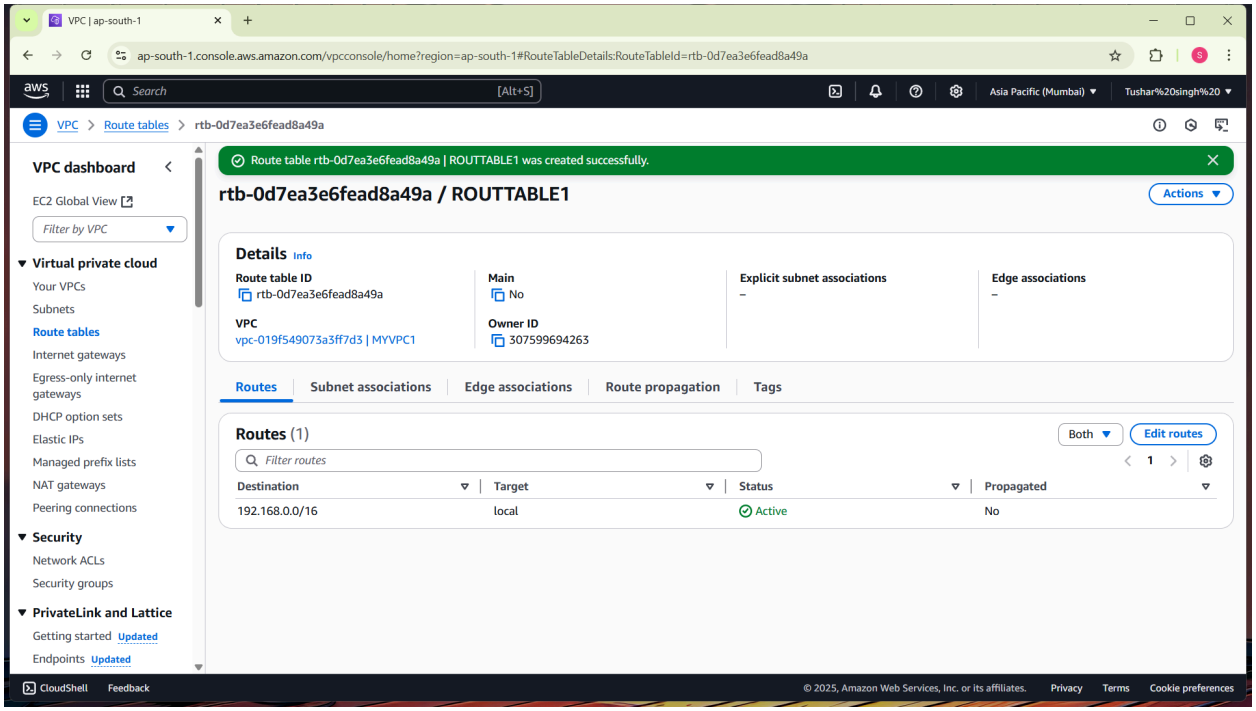


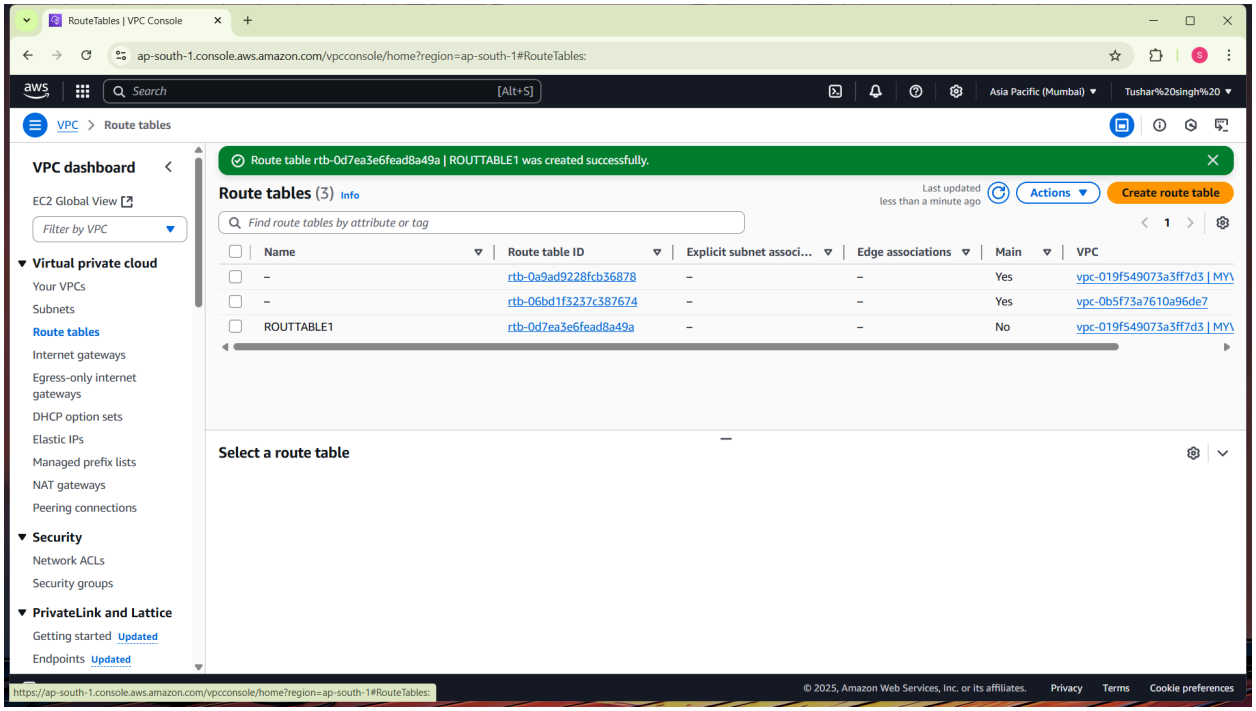
STEP22:



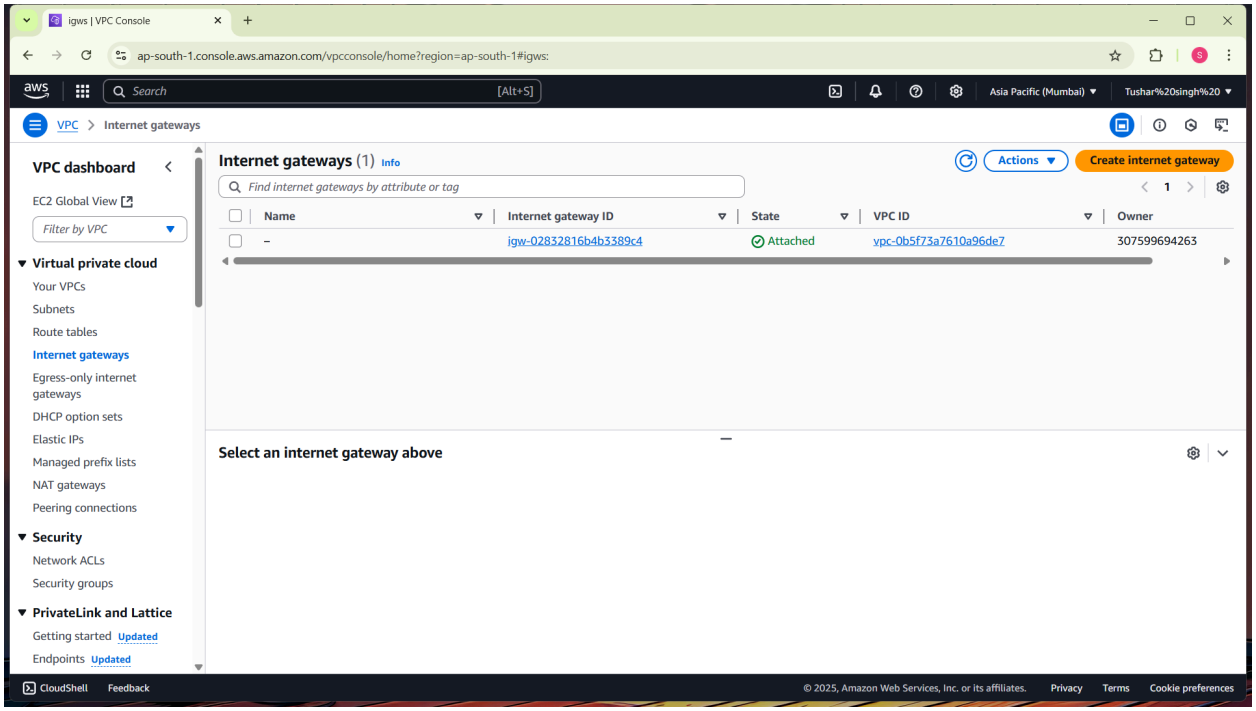
STEP23:



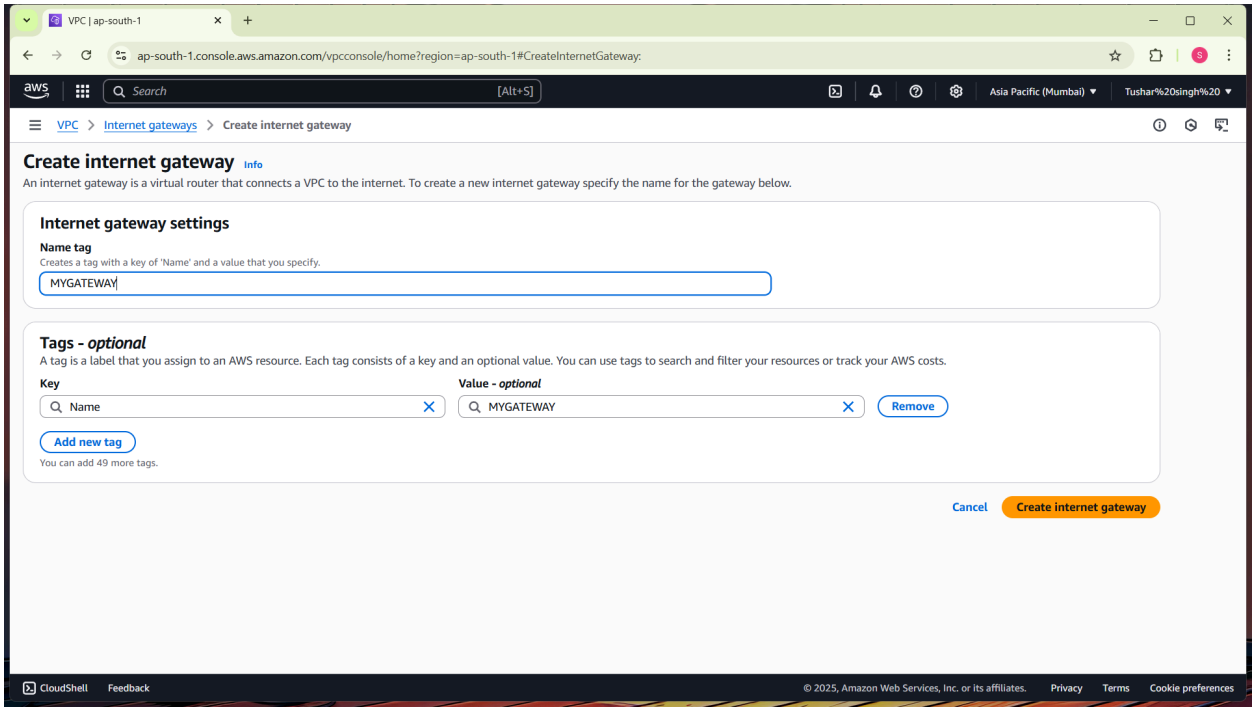
STEP24:



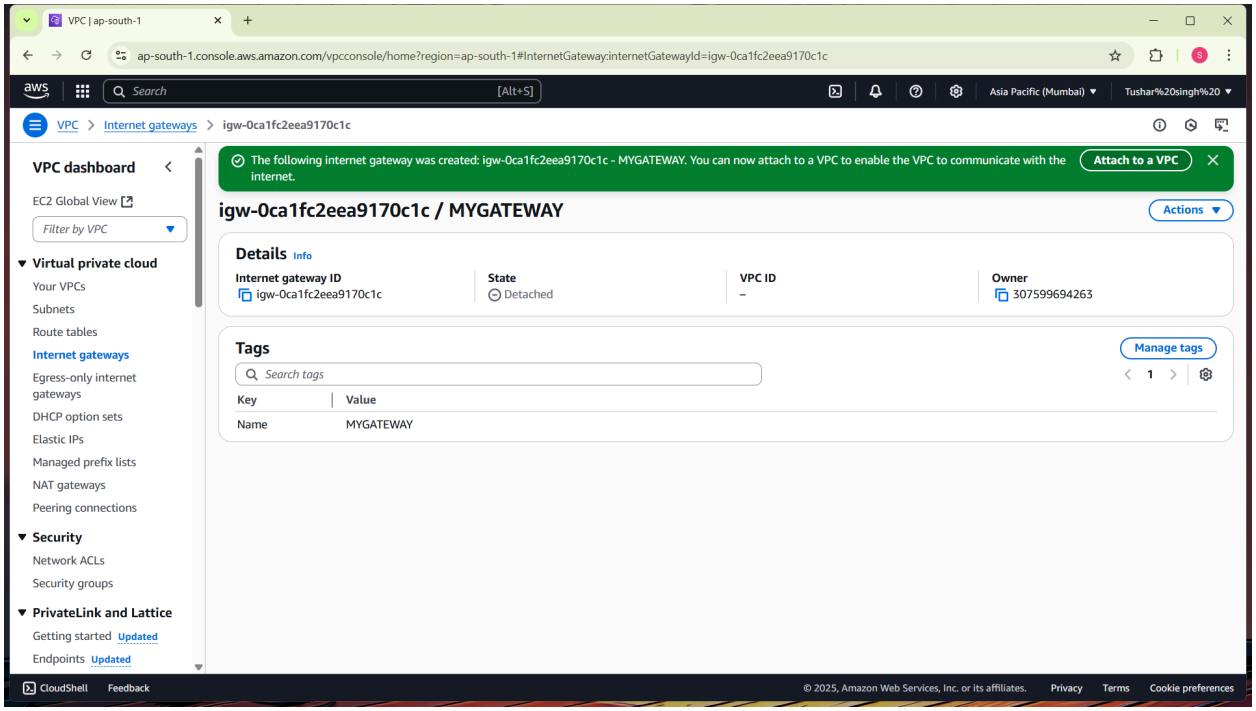
STEP25:



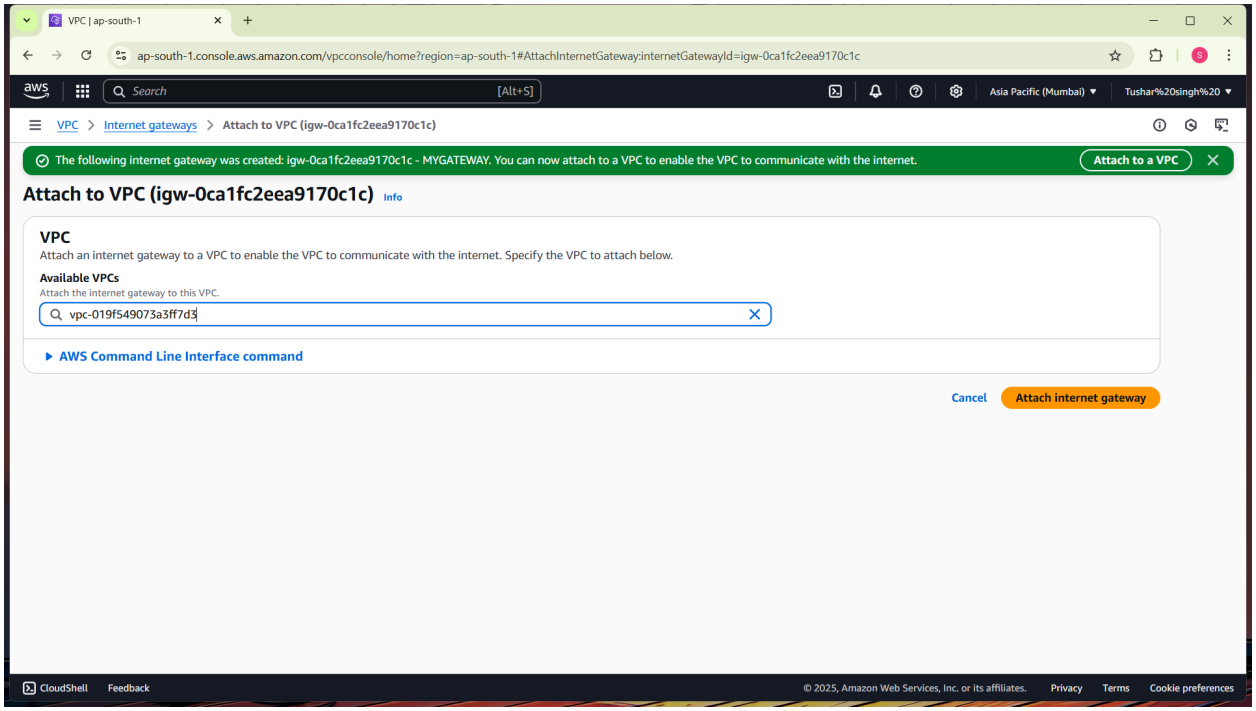
STEP26:



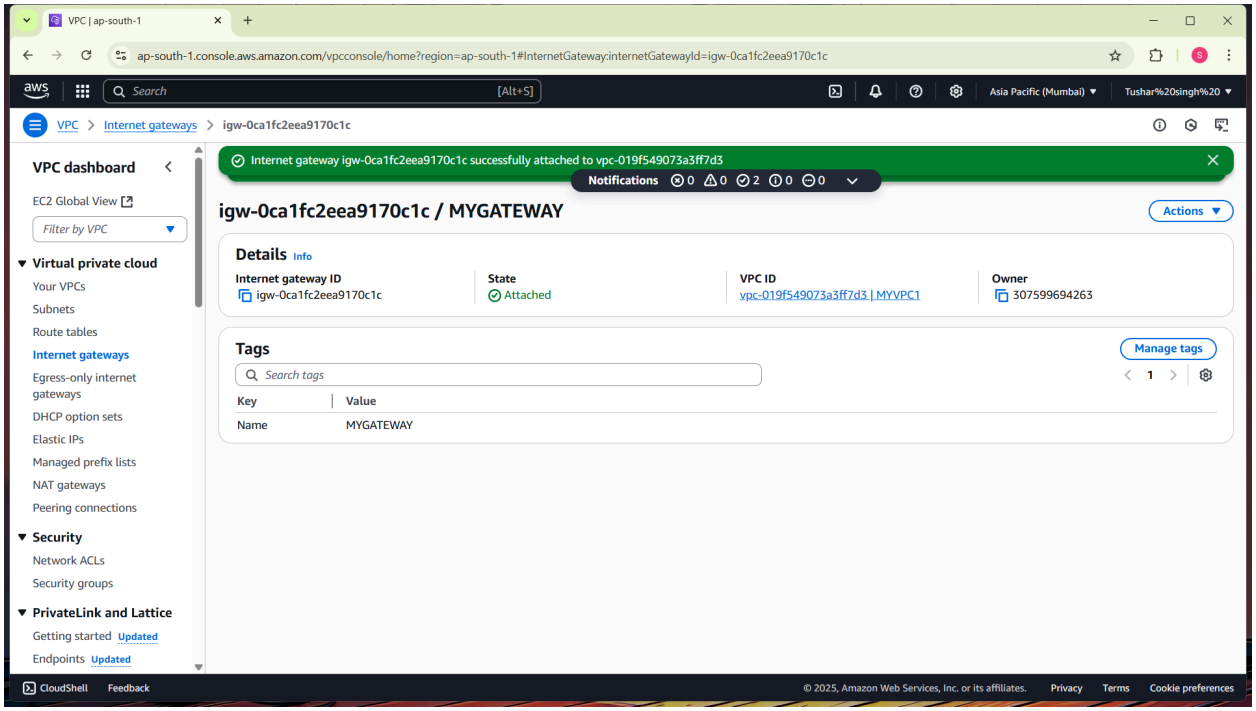
STEP27:



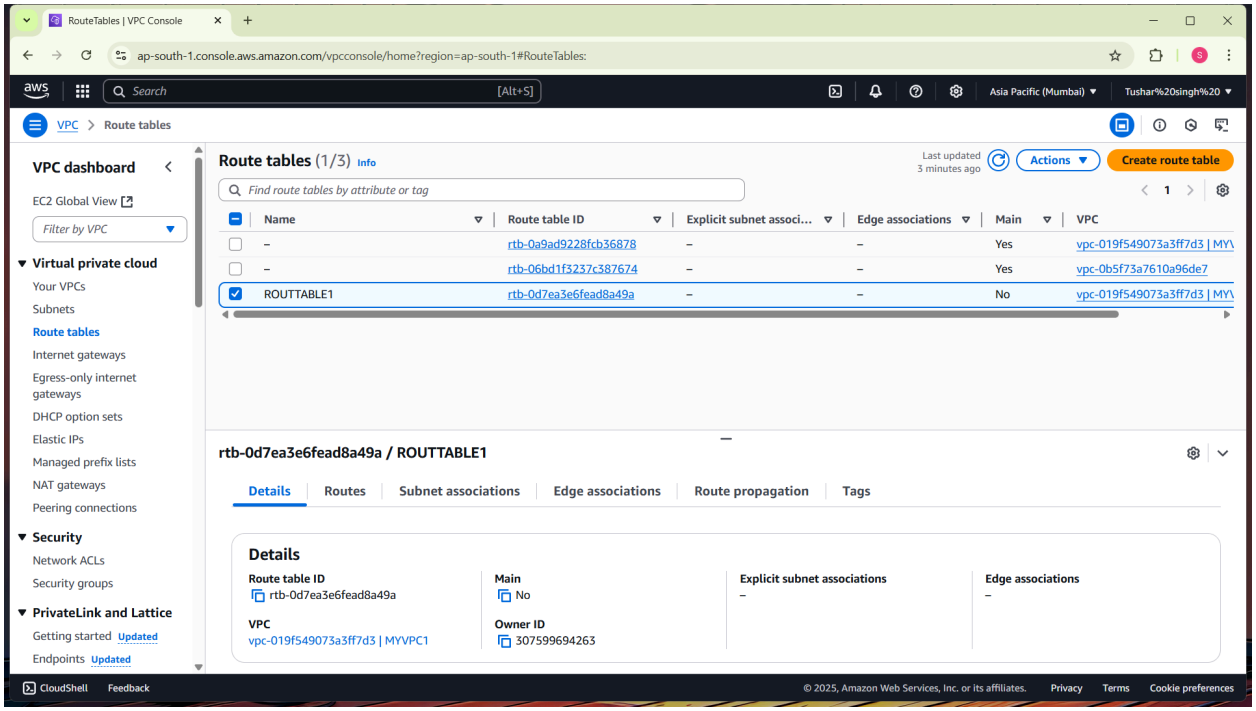
STEP28:



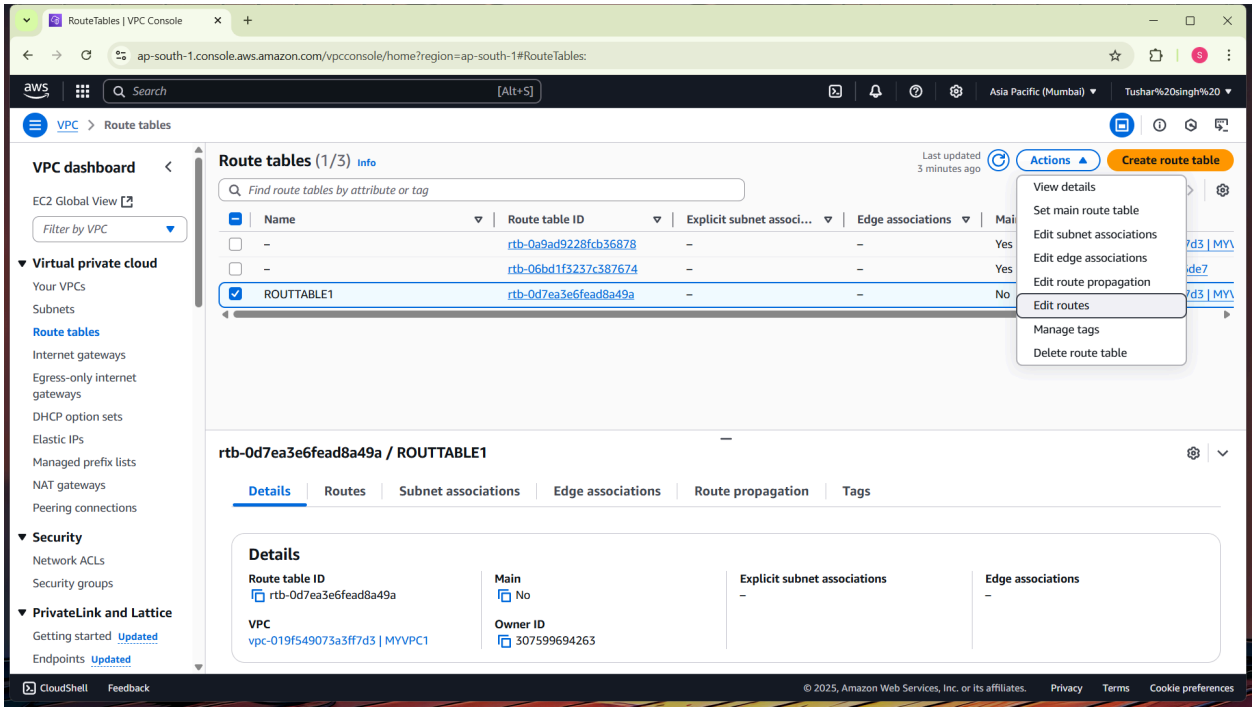
STEP29:



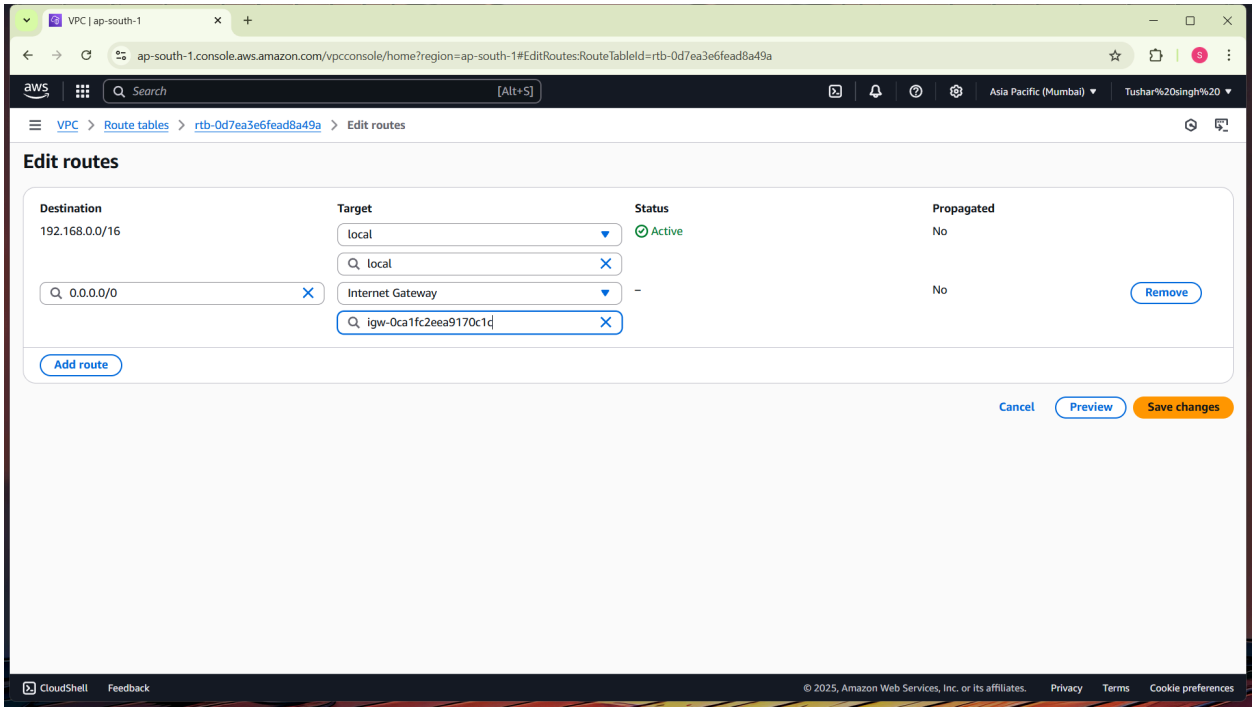
STEP30:



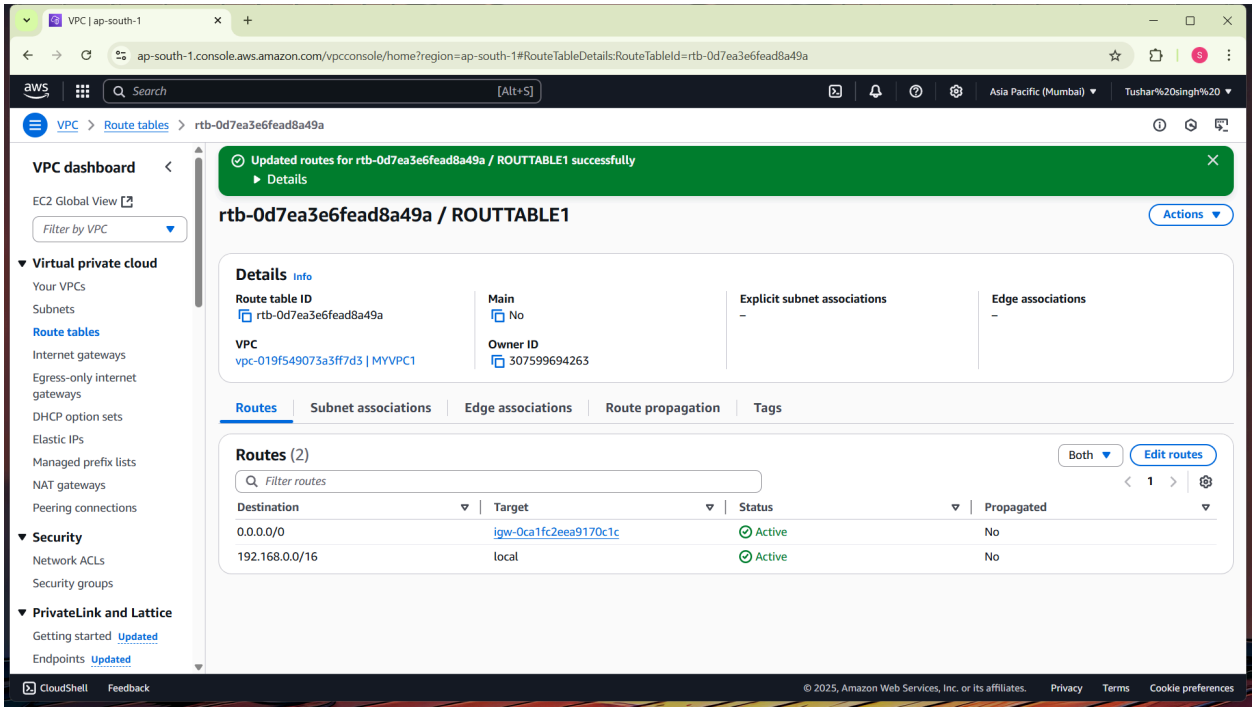
STEP31:



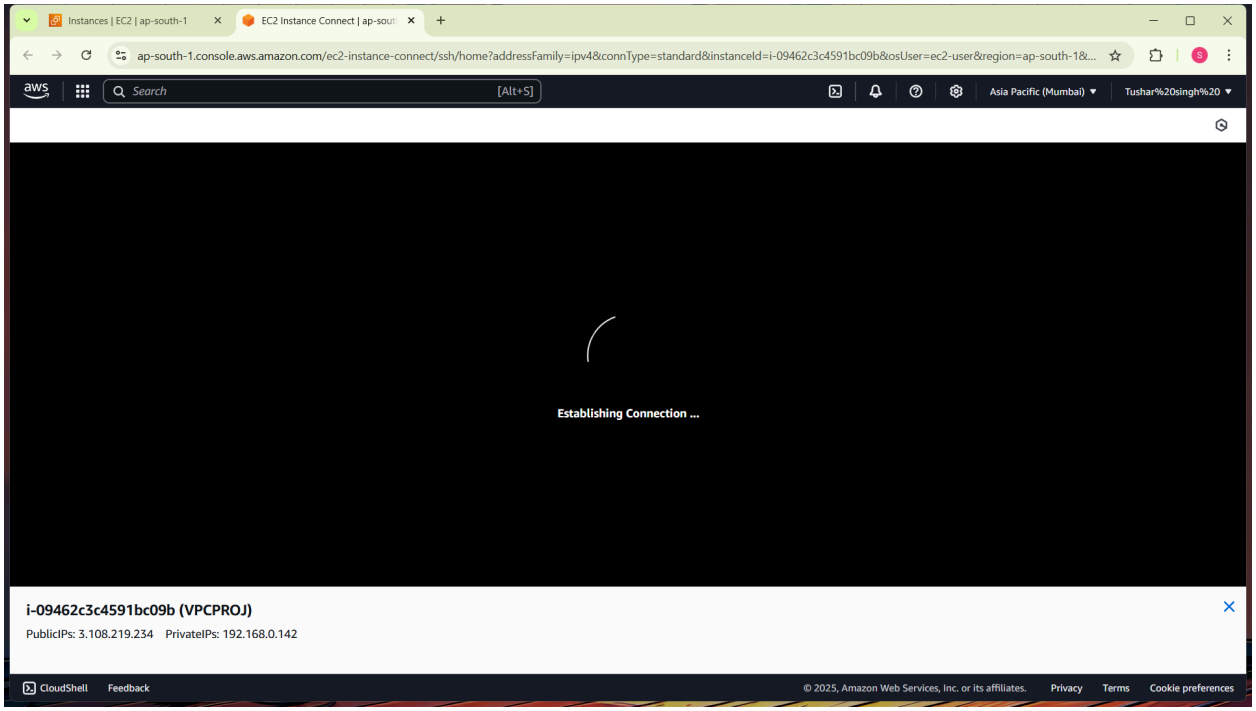
STEP32:



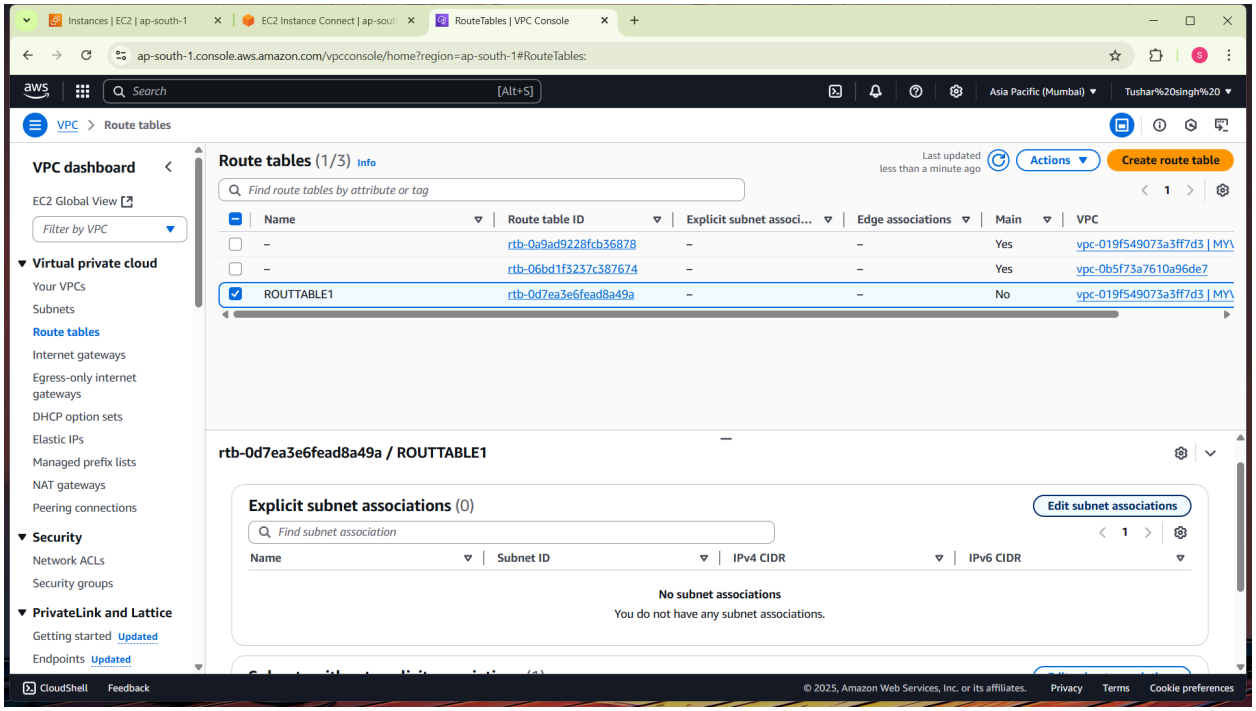
STEP33:



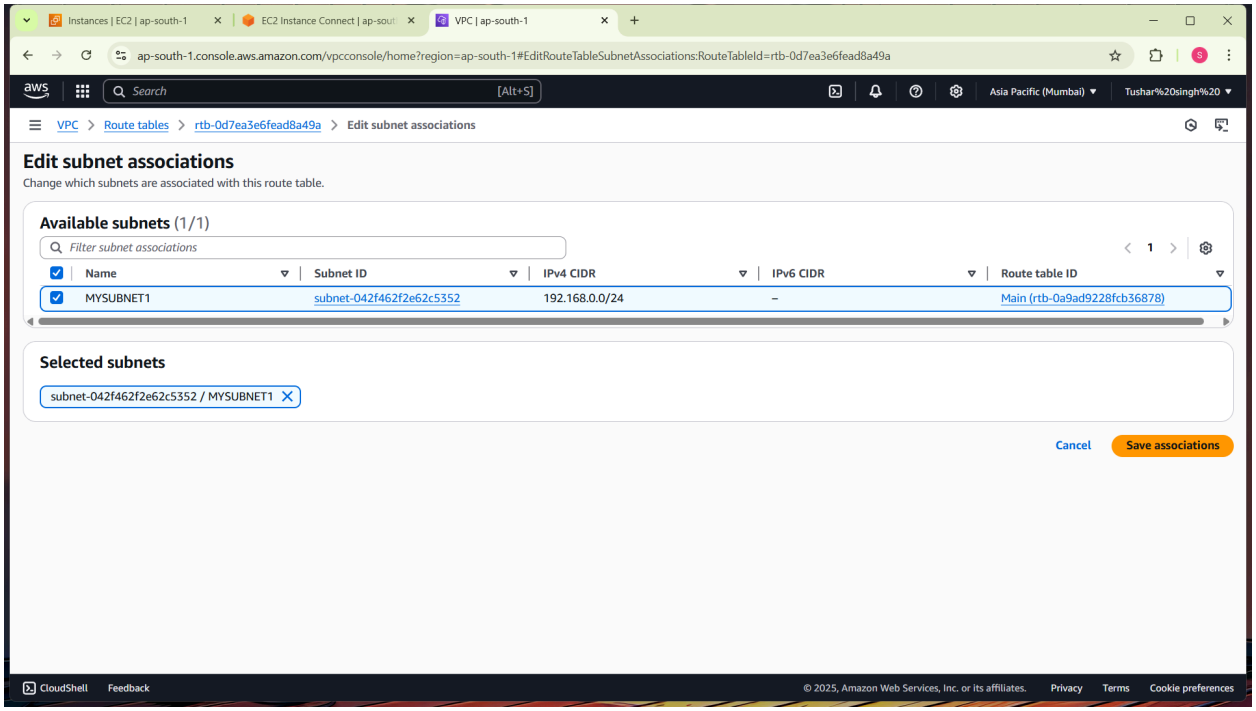
STEP34:



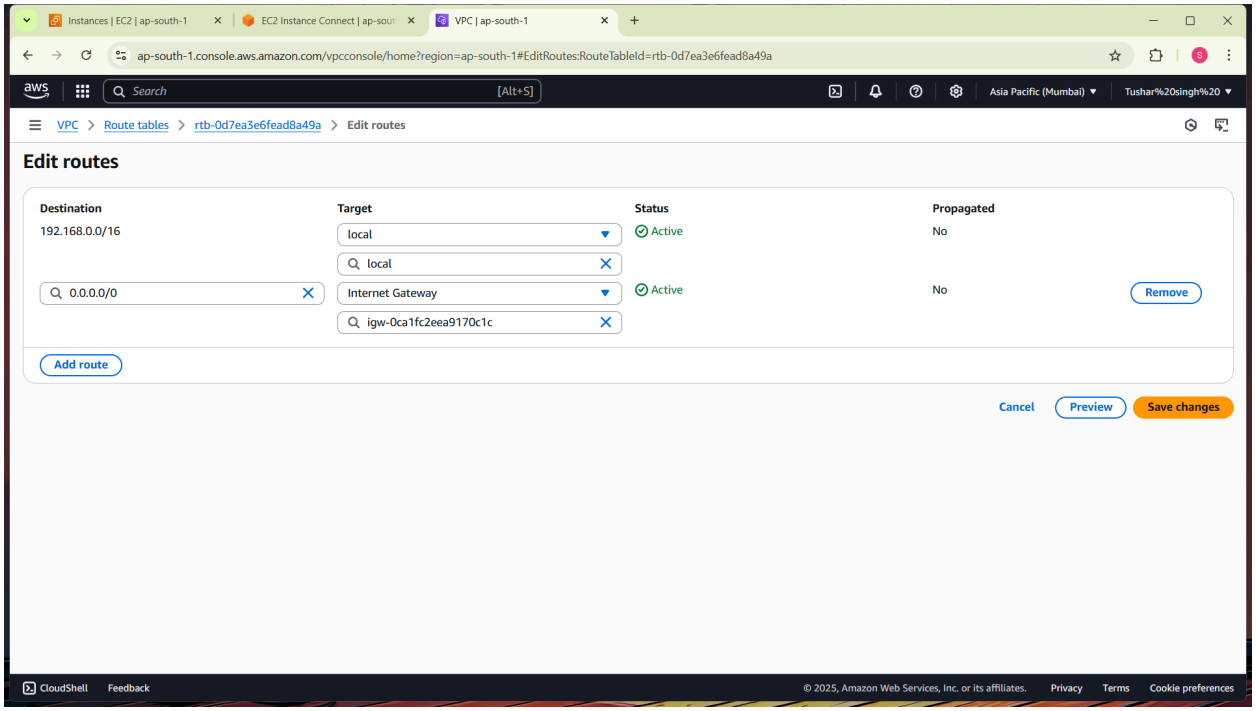
STEP35:



STEP36:



STEP37:



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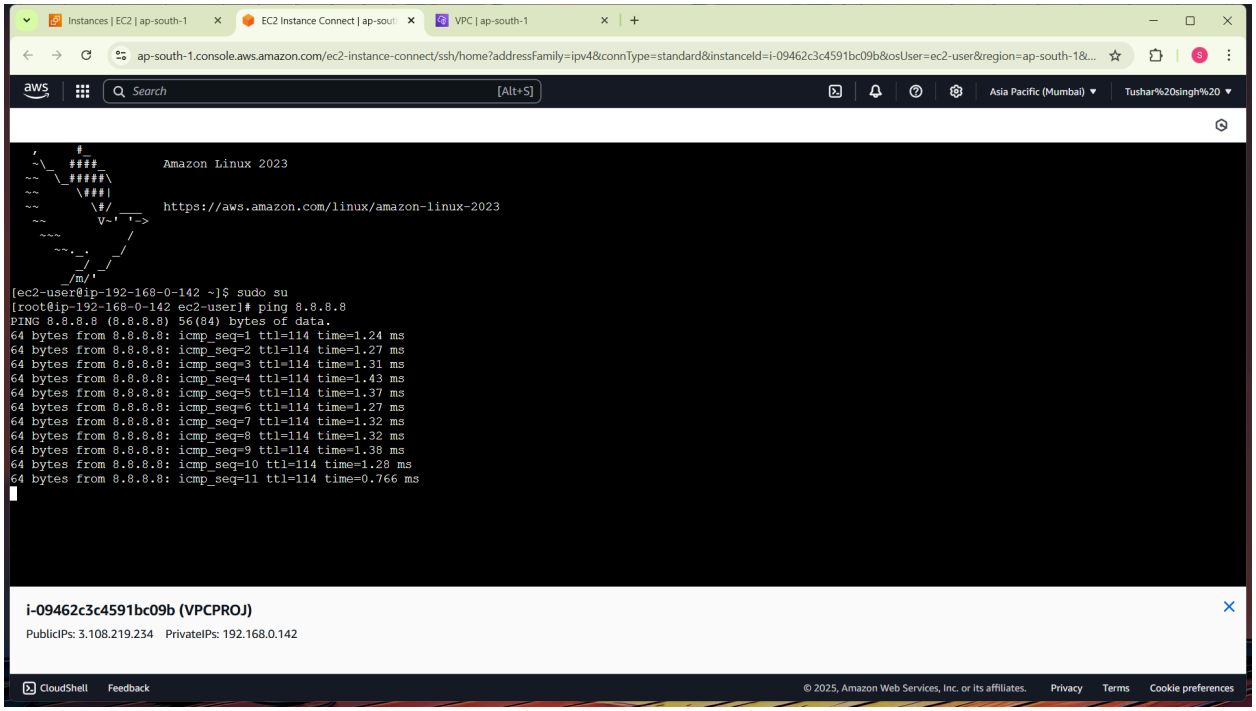

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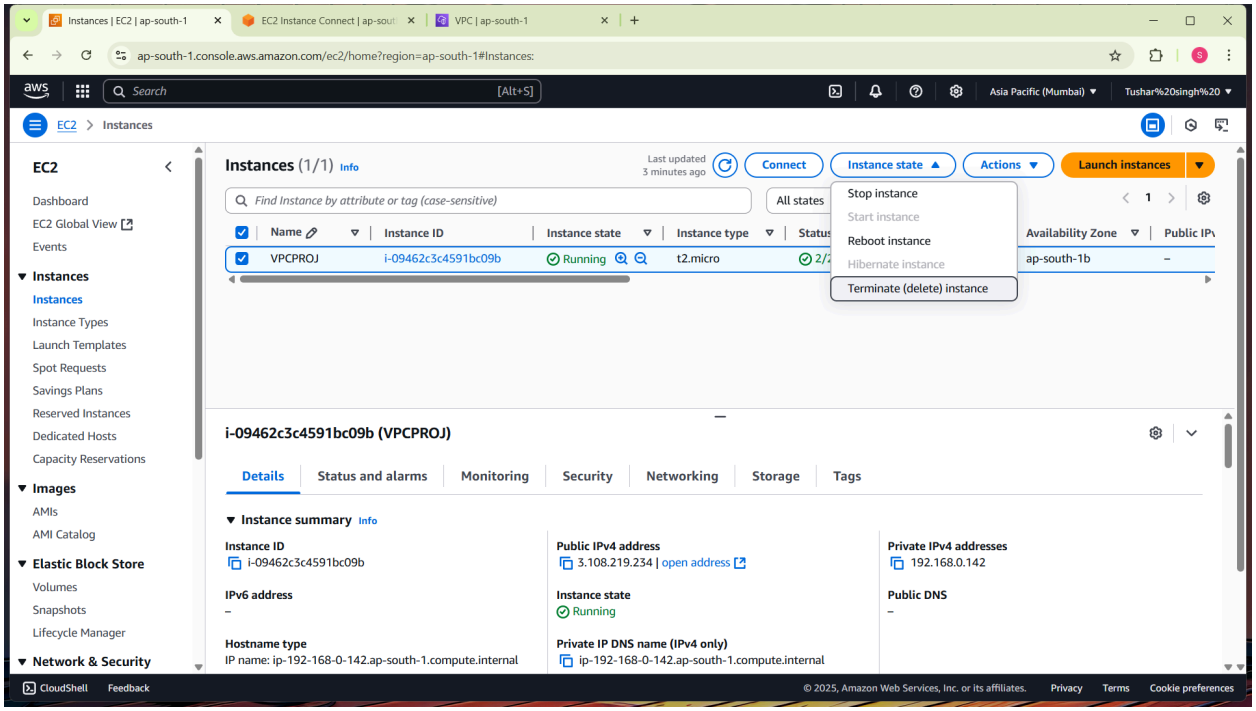

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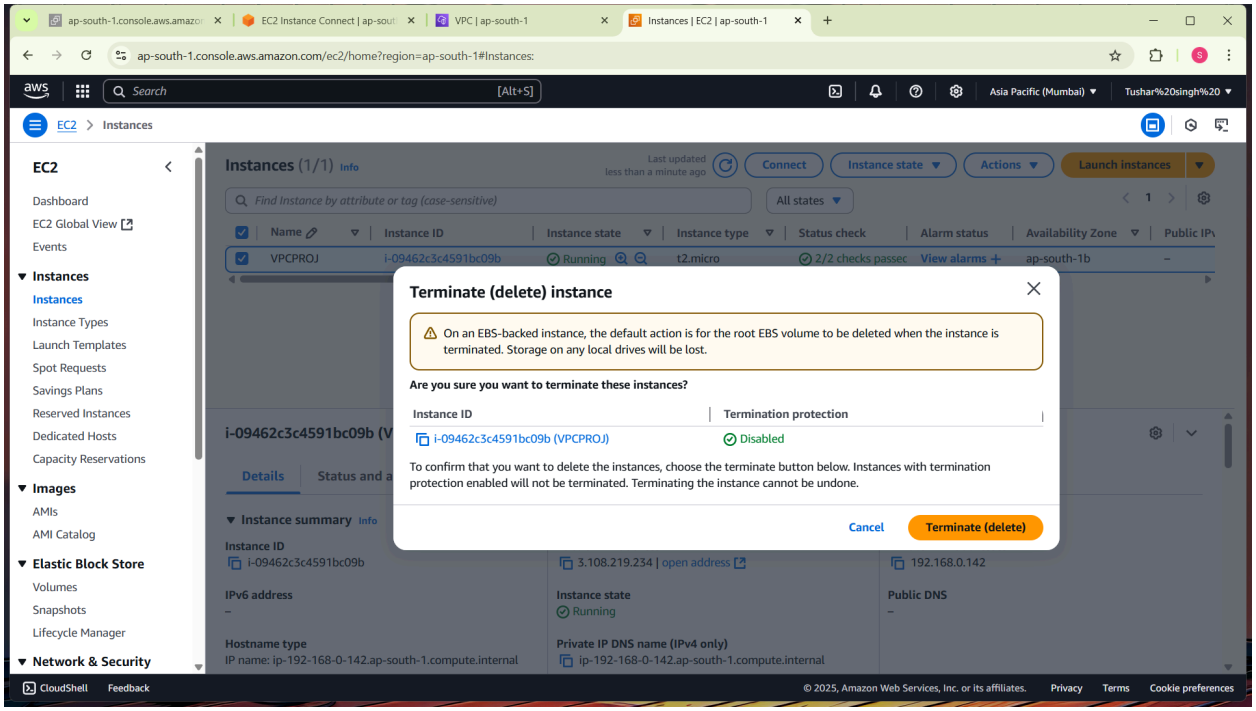
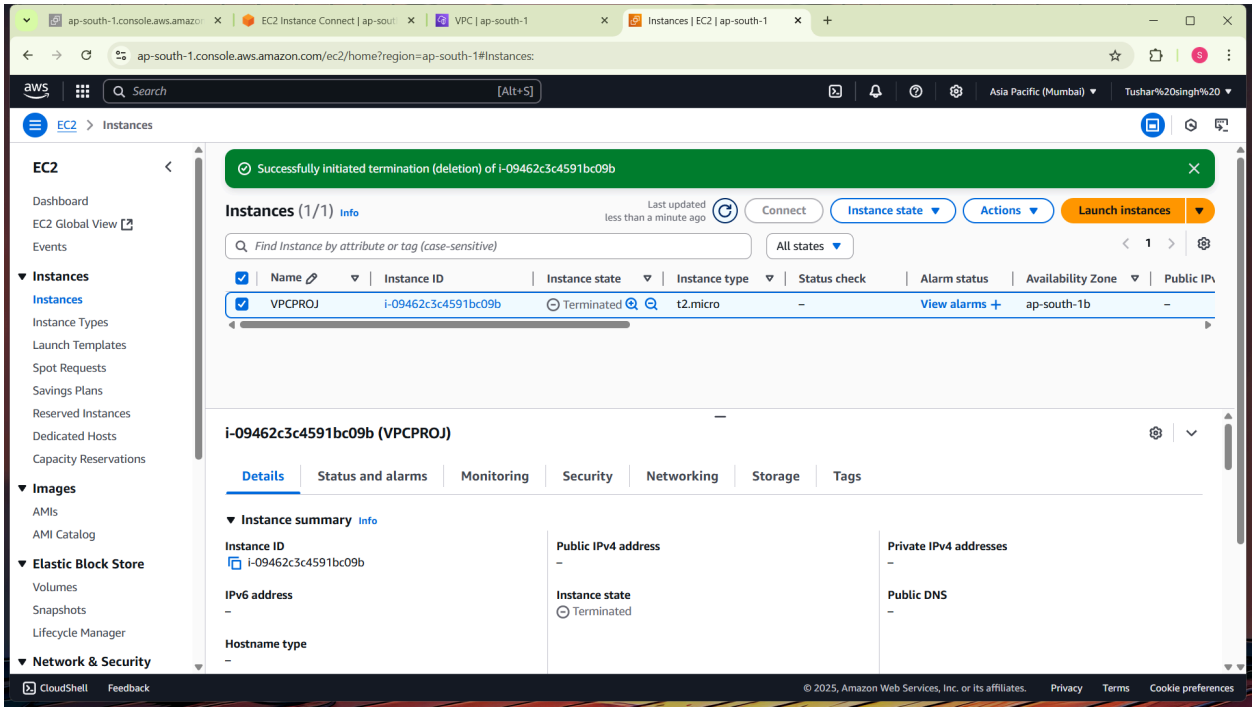


STEP41:



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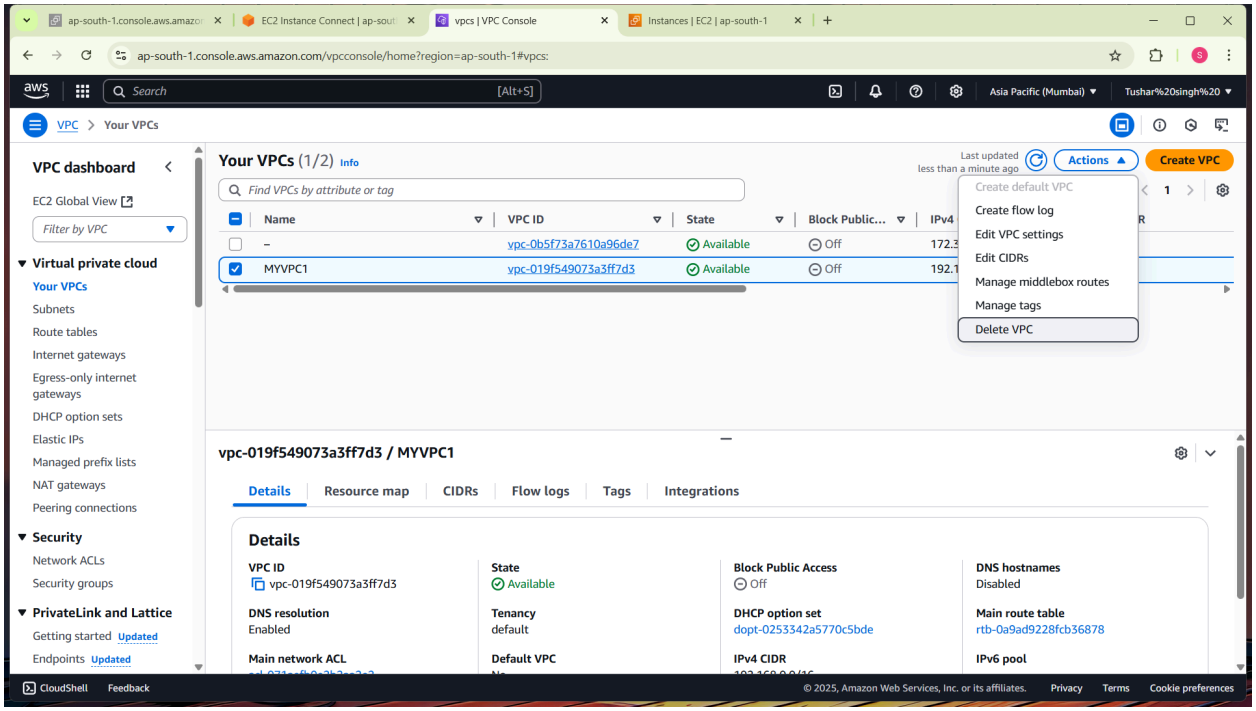

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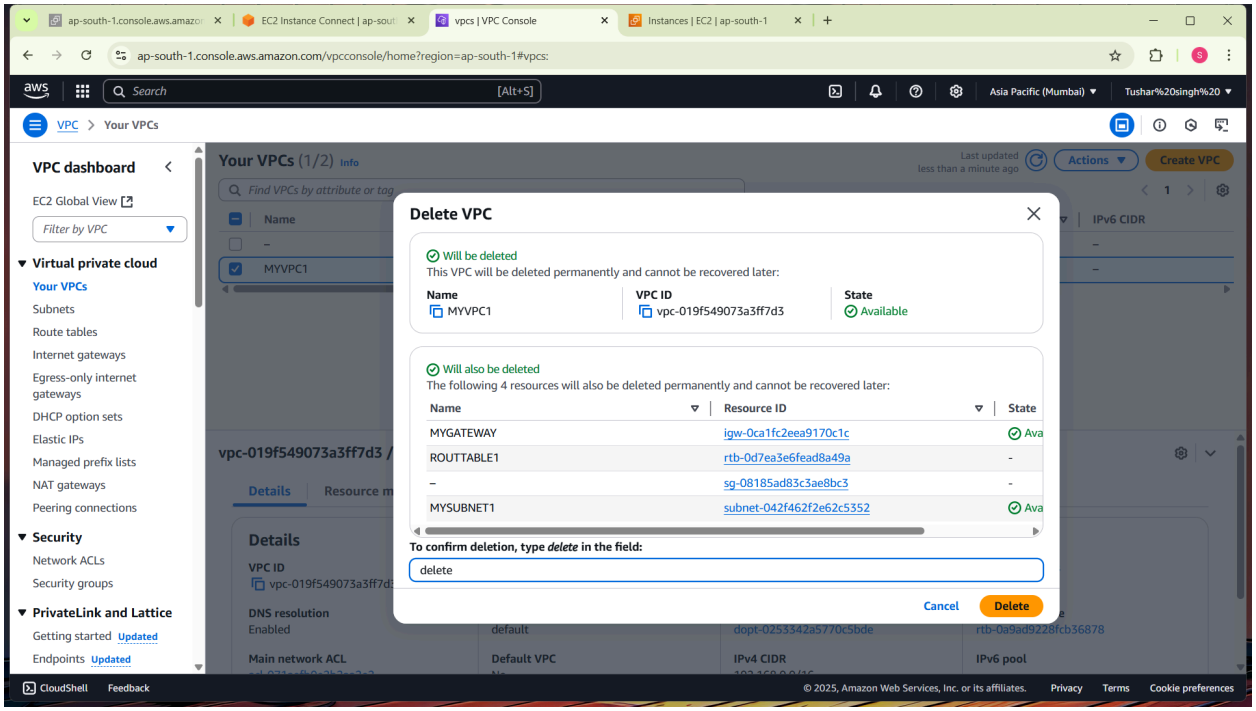

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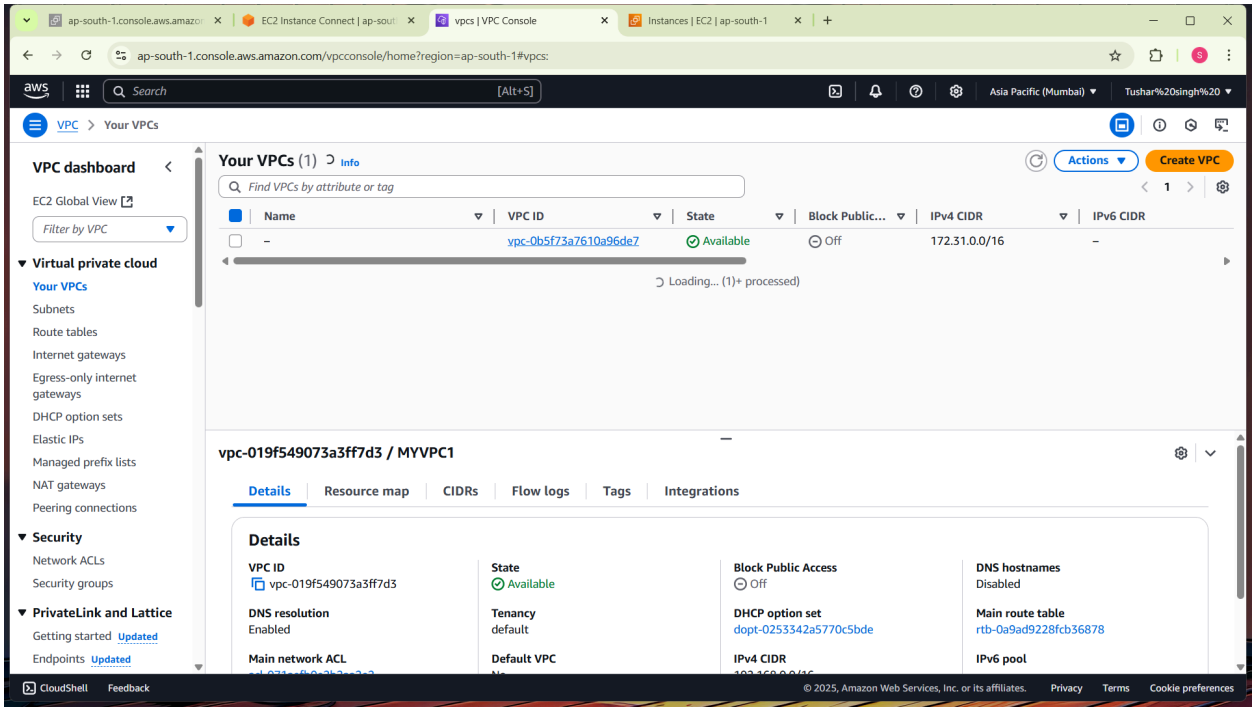

THANKYOU