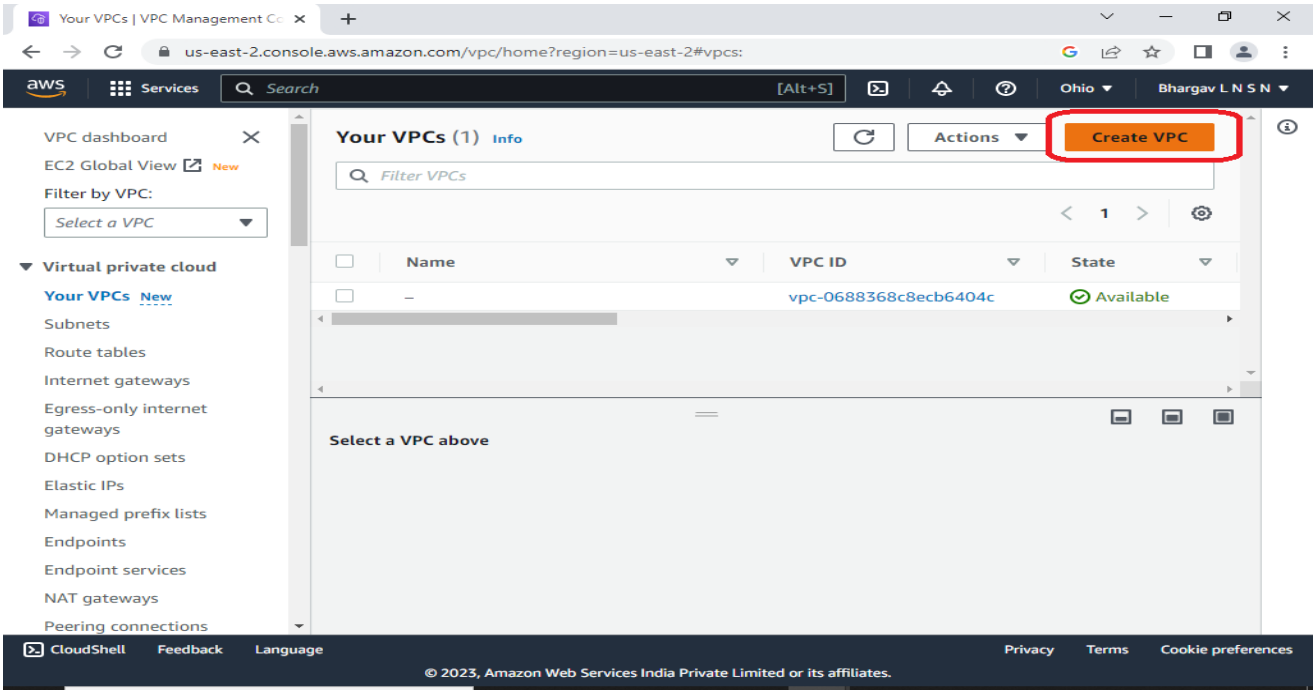
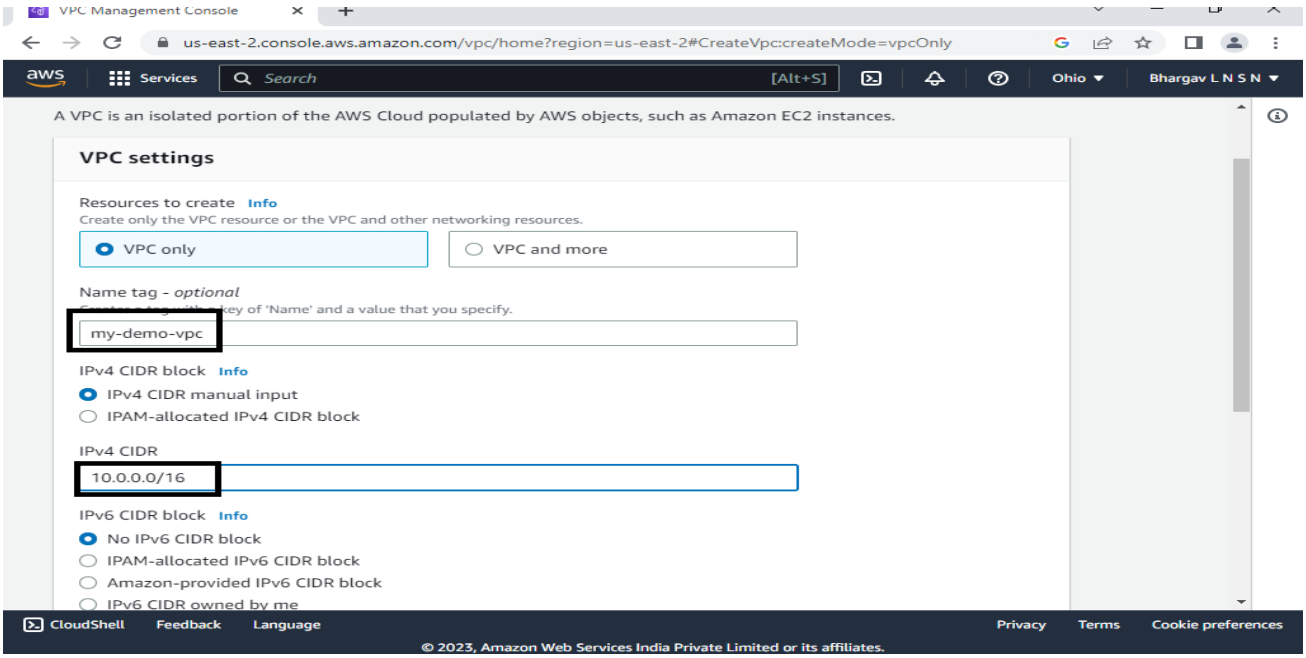
VPC Launching

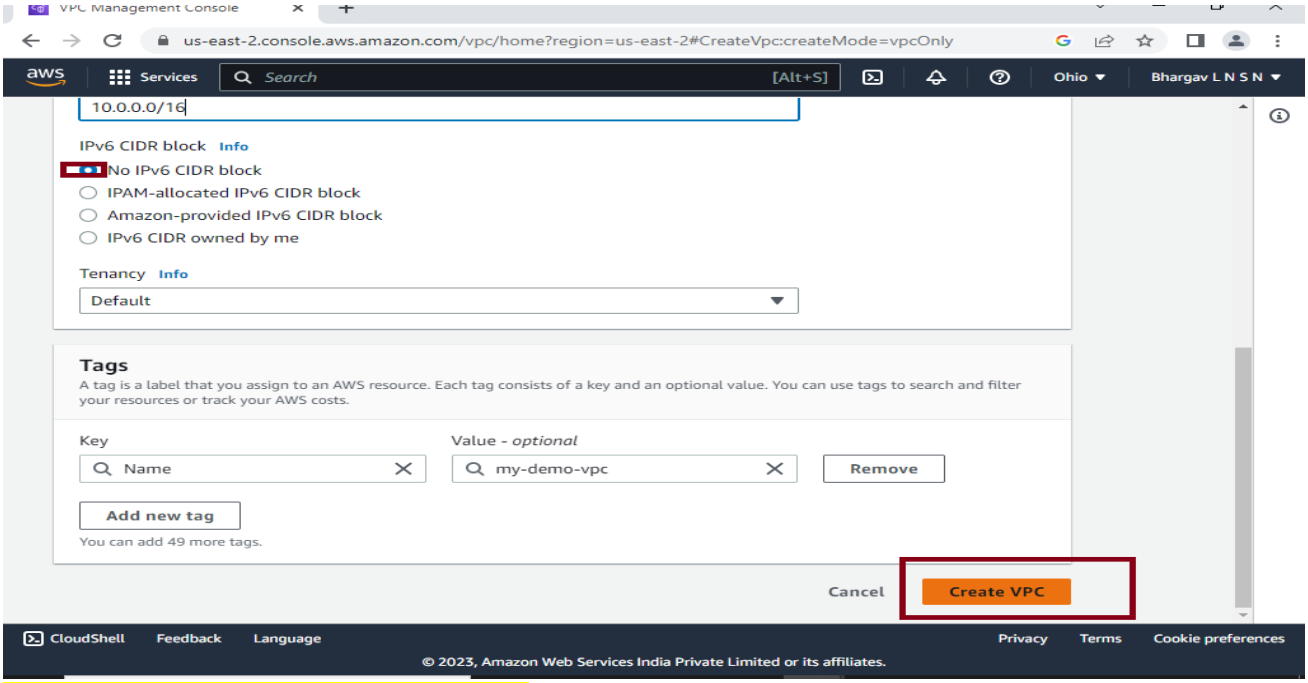
Step-1: Create VPC



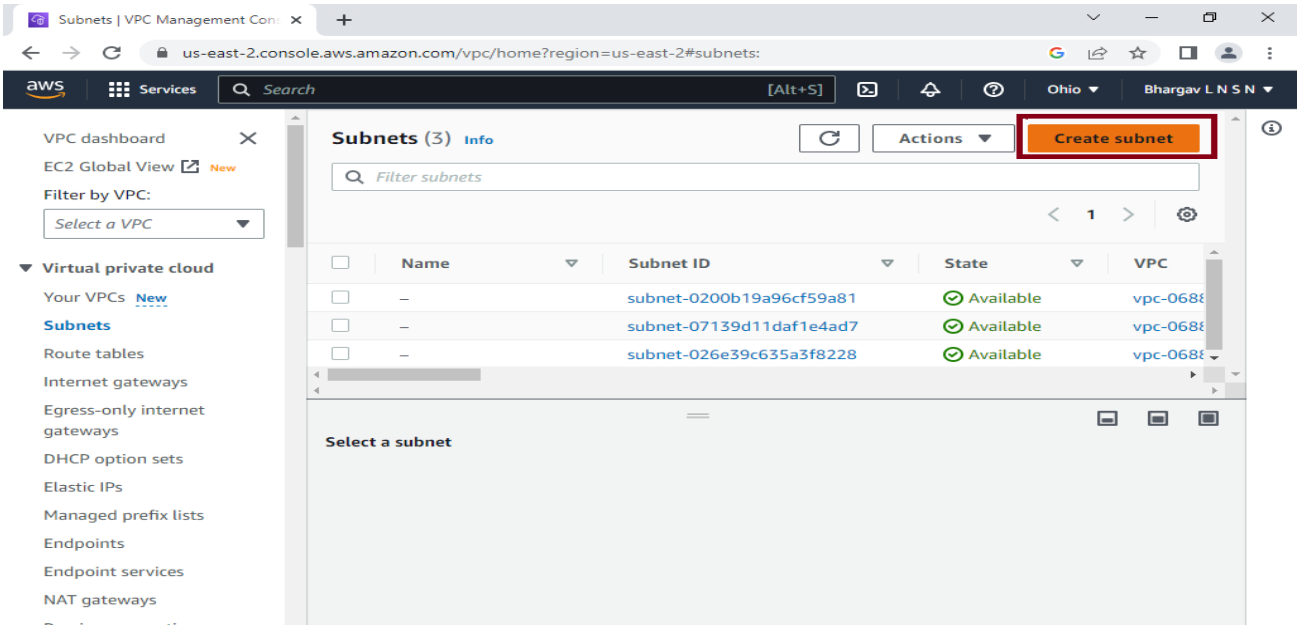
Add IPv4 CIDR

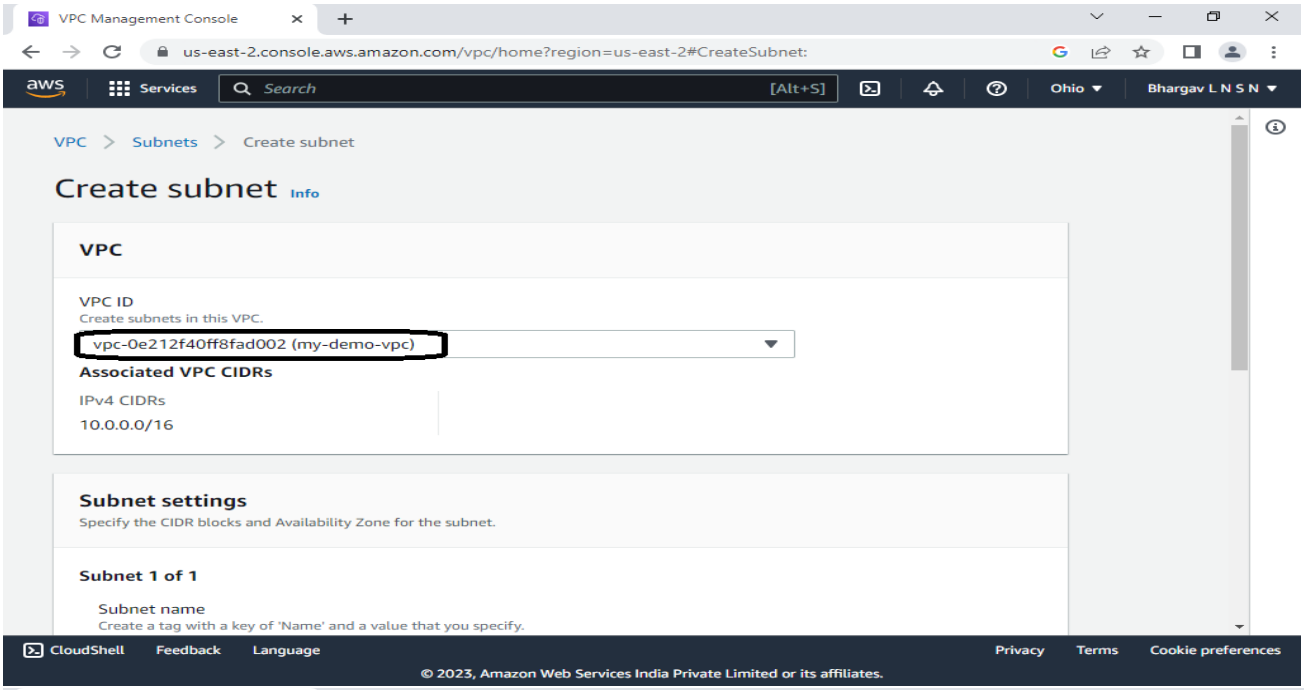


Create VPC



Create Subnets – Public and Private Subnets




VPC Management Console
us-east-2.console.aws.amazon.com/vpc/home?region=us-east-2#CreateSubnet:
aws
Services
Search
[Alt+S]
Ohio
Bhargav L N S N
VPC > Subnets > Create subnet
Create subnet Info
VPC
VPC ID
Create subnets in this VPC.
vpc-0e212f40ff8fad002 (my-demo-vpc)
Associated VPC CIDRs
IPv4 CIDRs
10.0.0.0/16
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.
CloudShell
Feedback
Language
Privacy
Terms
Cookie preferences
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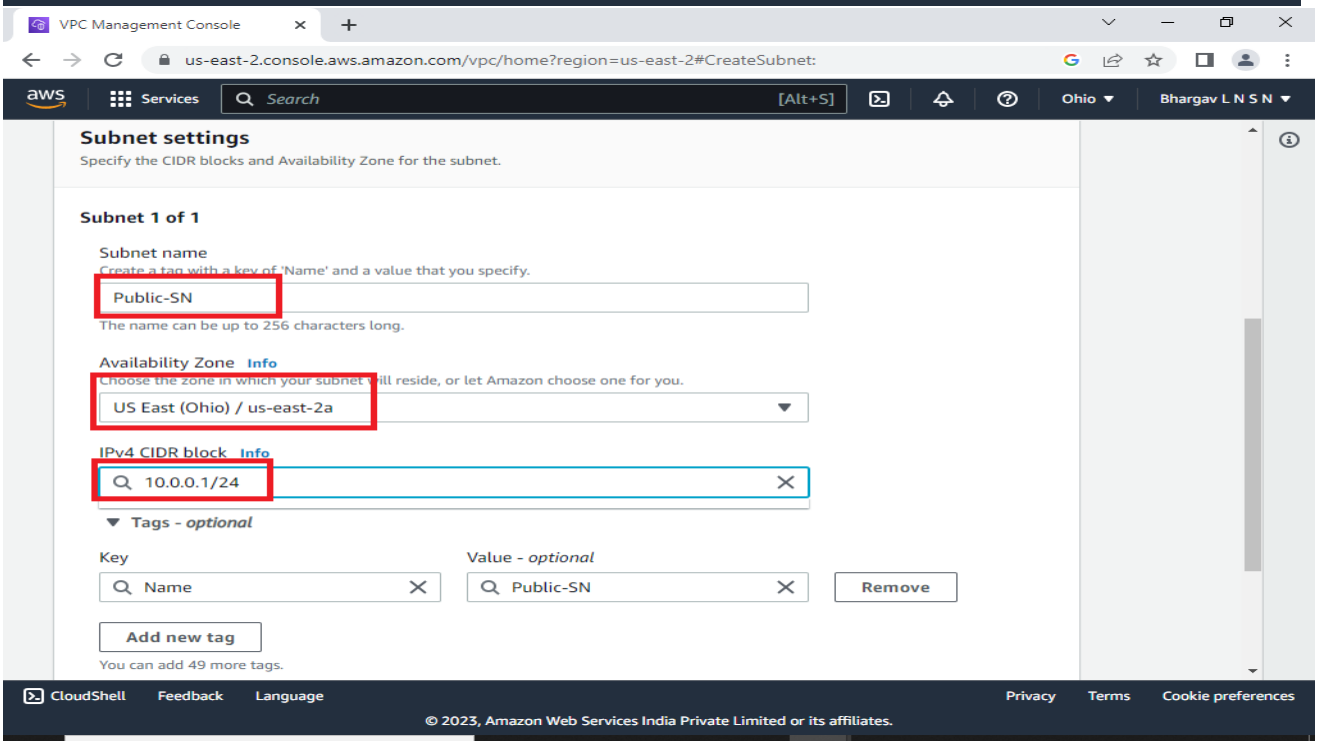
VPC Management Console
us-east-2.console.aws.amazon.com/vpc/home?region=us-east-2#CreateSubnet:
aws
Services
Search
[Alt+S]
Ohio
Bhargav L N S N
Subnet settings
Specify the CIDR blocks and Availability Zone for the subnet.
Subnet 1 of 1
Subnet name
Create a tag with a key of 'Name' and a value that you specify.
Public-SN
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.
US East (Ohio) / us-east-2a
IPv4 CIDR block Info
10.0.0.1/24
Tags - optional
Key
Value - optional
Name
Public-SN
Remove
Add new tag
You can add 49 more tags.
CloudShell
Feedback
Language
Privacy
Terms
Cookie preferences
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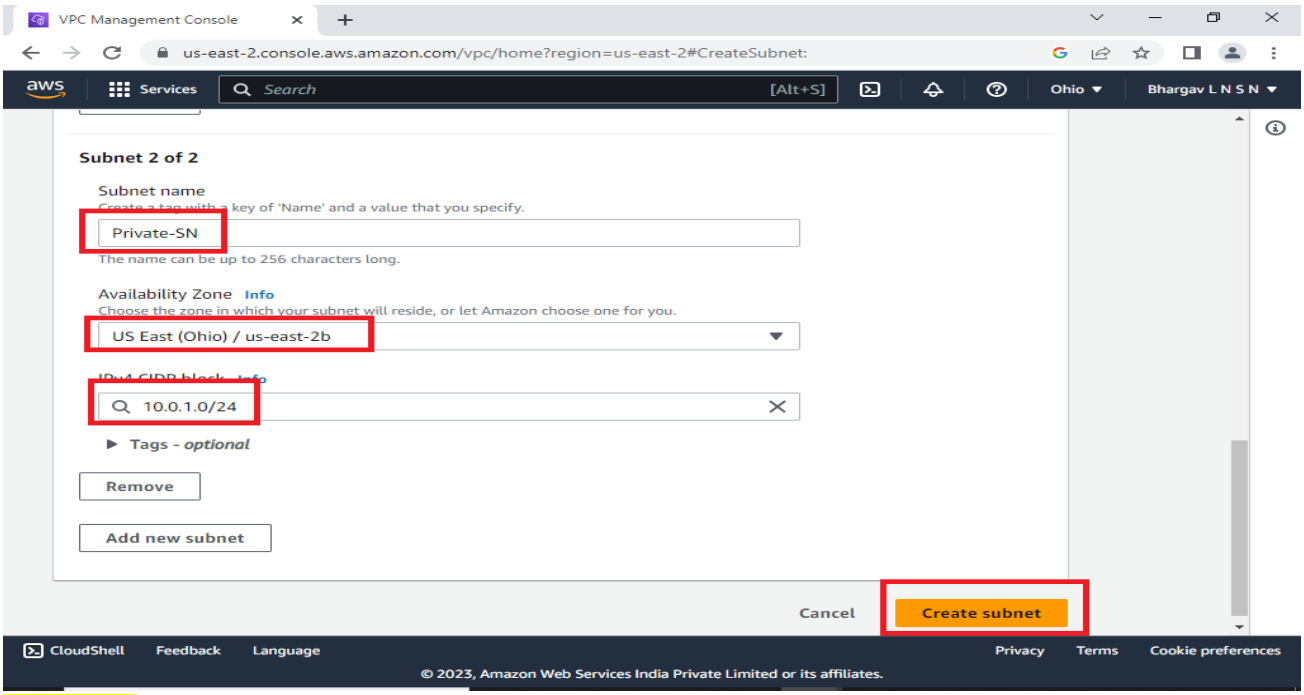
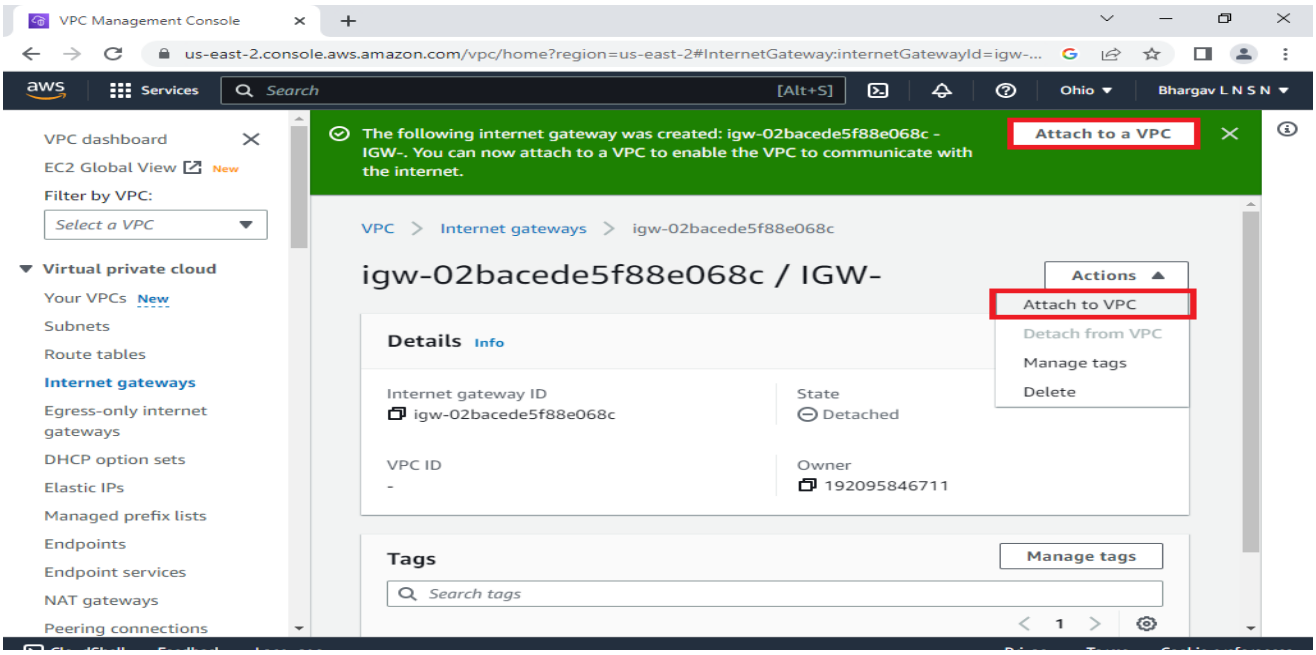
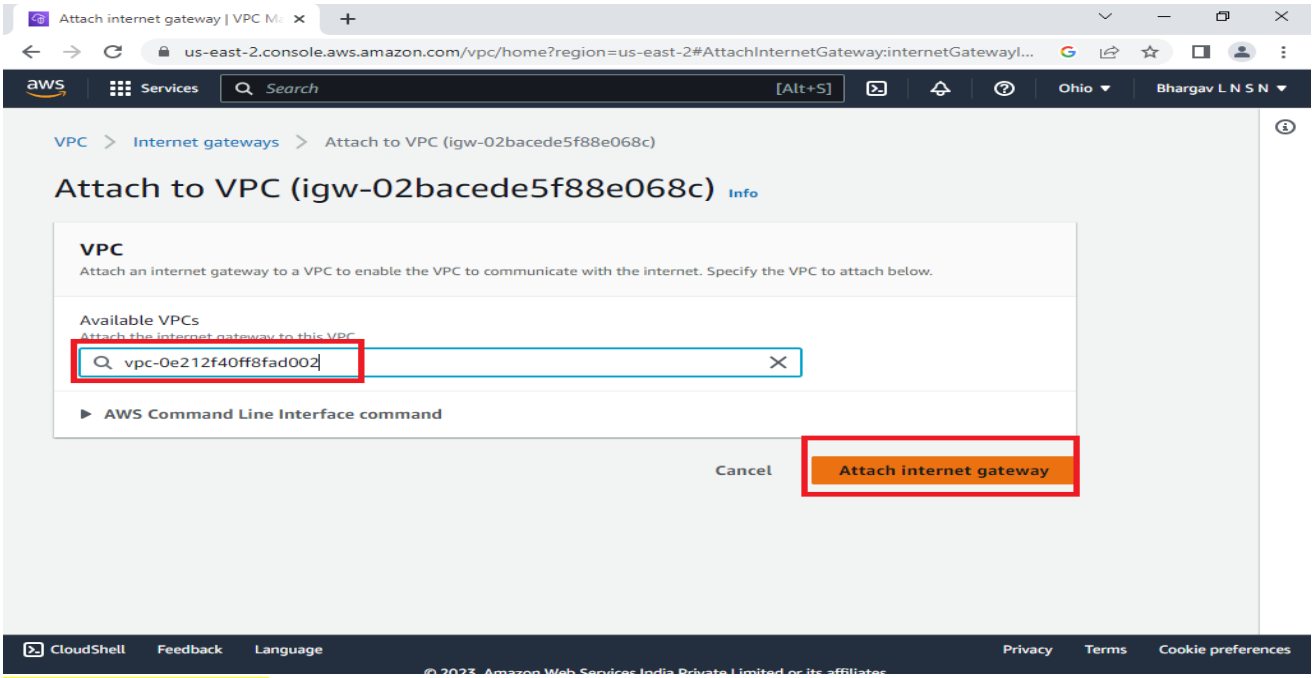
Create Subnet

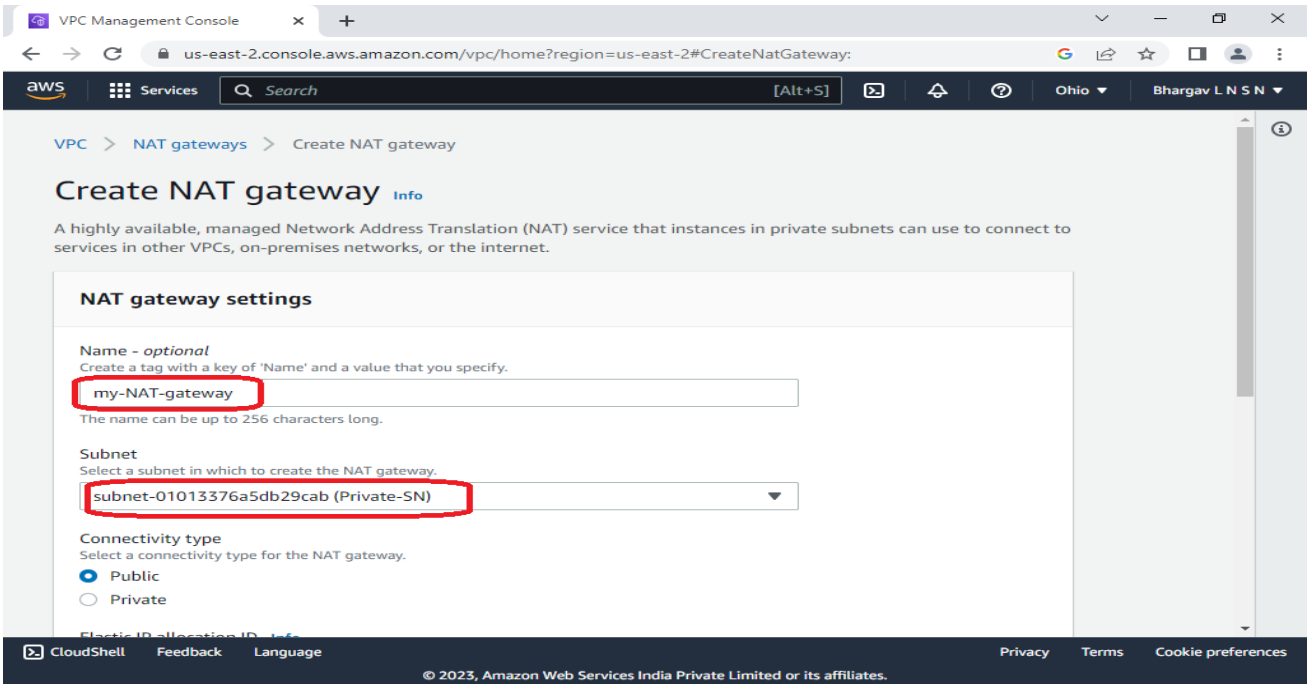


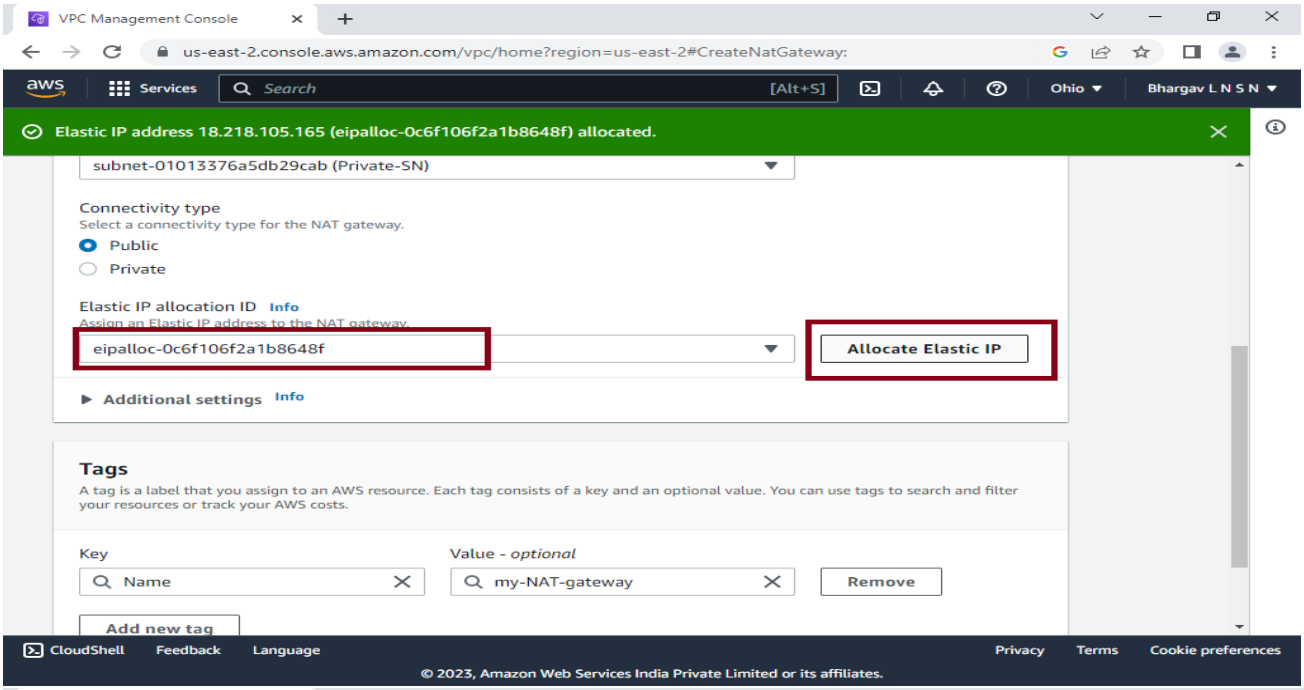
Attach VPC





Create NAT gateway




VPC Management Console
us-east-2.console.aws.amazon.com/vpc/home?region=us-east-2#CreateNatGateway:
Services
Search
[Alt+S]
Ohio
Bhargav L N S N
Elastic IP address 18.218.105.165 (eipalloc-0c6f106f2a1b8648f) allocated.
subnet-01013376a5db29cab (Private-SN)
Connectivity type
Select a connectivity type for the NAT gateway.
Public
Private
Elastic IP allocation ID Info
Assign an Elastic IP address to the NAT gateway.
eipalloc-0c6f106f2a1b8648f
Allocate Elastic IP
Additional settings Info
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
my-NAT-gateway
Remove
Add new tag
CloudShell
Feedback
Language
Privacy
Terms
Cookie preferences
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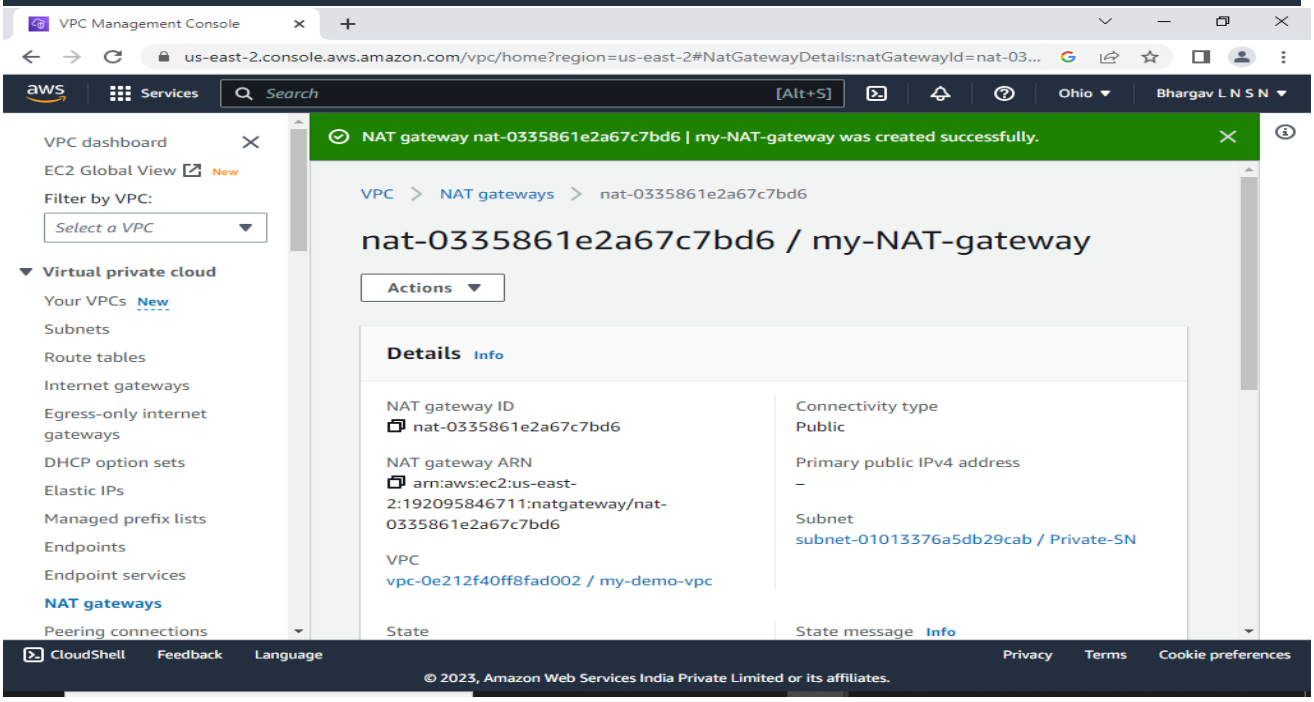
VPC Management Console
us-east-2.console.aws.amazon.com/vpc/home?region=us-east-2#NatGatewayDetails:natGatewayId=nat-03...
Services
Search
[Alt+S]
Ohio
Bhargav L N S N
VPC dashboard
EC2 Global View New
Filter by VPC:
Select a VPC
Virtual private cloud
Your VPCs New
Subnets
Route tables
Internet gateways
Egress-only internet gateways
DHCP option sets
Elastic IPs
Managed prefix lists
Endpoints
Endpoint services
NAT gateways
Peering connections
NAT gateway nat-0335861e2a67c7bd6 | my-NAT-gateway was created successfully.
VPC > NAT gateways > nat-0335861e2a67c7bd6
nat-0335861e2a67c7bd6 / my-NAT-gateway
Actions
Details Info
NAT gateway ID
nat-0335861e2a67c7bd6
NAT gateway ARN
arn:aws:ec2:us-east-2:192095846711:natgateway/nat-0335861e2a67c7bd6
VPC
vpc-0e212f40ff8fad002 / my-demo-vpc
State
Connectivity type
Public
Primary public IPv4 address
–
Subnet
subnet-01013376a5db29cab / Private-SN
State message Info
CloudShell
Feedback
Language
Privacy
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Cookie preferences
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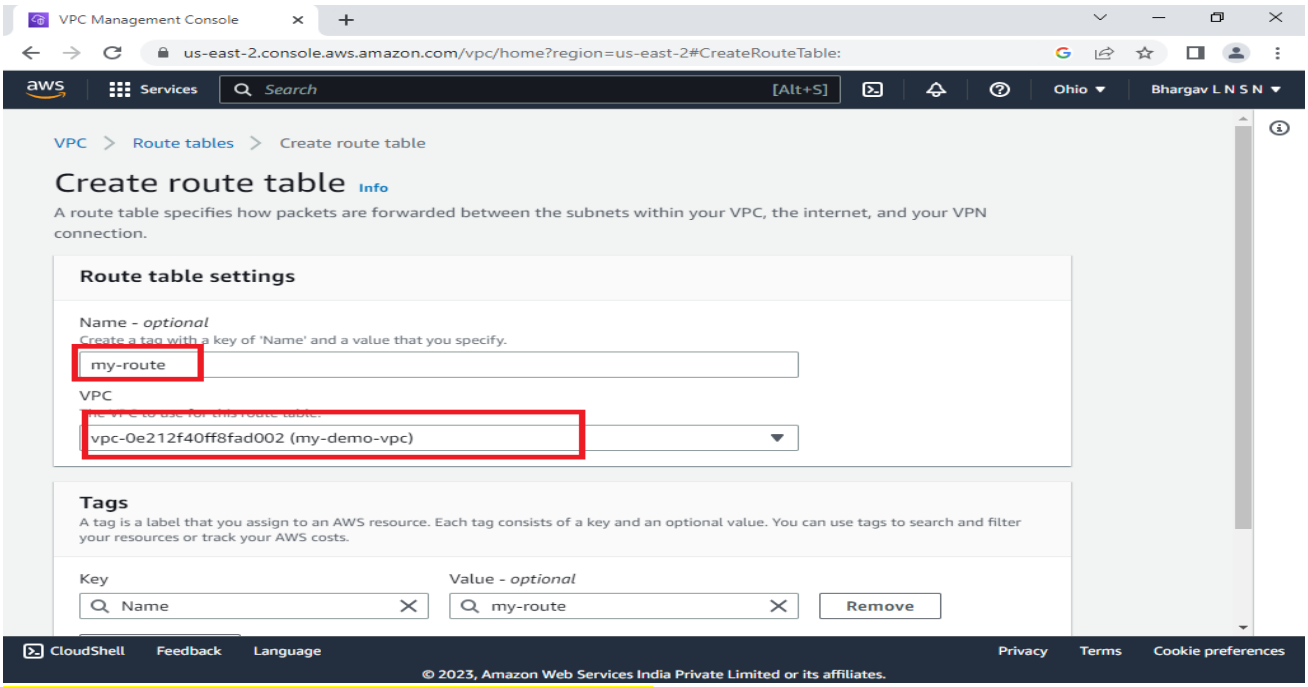
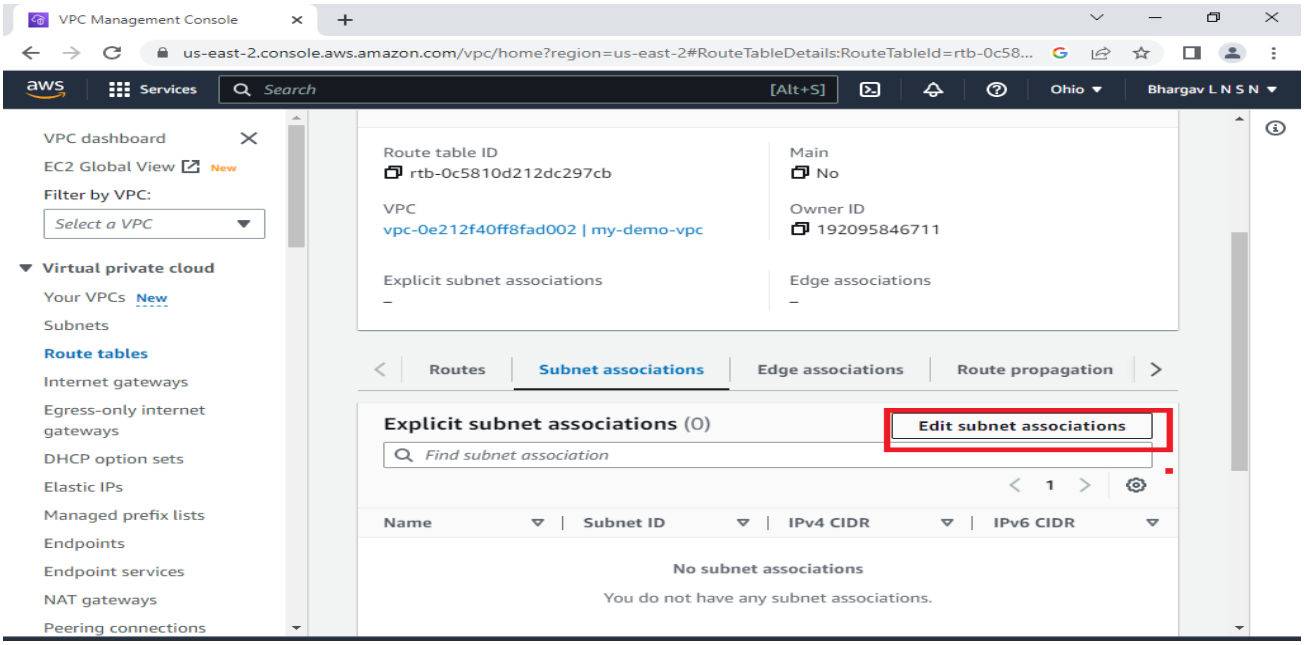
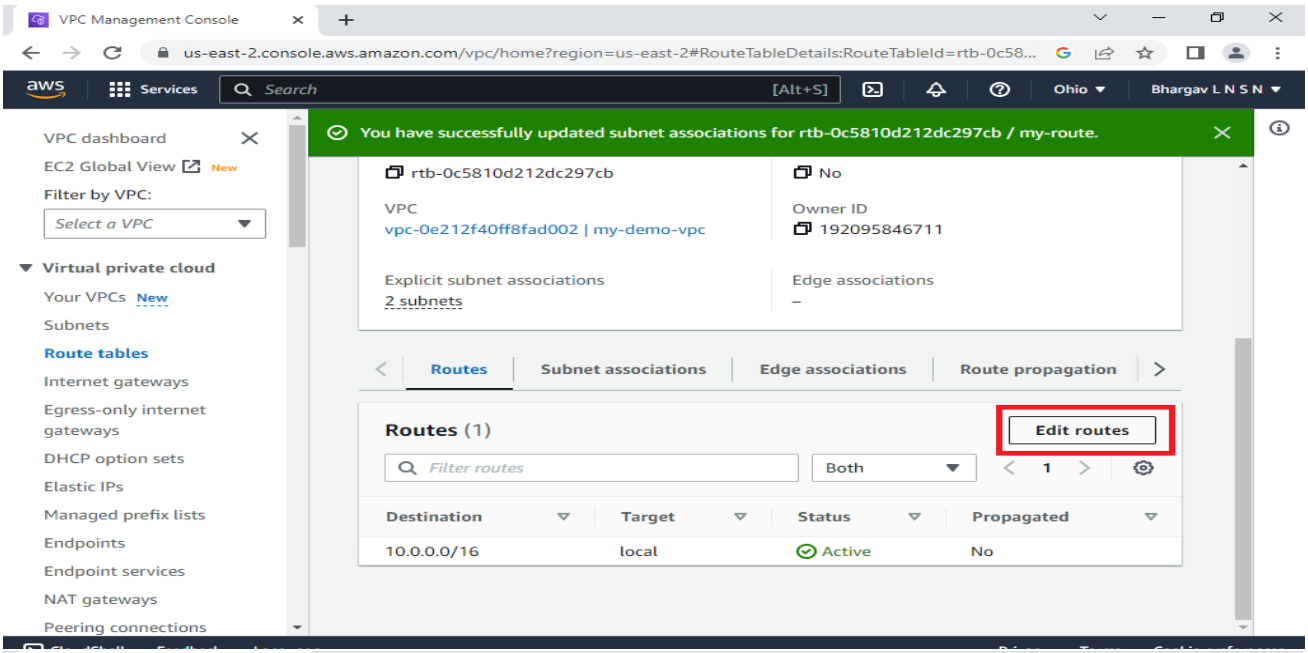
Create Route Table

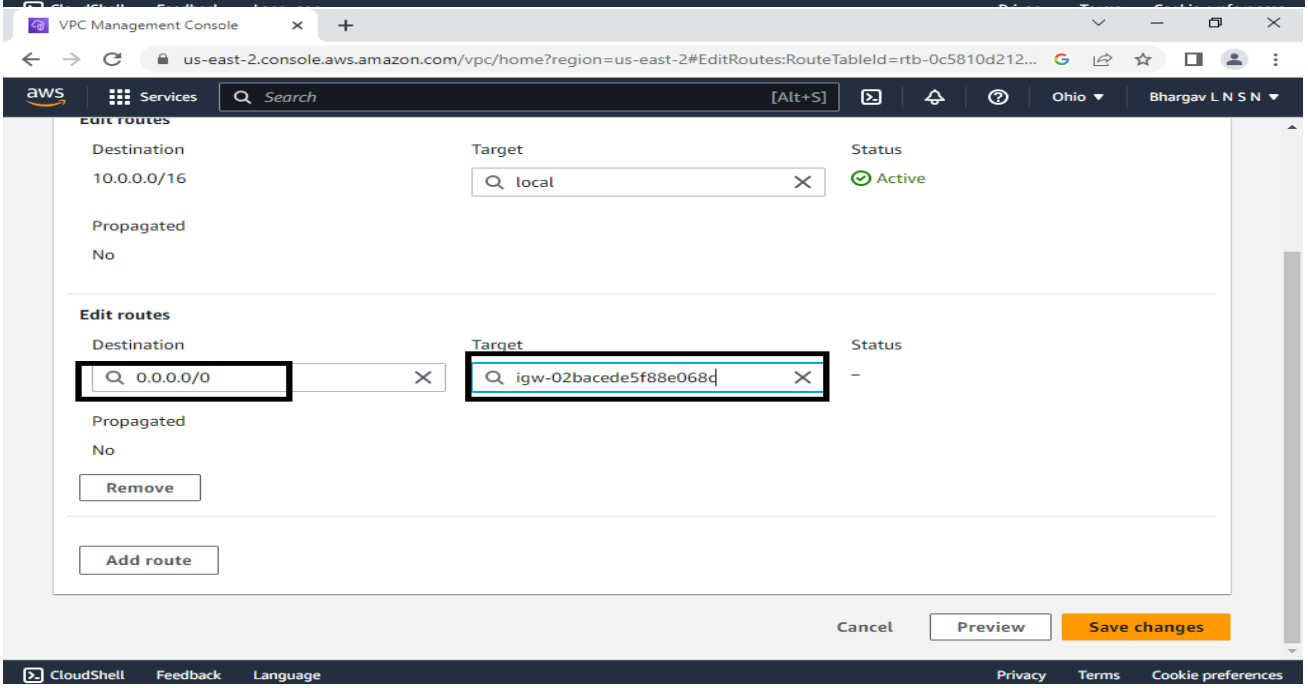


Edit Subnet Associations : ADD Subnets to Route Table

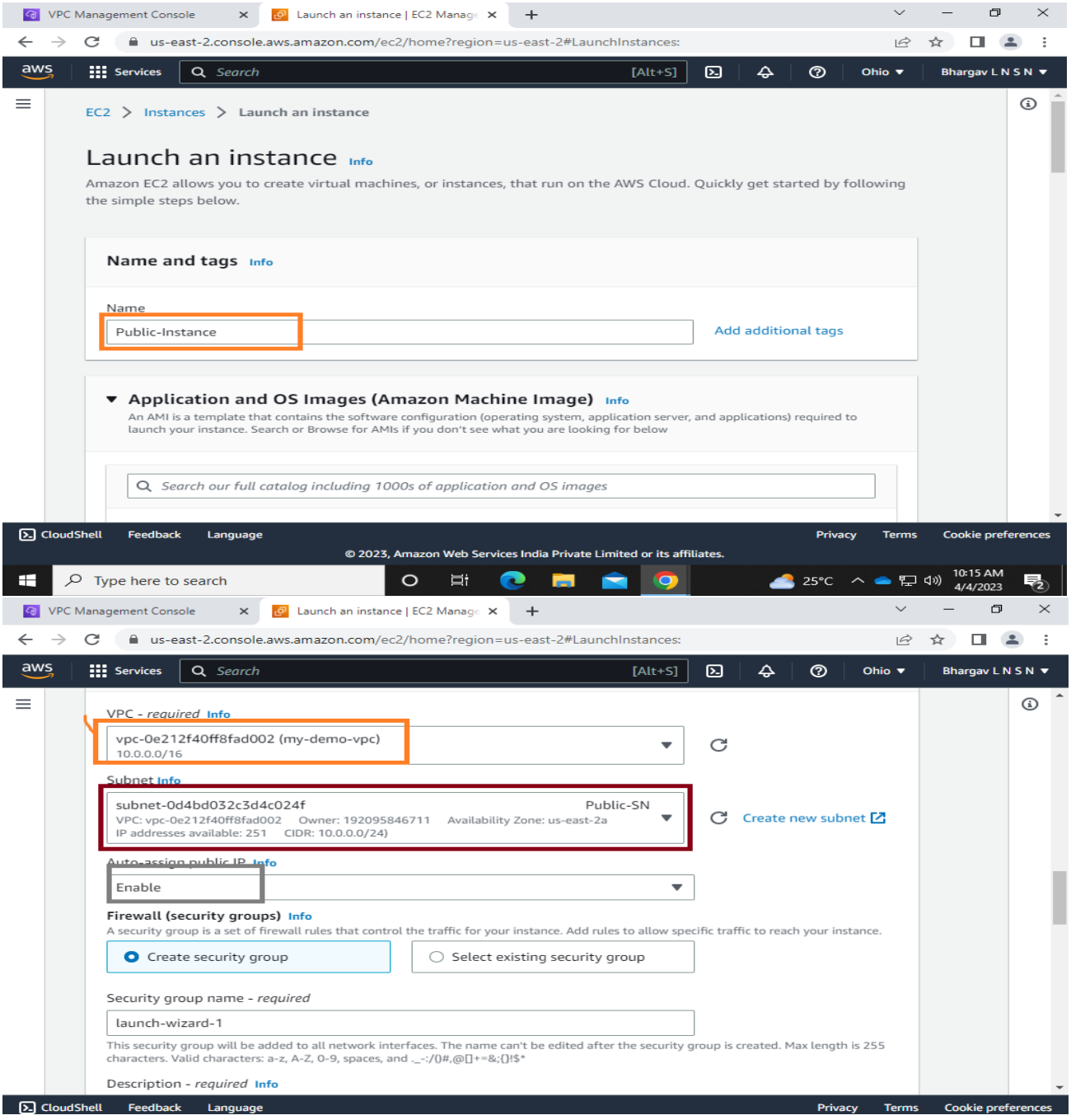


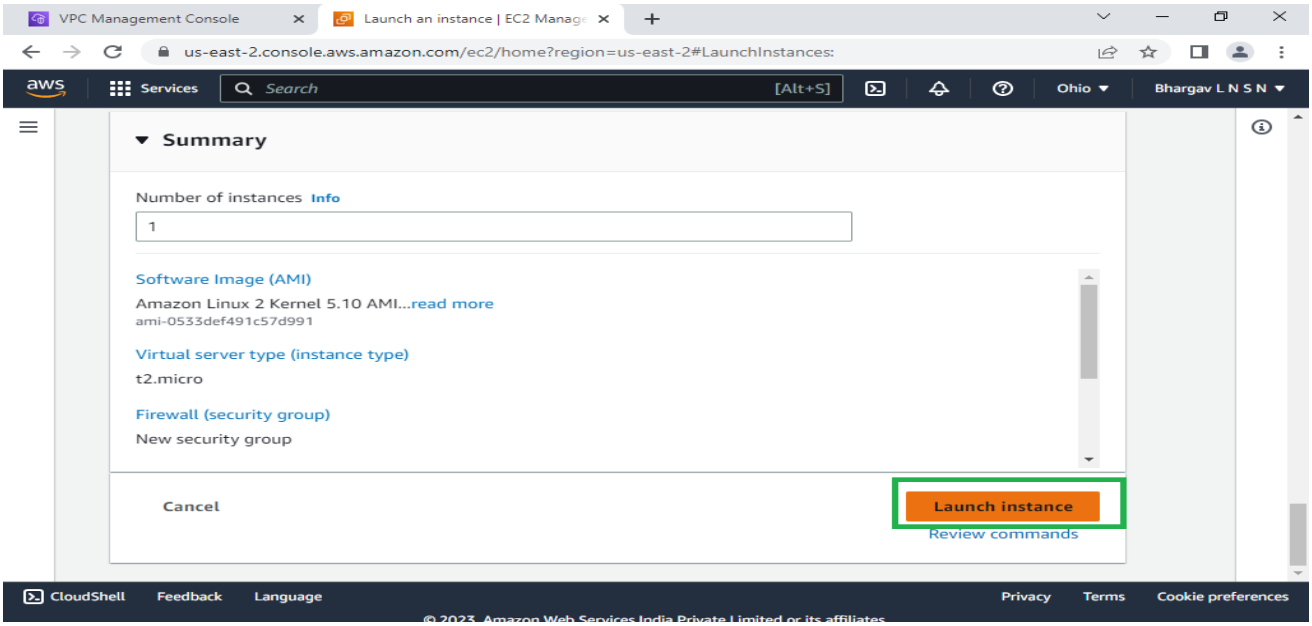
Edit Route : Add Internet Gateway and NAT gateway



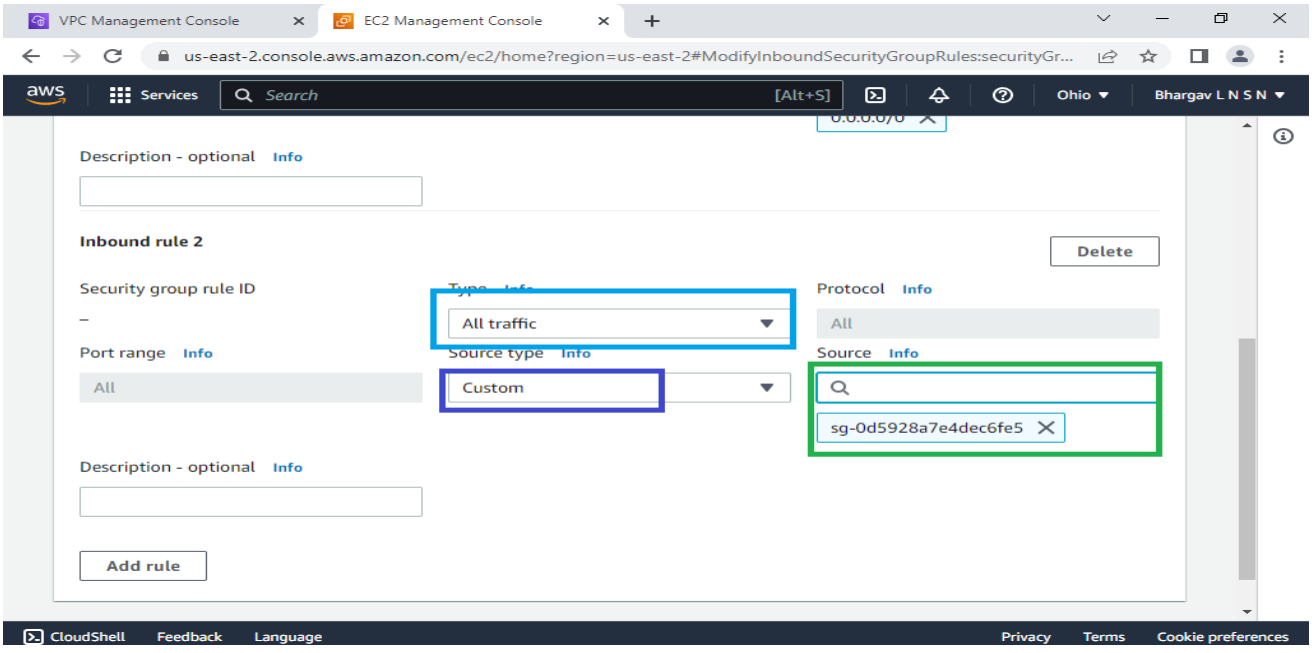


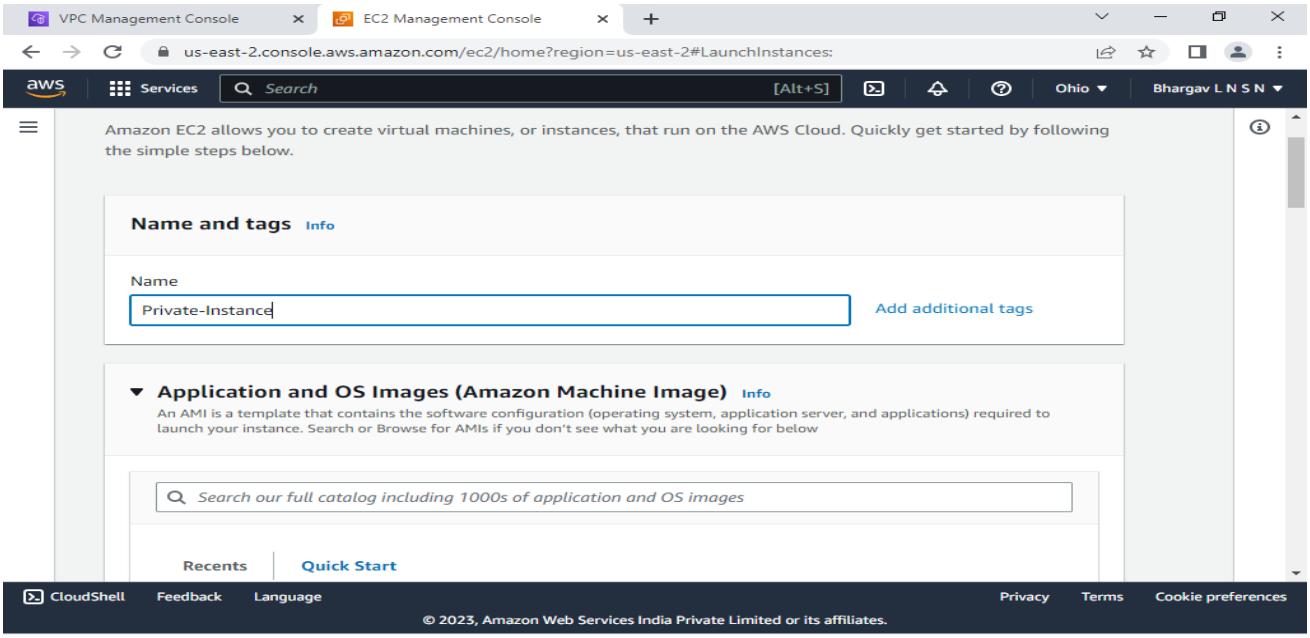
Now launch Instances : Public with Public Subnet and Private with Private Subnet





Edit Security Groups: ADD rule




VPC Management Console
EC2 Management Console
us-east-2.console.aws.amazon.com/ec2/home?region=us-east-2#LaunchInstances:
Services
Search
[Alt+S]
Ohio
Bhargav L N S N
Amazon EC2 allows you to create virtual machines, or instances, that run on the AWS Cloud. Quickly get started by following the simple steps below.
Name and tags Info
Name
Private-Instance
Add additional tags
Application and OS Images (Amazon Machine Image) Info
An AMI is a template that contains the software configuration (operating system, application server, and applications) required to launch your instance. Search or Browse for AMIs if you don't see what you are looking for below
Search our full catalog including 1000s of application and OS images
Recents
Quick Start
CloudShell
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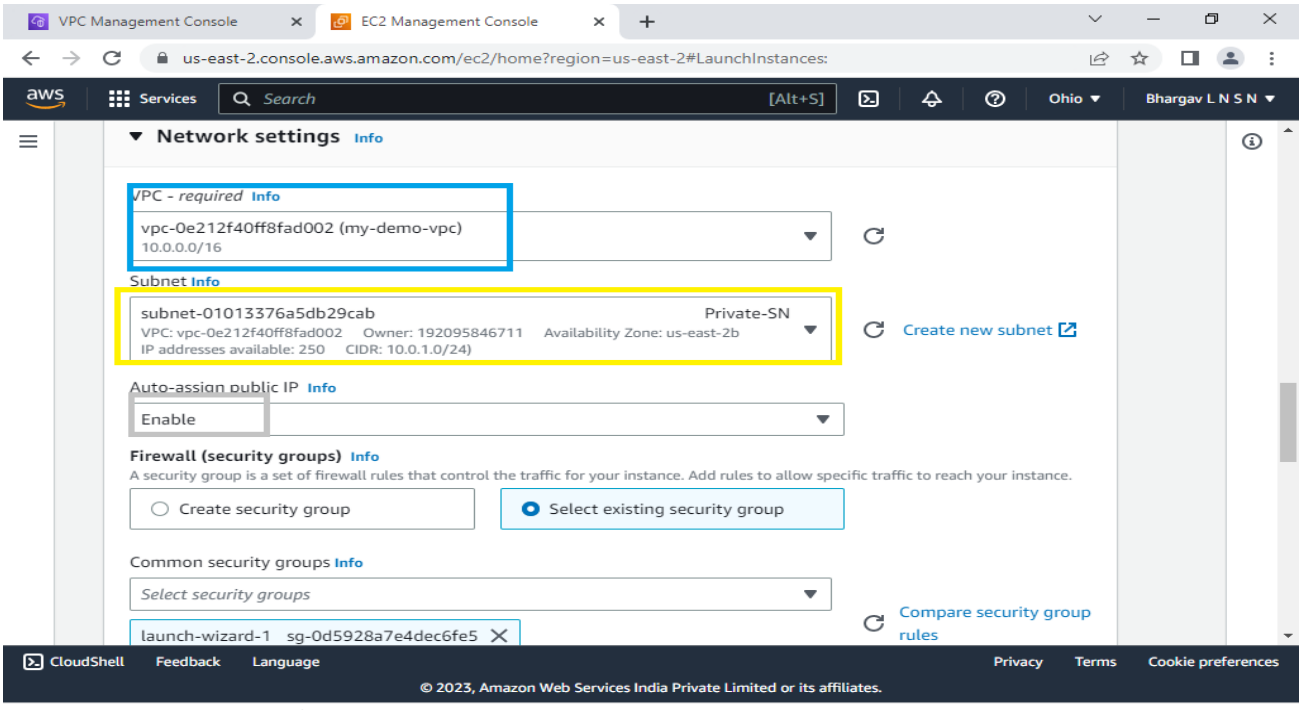
VPC Management Console
EC2 Management Console
us-east-2.console.aws.amazon.com/ec2/home?region=us-east-2#LaunchInstances:
Services
Search
[Alt+S]
Ohio
Bhargav L N S N
Network settings Info
VPC - required Info
vpc-0e212f40ff8fad002 (my-demo-vpc)
10.0.0.0/16
Subnet Info
subnet-01013376a5db29cab
Private-SN
VPC: vpc-0e212f40ff8fad002 Owner: 192095846711 Availability Zone: us-east-2b
IP addresses available: 250 CIDR: 10.0.1.0/24)
Create new subnet
Auto-assign public IP Info
Enable
Firewall (security groups) Info
A security group is a set of firewall rules that control the traffic for your instance. Add rules to allow specific traffic to reach your instance.
Create security group
Select existing security group
Common security groups Info
Select security groups
launch-wizard-1 sg-0d5928a7e4dec6fe5
Compare security group rules
CloudShell
Feedback
Language
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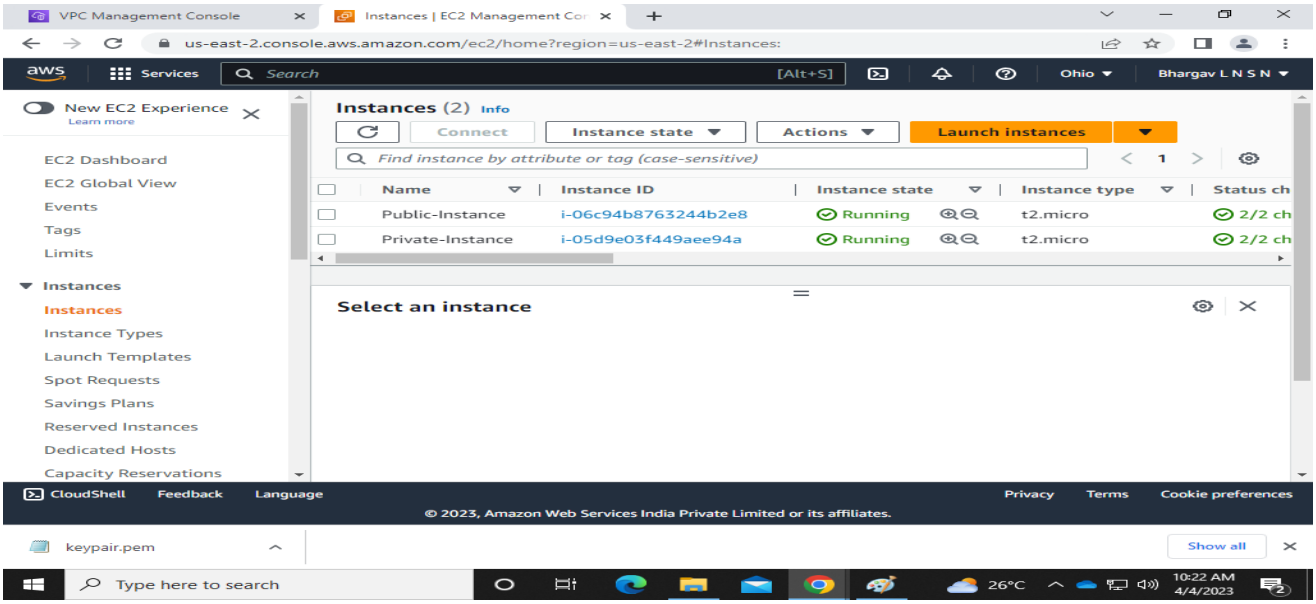

keypair - Notepad

File Edit Format View Help

```
-----BEGIN RSA PRIVATE KEY-----
MIIEpAIBAAKCAQEAgpGQq86yVnzrQhAKCBHsKoLpXXqvxDhJHEcQVvob1HhC9Ntv
SvUuxao32rgbp4S3sAv0/Z9KjBGxEOBexkiR7Tn2DRvaeNshdxqybEdNqG8khKzJ
AhVw7WirqiwM195z3pgFJ4etdLLPtzXHh+Ovxsv8KdvjnMpfNpgHrn+Sfa1JA1pR
FnJ5GBGXua4pLrp3SCxtX3r7xtu1ooFzU2KRIEWxg6Nto7xYBcLb5HyeIugPJmCr
k8u/k1K9wcs175sK1AQ9rOM+gA0IvGHw61LaGTMi73TaOV+aUbc+wc5+LFnnEa6N
D+uIQaTZ6RbHf0No/HWv6j9o7SvXE7NRFD90RwIDAQABAoIBACZu6LHZ7t7MeIeC
pyFG/UhqLn0orvJISyT6uhGQH38EQ11F+1WLJFBk0XodNW6y/0rfyiaZq9zdHEzG
br9Y/zNgG1AygbWPcyNXBWwf9Pj+djZjket+GjaX1+gIfWNRhLPh9ap0Ipe2RrQ8
LVaPq98NjlVX94DghPRR/fjcbmd1mkQAxWDLBIfewuaXdDH3GgzL7iRnZ5wciM0P
C2ABIesVeozjIdRhwnjgAvbXQqh/GgreNbraW+jzQjy9bFt56sEIHJJjeVRVPX17
A8y8tluf2FfDC/tVgc5PS0+jk7LL7Kb9uIPGFRg6sUBAJ09JZFF/Ypn1KBXQViIe
Z4UP60ECgYEA7OBt5G+ydzUUNHwhKYzgC7x5RfaCgdVQV2O+GKkiSm4hIVzQXAm/
zyJh18ijS84mM6pVCaRojfbPXPdPDlPDxtv+XjlP8qrPHkCNytPKIYMuW70Ht4ZB
eengC5RoqmZcIr7TZmIM7g8z3If19iQe7tQzukSGdxpOY8H7eSGs5OcCgYEAjRwM
iKhj62UQD+yHsXa7zhR94yET0DHMRmdR0d9rQpepvJ20jO4c+52wghLgB6KQpLfF
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Rsl9nEa/e1/pTyrNYBGs4M7nYJeo93Joy92BqaECgYEAk7PJsjRX4u8M/0EbaI44
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-----END RSA PRIVATE KEY-----
```
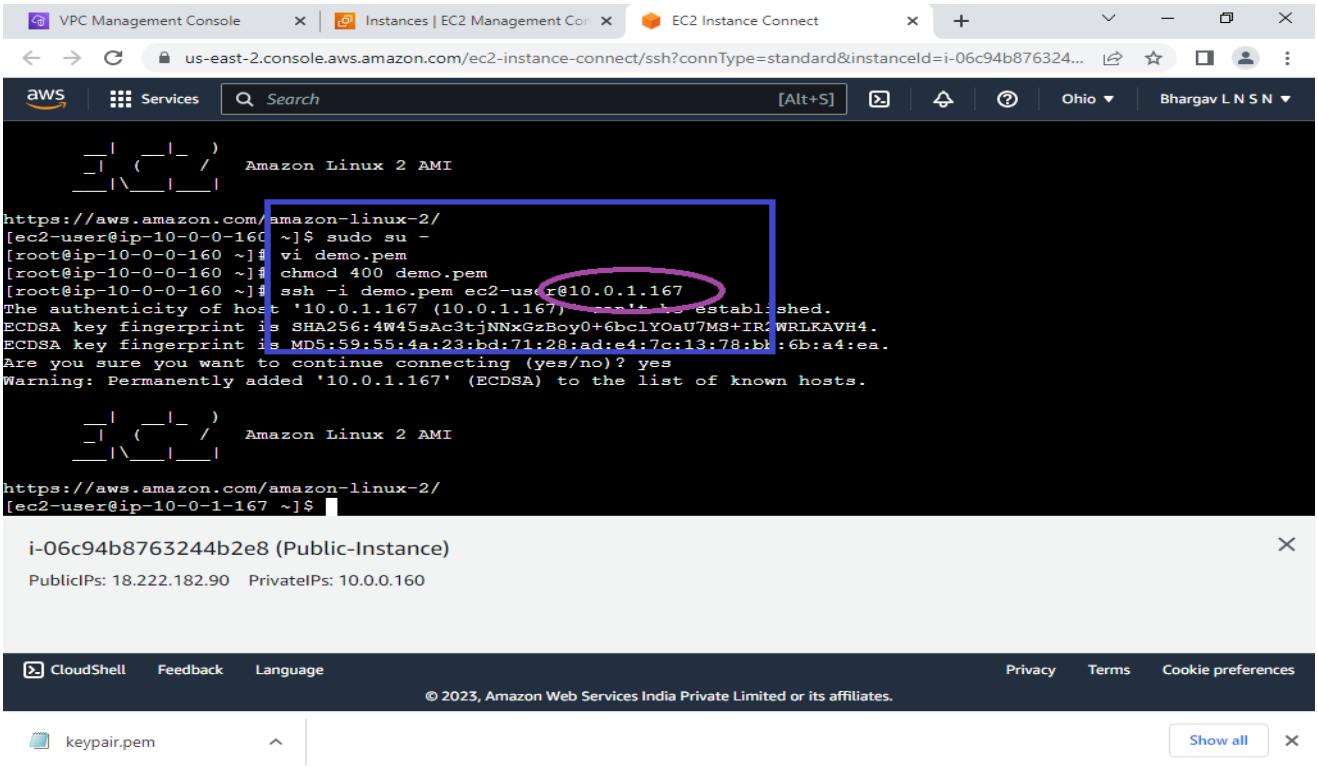
Set the ssh connection from the public instance to private instance