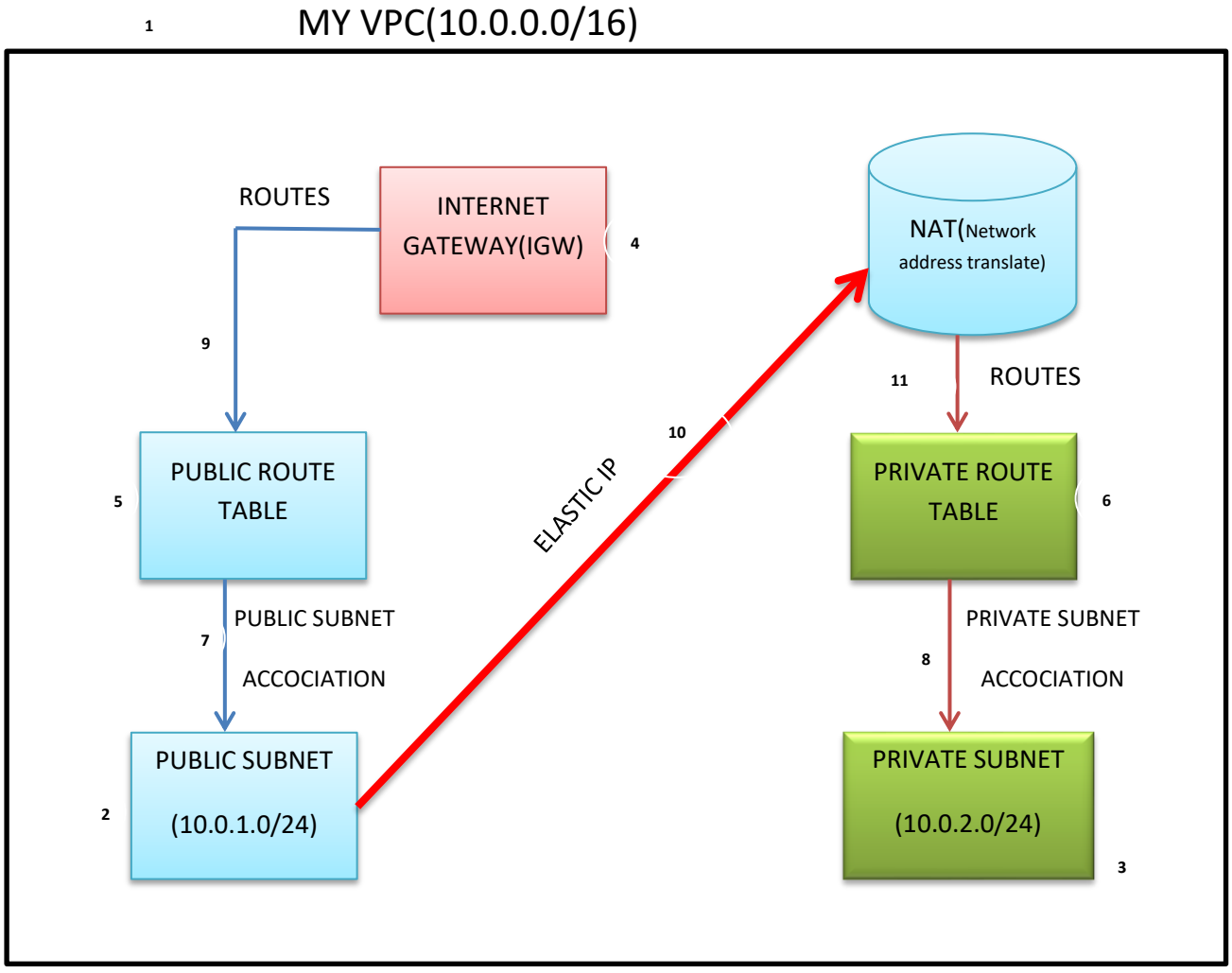
VPC

VIRTUAL PRIVATE CLOUD

Amazon Virtual Private Cloud (Amazon VPC) gives you full control over your virtual networking environment, including resource placement, connectivity, and security. Get started by setting up your VPC in the AWS service console.



THREE TIRE ARCHITECURE:

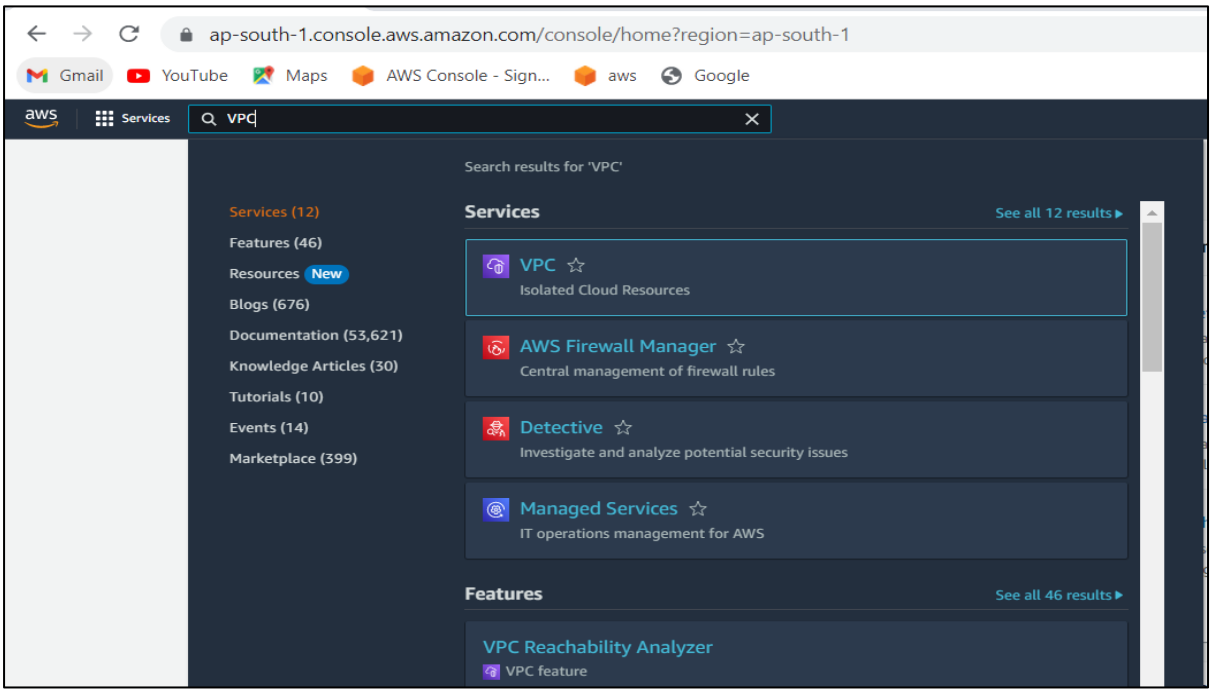
Webserver+Application+Database

TWO TIRE ARCHITECTURE

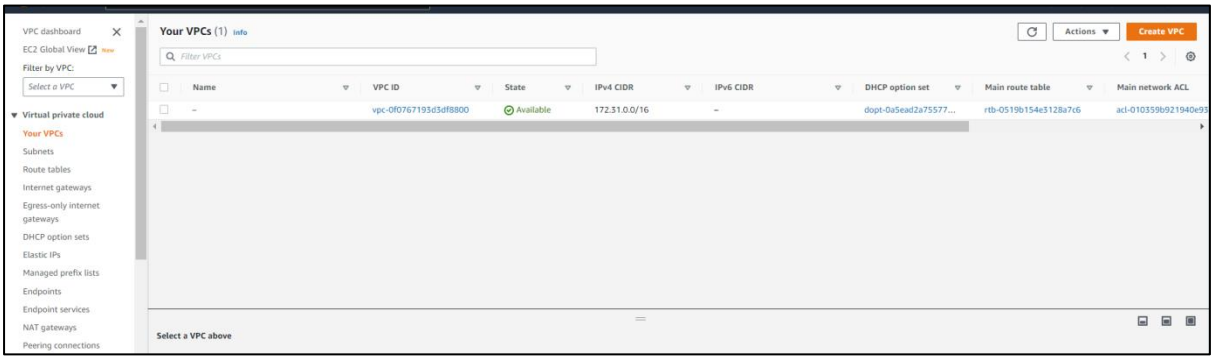
Webserver Or Application+Database

STEPS TO CREATE VPC:

STEP1:AWS--->Search Bar--->Vpc

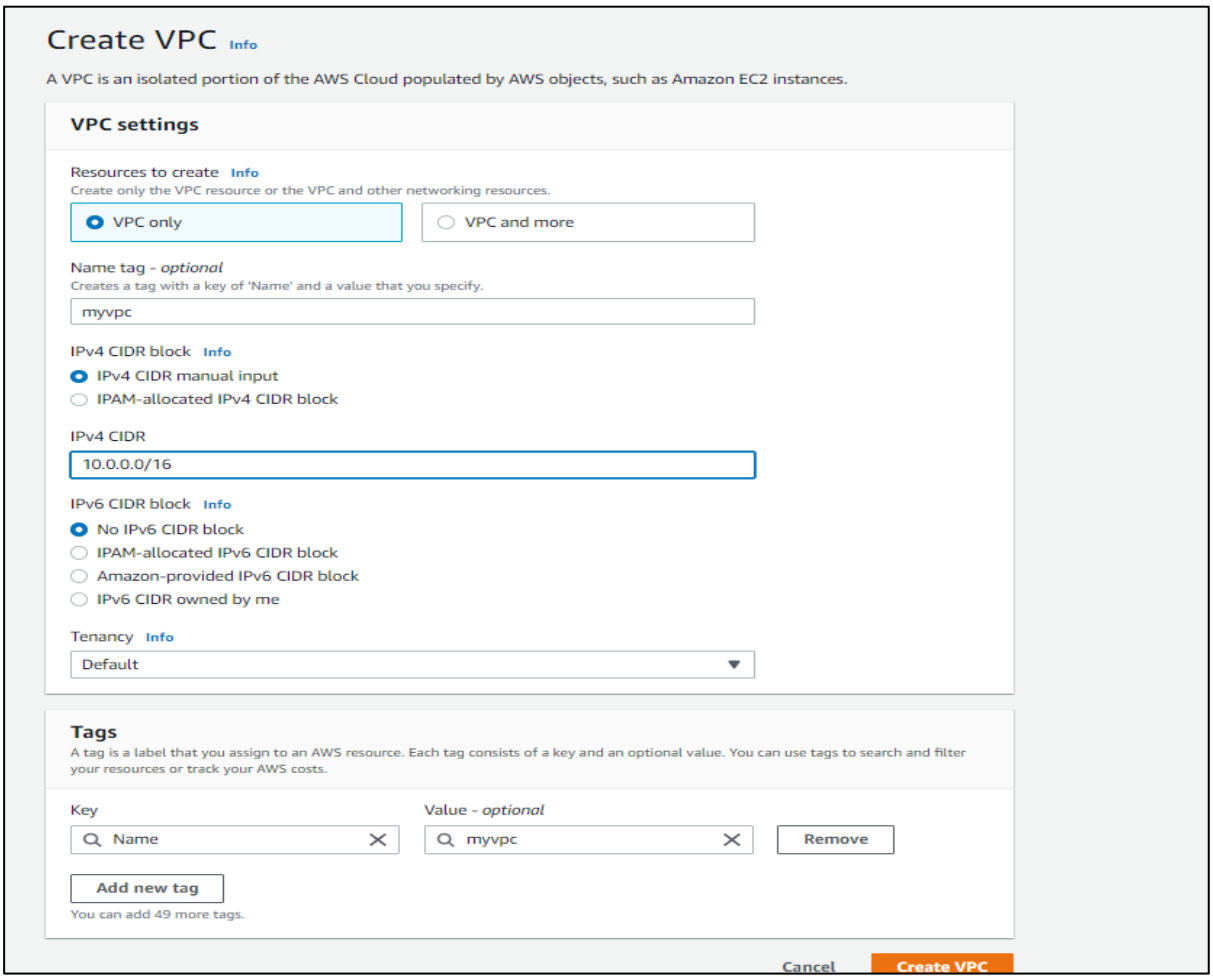


STEP1.1: Your Vpc--->Create Vpc

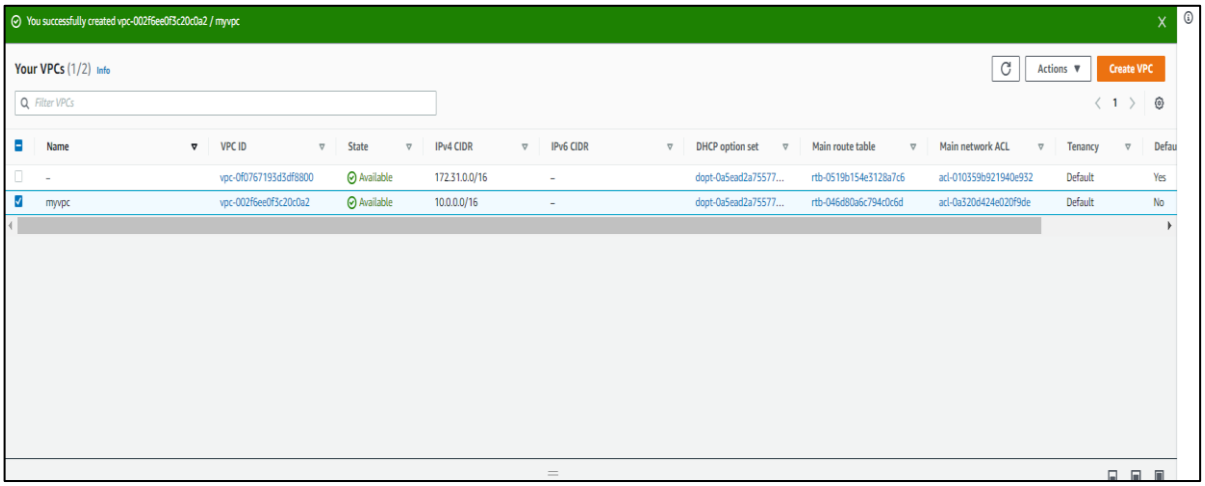


STEP1.2: Vpc Setting--->Vpc Only---->Name(Myvpc)---->ipv4CIDR(10.0.0.0/16)

----->Tenacy(Default)---->Create Vpc

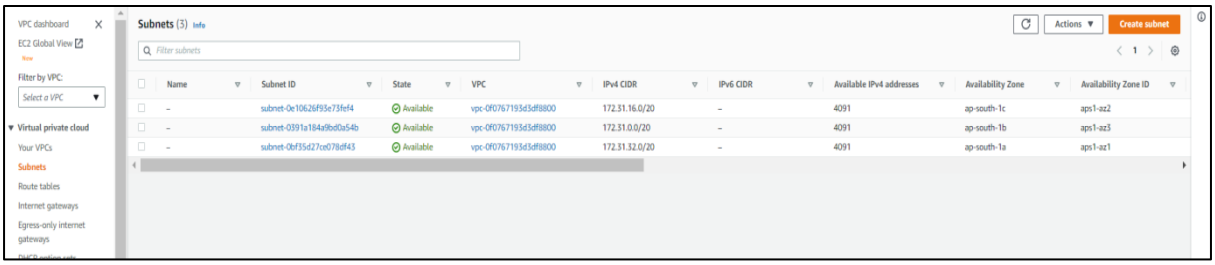

Create VPC Info
A VPC is an isolated portion of the AWS Cloud populated by AWS objects, such as Amazon EC2 instances.
VPC settings
Resources to create Info
Create only the VPC resource or the VPC and other networking resources.
VPC only
VPC and more
Name tag - optional
Creates a tag with a key of 'Name' and a value that you specify.
myvpc
IPv4 CIDR block Info
IPv4 CIDR manual input
IPAM-allocated IPv4 CIDR block
IPv4 CIDR
10.0.0.0/16
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
myvpc
Remove
Add new tag
You can add 49 more tags.
Cancel
Create VPC

Vpc created..

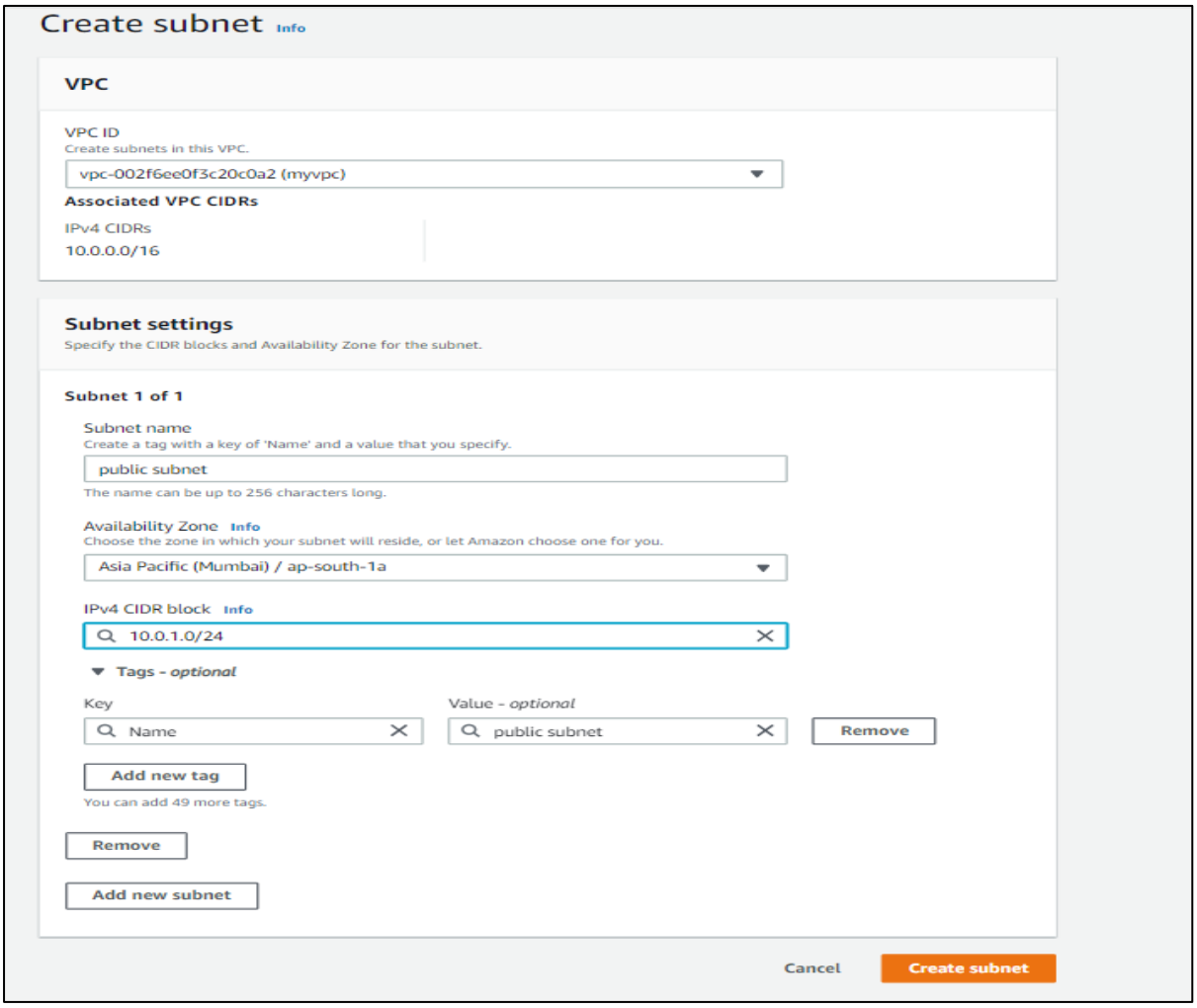

You successfully created vpc-002f6ee0f3c20c0a2 / myvpc
Your VPCs (1/2) Info
Actions
Create VPC
Filter VPCs
Name
VPC ID
State
IPv4 CIDR
IPv6 CIDR
DHCP option set
Main route table
Main network ACL
Tenancy
vpc-0f07671935d3df8800
Available
172.31.0.0/16
dopt-0a5ead2a75577...
rtb-0519b154e3128a7c6
acl-010359b921940e932
Default
Yes
myvpc
vpc-002f6ee0f3c20c0a2
Available
10.0.0.0/16
dopt-0a5ead2a75577...
rtb-046d80a6c794c0c6d
acl-0a320d424e020f9de
Default
No

STEP2:<u>CREATE SUBNET:</u>

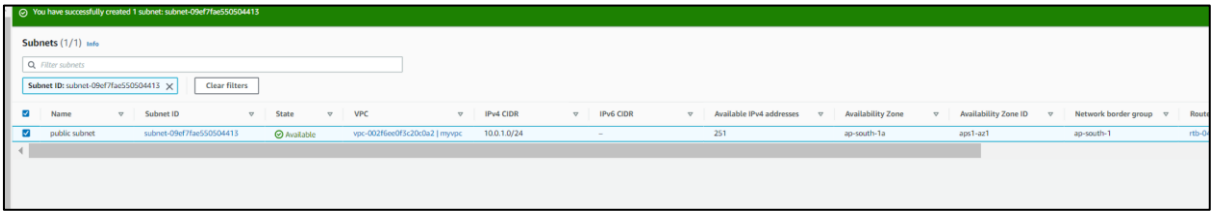
STEP2.1:CREATE PUBLIC SUBNET --->subnet---->create subnet



STEP2.2:vpc(creating vpc id select)---->subnet name(public subnet)---->availibity zone(ap-south-1a)---->ipvaCIDR(10.0.1.0/24)--->create subnet

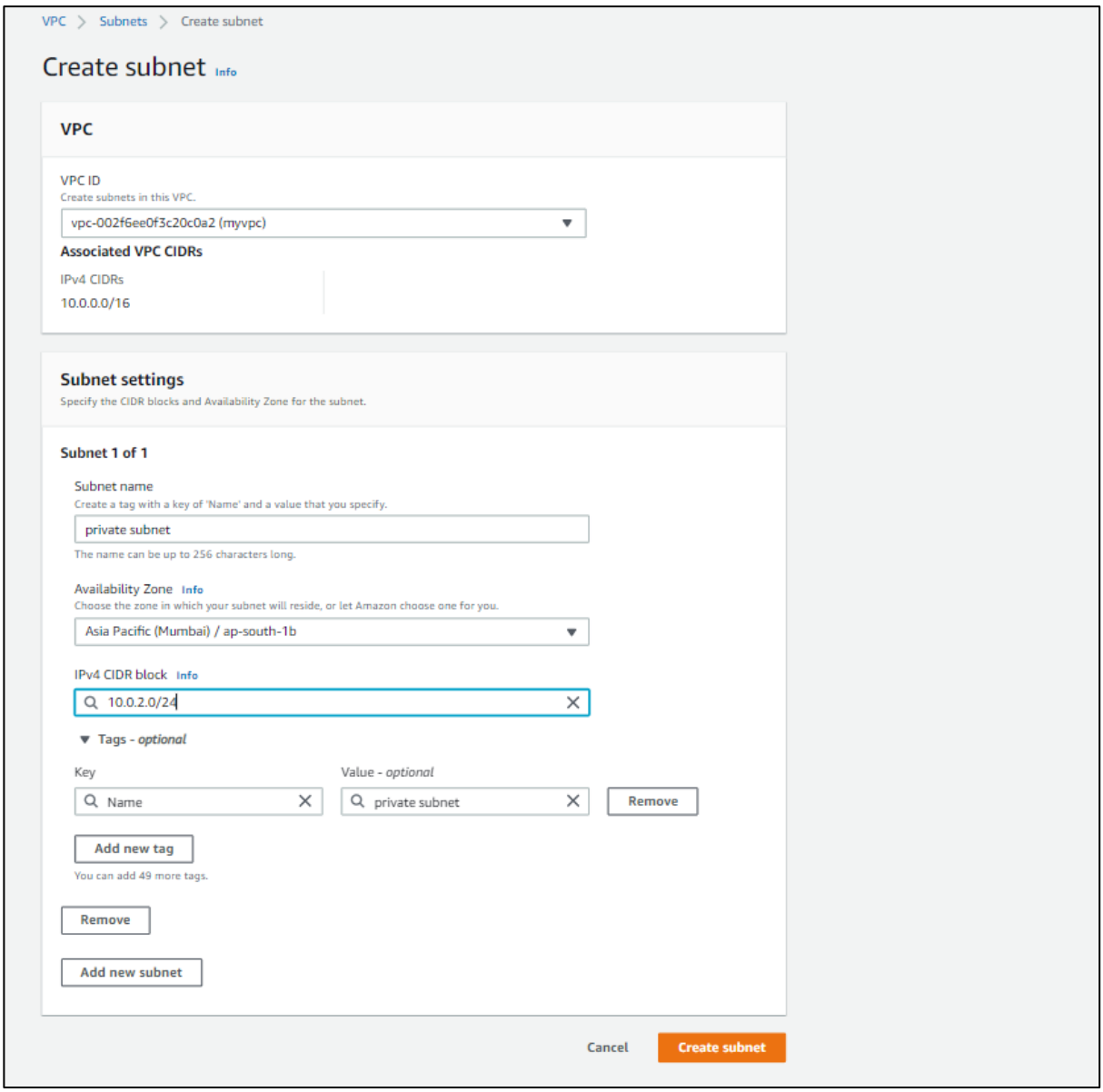


Public subnet created..

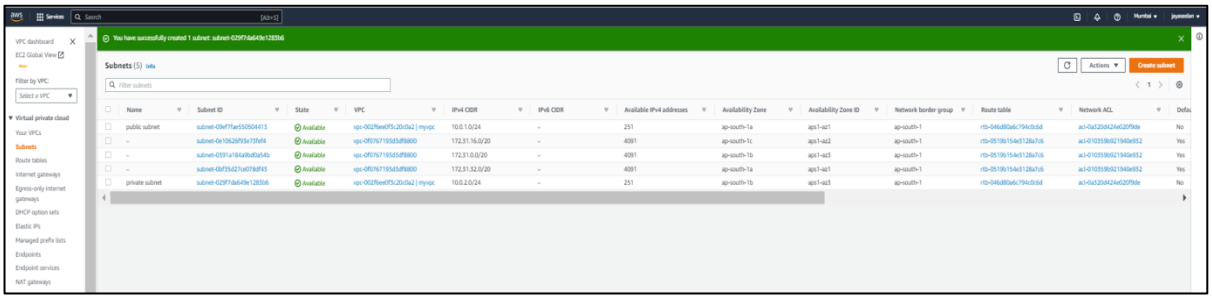


STEP2.3:PRIVATE SUBNET CREATE

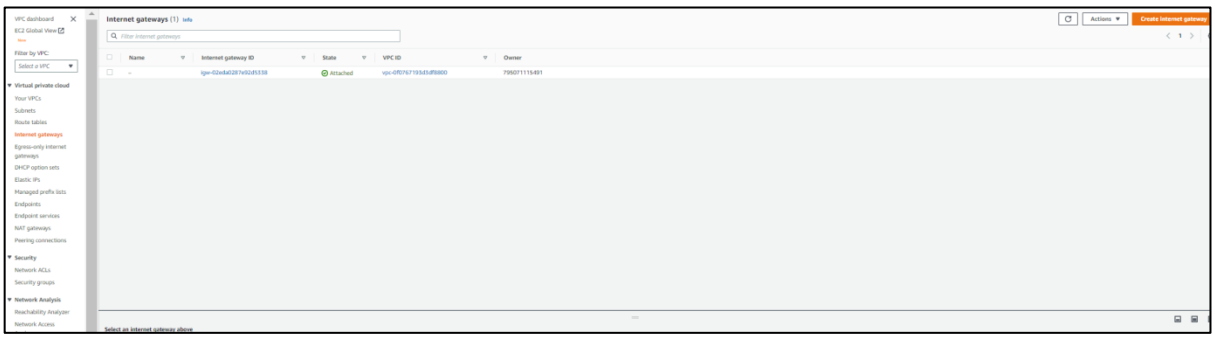
vpc(creating vpc id select)---->subnet name(private subnet)--->availibity zone(ap-south-1b)---->ipvaCIDR(10.0.2.0/24)--->create subnet



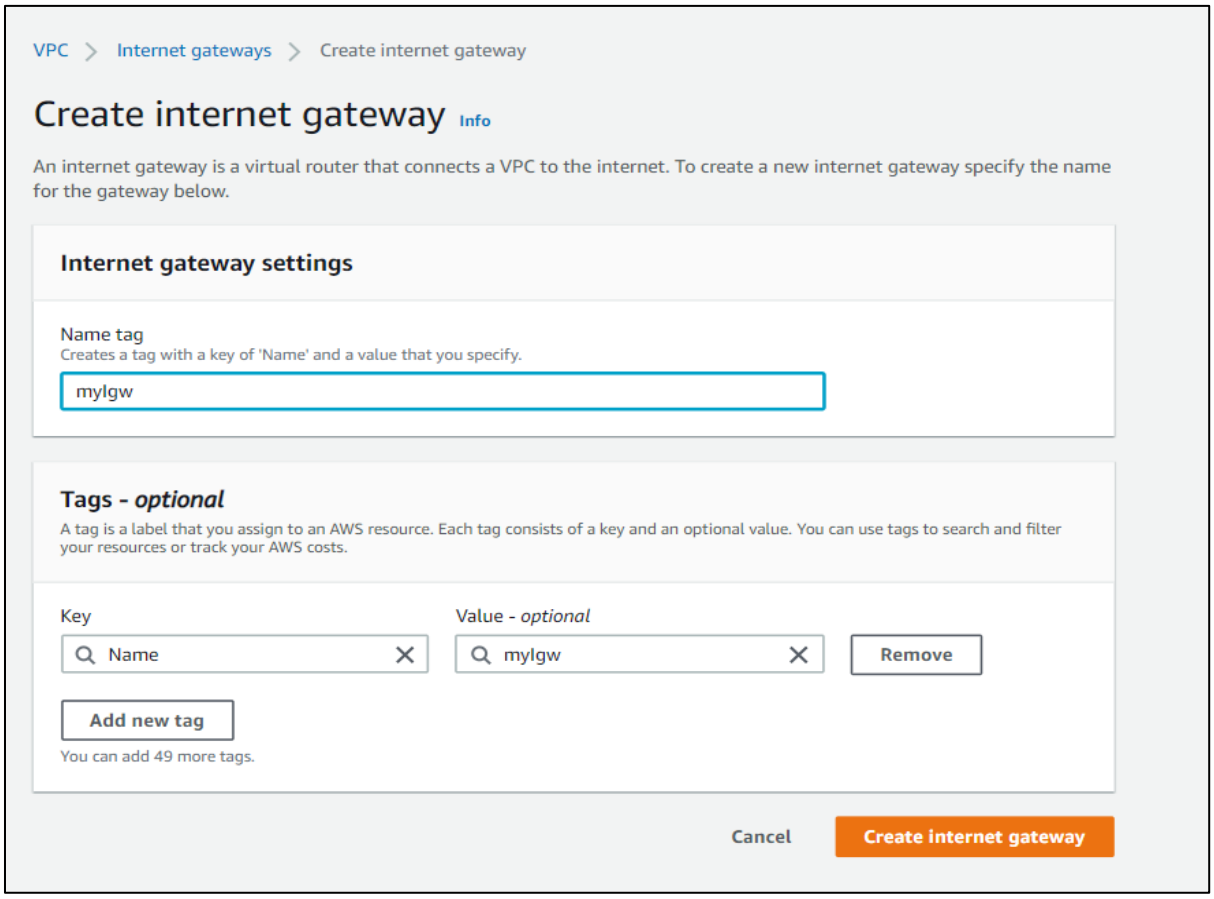
Public And Private Subnet Created.



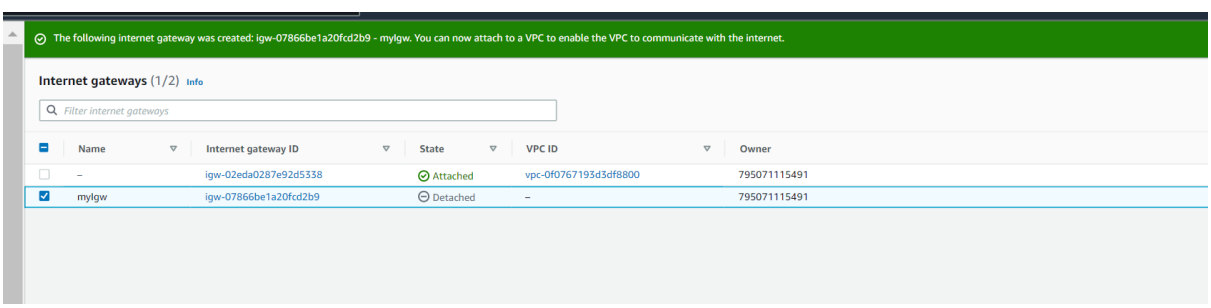
STEP3:internet gateway--->create internet gateway



STEP3.1:name tag (myigw)----->create internet gateway

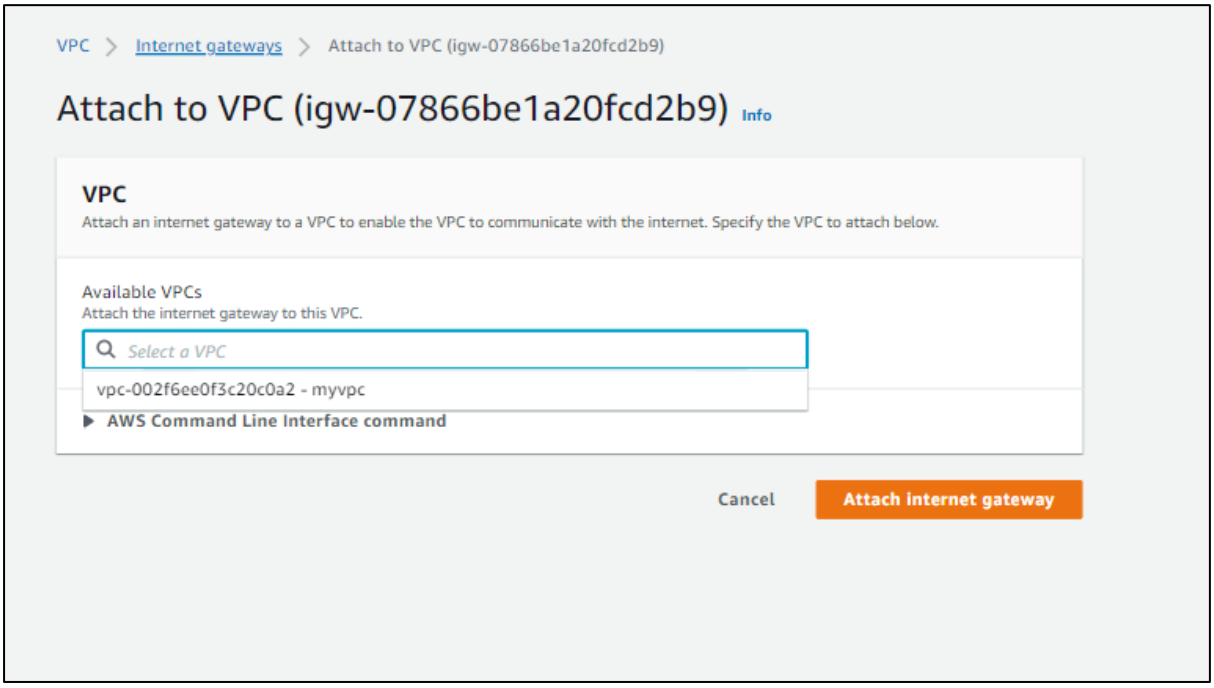


Internet gateway created...

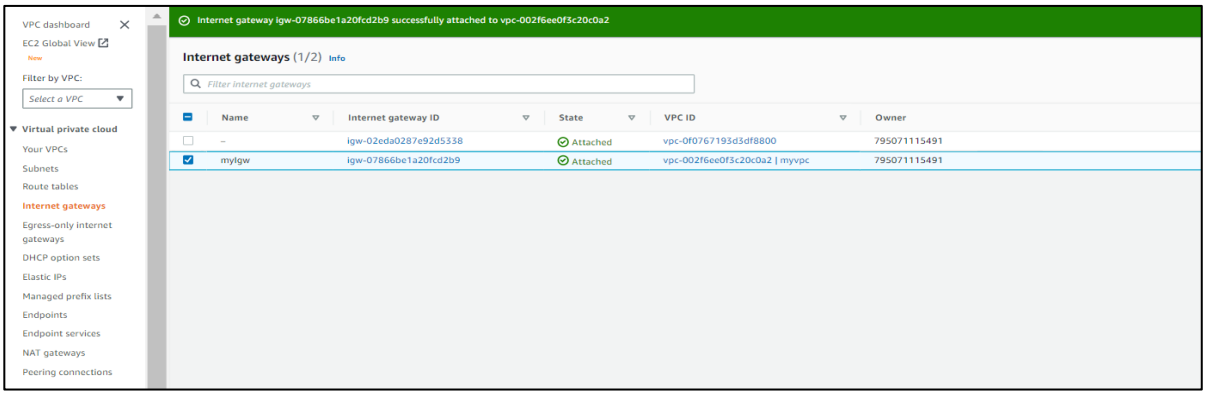


STEP3.2:INTERNET GATEWAY HOME--->STATE(DETACHED)(CHANGE TO ATTACHED)

Actoin----->Attach VPC--->Attach Internet Gateway

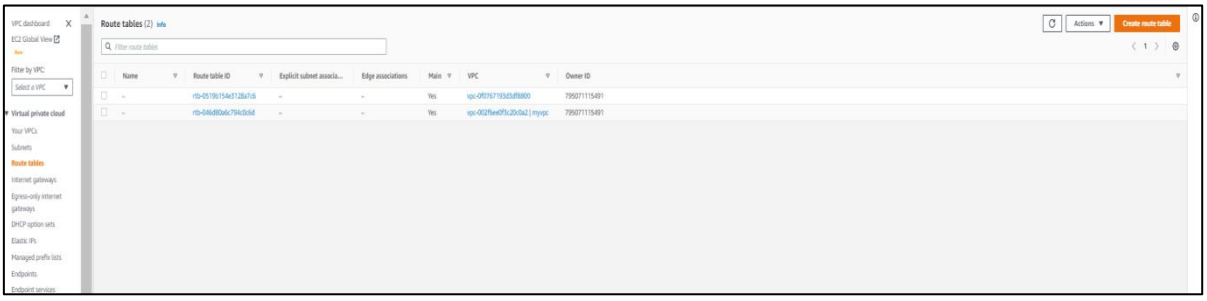


State(attached)...

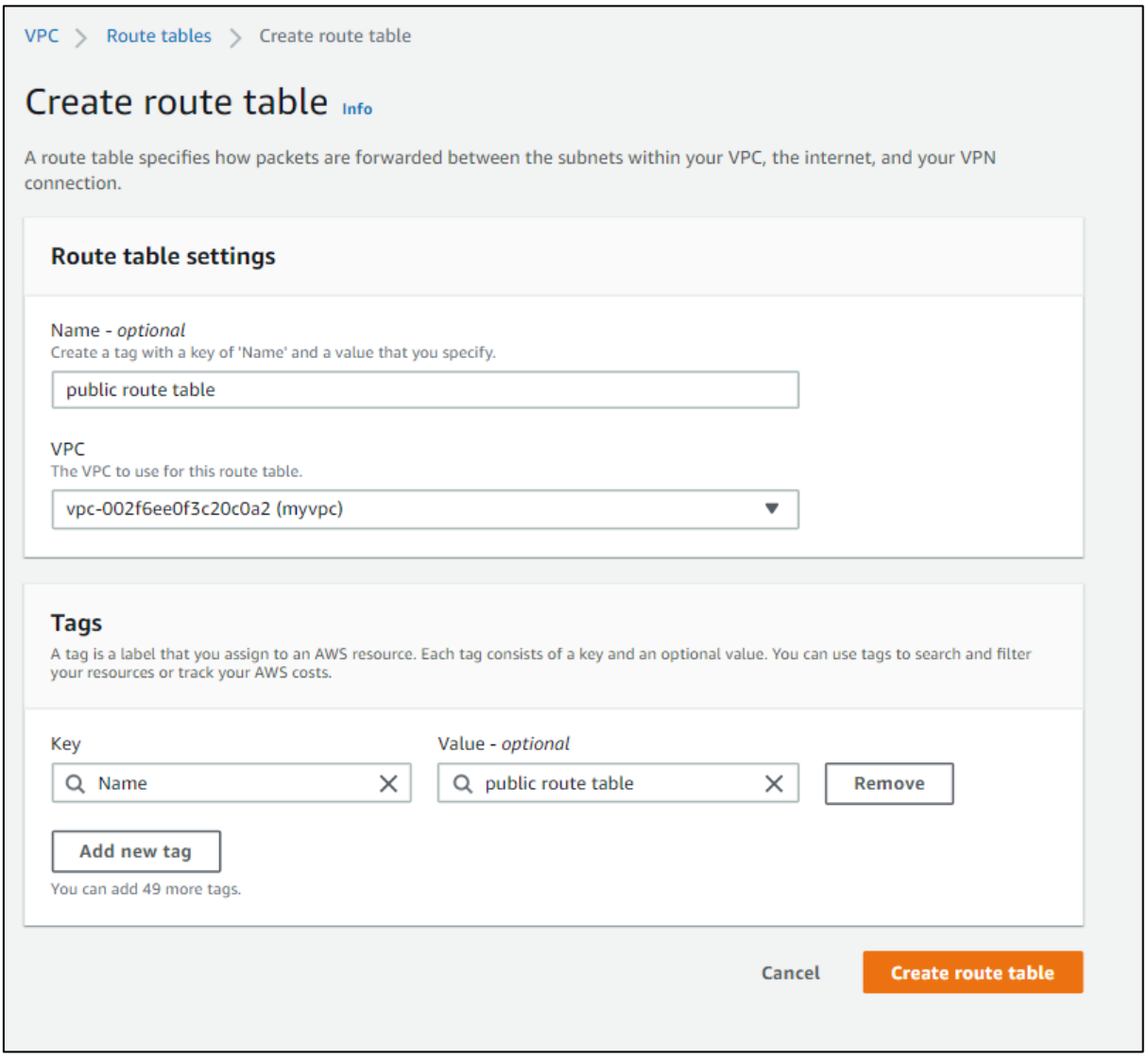


Vpc Attach Completed...

STEP4:CREATE PUBLIC ROUTE TABLE



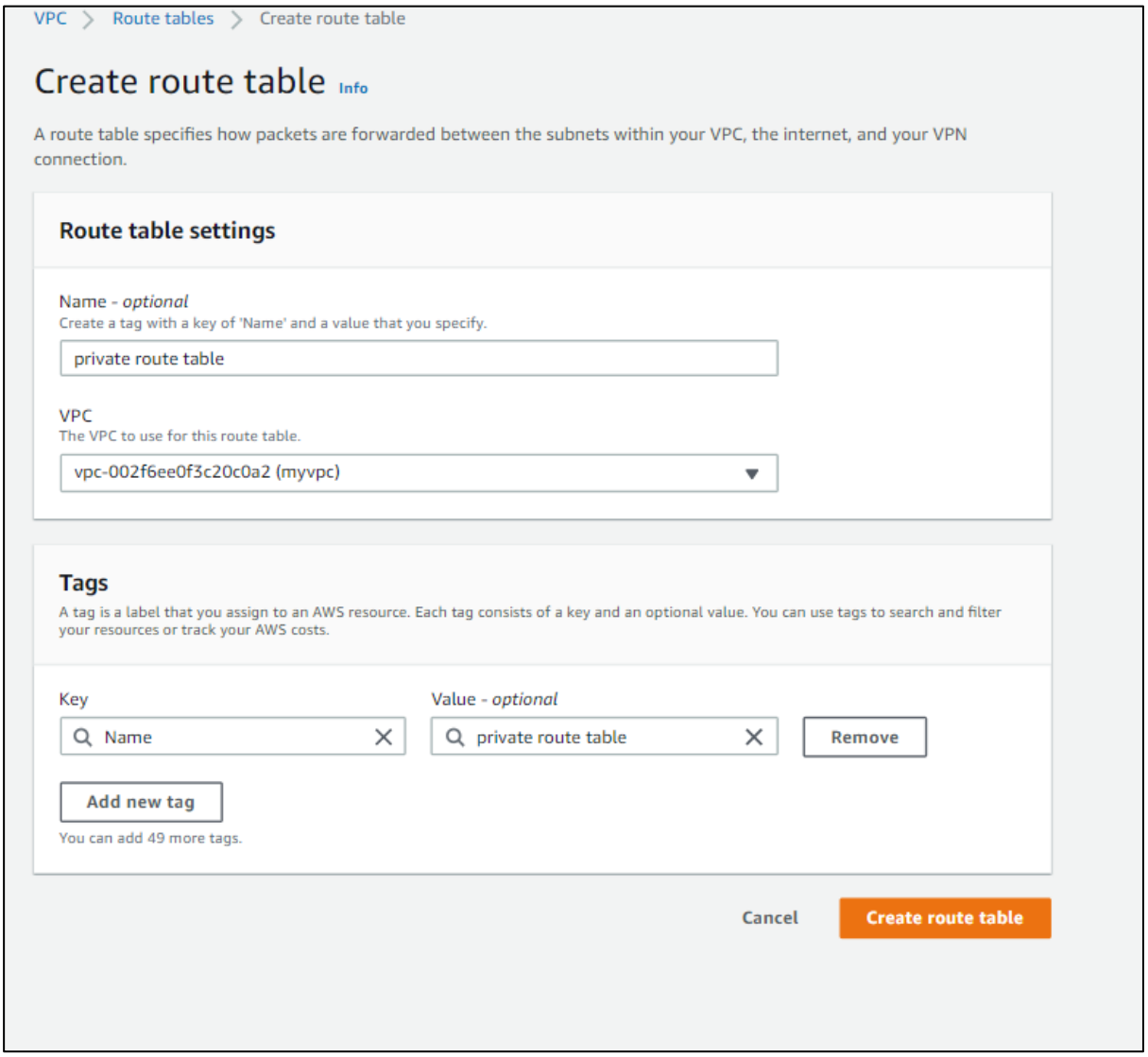
STEP4.1: Name(Public Route Table)---->Vpc Select---->Create Route Table



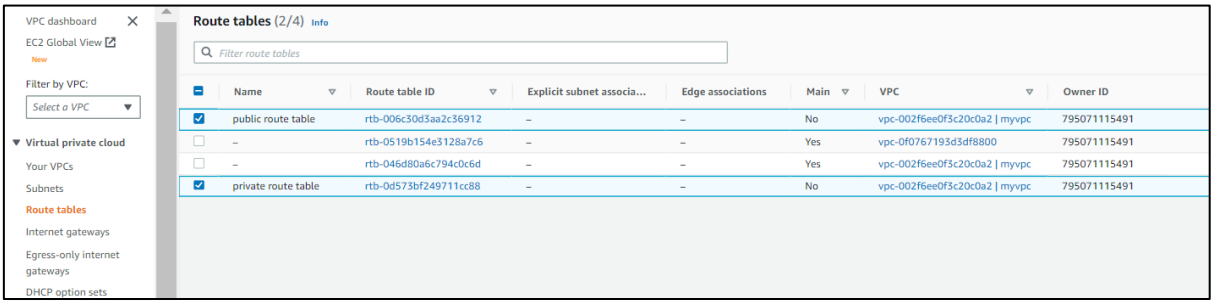
Public route table created...

STEP5:CREATE PRIVATE ROUTE TABLE

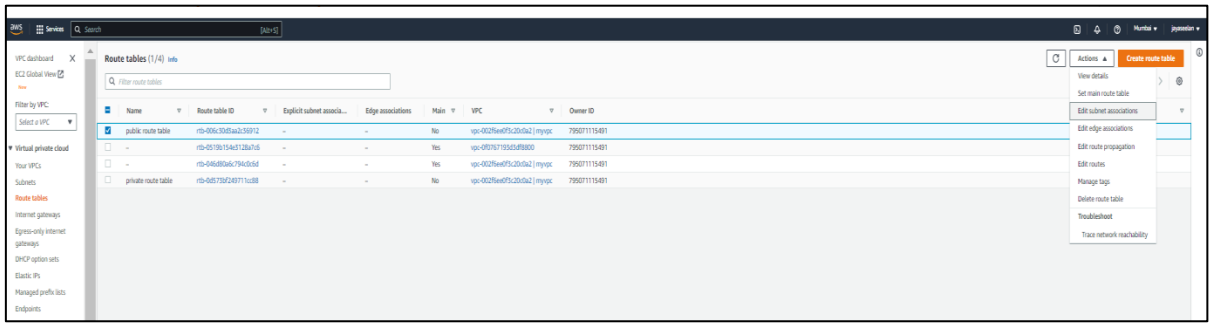
STEP5.1: Route Table**---->**Name(private Route Table)---->Vpc Select---->Create Route Table



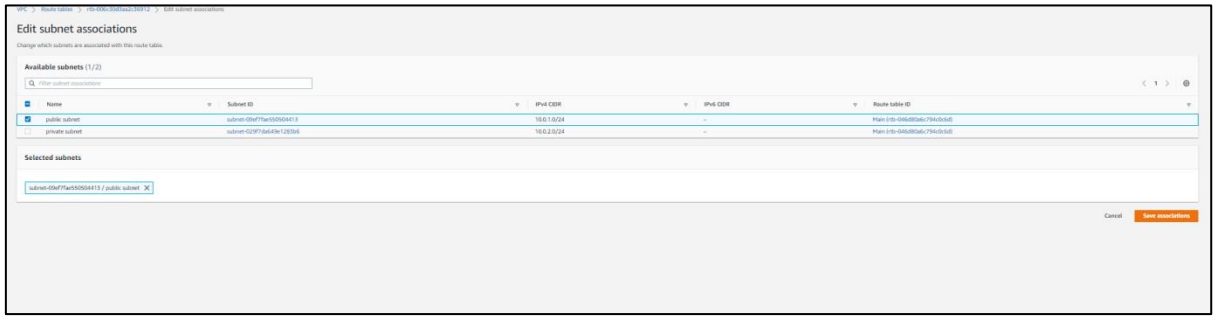
Public and private route table created..



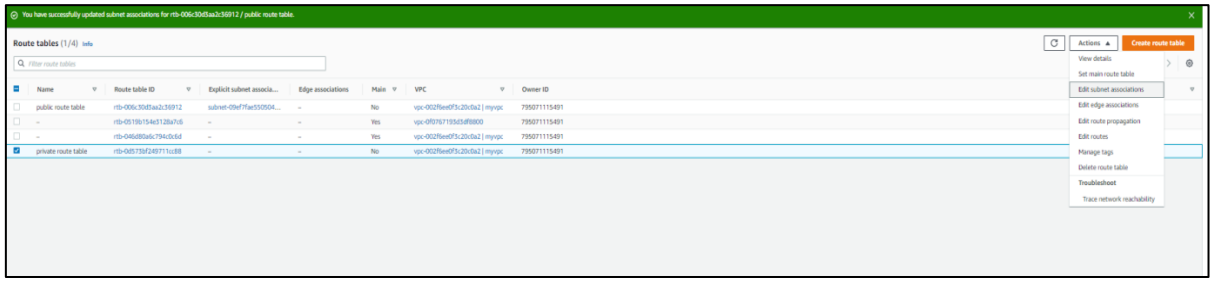
STEP6: Edit Subnet Association---->Route Table Home---->Select Public Route Table---->Action--->Edit Subnet Association.



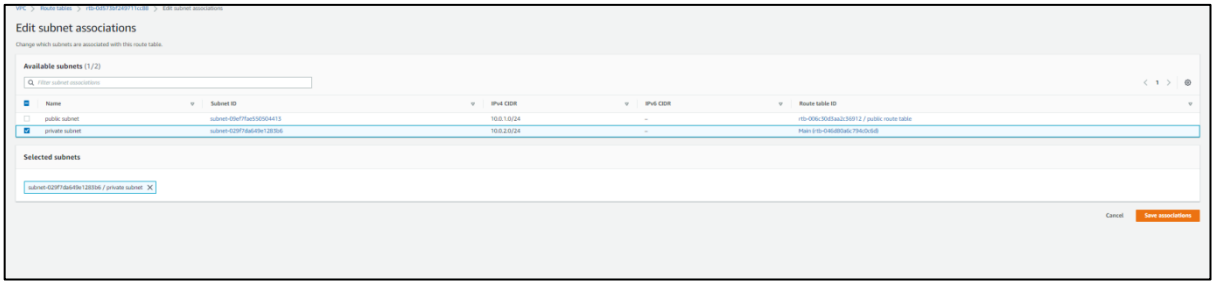
STEP6.1: Edit Subnet Association--->Select Public Subnet--->Save Associations



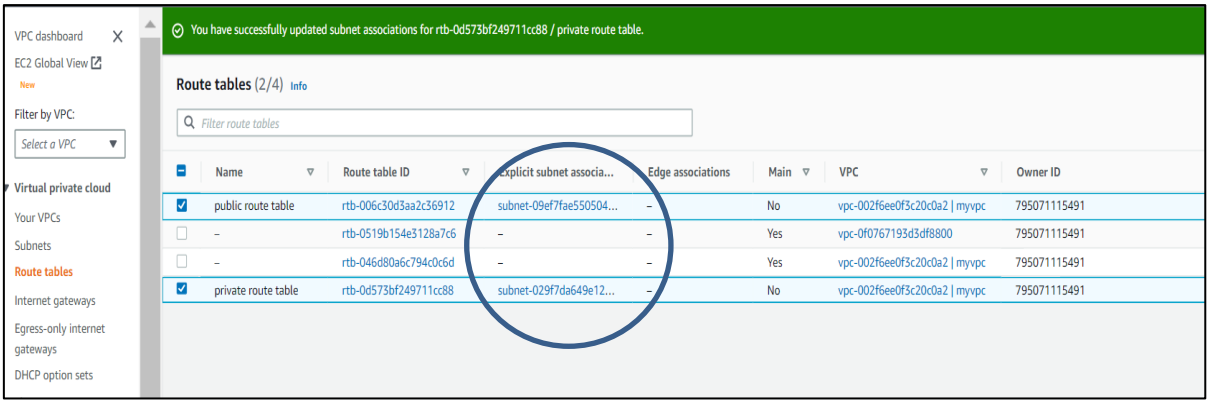
STEP6.2: Edit Subnet Association---->Route Table Home---->Select private Route Table---->Action--->Edit Subnet Association.



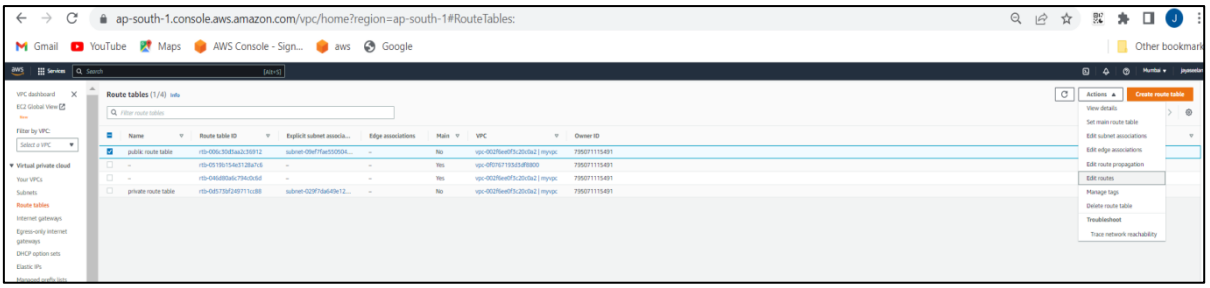
STEP6.3: Edit Subnet Association--->Select private Subnet--->Save Associations



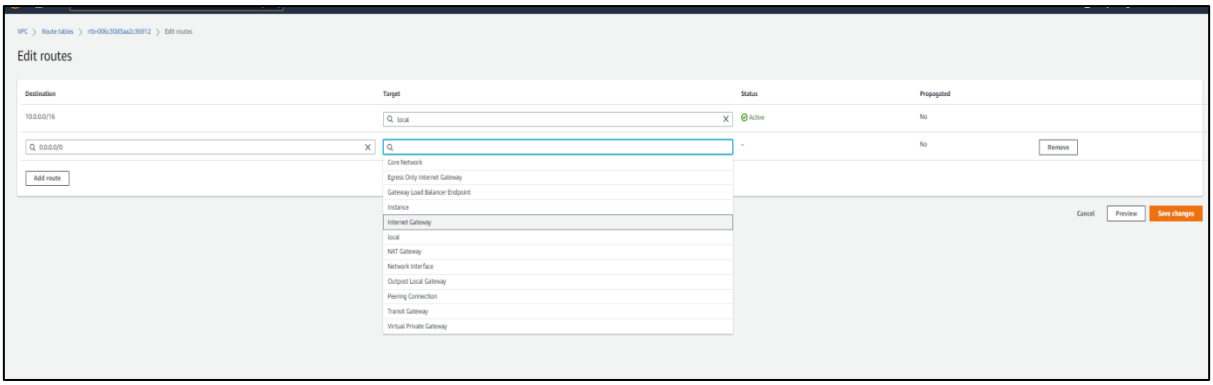
Public and private route table **subnet association** add completed..



STEP7: Public Route Table--->Actions--->Edit Routes

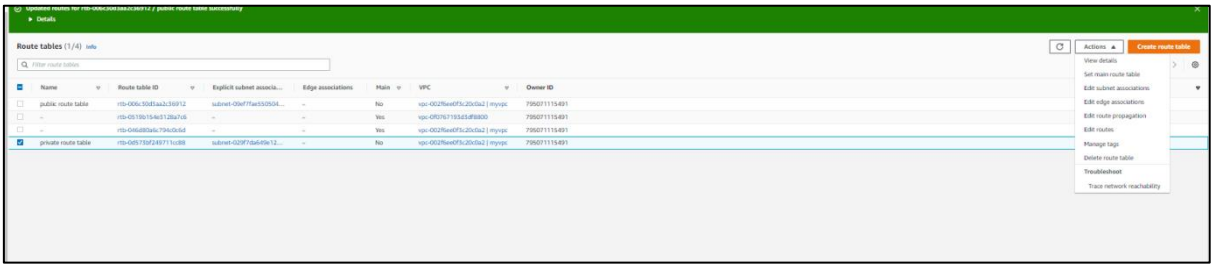


STEP7.1: Edit Routes---->Add Routes(0.0.0.0/0)---->Select Internet Gateway-->Save

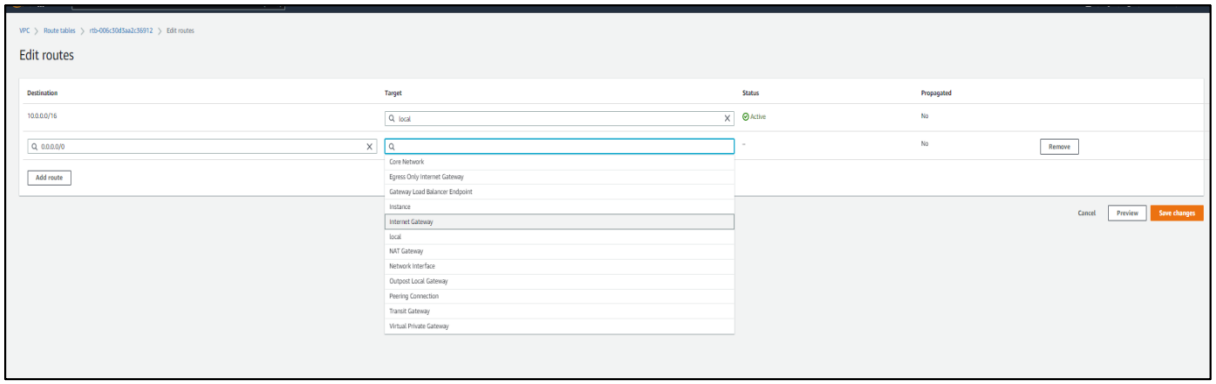


Internet gateway add success.. for public route table.

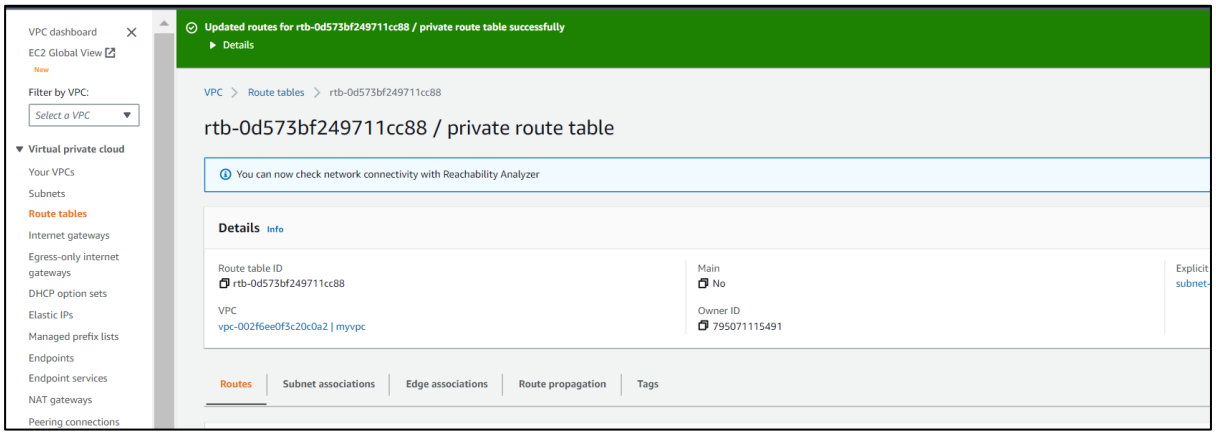
STEP8:private Route Table--->Actions--->Edit Routes



STEP8.1: Edit Routes---->Add Routes(0.0.0.0/0)---->Select Internet Gateway-->Save

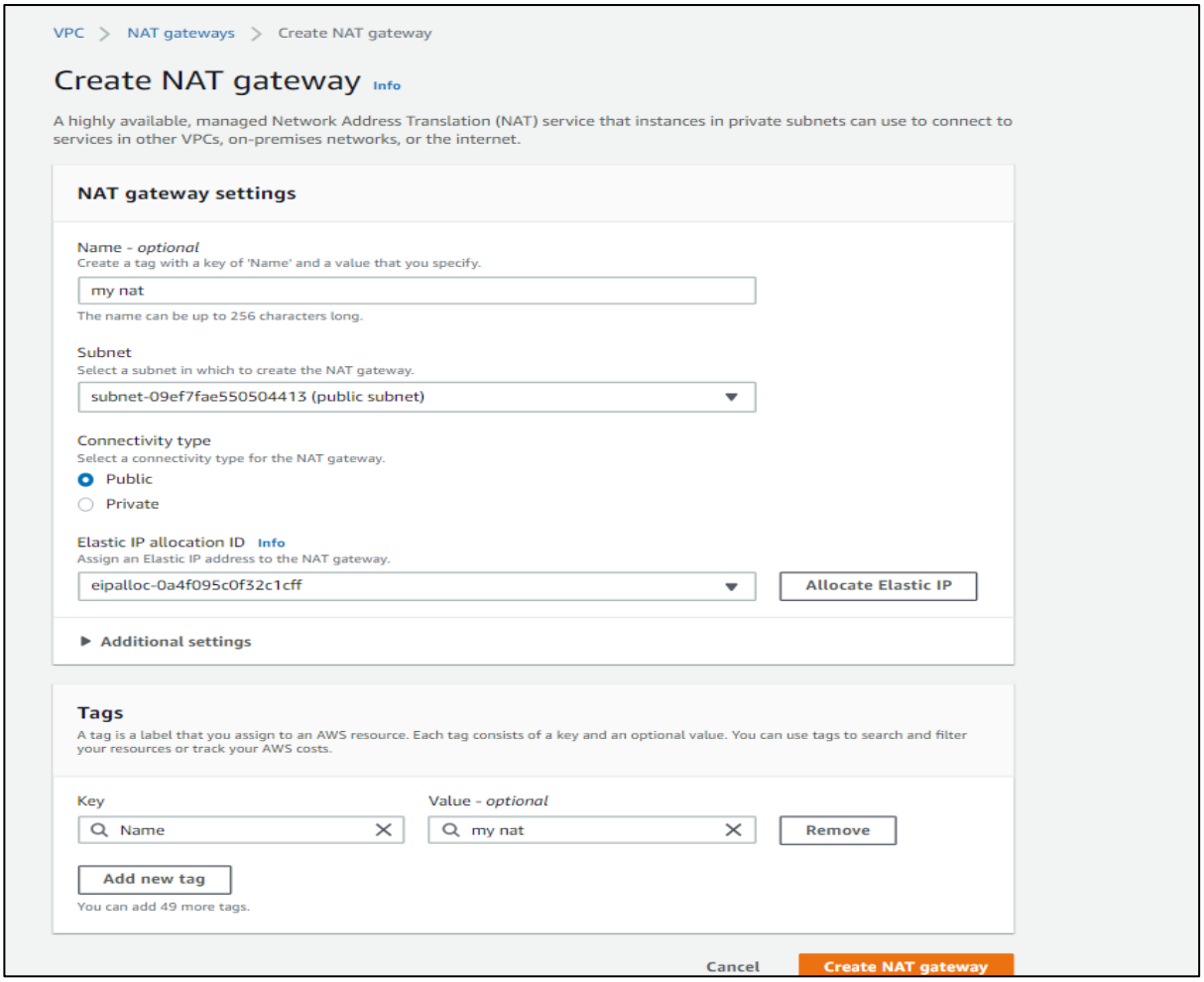


Internet gateway add success.. for private route table

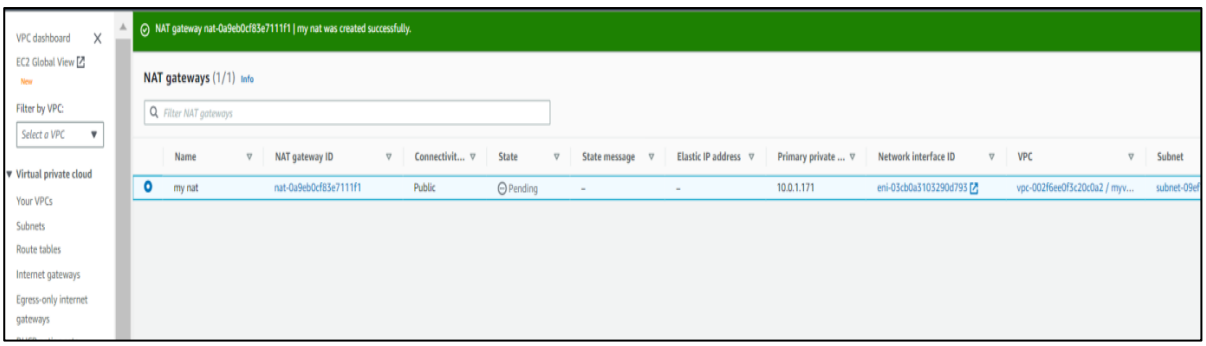


STEP9: Nat Gateway For Only Public Route Table

STEP9.1: Nateway Home---->Create Nat Gateway--->name(my nat)--->subnet(public subnet select(ap-south-1a)-→connectivity type(public)----->allocate elastic ip------>create Nat gateway

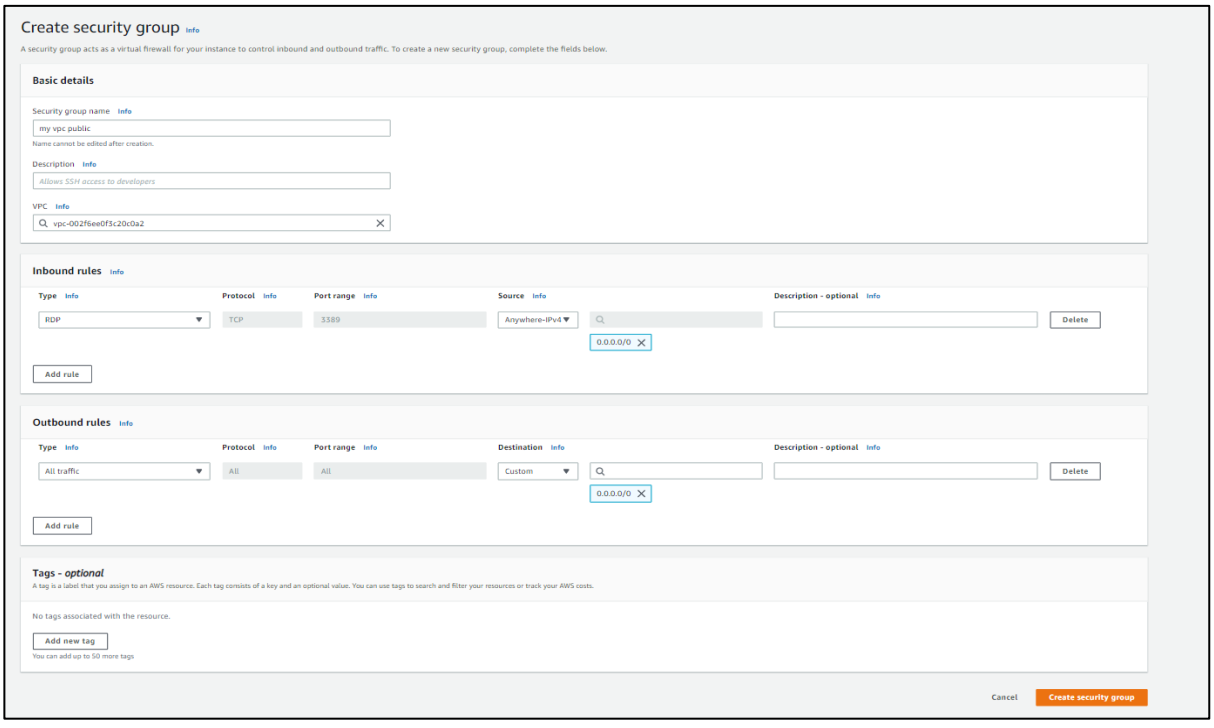


Nat gateway will created…

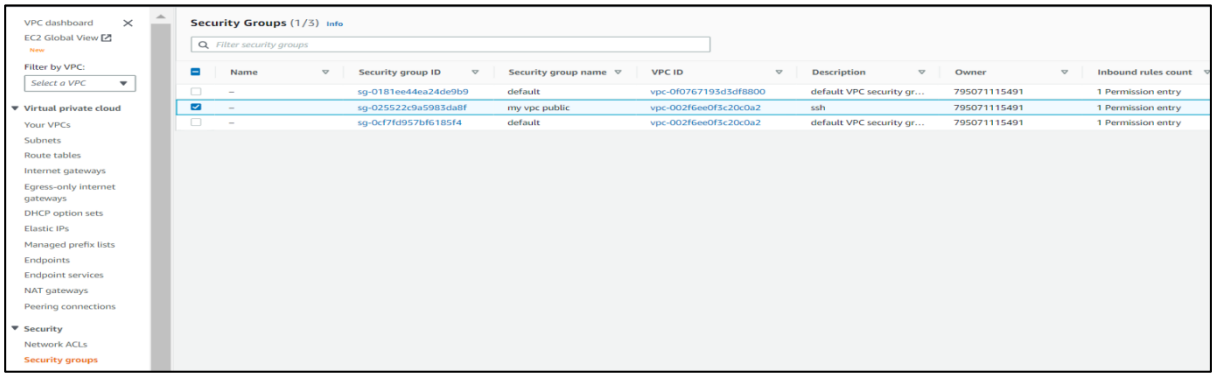


STEP10:Create Security Group For Public

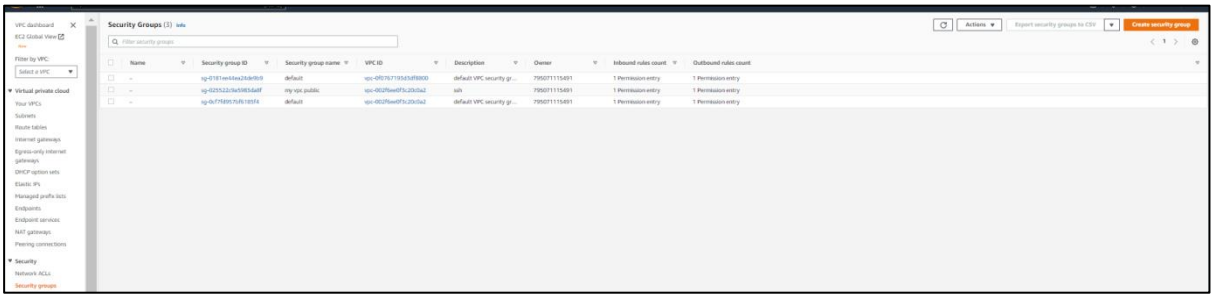
STEP10.1: Create Security Group---->Security Group Name(My Vpc Public)---->Vpc(Select Created Vpc)---->Inbound Rules--->Rdp---->Source(Anywhere)----->Create Security Group..



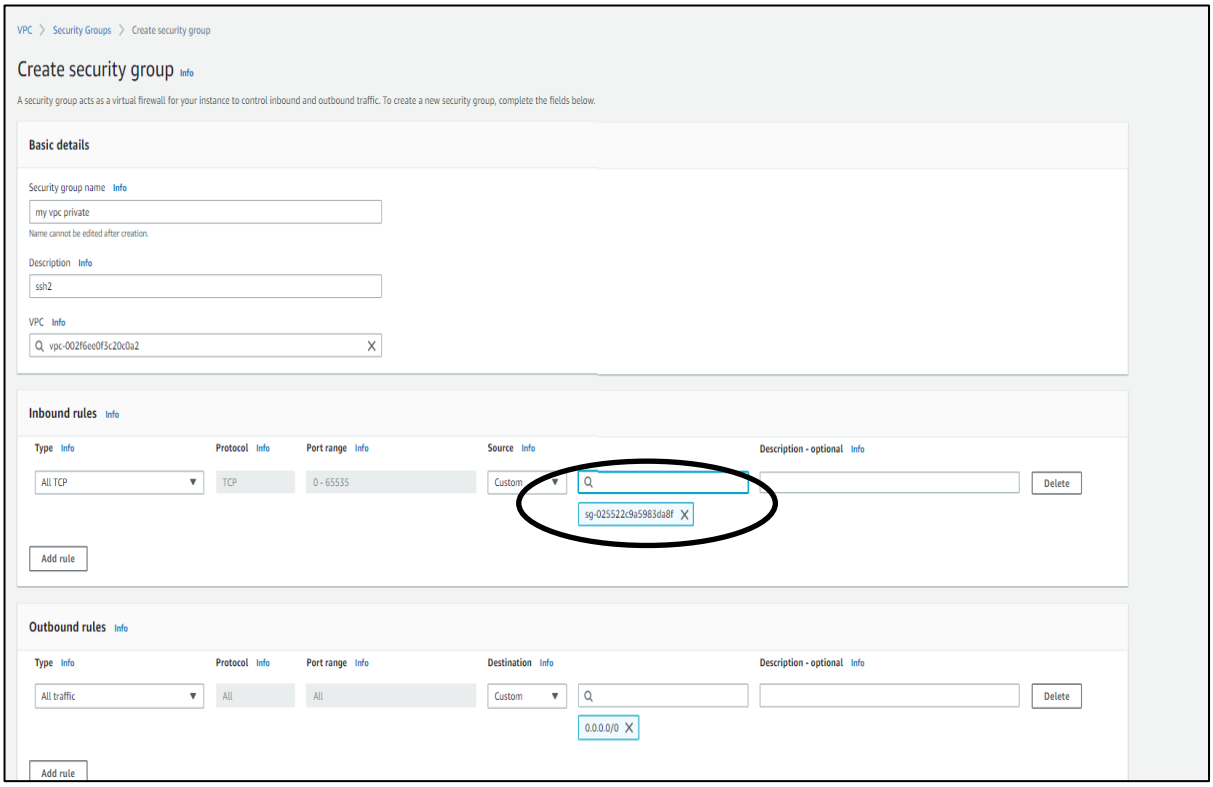
Security group for public will created...



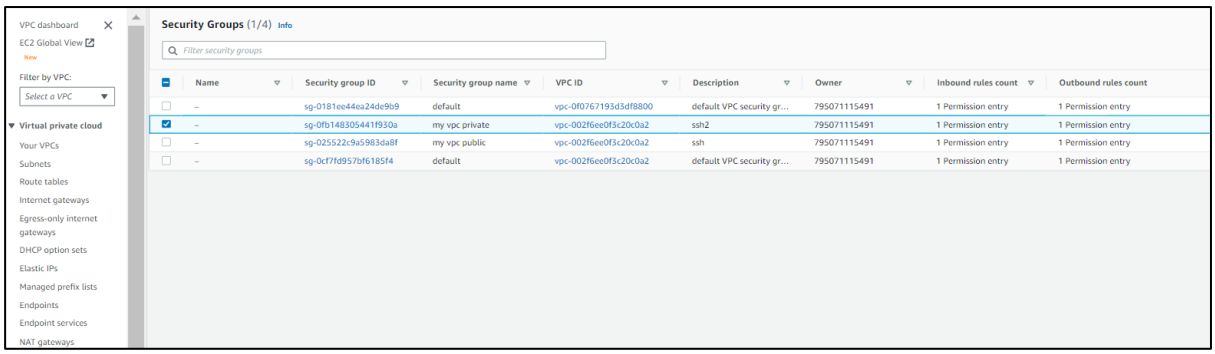
STEP11:Create Security Group For Private:



STEP11.1: Create Security Group---->Security Group Name(My Vpc Private)----
>Vpc(Select Created Vpc)---->Inbound Rules--->All Tcp---->Source(Custom)-----
>Select Public Security Id(MY VPC PUBLIC)---->create security group



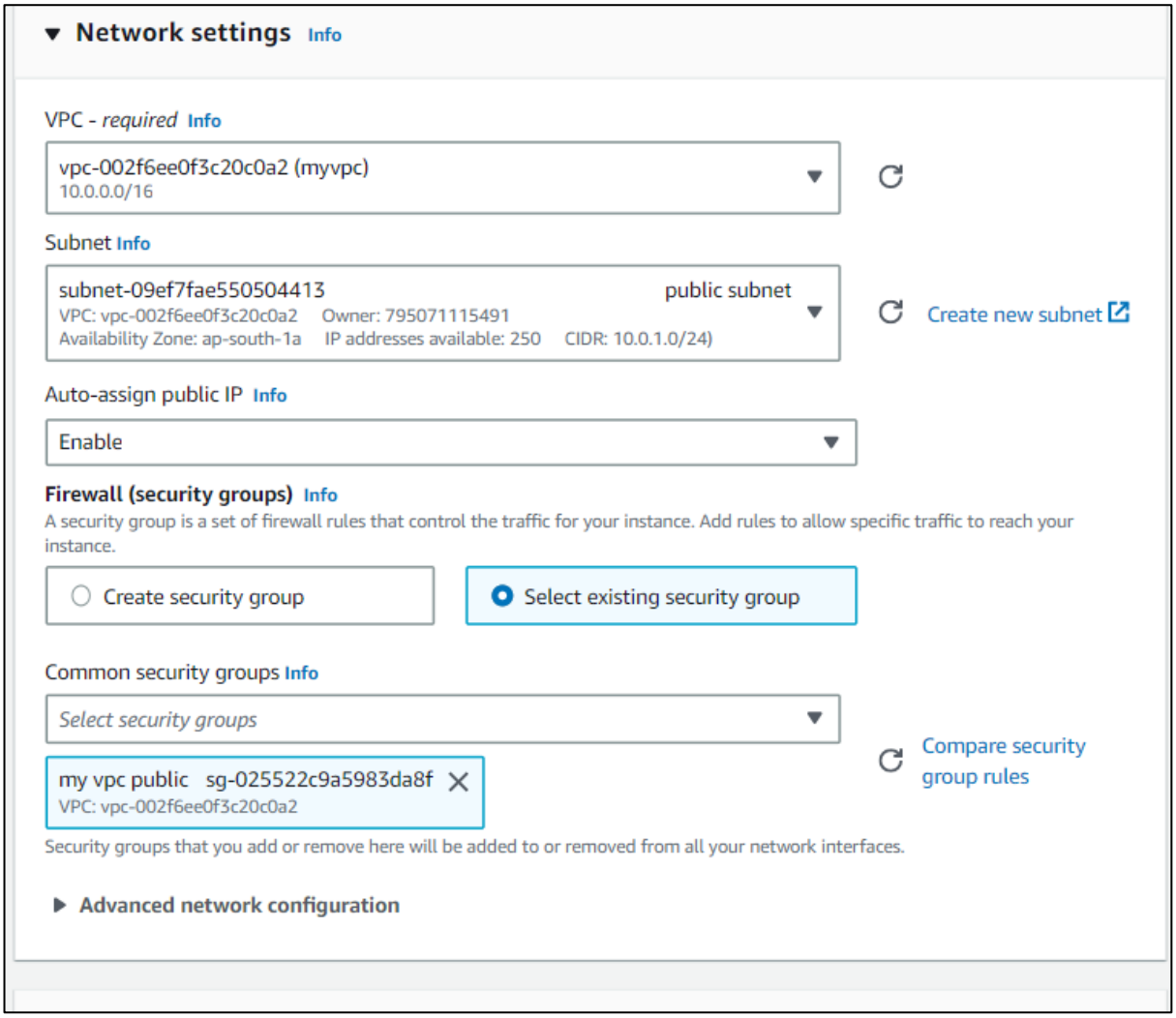
Security group for private will created…



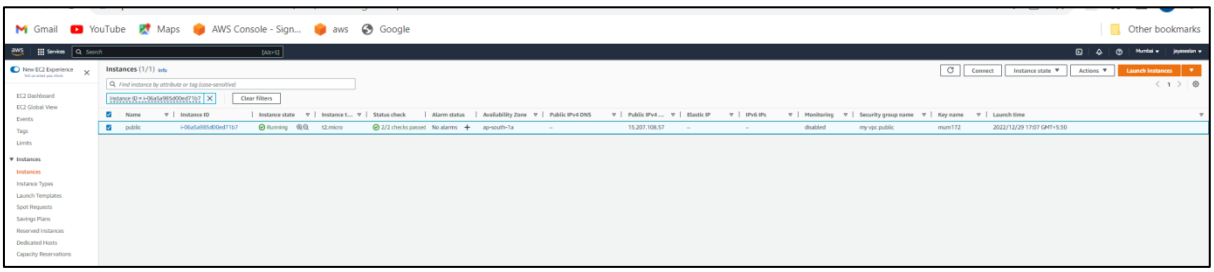
STEP12:Public Ec2 Instance Create

------> Launch windows instance--->select key

------->network settings--->vpc(created vpc select)---->subnet(public subnet)---->auto-sign public ip(enable)----->select existing security group(my vpc public)----->launch instance.



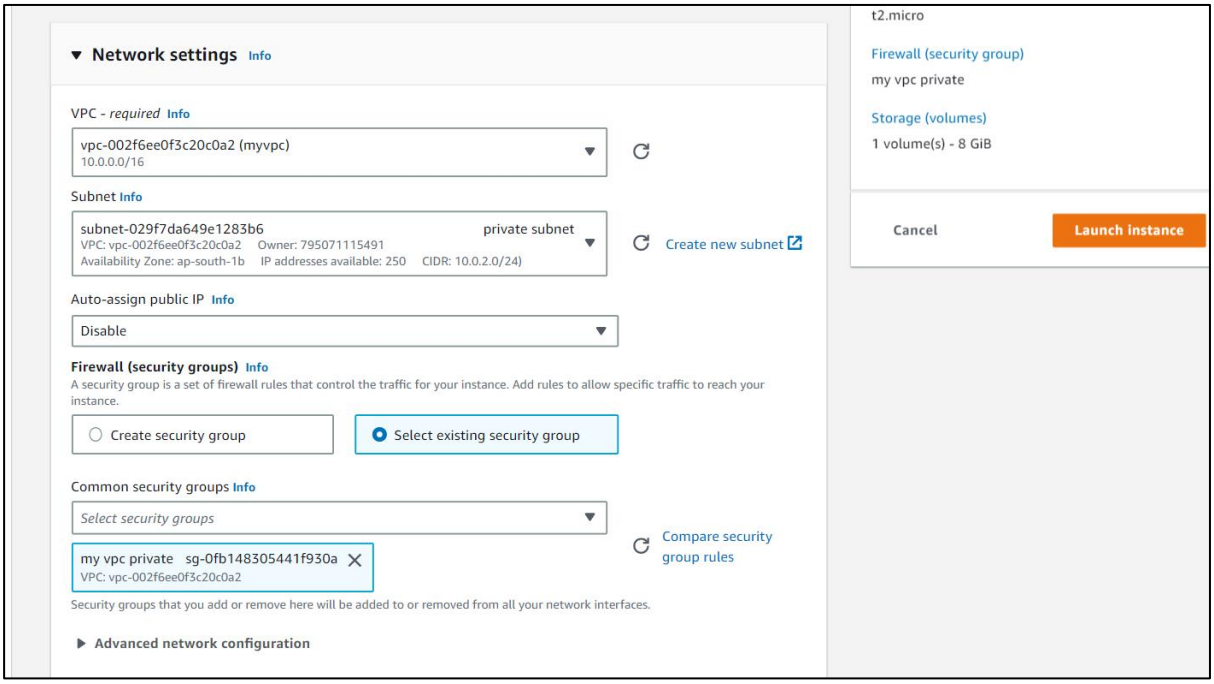
Public instance created..



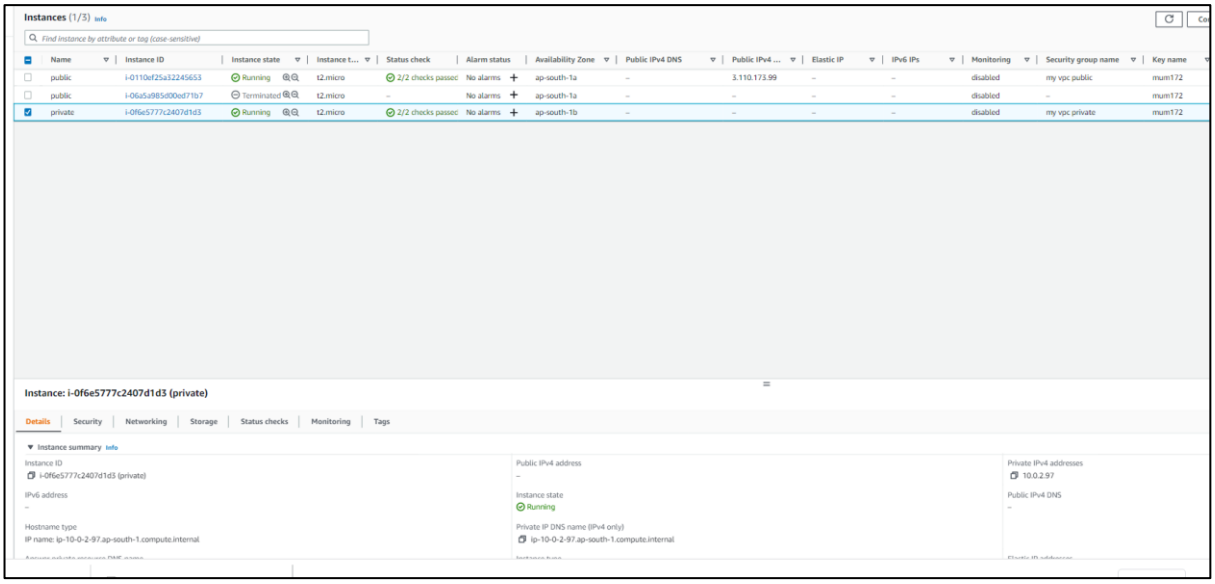
STEP13:Private Ec2 Instance Create

------> Launch windows instance--->select key

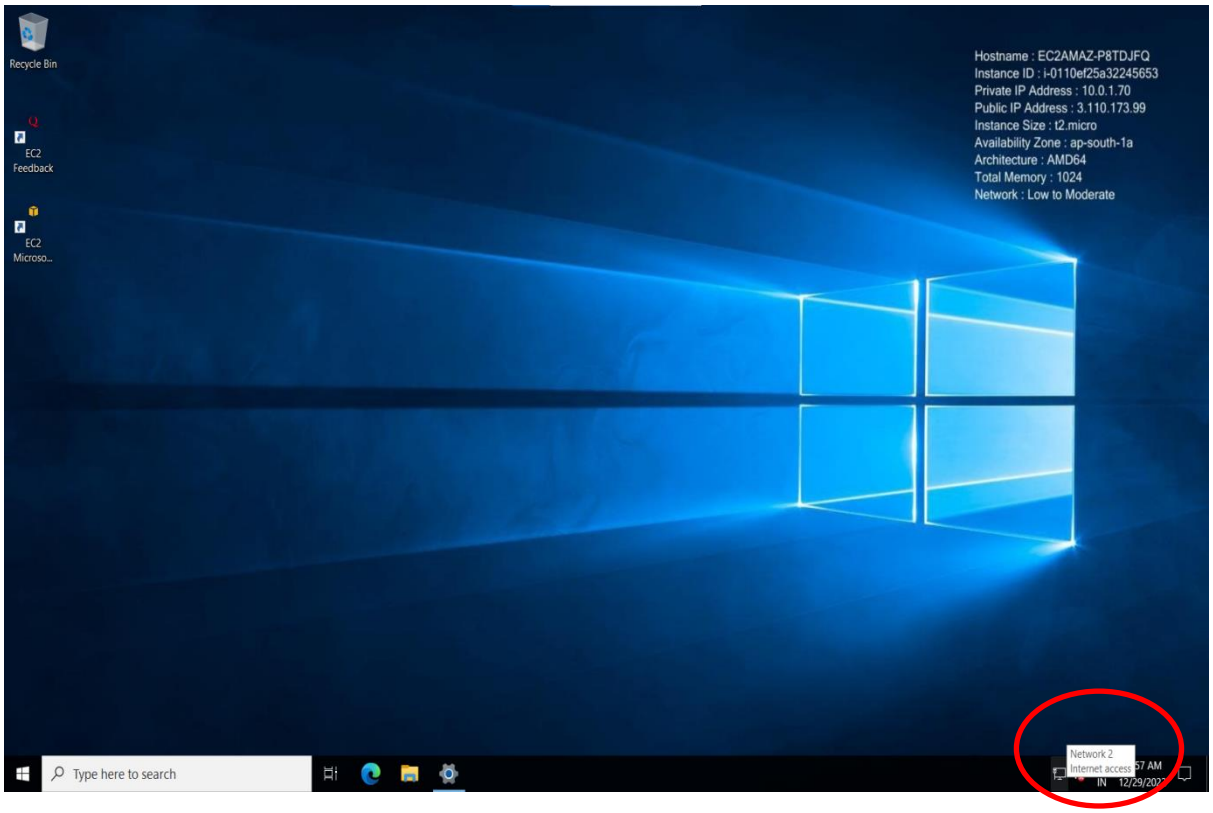
------->network settings--->vpc(created vpc select)---->subnet(private subnet)---->auto-sign public ip(disable)----->select existing security group(my vpc private)----->launch instance.



Private instance created..---->public ip not show



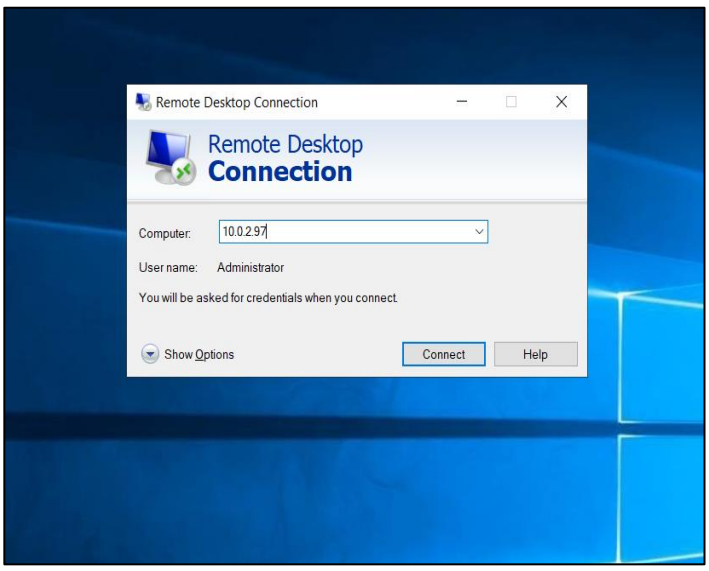
STEP13:connect rdp client --->get password--->open remote desktop control--->put password---->open windows

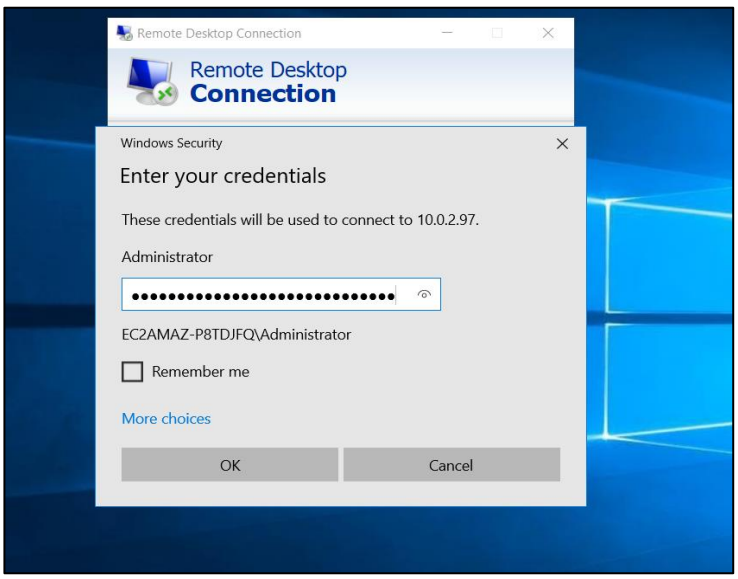


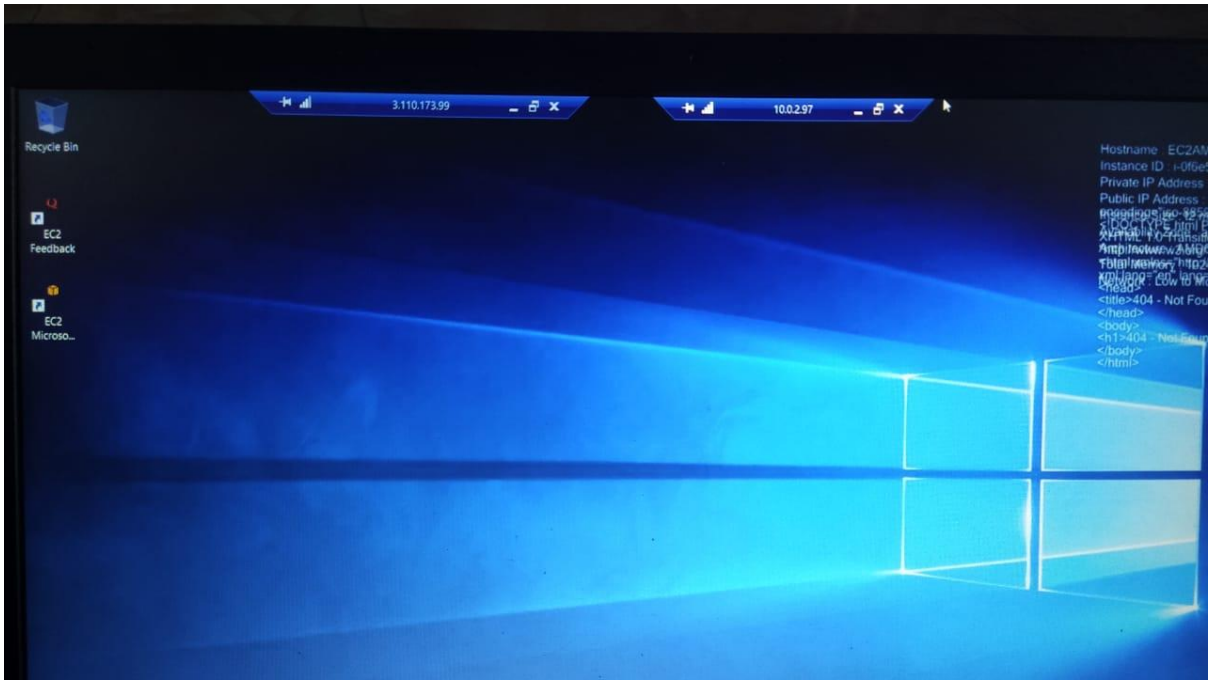
Shown internet acces it will success..

STEP14:now open private windows instance

---->private windows instance private ip copy--->put public window remote deskto control and put private instance password







Finally two windows server shown in single server…..

It will success…