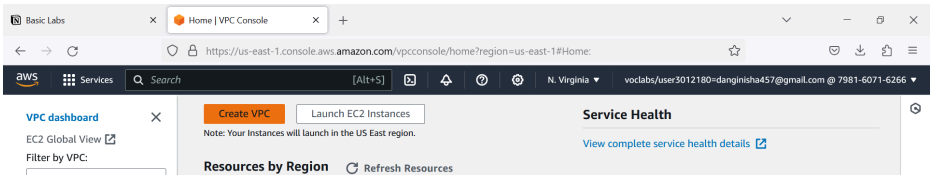
VPC Configuration Lab

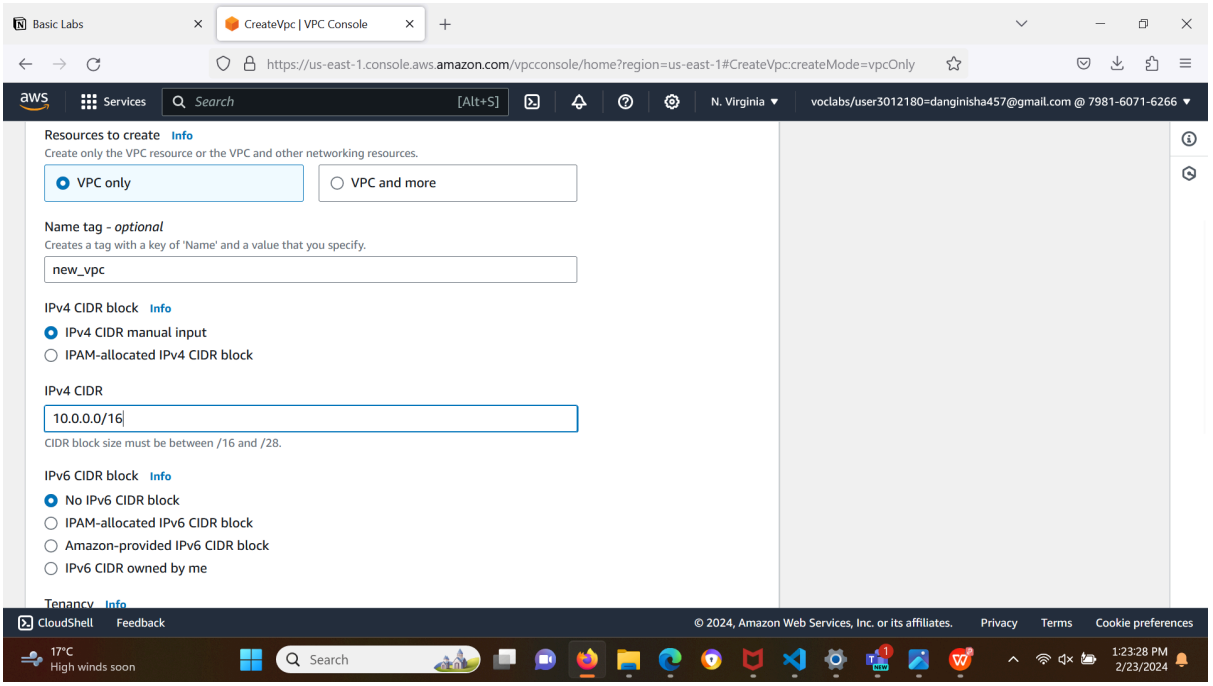
○ Objective: To understand the fundamentals of AWS networking through the configuration of a Virtual Private Cloud (VPC).
○ Approach: Students will create a new VPC, add subnets, set up an Internet Gateway, and configure route tables. The lab might also include setting up a simple EC2 instance within this VPC to demonstrate how resources are deployed in a custom network environment.
○ Goal: By the end of this lab, students should be able to create and configure a VPC, understand subnetting, and the role of route tables and internet gateways in AWS.

Solution:

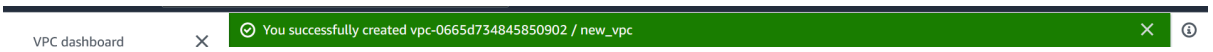
Step 1: We start by creating a VPC.



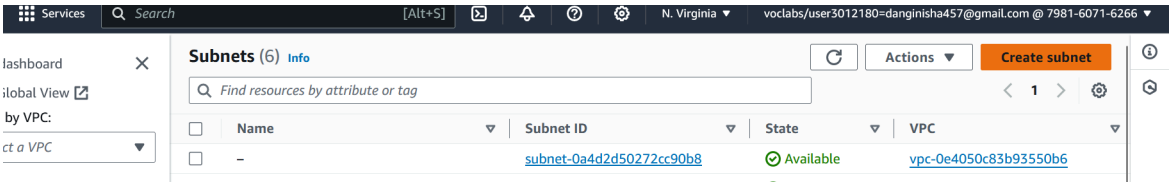
Set resources to create to VPC only and create a new VPC, provide APv4 CIDR. Then click on the “Create VPC” button.



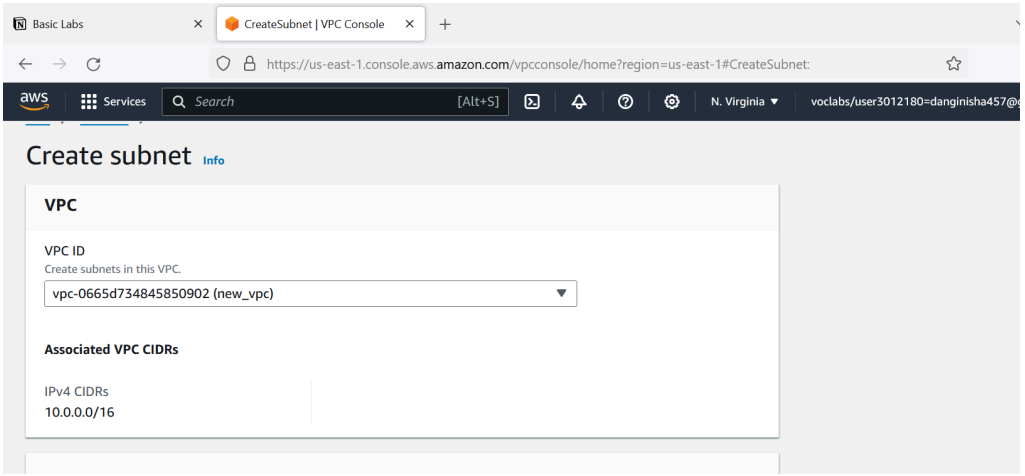
We can see a new VPC is successfully created.



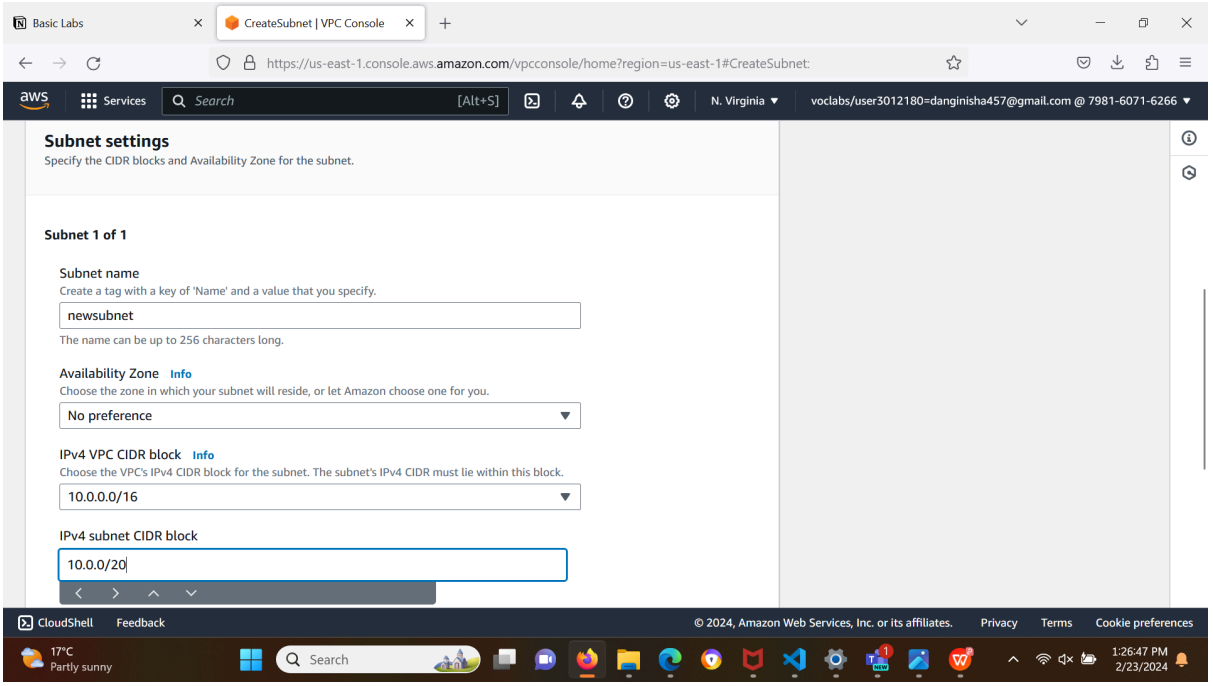
Step 2: Now, we create a new subnet.



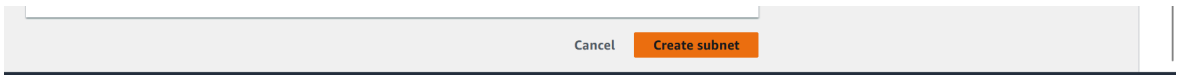
Select the VPC that we created earlier.



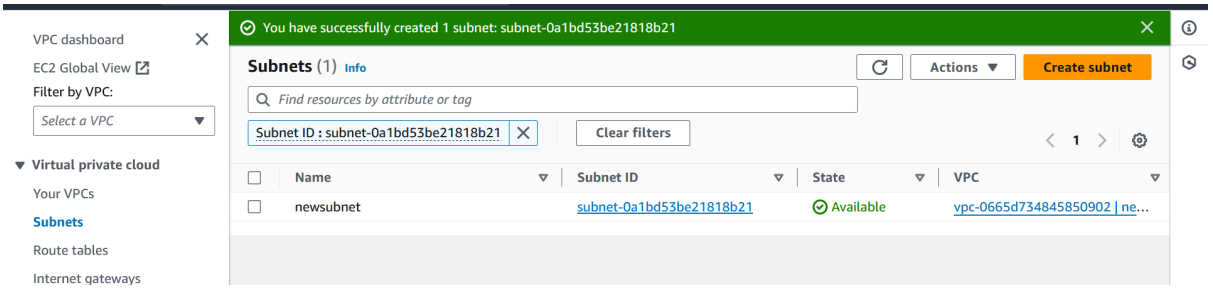
Then, we give a new subnet name, assign appropriate IPv4 subnet CIDR block



Then, click on the “Create Subnet” button.

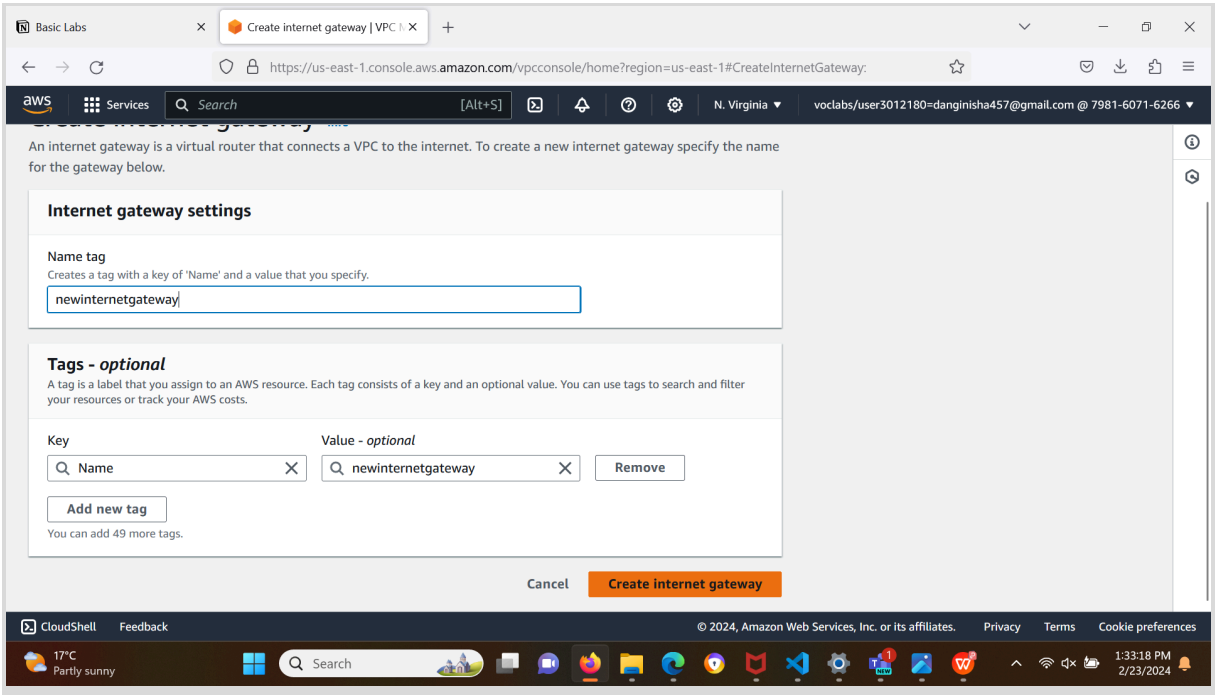


We can see that the subnet has been created successfully.

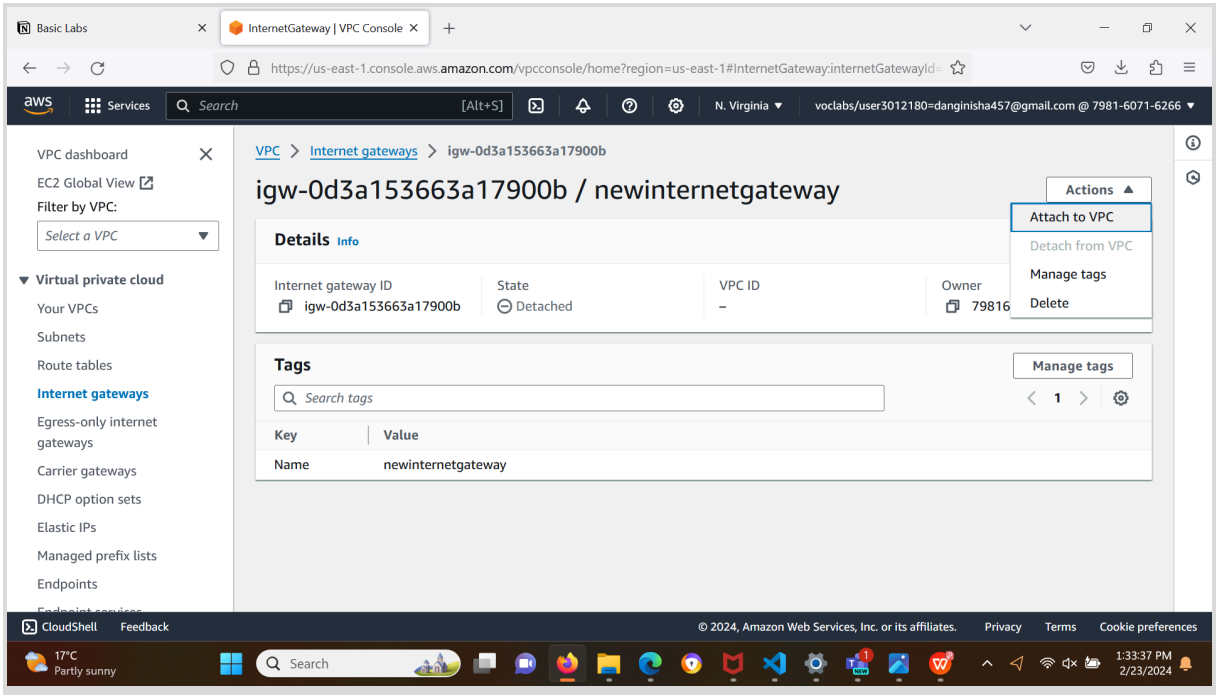


Step 3: Now, we create a new Internet Gateway.

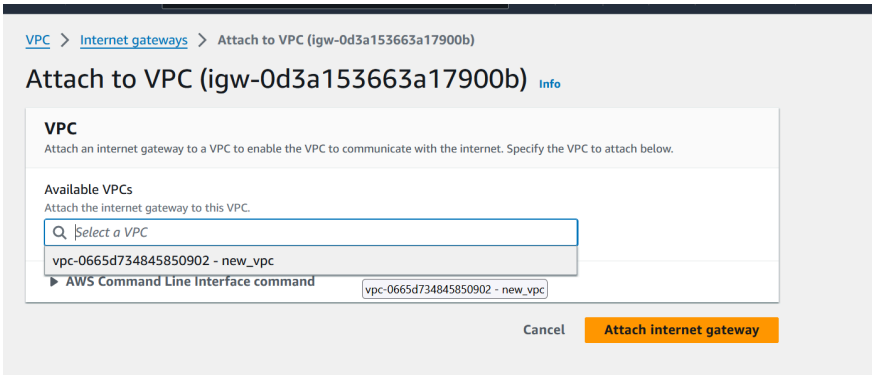
Give a name to the internet gateway and click on “Create Internet Gateway” button.



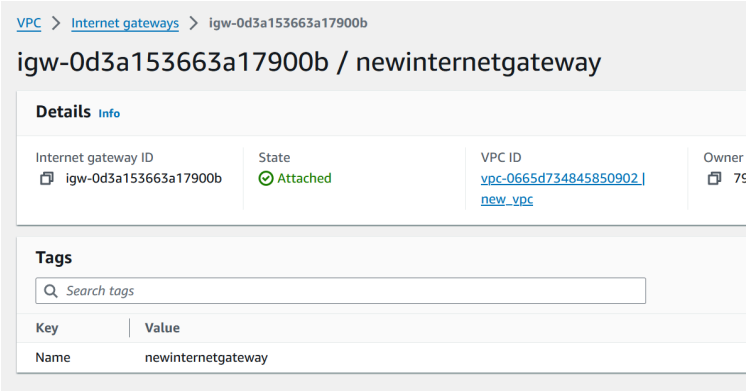
We can see that a new internet gateway has been created. Now, we should attach it to the VPC we created earlier.



Attach the VPC which we created earlier and then click on the “Attach internet gateway” button.

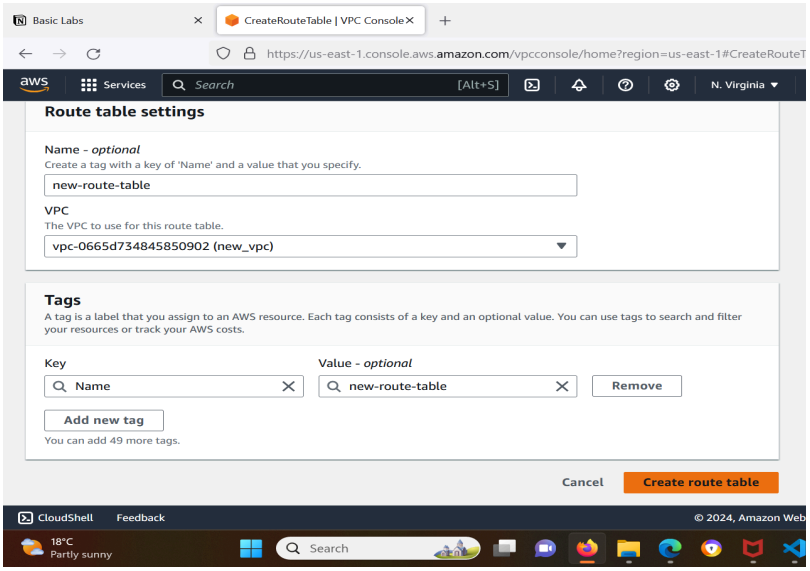


New internet gateway is created.

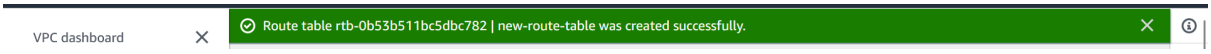


Step 4: Now, we create a new route table.

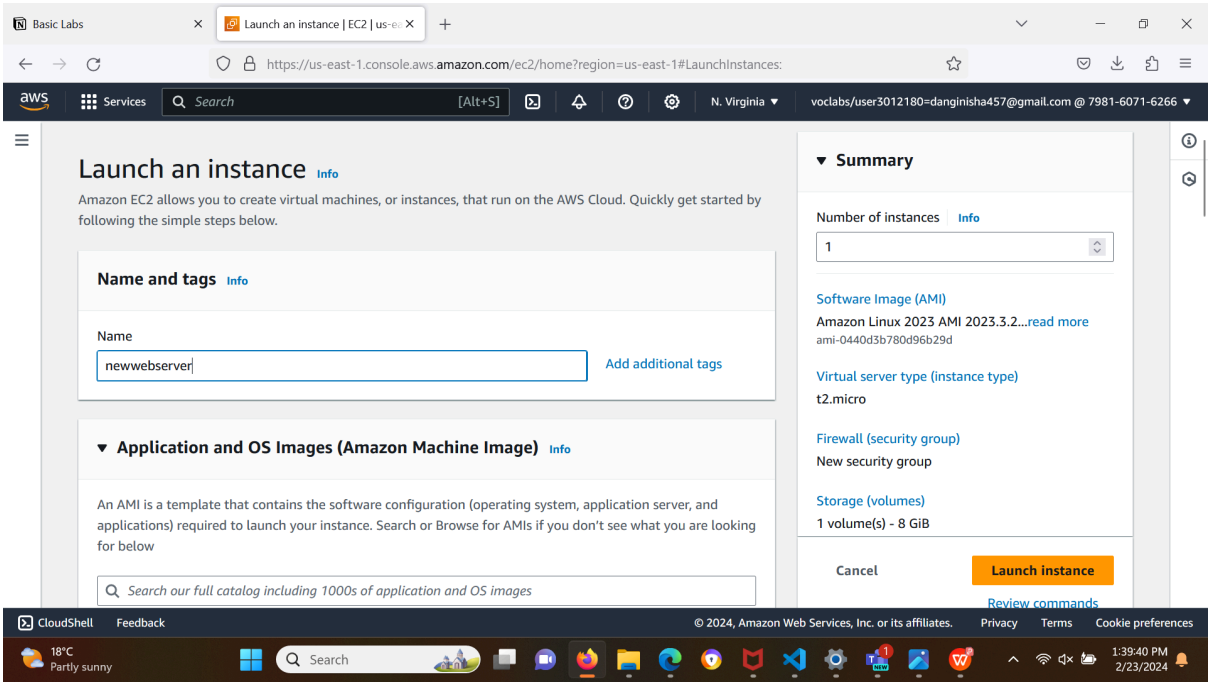
We give a name and assign a VPC which we created earlier then click on “Create route table” button.



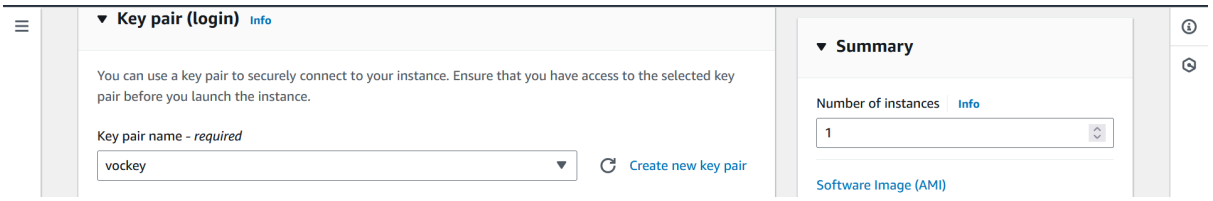
Route Table has been created successfully.



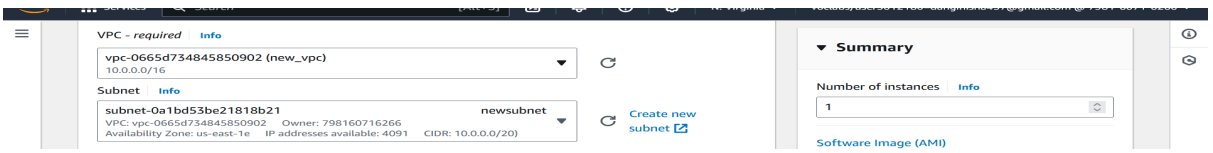
Step 5: Now, we create a new instance.



Select key pair name



Select VPC we created earlier, then launch instance.



We can see that the instance is created successfully.