Project Title: Cloud Infrastructure and Security Domain
Counsellor: Nita Jadav

Virtual Network Peering in Azure

**What is VNet Peering in AZURE?**

- Virtual network peering enables you to seamlessly connect two or more Virtual Networks in Azure. The virtual networks appear as one for connectivity purposes. The traffic between virtual machines in peered virtual networks uses the Microsoft backbone infrastructure.
- Like traffic between virtual machines in the same network, traffic is routed through Microsoft's private network only.

Azure supports the following types of peering:

- *Virtual network peering*: Connecting virtual networks within the same Azure region.
- *Global virtual network peering*: Connecting virtual networks across Azure regions.

Create Resource Group:

Step-1 In the search bar, type "Resource Group" and select "Resource Group" from the search results and click on "Create" button to create resource group.
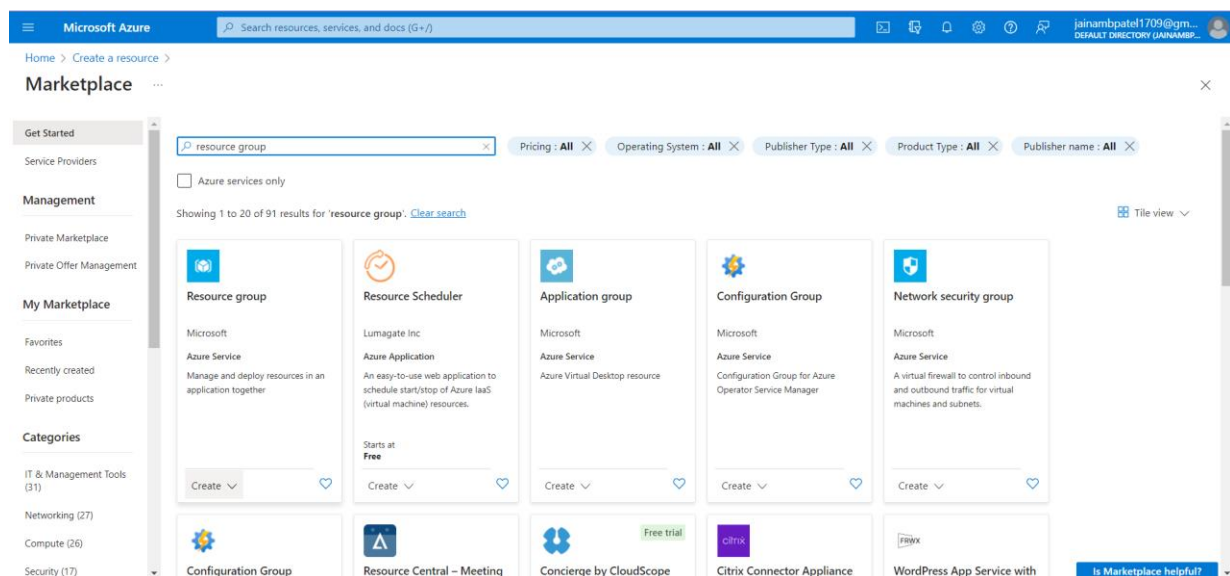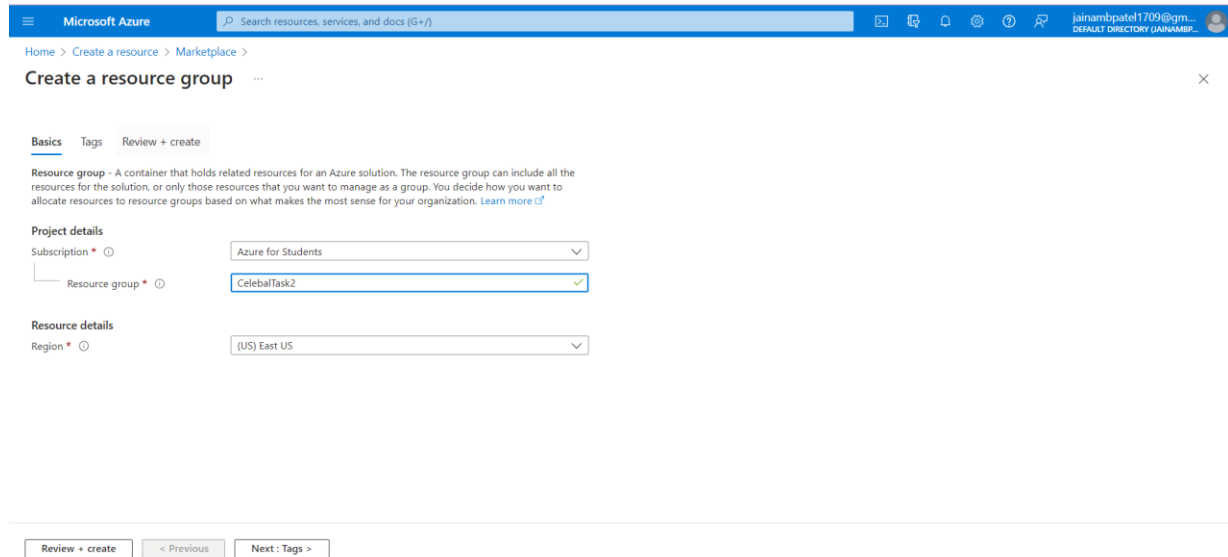

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Step-2 Now, select the subscription we selected here as Azure for student, entered the resource group name as CelebalTask2 and choose the region. after entering details click on next button.

Step-3 We entered the name-value keypair here also we can keep it blank. click on Next: Review + create.

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Student Name: Jainam Bijalkumar Patel

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Create Virtual Network:

Step-4 Enter the basic details of virtual network. (Subscription, name, region) and select the resource group as vNet1.

Step-5 On IP Addresses tab we can select default subnet but here we created a subnet named subnet1.

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Step-6 Virtual Network is created. you can click on go to resource and can see all the details of Virtual Network.

Step-7 Enter the basic details of virtual network. (Subscription, name, region) and select the resource group as vNet2.

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Step-8 On IP Addresses tab we can select default subnet but here we created a subnet named subnet2.

Step-9 Virtual Network is created. you can click on go to resource and can see all the details of Virtual Network.

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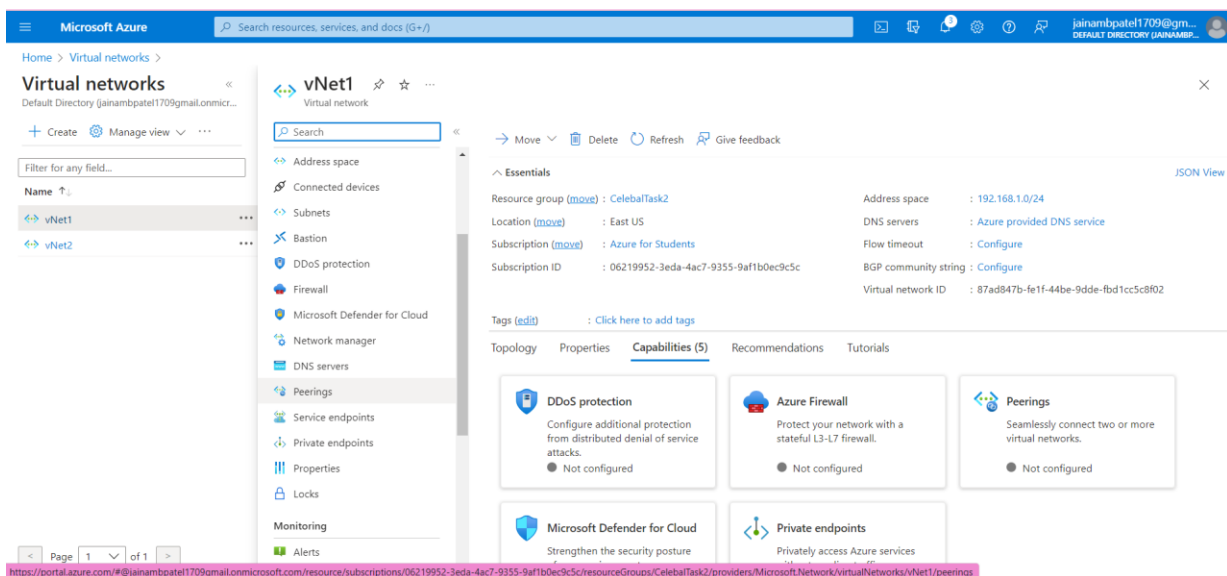Counsellor: Nita Jadav

Step-10 Go to the Virtual networks dashboard to check if the virtual network is created.
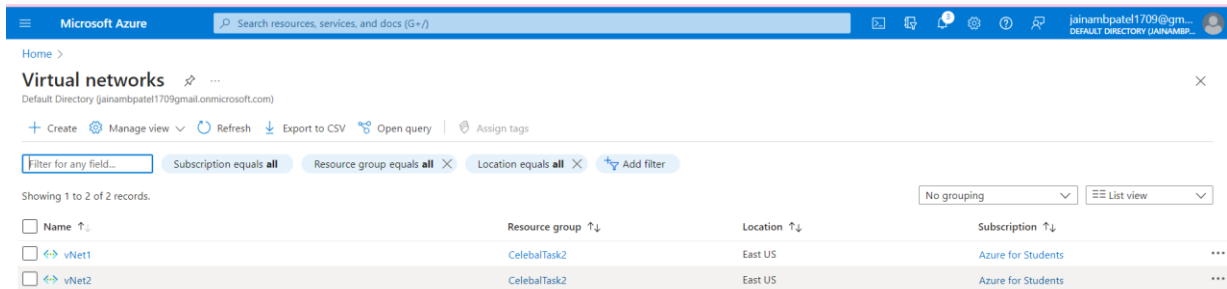
VNET Peering

Step-1 Go to the Azure portal and search for Virtual networks.

Step-2 Select the vNet1 we created and open its settings and peering tab and click on add button.

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Step-3 Give the Peering link a name.

Step-4 Give peering link name as vNet2-vNet1 and the select vNet2 as remote virtual network and then click on add.
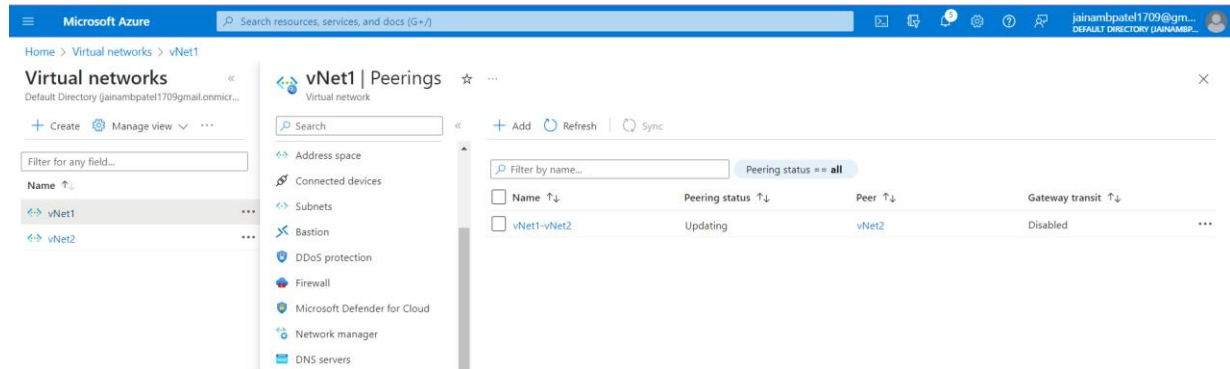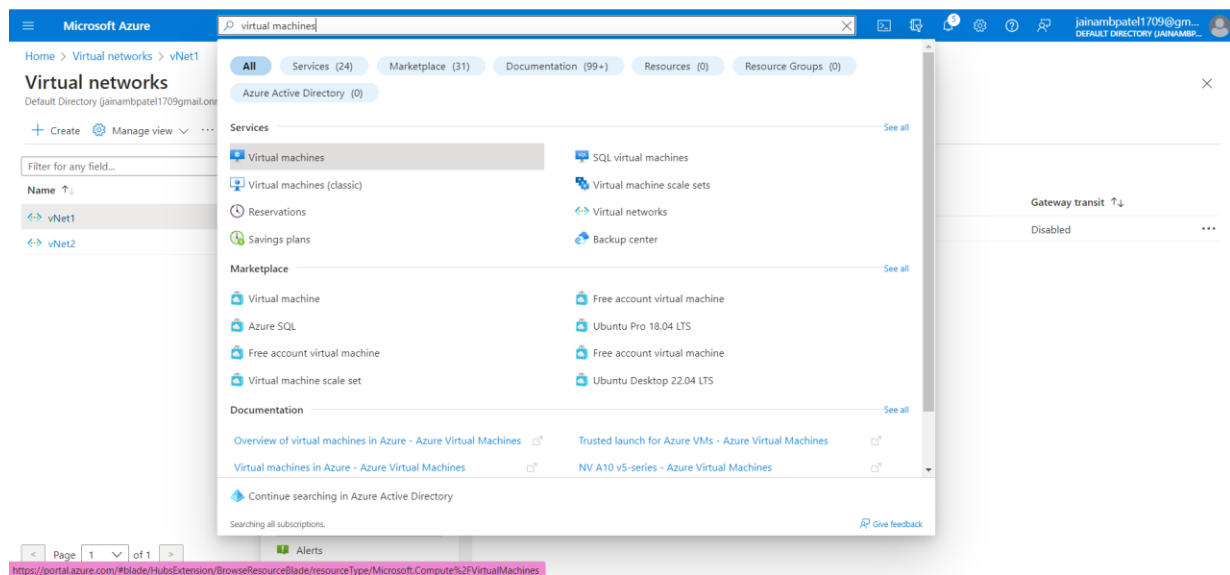

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Step-5 In the Peering tab check the Peering status, it should show connected.

Create Virtual Machine:

Step-1 Go to the Azure portal and search for Virtual Machine and click on it.

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Step-2 Select the resource group and then name the VM, also you may select the desired region as well.

Step-3 Now Create a username and password for the VM instance and select inbound port as RDP(3389).

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Step-4 Click on next and select OS disk type as Standard HDD.

Step-5 After that click on review and create. Then it will show you the pricing and then click on create and we can see that vm1 has been created.

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Step-6 create vm2 with the same process and steps we have created vm1 we can see that VM1 has been created.

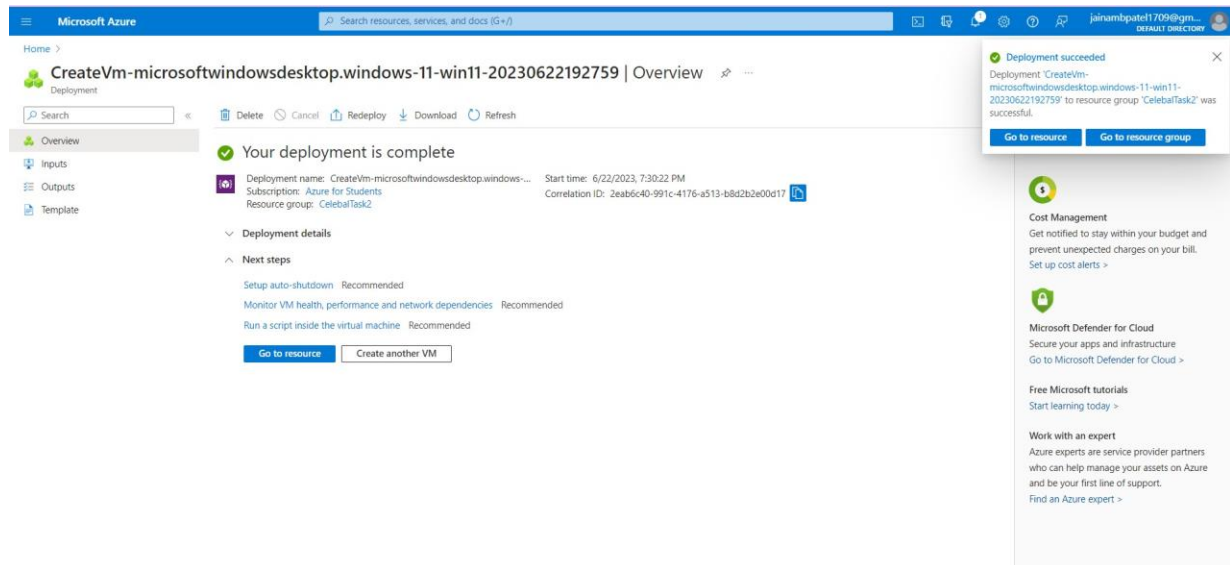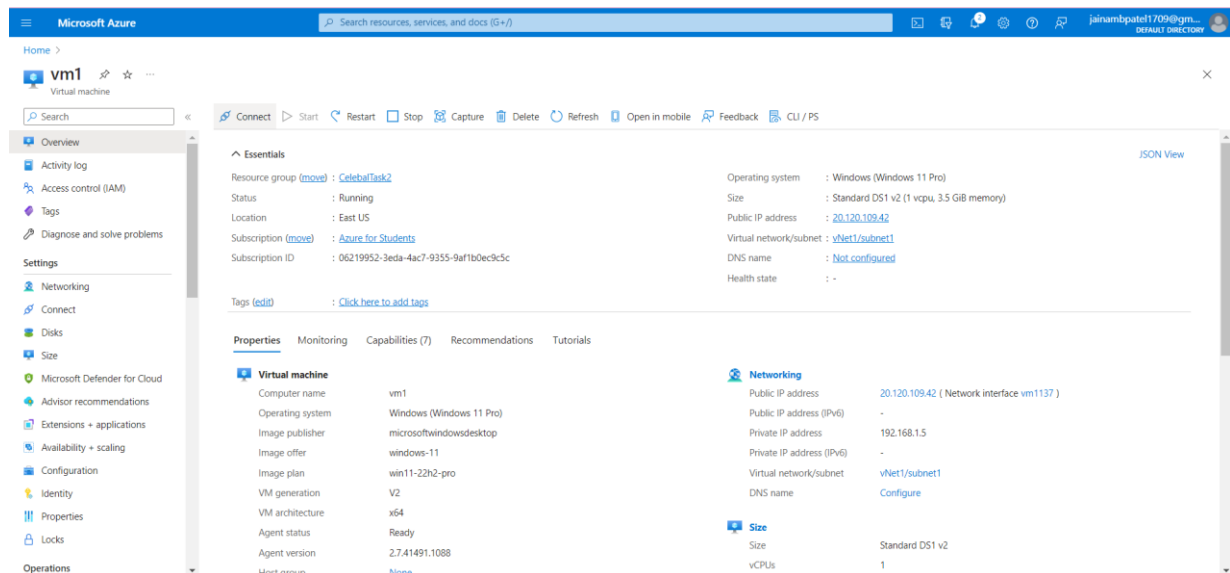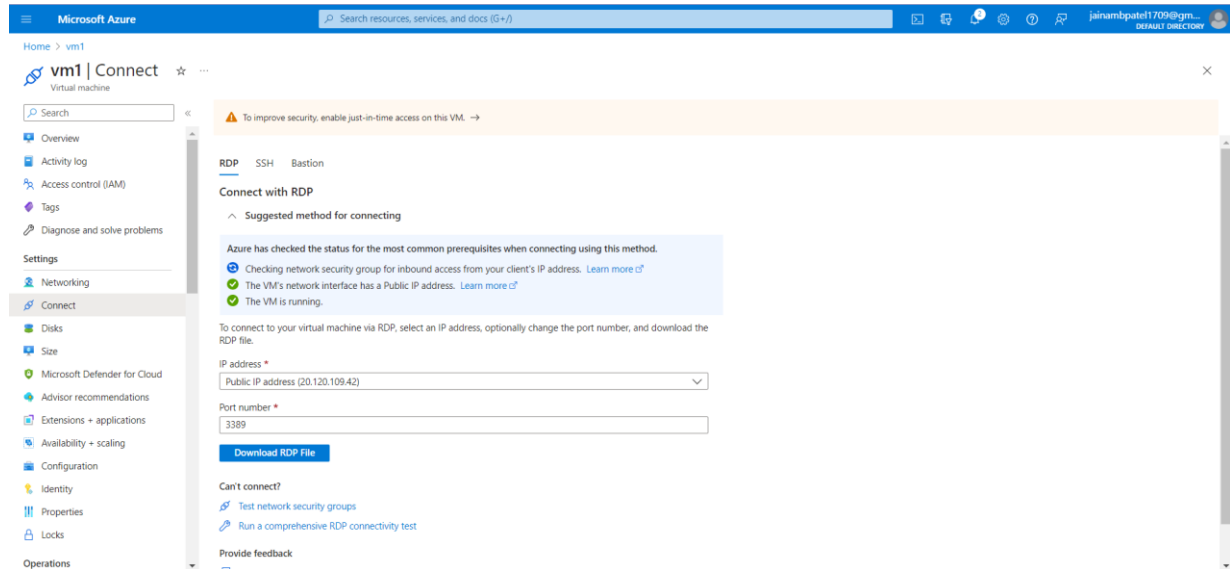**Step-7** After creation of virtual machine click on Connect button.

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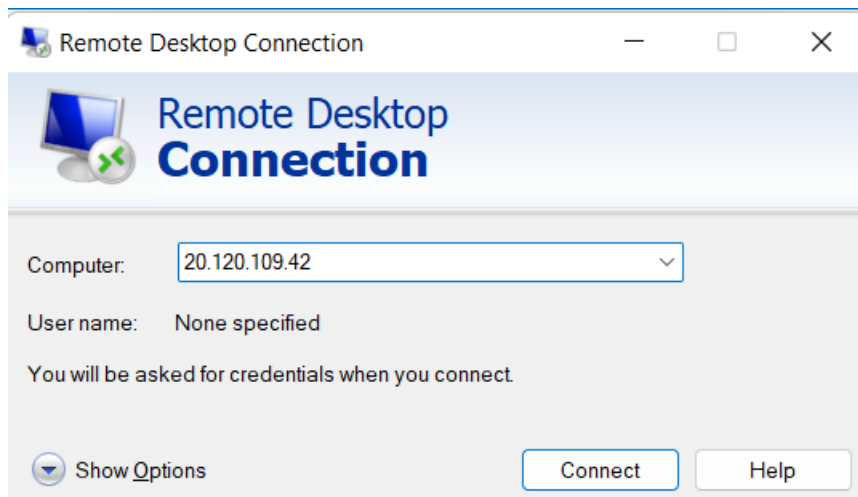Student Name: Jainam Bijalkumar Patel

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Step-8 click on download RDP file to connect/for remote desctop vm1

Step-9 Connect with vm1

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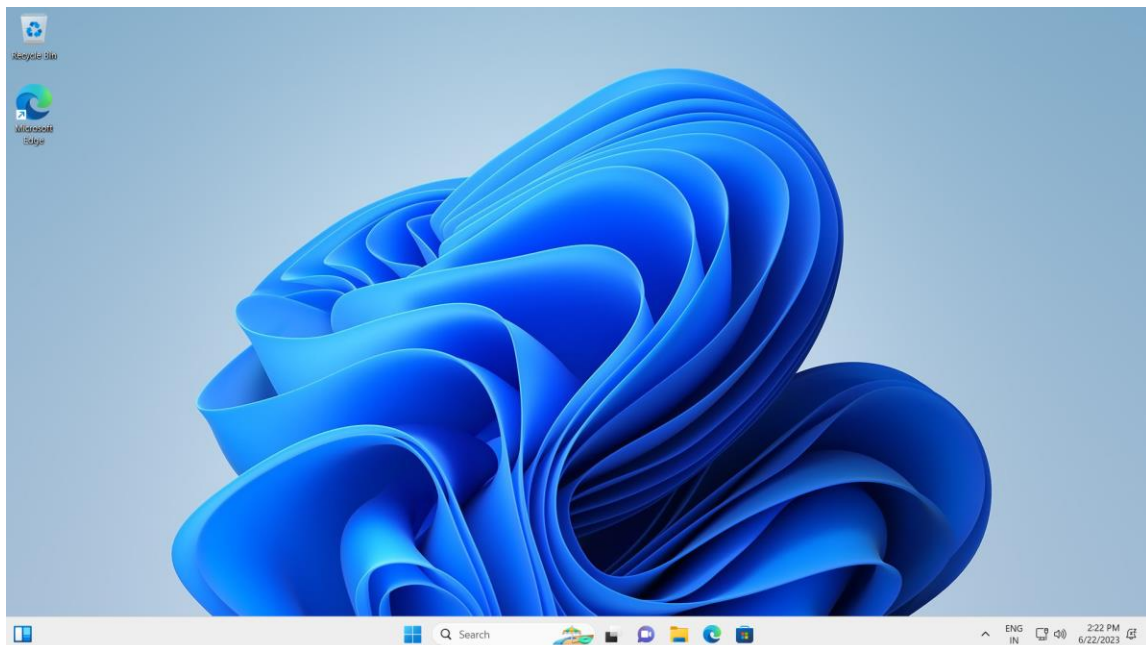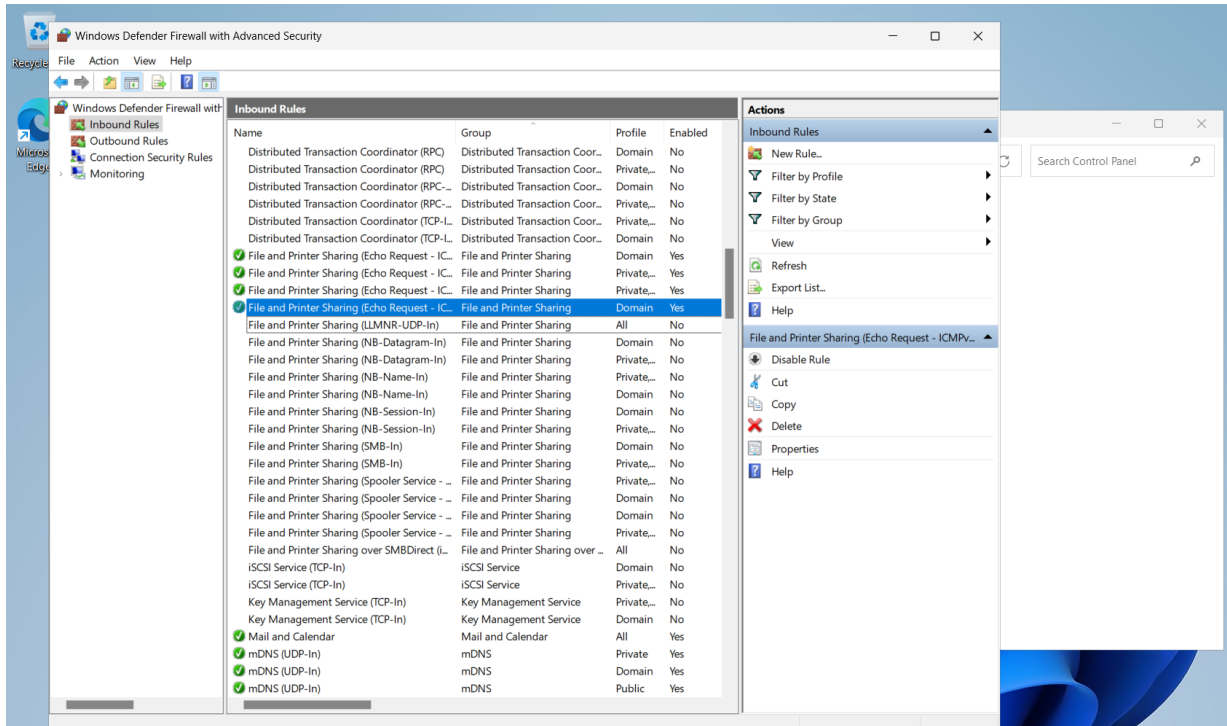

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Step-10 Enable the Internet Control Message Protocol (ICMP) in Inbound Rule Section in vm1
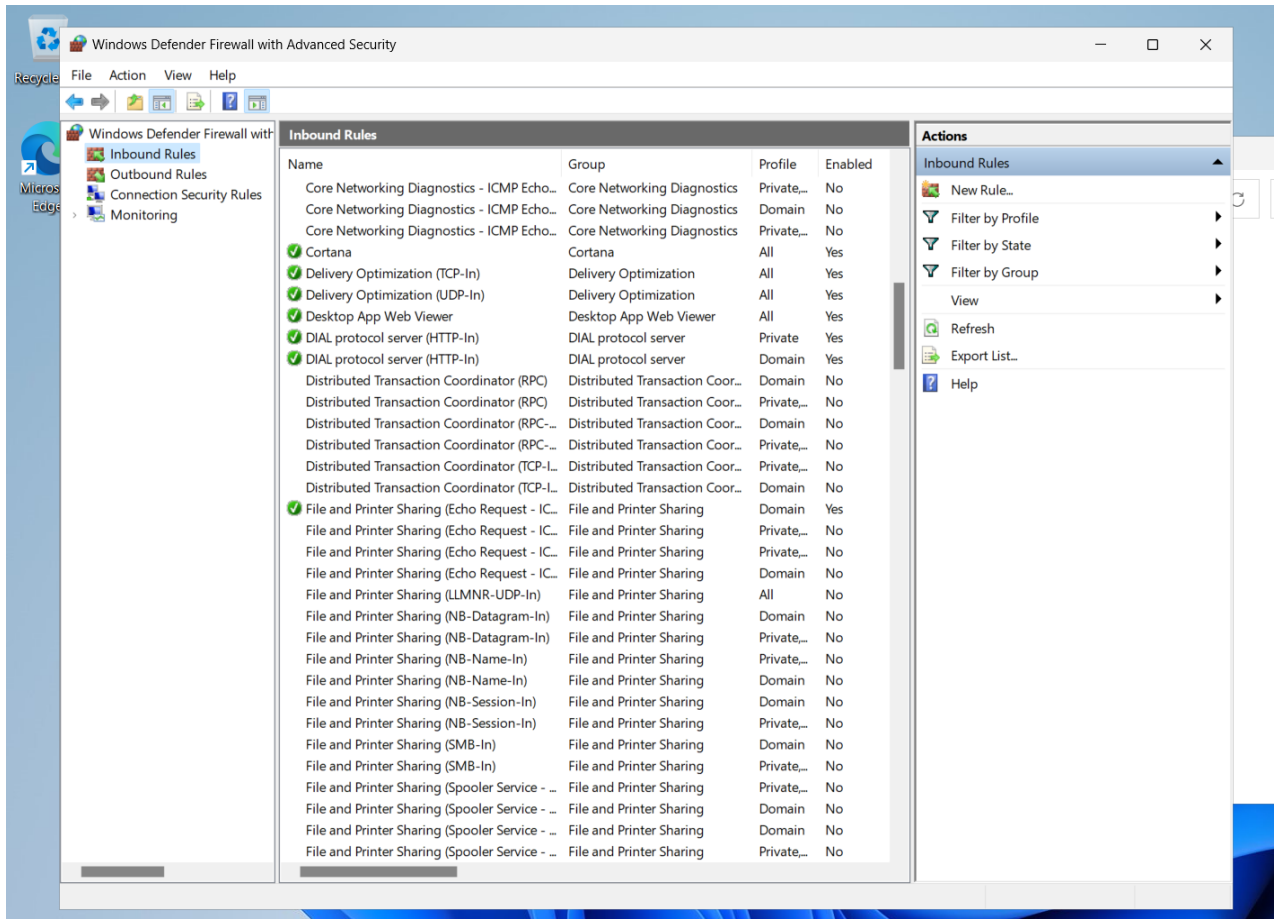
Step-11 Enable the Internet Control Message Protocol (ICMP) in Inbound Rule Section in vm2

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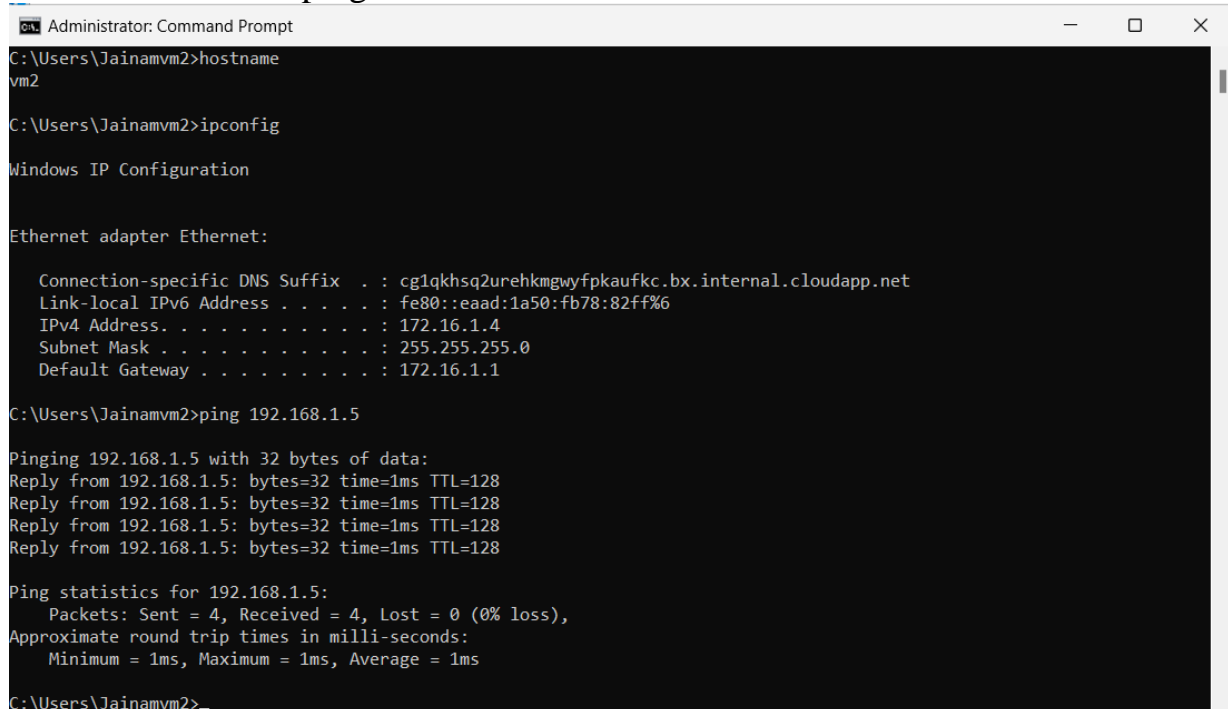Student Name: Jainam Bijalkumar Patel

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Step-12

1. Check the hostname using command: hostname
2. Check the ip address using command: ipconfig
3. Check the connectivity using command: ping

We can see that ping is successful so connection is established