

Name: Muhammad Osama

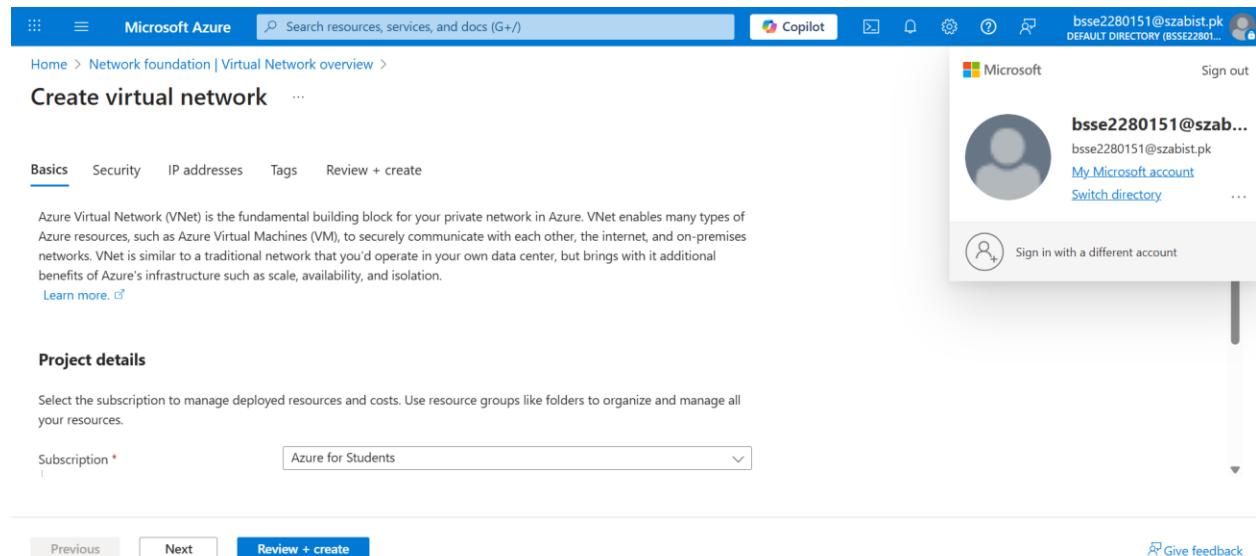
Registration no: 2280151

Program: BSSE

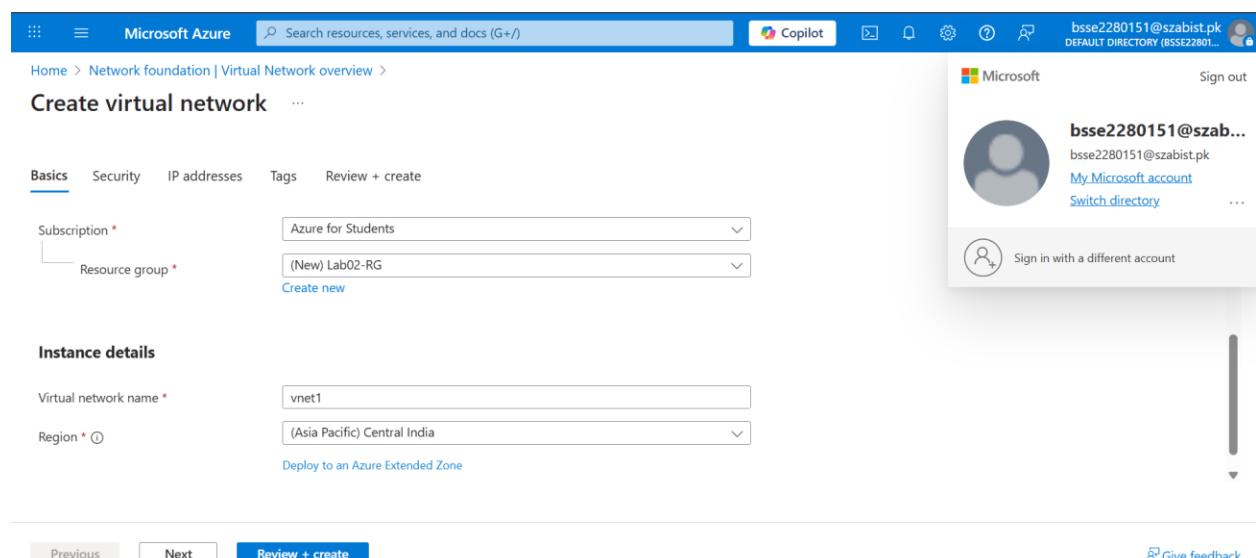
Section: B

Lab 02 - Create a Virtual Network

Task 01: Create the Virtual Network



The screenshot shows the Microsoft Azure 'Create virtual network' wizard. The user is on the 'Basics' step. They have selected 'Azure for Students' as the subscription and '(New) Lab02-RG' as the resource group. The 'Project details' section is visible, showing the subscription and resource group names.



The screenshot shows the Microsoft Azure 'Create virtual network' wizard. The user is on the 'Instance details' step. They have entered 'vnet1' as the virtual network name and selected '(Asia Pacific) Central India' as the region. The 'Review + create' button is at the bottom.

Microsoft Azure Search resources, services, and docs (G+) Copilot

Home > Network foundation | Virtual Network overview > Create virtual network ...

Validation passed

Basics Security IP addresses Tags Review + create

View automation template

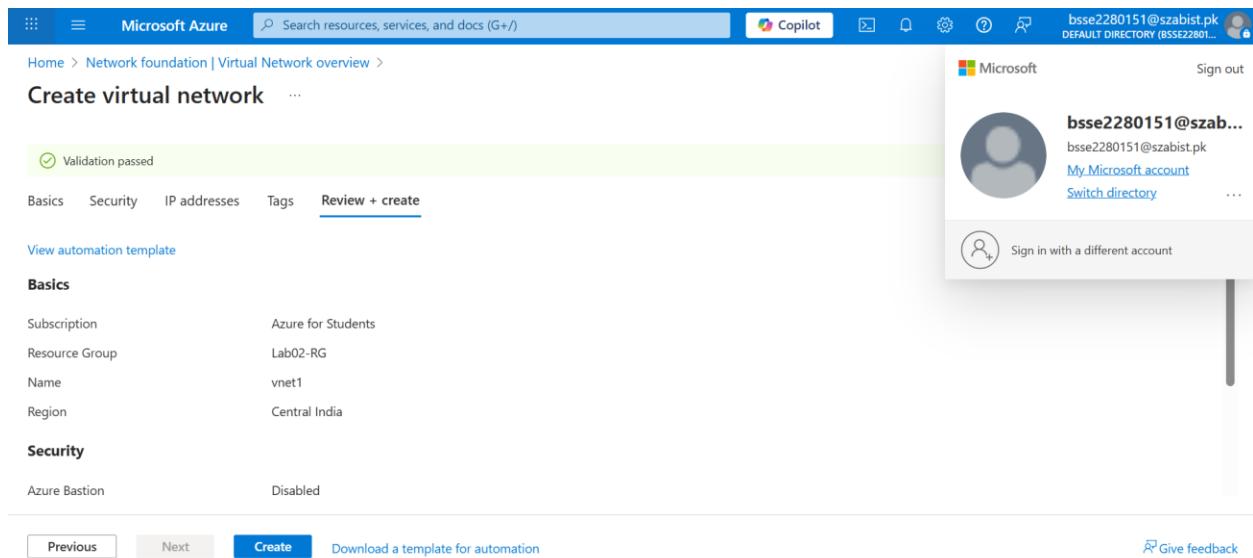
Basics

Subscription	Azure for Students
Resource Group	Lab02-RG
Name	vnet1
Region	Central India

Security

Azure Bastion	Disabled
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Previous Next Create Download a template for automation Give feedback



Microsoft Azure Search resources, services, and docs (G+) Copilot

Home > vnet1-1761758326282 | Overview ...

Deployment

Search X < Delete Cancel Redeploy Download Refresh

Overview

✓ Your deployment is complete

Deployment name : vnet1-1761758326282
Subscription : Azure for Students
Resource group : Lab02-RG
Start time : 10/29/2025, 10:18:55 PM
Correlation ID : 18920c93-9fac-47ab-9ee8-5fe9d934fb9a

Deployment details

Next steps

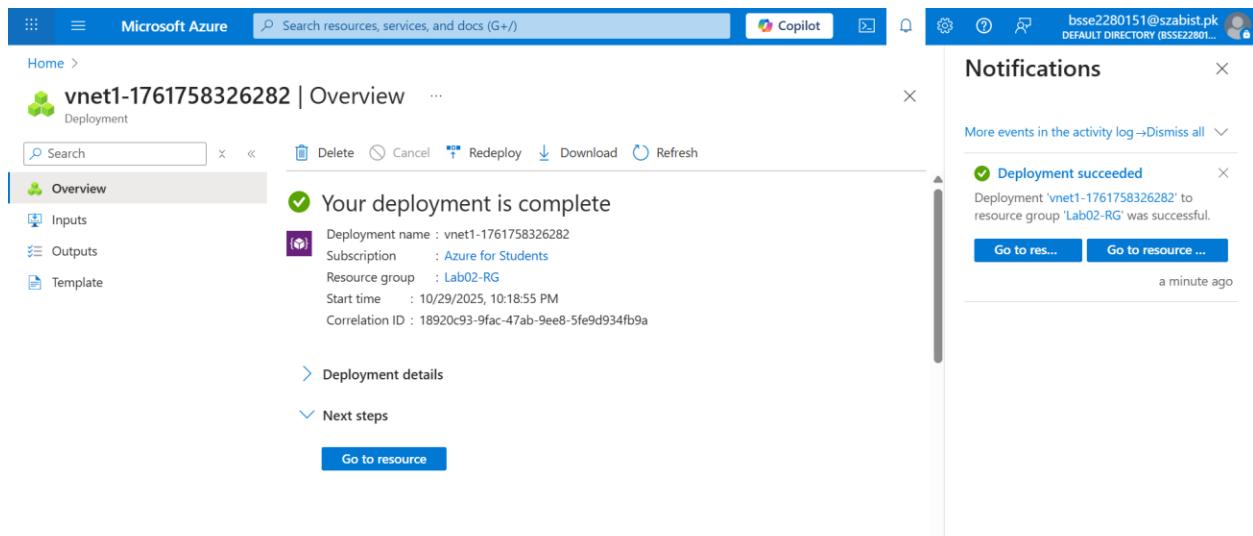
Go to resource

Notifications

More events in the activity log → Dismiss all

✓ Deployment succeeded Deployment 'vnet1-1761758326282' to resource group 'Lab02-RG' was successful.

Go to res... Go to resource ... a minute ago



The screenshot shows the Microsoft Azure portal interface. At the top, there's a search bar with the placeholder "Search resources, services, and docs (G+)" and a Copilot button. The main title is "vnet1-1761758326282 | Overview". On the left, a sidebar has "Overview" selected. Below the title, there are buttons for "Delete", "Cancel", "Redeploy", "Download", and "Refresh". A prominent message says "Your deployment is complete". Deployment details listed include: Deployment name : vnet1-1761758326282, Subscription : Azure for Students, Resource group : Lab02-RG, Start time : 10/29/2025, 10:18:55 PM, and Correlation ID : 18920c93-9fac-47ab-9ee8-5fe9d934fb9a. A "Deployment details" section is expanded, showing a table with columns: Resource, Type, Status, and Open. One row is visible: vnet1, Virtual network, OK, and Open. On the right, a sidebar shows the user profile "bsse2280151@szabist.pk" and options to sign out, switch accounts, or switch directory.

Task 02: Create Two Virtual Machines:

Virtual Machine 1:

The screenshot shows the 'Create a virtual machine' wizard in Microsoft Azure. The user is on the first step, 'Set instance details'. Key fields include:

- Subscription:** Azure for Students
- Resource group:** Lab02-RG (selected)
- Virtual machine name:** vm1
- Region:** (Asia Pacific) Central India
- Availability options:** Availability zone

At the bottom, there are navigation buttons: < Previous, Next : Disks >, and a prominent blue 'Review + create' button.

The screenshot shows the 'Create a virtual machine' wizard in Microsoft Azure. The user is on the second step, 'Configure VM generation'. Key fields include:

- Image:** Windows Server 2019 Datacenter - x64 Gen2
- VM architecture:** x64 (selected)
- Run with Azure Spot discount:** Unchecked
- Size:** Standard_D2s_v3 - 2 vcpus, 8 GiB memory (\$143.81/month)
- Enable Hibernation:** Unchecked

At the bottom, there are navigation buttons: < Previous, Next : Disks >, and a blue 'Review + create' button.

Microsoft Azure Search resources, services, and docs (G+/) Copilot

Home > Compute infrastructure | Virtual machines > Create a virtual machine

⚠️ Changing Basic options may reset selections you have made. Review all options prior to creating the virtual machine.

Help me choose the right VM size for my workload Help me create a low cost VM Help me create a VM

Username * osamauser

Password * ⋮ Confirm password *

Inbound port rules

Select which virtual machine network ports are accessible from the public internet. You can specify more limited or granular network access on the Networking tab.

Public inbound ports * None Allow selected ports

< Previous Next : Disks > Review + create Give feedback

Microsoft Azure Search resources, services, and docs (G+/) Copilot

Home > Compute infrastructure | Virtual machines > Create a virtual machine

⚠️ Changing Basic options may reset selections you have made. Review all options prior to creating the virtual machine.

Help me choose the right VM size for my workload Help me create a low cost VM Help me create a VM

Help me create a low cost VM Help me create a VM optimized for high availability Help me choose the right VM size for my workload

Inbound port rules

Select which virtual machine network ports are accessible from the public internet. You can specify more limited or granular network access on the Networking tab.

Public inbound ports * None Allow selected ports

Select inbound ports * RDP (3389)

⚠️ This will allow all IP addresses to access your virtual machine. This is only recommended for testing. Use the Advanced controls in the Networking tab to create rules to limit inbound traffic to known IP addresses.

< Previous Next : Disks > Review + create Give feedback

Microsoft Azure Search resources, services, and docs (G+/) Copilot

Home > Compute infrastructure | Virtual machines > Create a virtual machine

Help me choose the right VM size for my workload Help me create a low cost VM Help me create a VM optimized for high availability Help me choose the right VM size for my workload

Network interface

When creating a virtual machine, a network interface will be created for you.

Virtual network vnet1 (Lab02-RG)
Edit virtual network

Subnet * (New) snet-centralindia-1
Edit subnet 10.0.1.0 - 10.0.1.255 (256 addresses)

Public IP (new) vm1-ip
Create new

NIC network security group None Basic Advanced

< Previous Next : Management > Review + create Give feedback

bsse2280151@szabist.pk DEFAULT DIRECTORY (BSSE22801... Sign out

My Microsoft account Switch directory ...

Sign in with a different account

Microsoft Azure Search resources, services, and docs (G+/) Copilot

Home > Compute infrastructure | Virtual machines > Create a virtual machine

Help me choose the right VM size for my workload Help me create a low cost VM Help me create a VM optimized for high availability Help me choose the right VM size for my workload

Validation passed

Basics Disks Networking Management Monitoring Advanced Tags Review + create

Price

1 X Standard D2s v3 by Microsoft Subscription credits apply 0.1970 USD/hr Pricing for other VM sizes Terms of use | Privacy policy

TERMS

By clicking "Create", I (a) agree to the legal terms and privacy statement(s) associated with the Marketplace offering(s) listed above; (b) authorize Microsoft to bill my current payment method for the fees associated with the offering(s), with the same

< Previous Next > Create Download a template for automation Give feedback

bsse2280151@szabist.pk DEFAULT DIRECTORY (BSSE22801... Sign out

My Microsoft account Switch directory ...

Sign in with a different account

Microsoft Azure Search resources, services, and docs (G+) Copilot

Home > CreateVm-MicrosoftWindowsServer.WindowsServer-201-2025103010190... Notifications

Deployment

Search X < Delete Cancel Redeploy Download Refresh

Overview

Your deployment is complete

Deployment name : CreateVm-MicrosoftWindowsServer.WindowsServer-201-20251030101905
Subscription : Azure for Students
Resource group : Lab02-RG
Start time : 10/30/2025, 10:34:34 AM
Correlation ID : da39a8b0-f5a1-4502-8d38-cceb80a35d6a

Deployment details

Resource	Type	Status	Open
vm1	Virtual machine	OK	Open
vm1615_z2	Microsoft.Network/networkInterface	OK	Open
vm1-nsg	Network security group	OK	Open
vm1 in	Public IP address	OK	Open

Add or remove favorites by pressing Ctrl+Shift+F

More events in the activity log → Dismiss all

Deployment succeeded Deployment 'CreateVm-MicrosoftWindowsServer.WindowsServer-201-20251030101905' to resource group 'Lab02-RG' was successful.

Go to reso... Pin to dash... a few seconds ago

Microsoft Azure Search resources, services, and docs (G+) Copilot

Home > CreateVm-MicrosoftWindowsServer.WindowsServer-201-20251030101905 | Overview Sign out

Deployment

Search X < Delete Cancel Redeploy Download Refresh

Overview

Your deployment is complete

Deployment name : CreateVm-MicrosoftWindowsServer.WindowsServer-201-20251030101905 Start time : 10/30/2025, 10:34:34 AM
Subscription : Azure for Students Correlation ID : da39a8b0-f5a1-4502-8d38-cc...
Resource group : Lab02-RG

Deployment details

Next steps

Set up auto-shutdown Recommended
Monitor VM health, performance, and network dependencies Recommended
Run a script inside the virtual machine Recommended

Go to resource Create another VM Scale out your VM

Give feedback

bsse2280151@szabist.pk My Microsoft account Switch directory ...

Sign in with a different account

Get notified to stay within your budget and prevent unexpected charges on your bill.
Set up cost alerts >

Virtual Machine 2:

The screenshot shows the 'Create a virtual machine' wizard in Microsoft Azure. The user is on the first step, 'Instance details'. The top navigation bar includes 'Microsoft Azure', 'Search resources, services, and docs (G+)', 'Copilot', and a user profile for 'bsse2280151@szabist.pk'. The main form has several input fields:

- Subscription**: Azure for Students
- Resource group**: Lab02-RG (selected)
- Virtual machine name**: vm2
- Region**: (Asia Pacific) Central India
- Availability options**: Availability zone (selected)

At the bottom, there are buttons for '< Previous', 'Next : Disks >', and 'Review + create'.

The screenshot shows the 'Create a virtual machine' wizard in Microsoft Azure, specifically the 'Networking' step. The top navigation bar and user profile are identical to the previous screenshot. The main form includes:

- Virtual network**: vnet1 (Lab02-RG)
- Subnet**: (New) snet-centralindia-2 (selected)
- Public IP**: (new) vm2-ip

Below these fields, a note states: 'Define network connectivity for your virtual machine by configuring network interface card (NIC) settings. You can control ports, inbound and outbound connectivity with security group rules, or place behind an existing load balancing solution.' There are also 'Learn more' and 'Edit virtual network' links. At the bottom, there are buttons for '< Previous', 'Next : Management >', and 'Review + create'.

Microsoft Azure Search resources, services, and docs (G+) Copilot

All services > CreateVm-MicrosoftWindowsServer.WindowsServer-201-2025103010391...

Deployment

Search X < Delete Cancel Redeploy Download Refresh

Overview

Inputs Outputs Template

Your deployment is complete

Deployment name : CreateVm-MicrosoftWindowsServer.WindowsServer-201-20251030103917
Subscription : Azure for Students
Resource group : Lab02-RG
Start time : 10/30/2025, 10:43:42 AM
Correlation ID : 9f56a303-f2c7-4705-8f73-e4599638a89a

Deployment details

Resource	Type	Status	Open
vm2	Virtual machine	OK	Open
vm2240_z2	Microsoft.Network/networkInterface	OK	Open

Notifications

More events in the activity log → Dismiss all

Deployment succeeded Deployment 'CreateVm-MicrosoftWindowsServer.WindowsServer-201-20251030103917' to resource group 'Lab02-RG' was successful.

Go to reso... Pin to dash... a few seconds ago

Task 03: Test the Connection

The screenshot shows the Microsoft Azure portal interface. The left sidebar is for the virtual machine 'vm1'. The main area is titled 'Native RDP' and contains the following fields:

- Source machine**:
 - Source machine OS: Windows
 - Source IP address: Local IP | 223.29.233.3 (status: Connecting over a VPN?)
- Destination VM**:
 - VM IP address: Public IP | 4.240.101.68
 - VM port: 3389
- Connection prerequisites**:
 - VM access: Check inbound NSG rules (radio button selected)
- Connect using RDP file**:
 - Download and open file to connect (button)
 - Download RDP file (button)
- Username**: osamauser

The screenshot shows the Microsoft Azure portal interface. The left sidebar is for the virtual machine 'vm1'. A 'Remote Desktop Connection security warning' dialog box is displayed in the center:

The publisher of this remote connection can't be identified. Do you want to connect anyway?

This remote connection could harm your local or remote computer. Do not connect unless you know where this connection came from or have used it before.

VM IP address: 4.240.101.68
VM port: 3389
Publisher: Unknown publisher
Type: Remote Desktop Connection
Remote computer: 4.240.101.68

Check access (button)
Distrust publisher (checkbox)
Show Details (button)
Connect (button) | Cancel (button)

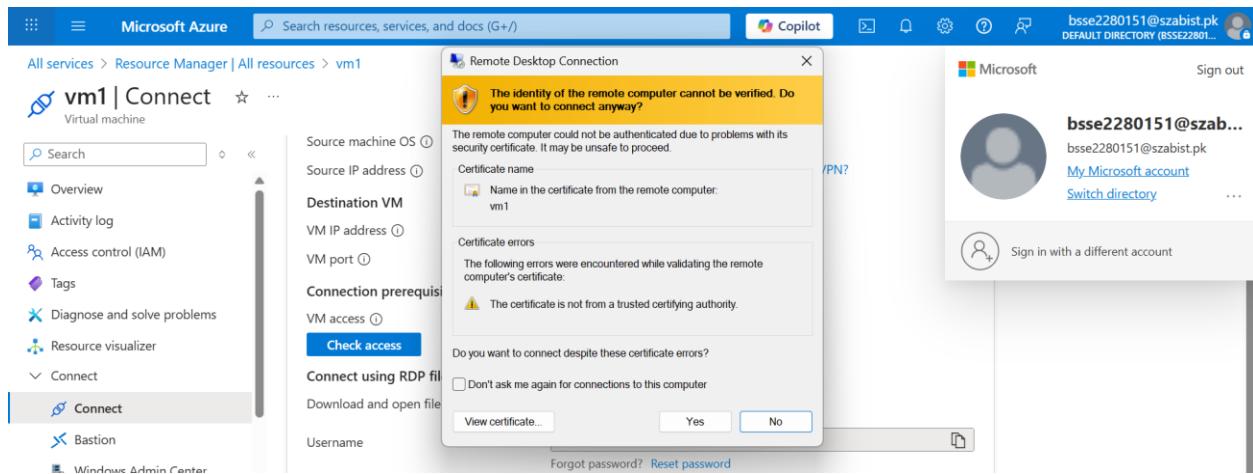
The screenshot shows the Microsoft Azure portal interface. The left sidebar is for the virtual machine 'vm1'. A 'Windows Security' dialog box is displayed in the center:

Enter your credentials
These credentials will be used to connect to 4.240.101.68.

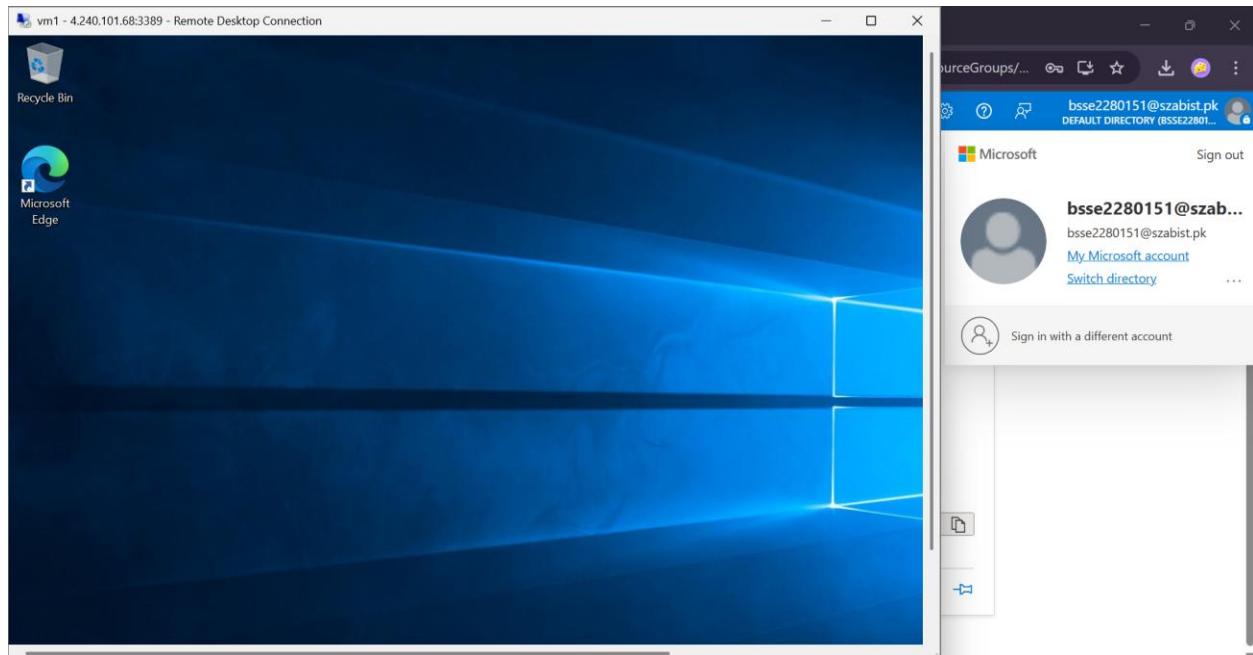
osamauser
Password: (redacted)
Remember me (checkbox)

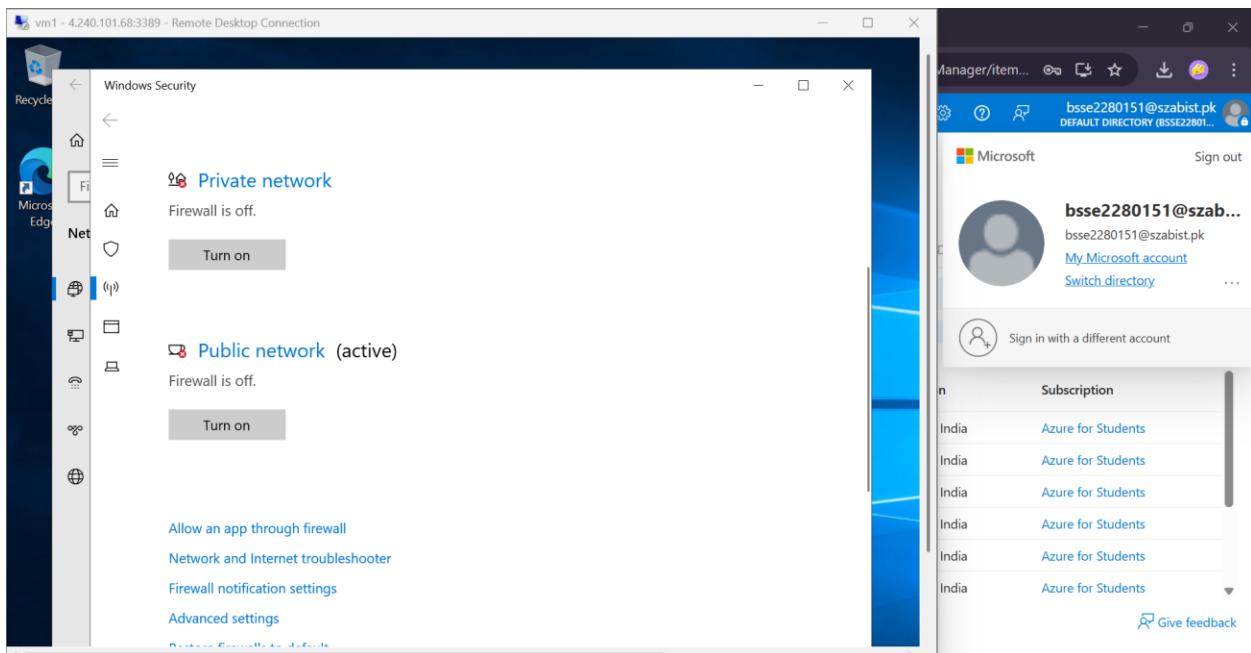
More choices (link)
Edit settings (link)

OK (button) | Cancel (button)

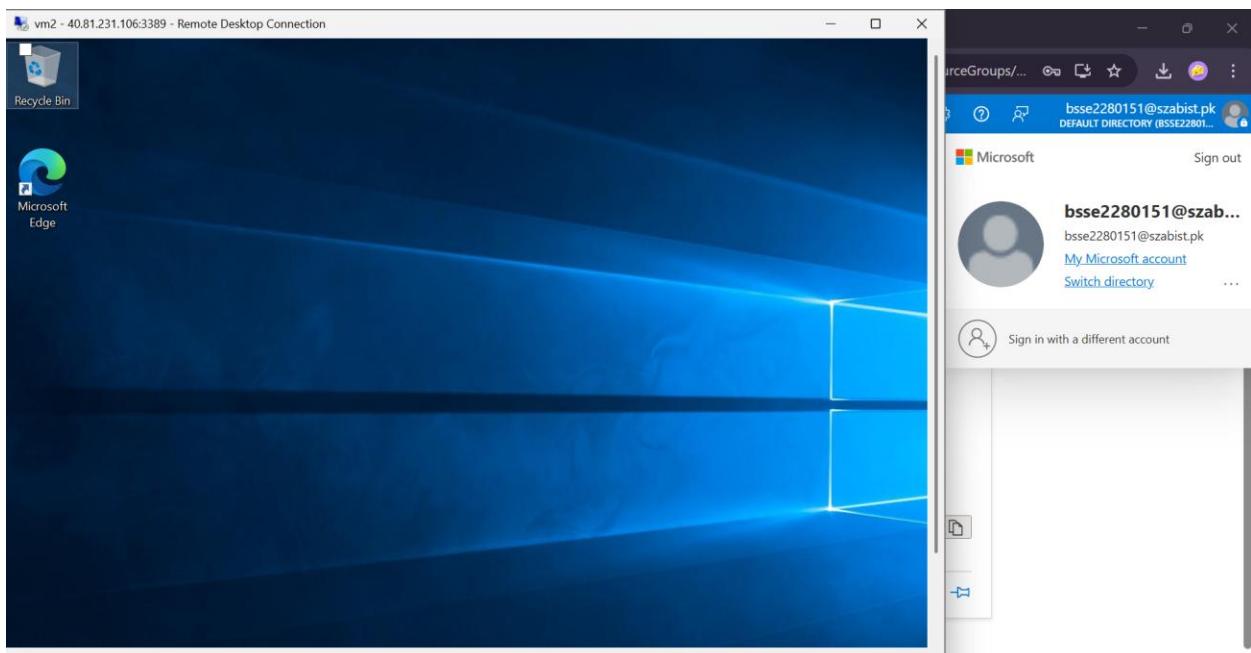


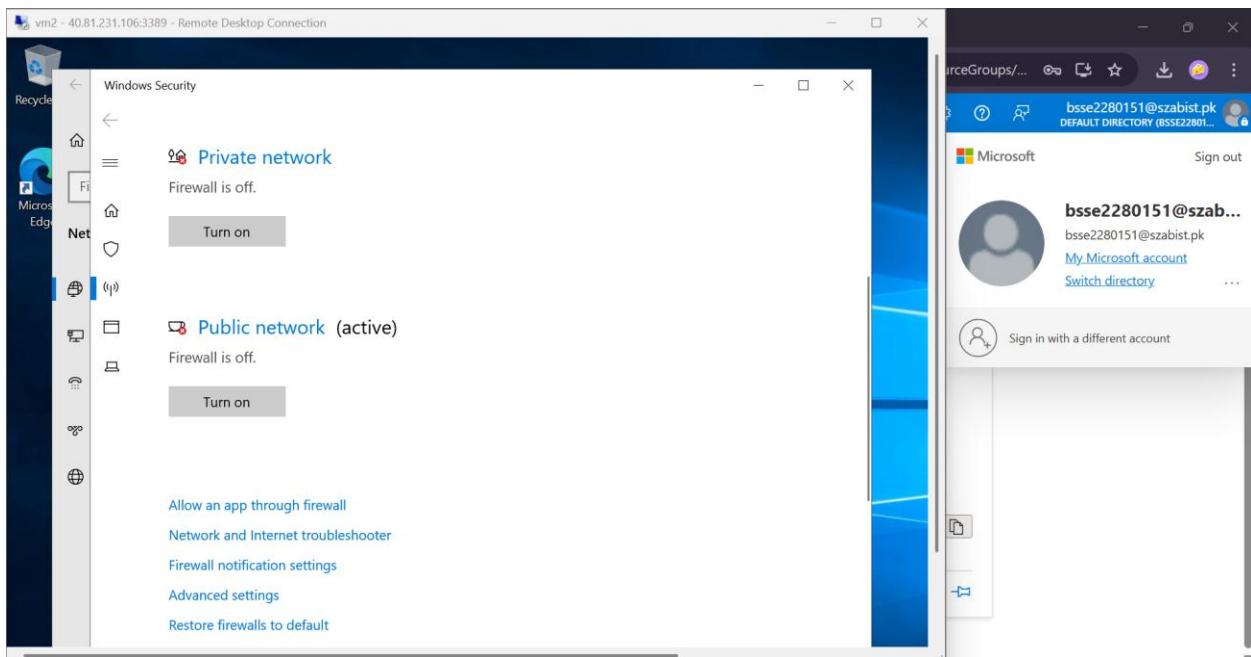
ON VM 1:





ON VM 2:





Task 04: PING VM2 FROM VM1

