

Name: Muhammad Osama

Registration no: 2280151

Program: BSSE

Section: B

Lab 02 - Create a Virtual Network

Task 01: Create the Virtual Network

Microsoft Azure

Search resources, services, and docs (G+)

Copilot

bsse2280151@szabist.pk
DEFAULT DIRECTORY (853E22801...

[Home](#) > [Network foundation](#) | [Virtual Network overview](#) >

Create virtual network

[Basics](#) [Security](#) [IP addresses](#) [Tags](#) [Review + create](#)

Azure Virtual Network (VNet) is the fundamental building block for your private network in Azure. VNet enables many types of Azure resources, such as Azure Virtual Machines (VM), to securely communicate with each other, the internet, and on-premises networks. VNet is similar to a traditional network that you'd operate in your own data center, but brings with it additional benefits of Azure's infrastructure such as scale, availability, and isolation.

[Learn more.](#)

Project details


Select the subscription to manage deployed resources and costs. Use resource groups like folders to organize and manage all your resources.

Subscription *


[Previous](#) [Next](#) [Review + create](#)

[Give feedback](#)

Microsoft Sign out



bsse2280151@szab...
bsse2280151@szabist.pk
[My Microsoft account](#)
[Switch directory](#)

 Sign in with a different account

Microsoft Azure

Search resources, services, and docs (G+)

Copilot

bsse2280151@szabist.pk
DEFAULT DIRECTORY (853E22801...

[Home](#) > [Network foundation](#) | [Virtual Network overview](#) >

Create virtual network

[Basics](#) [Security](#) [IP addresses](#) [Tags](#) [Review + create](#)

Subscription *

Resource group *
[Create new](#)

Instance details


Virtual network name *

Region *
[Deploy to an Azure Extended Zone](#)


[Previous](#) [Next](#) [Review + create](#)

[Give feedback](#)

Microsoft Sign out



bsse2280151@szab...
bsse2280151@szabist.pk
[My Microsoft account](#)
[Switch directory](#)

 Sign in with a different account

Microsoft Azure

Search resources, services, and docs (G+/I)

Copilot

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

Home > Network foundation | Virtual Network overview >

Create virtual network ...

Validation passed

BasicsSecurityIP addressesTagsReview + create

[View automation template](#)

Basics

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

Security


Azure Bastion	Disabled
---------------	----------

PreviousNextCreate


[Download a template for automation](#)

[Give feedback](#)

MicrosoftSign out



bsse2280151@szab...
bsse2280151@szabist.pk
[My Microsoft account](#)
[Switch directory](#)

 Sign in with a different account


Microsoft Azure

Search resources, services, and docs (G+/I)

Copilot

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

Home >

 **vnet1-1761758326282 | Overview** ...

Deployment

Search


DeleteCancelRedeployDownloadRefresh


Overview

Inputs

Outputs

Template

 **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

Microsoft Azure

Search resources, services, and docs (G+)

Copilot

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

Sign out

Home >

vnet1-1761758326282 | Overview

Deployment

Search

Delete

Cancel

Redeploy

Download

Refresh

Overview

Inputs

Outputs

Template

✓ 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

Resource	Type	Status	Open
✓ vnet1	Virtual network	OK	Open

Next steps

Microsoft

bsse2280151@szab...
bsse2280151@szabist.pk
[My Microsoft account](#)
[Switch directory](#)

Sign in with a different account

2 minutes ago

Task 02: Create Two Virtual Machines:

Virtual Machine 1:

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

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 V

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

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

Subscription *

Resource group * [Create new](#)

Instance details

Virtual machine name *

Region * [Deploy to an Azure Extended Zone](#)

Availability options

< Previous | Next: Disks > | Review + create

Give feedback

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

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 V

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

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

Image * [See all images](#) | [Configure VM generation](#)

VM architecture ☐ Arm64 ☒ x64

Arm64 is not supported with the selected image.

Run with Azure Spot discount ☐

Size * [See all sizes](#)

Enable Hibernation ☐

< Previous | Next: Disks > | Review + create

Give feedback

Microsoft Azure

Search resources, services, and docs (G+I)

Copilot

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

Sign out

Home > Compute infrastructure | Virtual machines >

Create a virtual machine

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

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

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

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

< PreviousNext : Disks >Review + create

Give feedback

Microsoft Azure

Search resources, services, and docs (G+I)

Copilot

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

Sign out

Home > Compute infrastructure | Virtual machines >

Create a virtual machine

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

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

Help me create a low cost VMHelp me create a VM optimized for high availabilityHelp 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.

< PreviousNext : Disks >Review + create

Give feedback

Microsoft Azure

Search resources, services, and docs (G+/I)

Copilot

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

Home > Compute infrastructure | Virtual machines >

Create a virtual machine

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

Help me create a low cost VMHelp me create a VM optimized for high availabilityHelp 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 subnet10.0.1.0 - 10.0.1.255 (256 addresses)

Public IP (new) vm1-ip
Create new

NIC network security group None
Basic
Advanced

< PreviousNext : Management >Review + create

Give feedback

MicrosoftSign out

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

Sign in with a different account

Microsoft Azure

Search resources, services, and docs (G+/I)

Copilot

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

Home > Compute infrastructure | Virtual machines >

Create a virtual machine

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

Validation passed

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

BasicsDisksNetworkingManagementMonitoringAdvancedTagsReview + create

Price

1 X Standard D2s v3
by Microsoft
Terms of use | Privacy policy

Subscription credits apply
0.1970 USD/hr
Pricing for other VM sizes

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

< PreviousNext >Create

Download a template for automationGive feedback

MicrosoftSign out

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

Sign in with a different account

Microsoft Azure

Search resources, services, and docs (G+/I)

Copilot

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

Home >

CreateVm-MicrosoftWindowsServer.WindowsServer-201-2025103010190...
Deployment

Search

Delete Cancel Redeploy Download Refresh

Overview

Inputs

Outputs

Template

✓ 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/networkInter	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

Notifications

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 dashb...

a few seconds ago

Microsoft Azure

Search resources, services, and docs (G+/I)

Copilot

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

Home >

CreateVm-MicrosoftWindowsServer.WindowsServer-201-20251030101905 | Overview

Search

Delete Cancel Redeploy Download Refresh

Overview

Inputs

Outputs

Template

✓ Your deployment is complete

Deployment name : CreateVm-MicrosoftWindows... 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

Microsoft Sign out

bsse2280151@szab...
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:

Microsoft Azure

Search resources, services, and docs (G+/)

Copilot

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

[All services](#) > [Compute infrastructure](#) | [Virtual machines](#) >

Create a virtual machine

[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](#)

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

[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](#)

Subscription * ⓘ

Azure for Students

Resource group * ⓘ

Lab02-RG

[Create new](#)

Instance details

Virtual machine name * ⓘ

vm2

Region * ⓘ

(Asia Pacific) Central India

[Deploy to an Azure Extended Zone](#)

Availability options ⓘ

Availability zone


< Previous

Next : Disks >

Review + create

[Give feedback](#)

Microsoft Sign out



bsse2280151@szab...
bsse2280151@szabist.pk
[My Microsoft account](#)
[Switch directory](#)

Sign in with a different account

Microsoft Azure

Search resources, services, and docs (G+/)

Copilot

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

[All services](#) > [Compute infrastructure](#) | [Virtual machines](#) >

Create a virtual machine

[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](#)

[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](#)

Basics

Disks

Networking

Management

Monitoring

Advanced

Tags

Review + create

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.

[Learn more](#)

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-2

[Edit subnet](#)

10.0.2.0 - 10.0.2.255 (256 addresses)

Public IP ⓘ

(new) vm2-ip

[Create new](#)


< Previous

Next : Management >

Review + create

[Give feedback](#)

Microsoft Sign out



bsse2280151@szab...
bsse2280151@szabist.pk
[My Microsoft account](#)
[Switch directory](#)

Sign in with a different account

Task 03: Test the Connection

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

bsse2280151@szabist.pk
DEFAULT DIRECTORY (BSSE22801...)

All services > Resource Manager | All resources > vm1

vm1 | Connect ☆ ...
Virtual machine

Search

- Overview
- Activity log
- Access control (IAM)
- Tags
- Diagnose and solve problems
- Resource visualizer
- Connect
- Connect
- Bastion
- Windows Admin Center
- Networking
- Settings

Native RDP ⓘ

Source machine

Source machine OS ⓘ Windows

Source IP address ⓘ Local IP | 223.29.233.3 [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

[Check access](#)

Connect using RDP file

Download and open file to connect [Download RDP file](#)

Username osamauser [Download RDP file](#)

Forgot password? Reset password

Microsoft Sign out

bsse2280151@szab...
bsse2280151@szabist.pk
[My Microsoft account](#)
[Switch directory](#)

Sign in with a different account

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

bsse2280151@szabist.pk
DEFAULT DIRECTORY (BSSE22801...)

All services > Resource Manager | All resources > vm1

vm1 | Connect ☆ ...
Virtual machine

Search

- Overview
- Activity log
- Access control (IAM)
- Tags
- Diagnose and solve problems
- Resource visualizer
- Connect
- Connect
- Bastion
- Windows Admin Center
- Networking
- Settings

Native RDP ⓘ

Source machine

Source machine OS ⓘ Windows

Source IP address ⓘ Local IP | 223.29.233.3 [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

[Check access](#)

Connect using RDP file

Download and open file to connect [Download RDP file](#)

Username osamauser [Download RDP file](#)

Forgot password? Reset password

Microsoft Sign out

bsse2280151@szab...
bsse2280151@szabist.pk
[My Microsoft account](#)
[Switch directory](#)

Sign in with a different account

Remote Desktop Connection security warning

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.

Publisher: Unknown publisher
Type: Remote Desktop Connection
Remote computer: 4.240.101.68

☐ Don't ask me again for connections to this computer

[Show Details](#) [Connect](#) [Cancel](#)

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

bsse2280151@szabist.pk
DEFAULT DIRECTORY (BSSE22801...)

All services > Resource Manager | All resources > vm1

vm1 | Connect ☆ ...
Virtual machine

Search

- Overview
- Activity log
- Access control (IAM)
- Tags
- Diagnose and solve problems
- Resource visualizer
- Connect
- Connect
- Bastion
- Windows Admin Center
- Networking
- Settings

Native RDP ⓘ

Source machine

Source machine OS ⓘ Windows

Source IP address ⓘ Local IP | 223.29.233.3 [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

[Check access](#)

Connect using RDP file

Download and open file to connect [Download RDP file](#)

Username osamauser [Download RDP file](#)

Forgot password? Reset password

Microsoft Sign out

bsse2280151@szab...
bsse2280151@szabist.pk
[My Microsoft account](#)
[Switch directory](#)

Sign in with a different account

Windows Security

Enter your credentials

These credentials will be used to connect to 4.240.101.68.

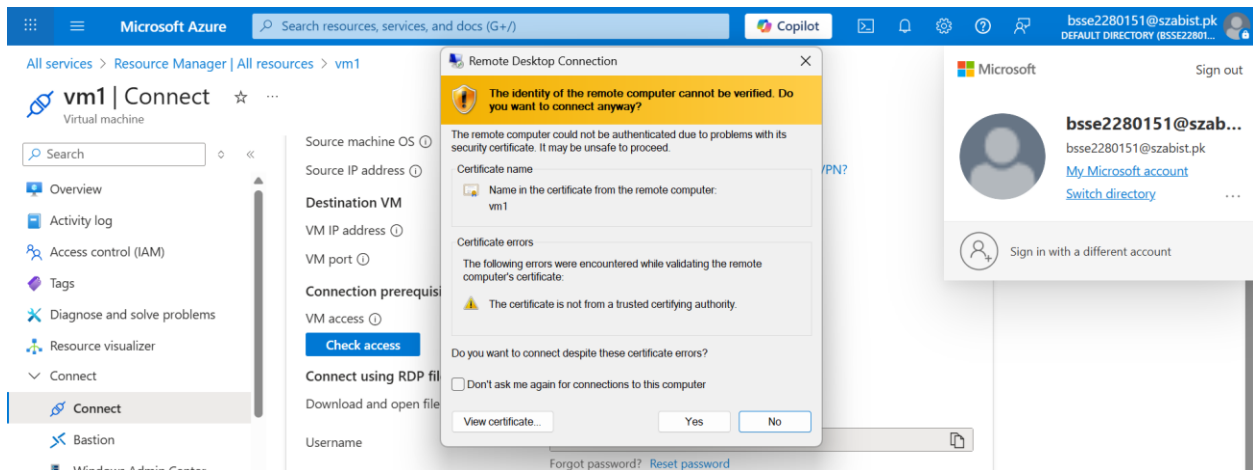
osamauser

Password

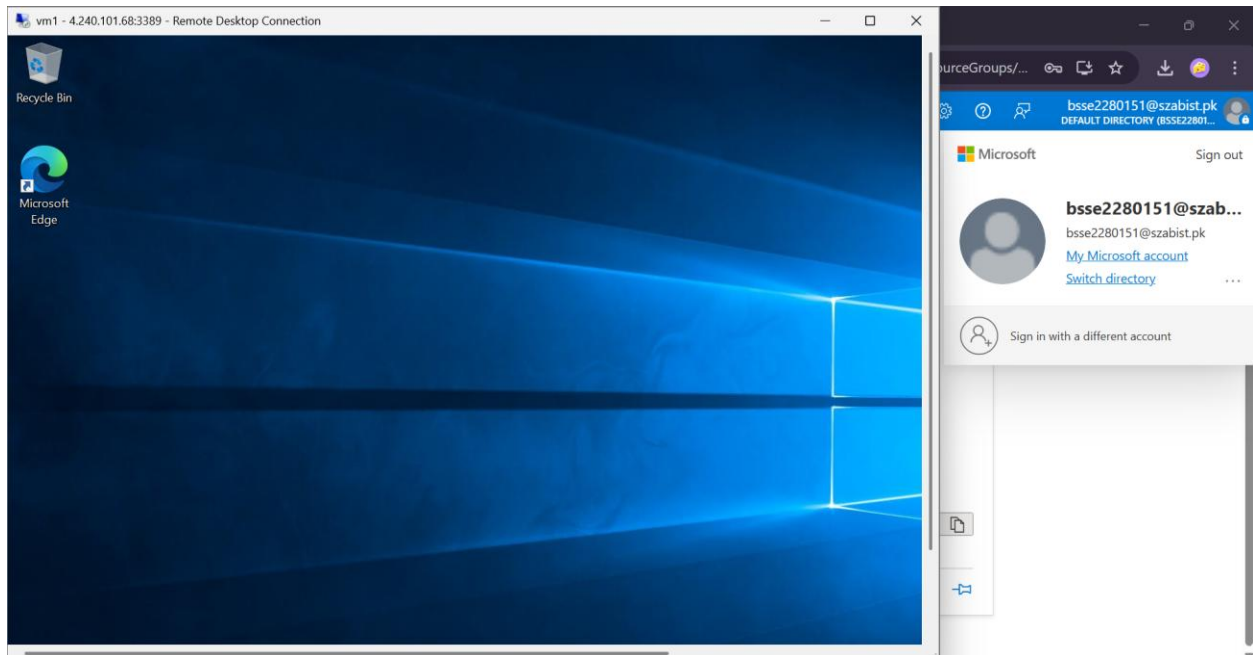
☐ Remember me

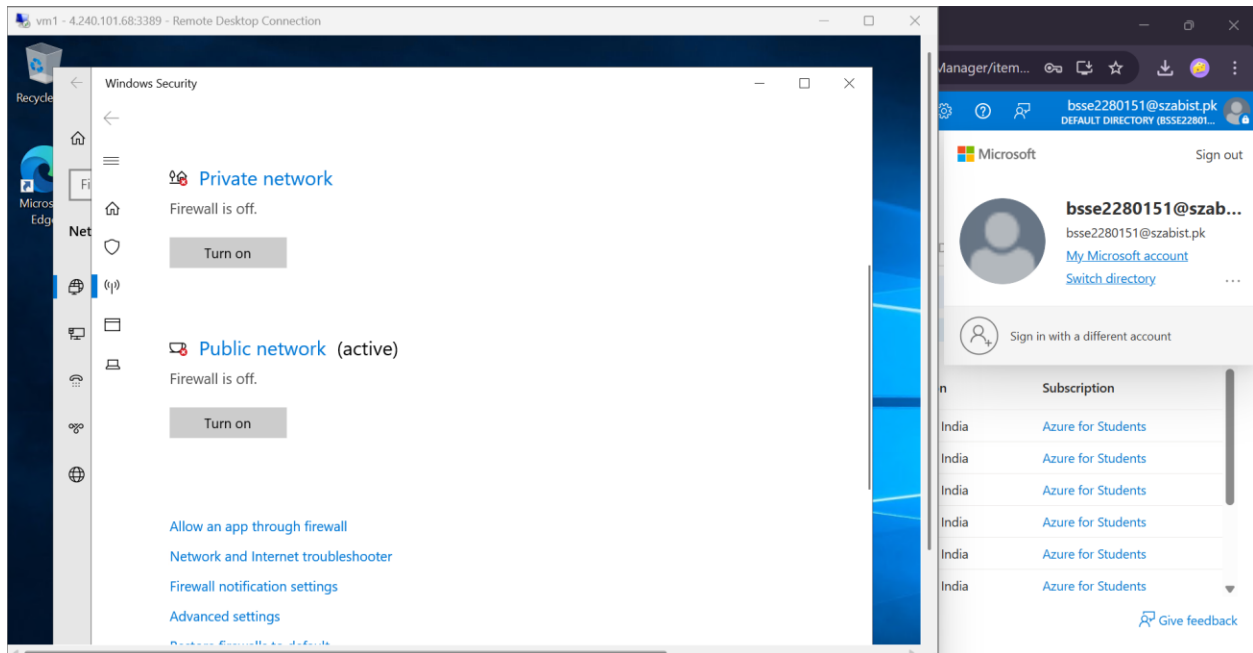
More choices

[OK](#) [Cancel](#)

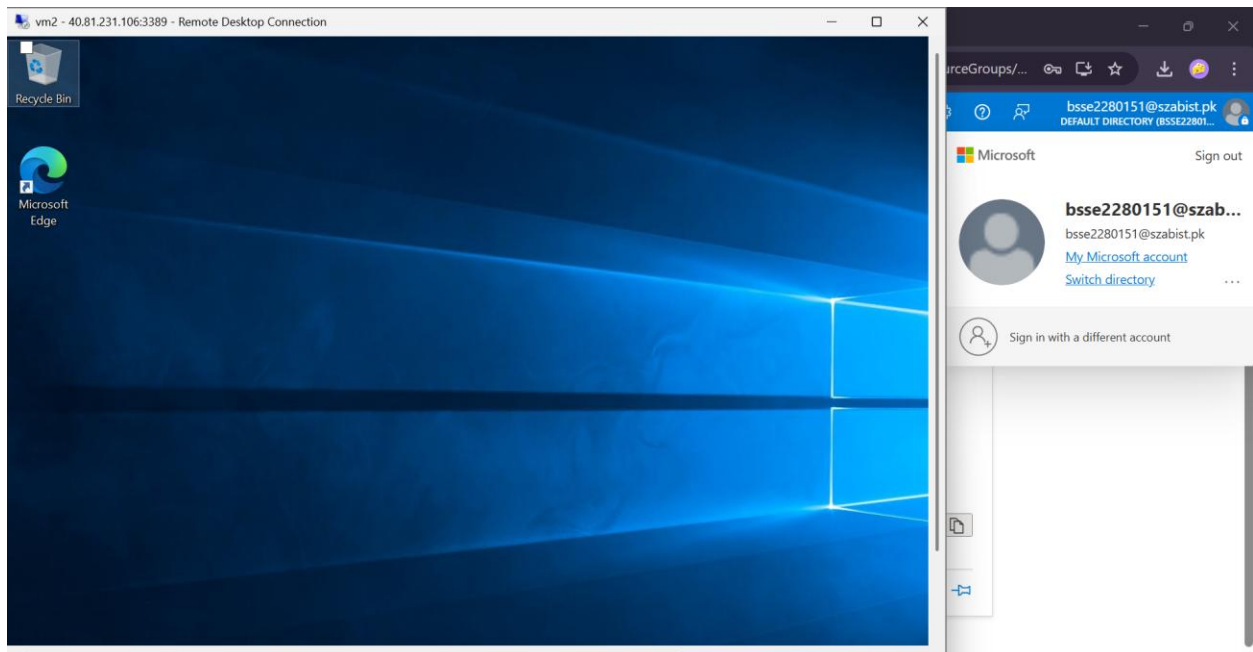


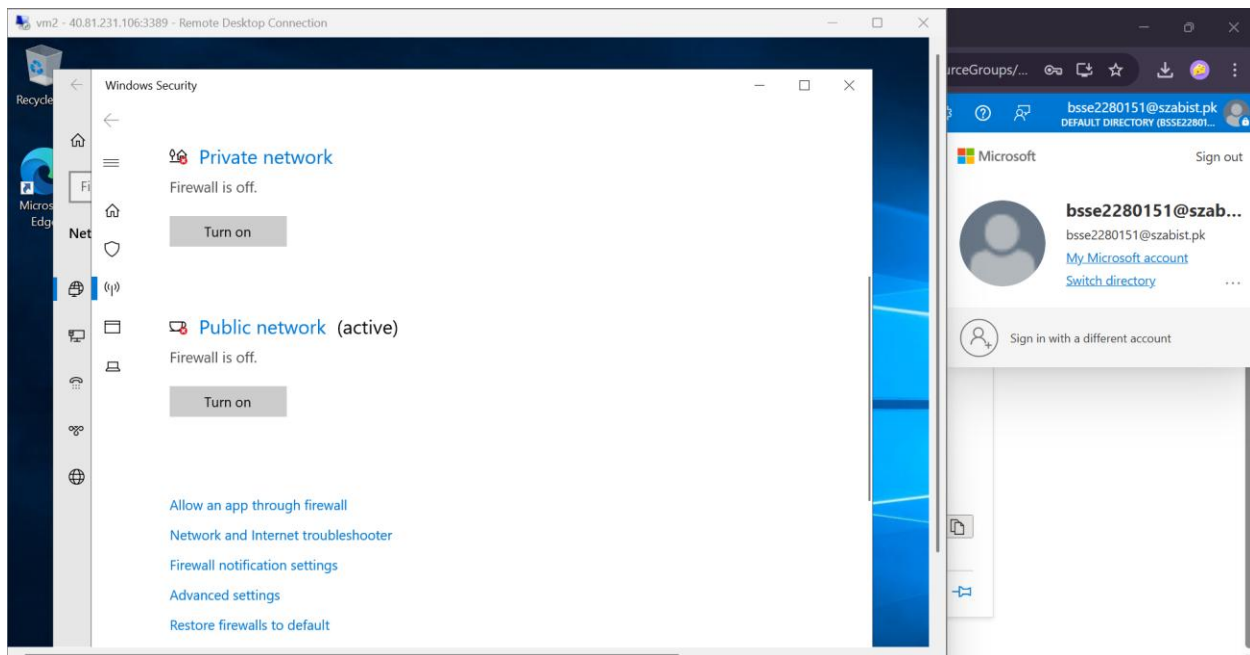
ON VM 1:





ON VM 2:





Task 04: PING VM2 FROM VM1

