# DENYING INTERNET ACCESS FOR AZURE VM USING TERRAFORM

# Setup Terraform to Azure

provider "azurerm" {

features {}

}

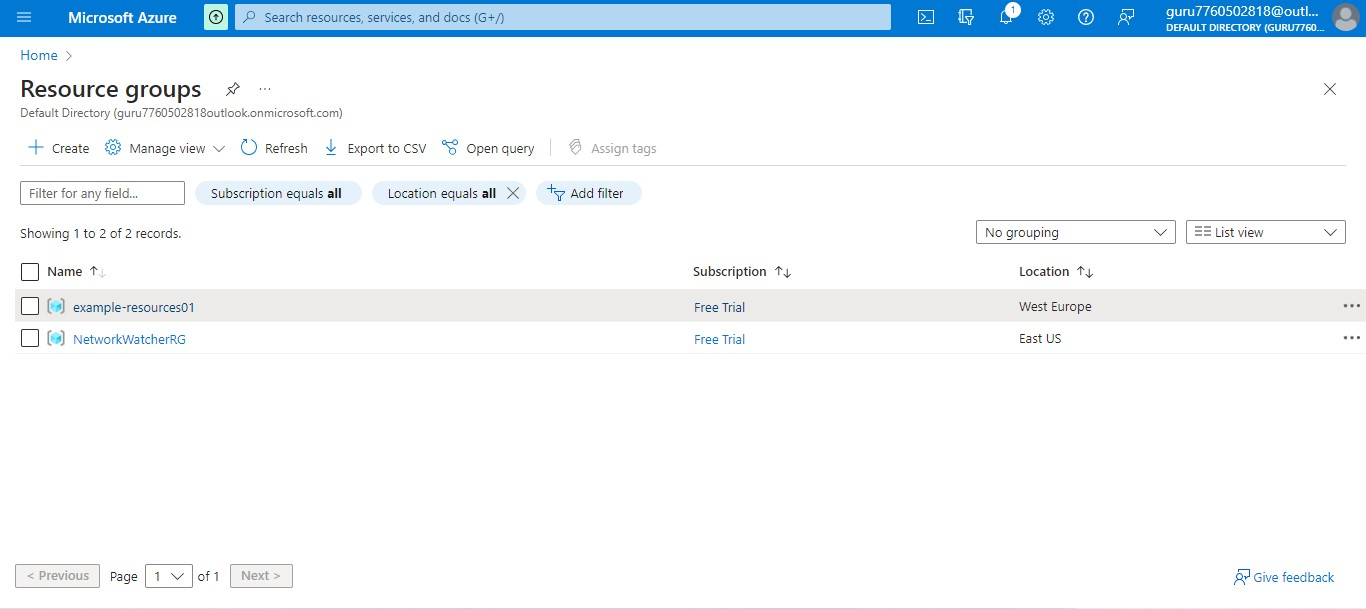
# Created Resource Group

resource "azurerm\_resource\_group" "example" {

name = "example-resources01"

location = "West Europe"

}



# Created Virtual Network

resource "azurerm\_virtual\_network" "example" {

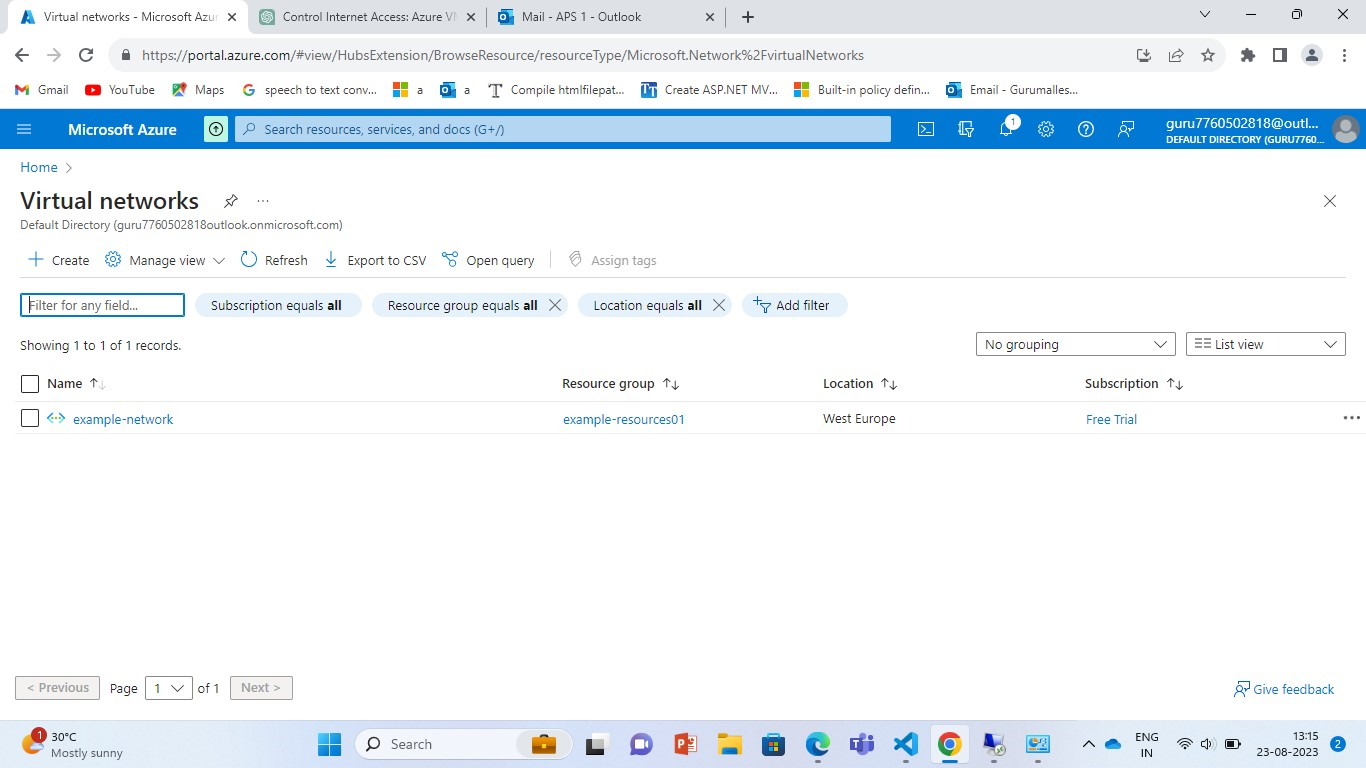
name = "example-network"

address\_space = ["10.0.0.0/16"]

location = azurerm\_resource\_group.example.location

resource\_group\_name = azurerm\_resource\_group.example.name

}



# Created subnet

resource "azurerm\_subnet" "example" {

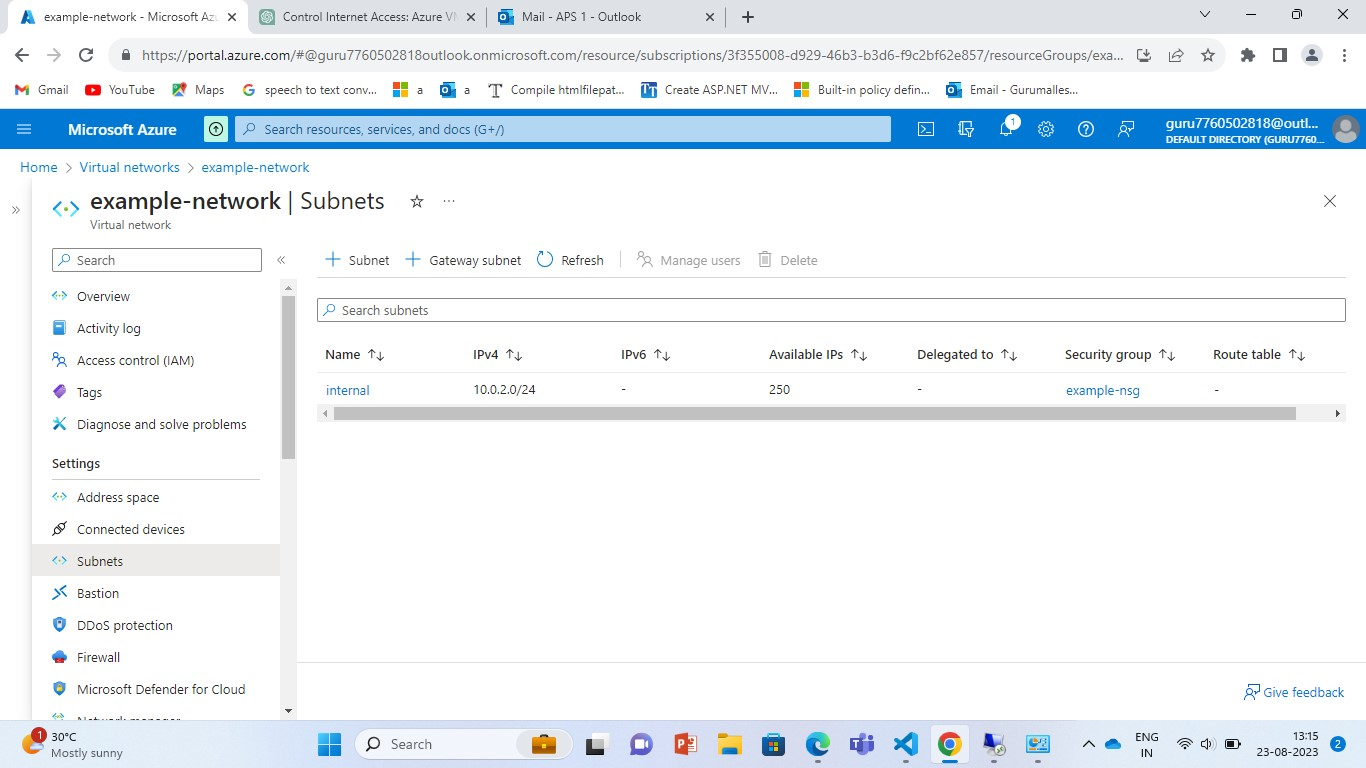
name = "internal"

resource\_group\_name = azurerm\_resource\_group.example.name

virtual\_network\_name = azurerm\_virtual\_network.example.name

address\_prefixes = ["10.0.2.0/24"]

}



# Created Public IP

resource "azurerm\_public\_ip" "example" {

name = "example-publicip01"

location = azurerm\_resource\_group.example.location

resource\_group\_name = azurerm\_resource\_group.example.name

allocation\_method = "Dynamic"

}



# Created Network Interface

resource "azurerm\_network\_interface" "example" {

name = "example-nic"

location = azurerm\_resource\_group.example.location

resource\_group\_name = azurerm\_resource\_group.example.name

ip\_configuration {

name = "internal"

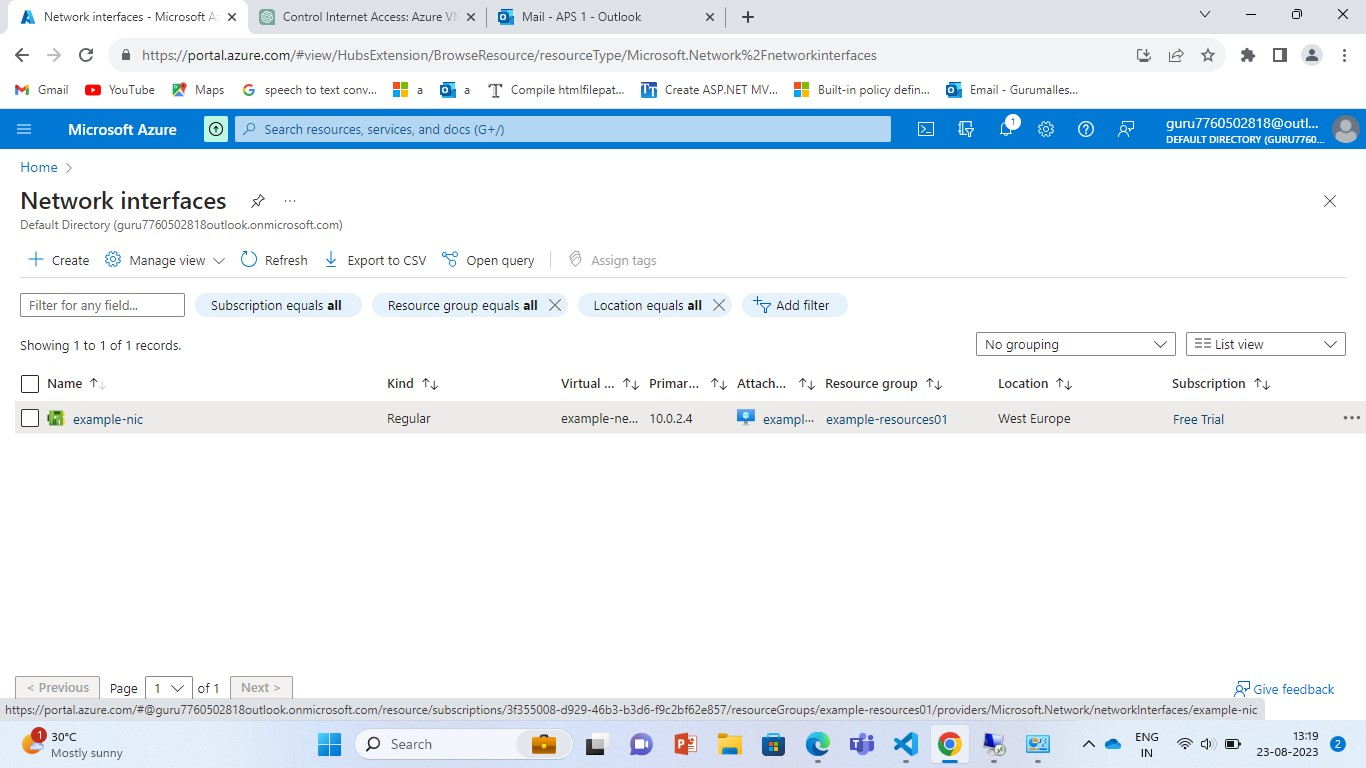
subnet\_id = azurerm\_subnet.example.id

private\_ip\_address\_allocation = "Dynamic"

public\_ip\_address\_id = azurerm\_public\_ip.example.id

}

}



# Created Network security group

# Defining Network Security Group to allow/deny Internet access

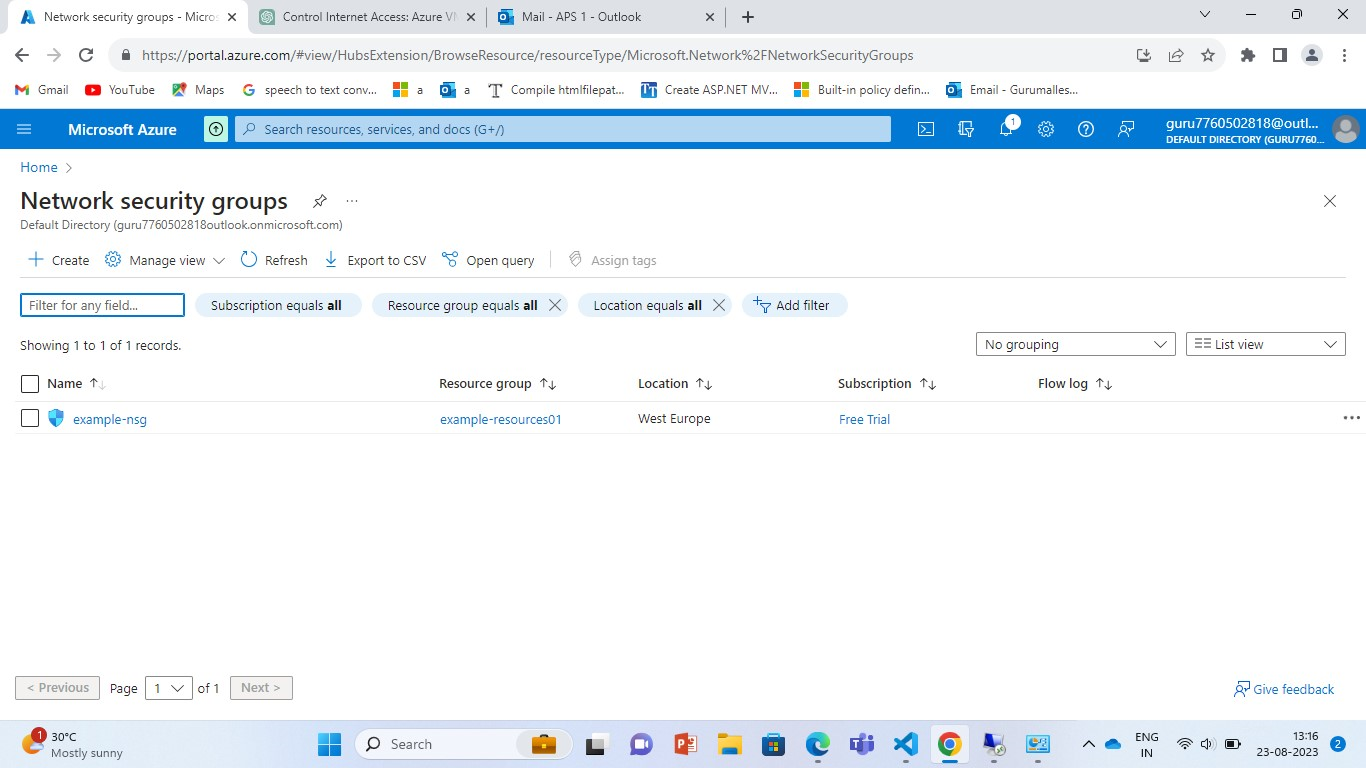
resource "azurerm\_network\_security\_group" "example" {

name = "example-nsg"

location = azurerm\_resource\_group.example.location

resource\_group\_name = azurerm\_resource\_group.example.name

}



# Created Network security rule for denying internet for azure vm.

# Defining Outbound Rule to denying Internet in vm with priority and further rules.

resource "azurerm\_network\_security\_rule" "deny\_outbound" {

name = "DenyAllInternet"

priority = 100

direction = "Outbound"

access = "Deny"

protocol = "\*"

source\_port\_range = "\*"

destination\_port\_range = "\*"

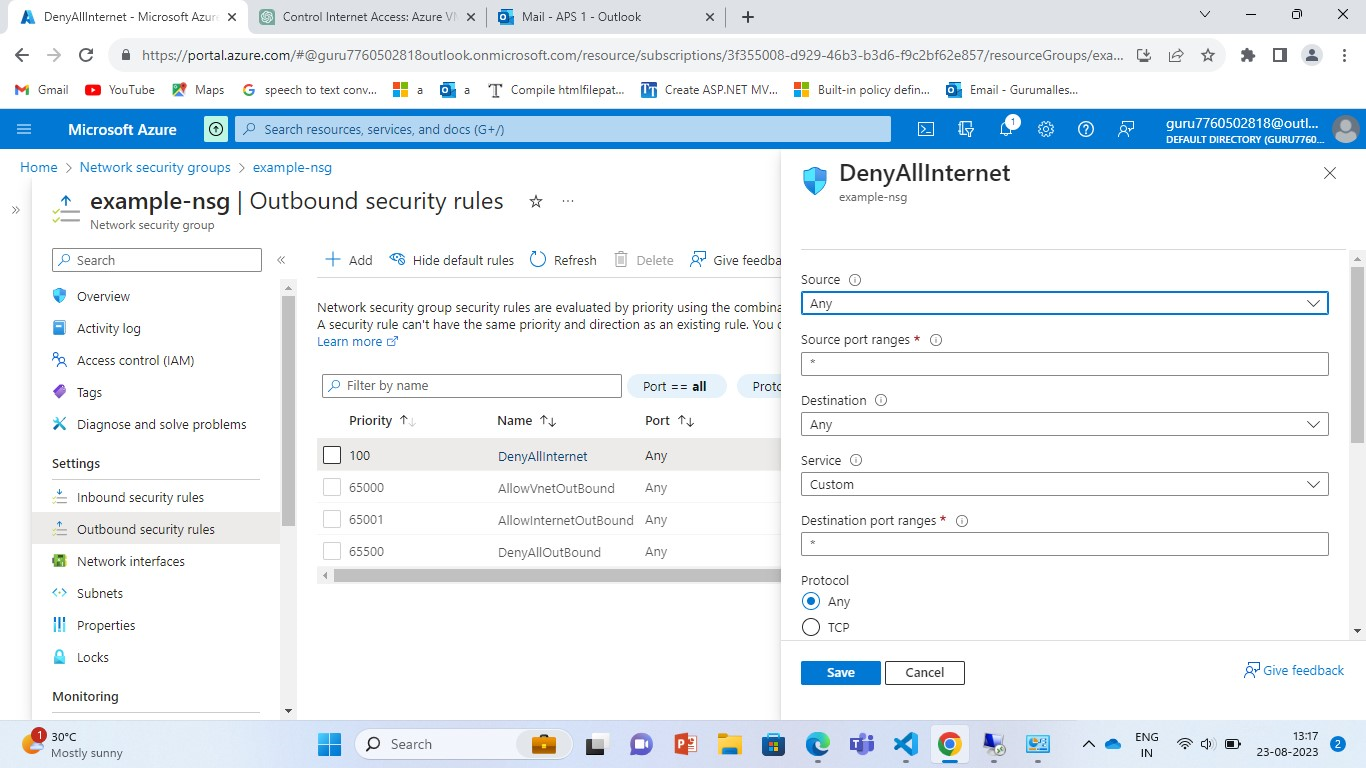
source\_address\_prefix = "\*"

destination\_address\_prefix = "\*"

resource\_group\_name = azurerm\_resource\_group.example.name

network\_security\_group\_name = azurerm\_network\_security\_group.example.name

}



# Created Network security rule for allowing internet for azure vm

# Here allowing the RDP port (3389) were as we defined Public IP to connect azure vm with user name and password

resource "azurerm\_network\_security\_rule" "allow\_rdp" {

name = "allow-rdp"

priority = 101

direction = "Inbound"

access = "Allow"

protocol = "Tcp"

source\_port\_range = "\*"

destination\_port\_range = "3389"

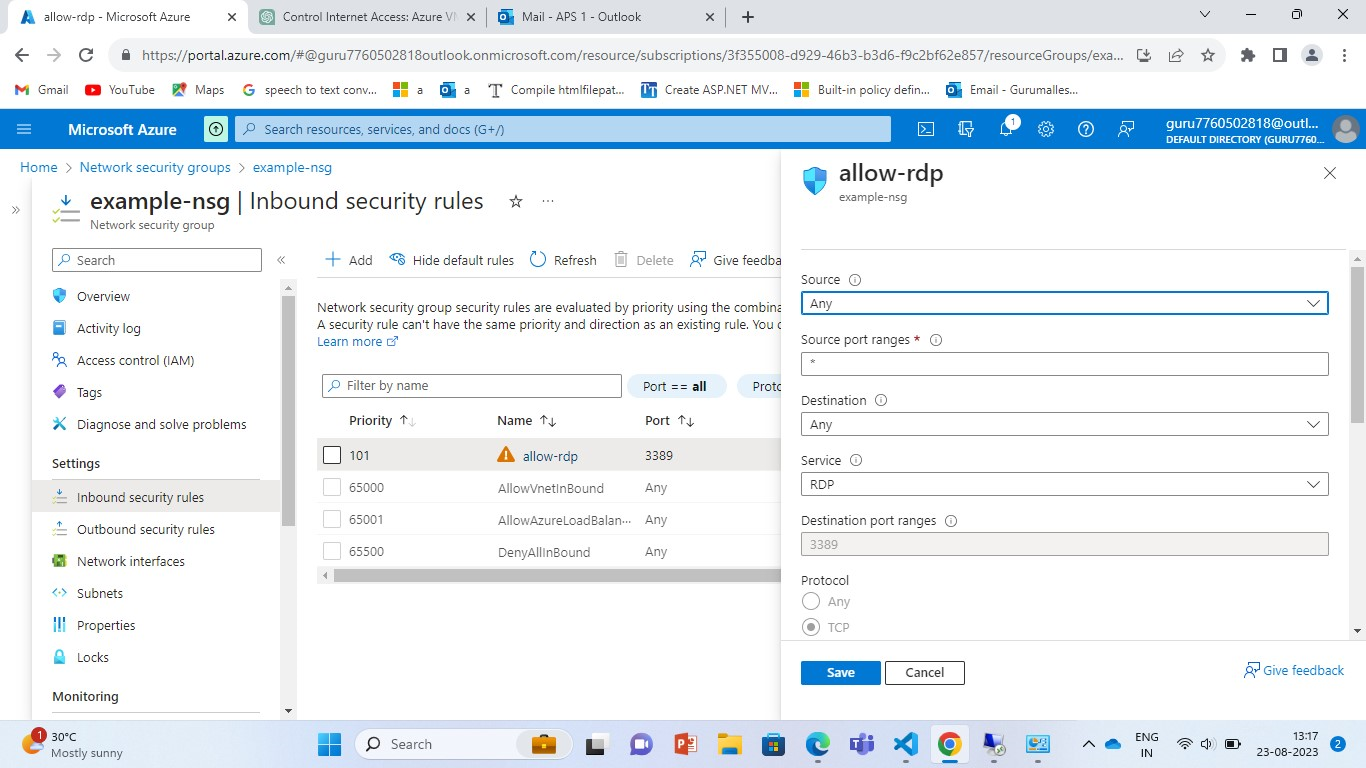
source\_address\_prefix = "\*"

destination\_address\_prefix = "\*"

resource\_group\_name = azurerm\_resource\_group.example.name

network\_security\_group\_name = azurerm\_network\_security\_group.example.name

}



# Associating NSG to Subnet

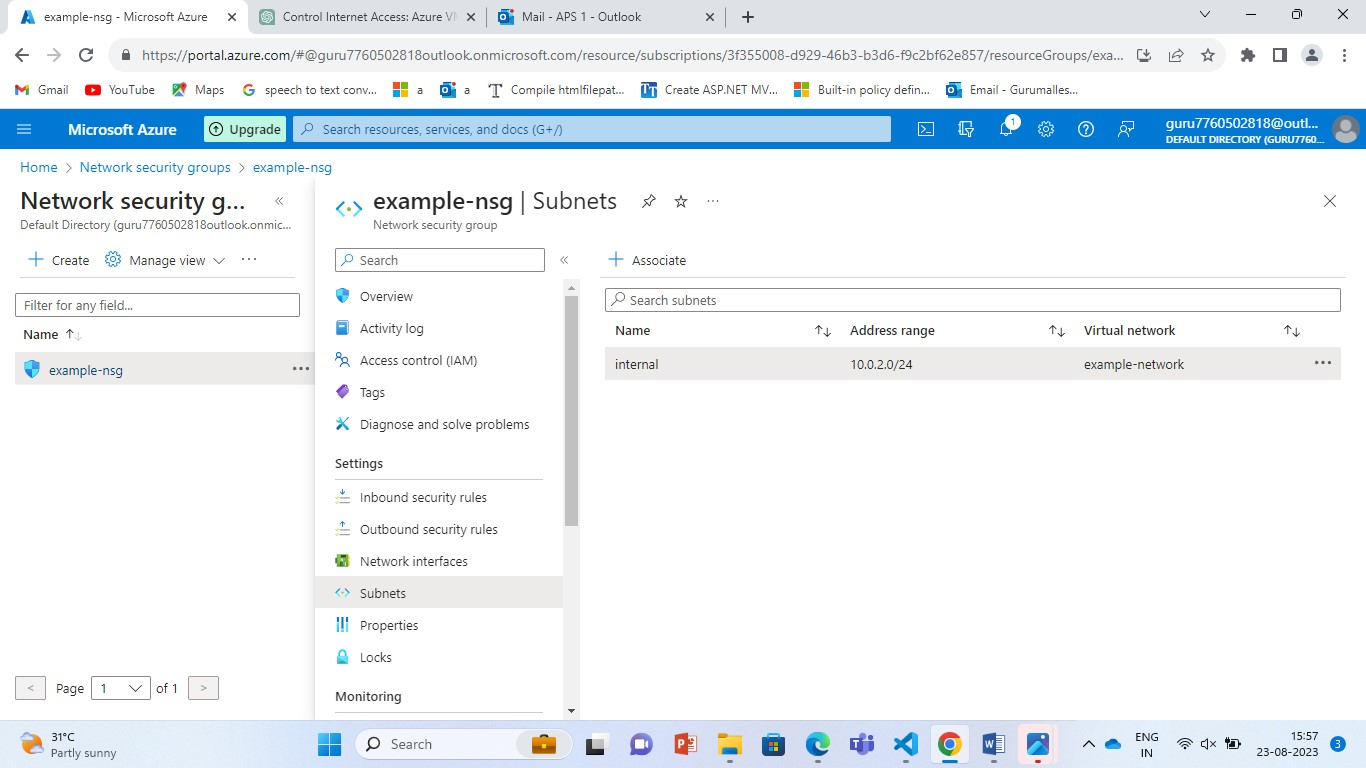
# Here associating NSG to subnet because, for one vm it should be associated to subnet for multiple vm it should be associated to NIC

resource "azurerm\_subnet\_network\_security\_group\_association" "subnet" {

network\_security\_group\_id = azurerm\_network\_security\_group.example.id

subnet\_id = azurerm\_subnet.example.id

}



# Created Azure Windows Virtual machine

resource "azurerm\_windows\_virtual\_machine" "example" {

name = "example-machine"

resource\_group\_name = azurerm\_resource\_group.example.name

location = azurerm\_resource\_group.example.location

size = "Standard\_F2"

admin\_username = "adminuser"

admin\_password = "P@$$w0rd1234!"

network\_interface\_ids = [azurerm\_network\_interface.example.id,]

os\_disk {

caching = "ReadWrite"

storage\_account\_type = "Standard\_LRS"

}

source\_image\_reference {

publisher = "MicrosoftWindowsServer"

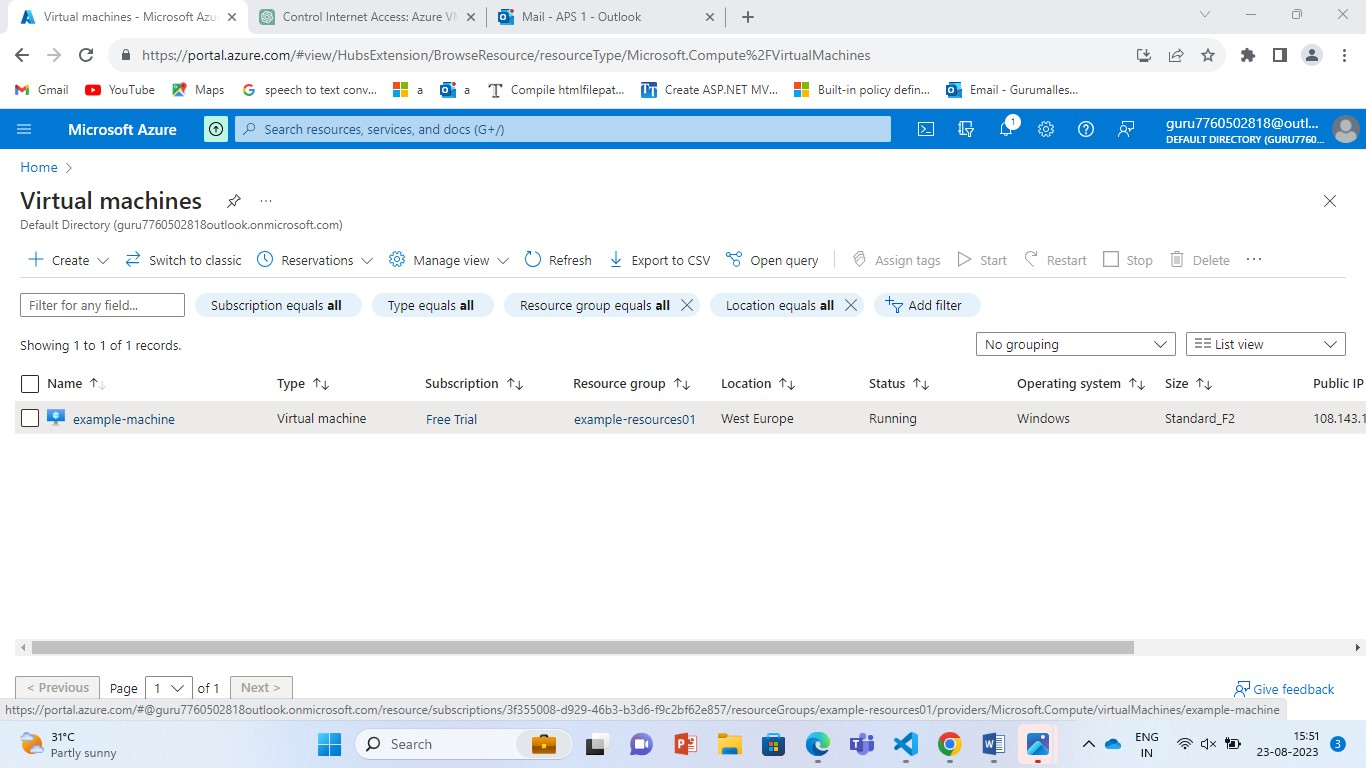
offer = "WindowsServer"

sku = "2016-Datacenter"

version = "latest"

}

}



# For This VM Internet is denied

# After assigning NSG rule to deny internet in vm the vm will be disconnected

Example: Here I entered url as [www.google.com](http://www.google.com) hence the page can’t be displayed

