# Main.tf file

#Provider

provider "azurerm" {

  subscription\_id = "69c34967-1d4e-461f-89d4-a4c9b4a8df93"

  tenant\_id = "c10ed642-434c-4242-92ca-bc5035697832"

    features {

    resource\_group {

      prevent\_deletion\_if\_contains\_resources = false

    }

    }

}

#Resource group

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

    name = "rg\_terraform\_demo"

    location = "eastus"

}

# Create a virtual network within the resource group

resource "azurerm\_virtual\_network" "virtual\_network" {

  name                = "example-network"

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

  location            = azurerm\_resource\_group.resource\_group.location

  address\_space       = ["10.0.0.0/16"]

  #address\_space       = ["10.0.1.0/16"]

}

#second vnet for pering purpose

resource "azurerm\_virtual\_network" "virtual\_network1" {

  name                = "example-network1"

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

  address\_space       = ["10.2.0.0/16"]

  location            = azurerm\_resource\_group.resource\_group.location

}

#peering Vnets

resource "azurerm\_virtual\_network\_peering" "virtual\_network\_peering" {

  name                      = "peer1to2"

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

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

  remote\_virtual\_network\_id = azurerm\_virtual\_network.virtual\_network1.id

}

resource "azurerm\_virtual\_network\_peering" "Virtual\_network\_peering1" {

  name                      = "peer2to1"

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

  virtual\_network\_name      = azurerm\_virtual\_network.virtual\_network1.name

  remote\_virtual\_network\_id = azurerm\_virtual\_network.virtual\_network.id

}

# creating subnet

resource "azurerm\_subnet" "internal" {

  name                 = "internal"

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

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

  address\_prefixes     = ["10.0.2.0/24"]

}

resource "azurerm\_public\_ip" "public\_ip" {

  name                = "acceptanceTestPublicIp1-${count.index +1}"

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

  location            = azurerm\_resource\_group.resource\_group.location

  allocation\_method   = "Static"

  count               = var.numberofmachines

  #tags = {

   # environment = "Production"

  #}

  }

  #Net work interface (NIC)

resource "azurerm\_network\_interface" "network\_interface" {

  name                = "aznel-nic-${count.index +1}"

  location            = azurerm\_resource\_group.resource\_group.location

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

  count               = var.numberofmachines

 #IP configuration

  ip\_configuration {

    name                          = "my\_nic\_configuration"

    subnet\_id                     = azurerm\_subnet.internal.id

    private\_ip\_address\_allocation = "Dynamic"

    public\_ip\_address\_id          = azurerm\_public\_ip.public\_ip[count.index].id

  }

}

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

  name                = "acceptanceTestSecurityGroup1"

  location            = azurerm\_resource\_group.resource\_group.location

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

   security\_rule {

    name                       = "test123"

    priority                   = 100

    direction                  = "Inbound"

    access                     = "Allow"

    protocol                   = "Tcp"

    source\_port\_range          = "\*"

    destination\_port\_ranges     = ["22","80","443"]

    source\_address\_prefix      = "\*"

    destination\_address\_prefix = "\*"

}

}

resource "azurerm\_network\_interface\_security\_group\_association" "network\_interface\_security\_group\_association" {

  network\_interface\_id      = azurerm\_network\_interface.network\_interface[count.index].id

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

  count                     = var.numberofmachines

}

resource "azurerm\_linux\_virtual\_machine" "linux\_virtual\_machine" {

  name                = "example-machine-${count.index +1}"

  count               = var.numberofmachines

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

  location            = azurerm\_resource\_group.resource\_group.location

  size                = "Standard\_F2"

  computer\_name       = "hostname-${count.index +1}"

  admin\_username      = "adminuser"

  admin\_password      = "windows@123456"

  disable\_password\_authentication = false

  network\_interface\_ids = [

    azurerm\_network\_interface.network\_interface[count.index].id,

  ]

  os\_disk {

    name = "osdisk-${count.index +1}"

    caching              = "ReadWrite"

    storage\_account\_type = "Standard\_LRS"

  }

  source\_image\_reference {

    publisher = "Canonical"

    offer     = "0001-com-ubuntu-server-jammy"

    sku       = "22\_04-lts"

    version   = "latest"

  }

}

#terraform.tfvars

numberofmachines = 2

#variables.tf

variable "numberofmachines" {

  type = number

}