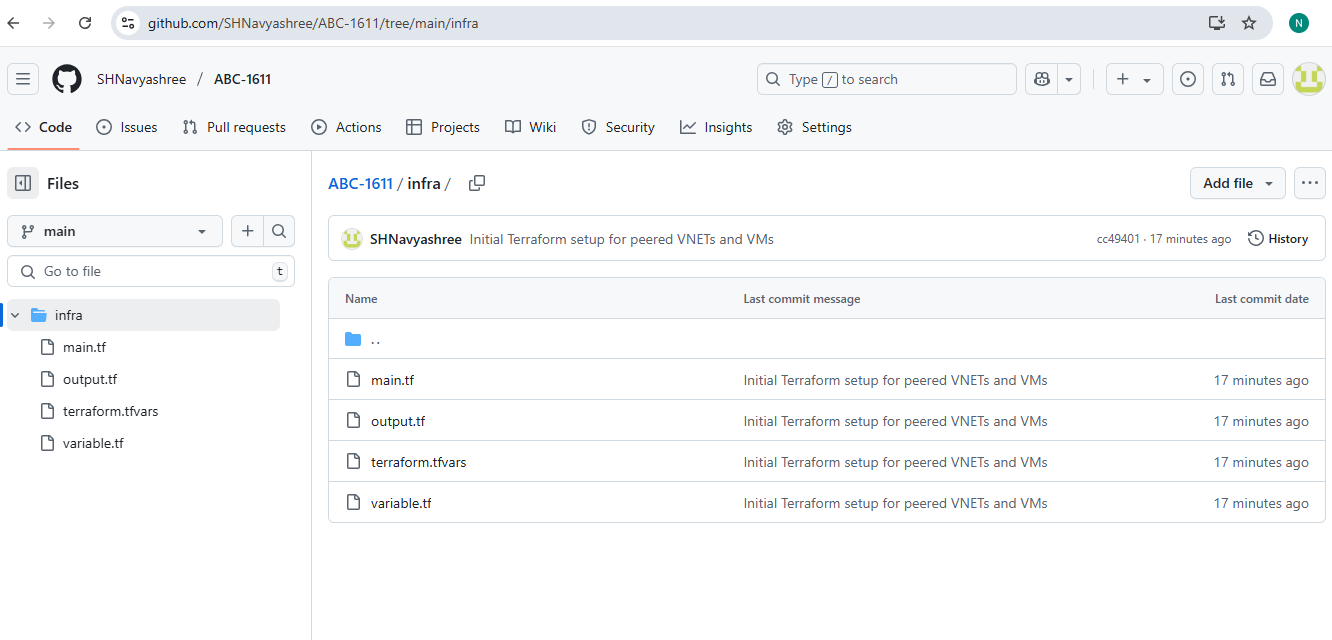
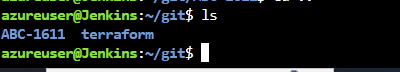
NAME: Navyashree S H

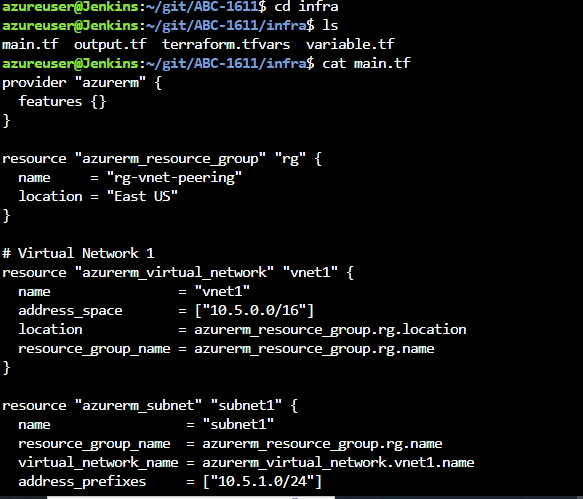
QUESTION NUMBER: 3

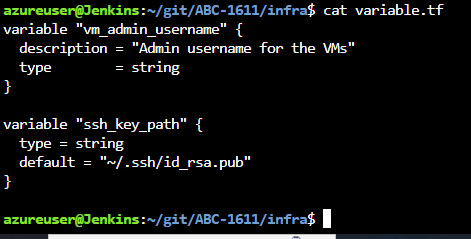
Create git hub repo

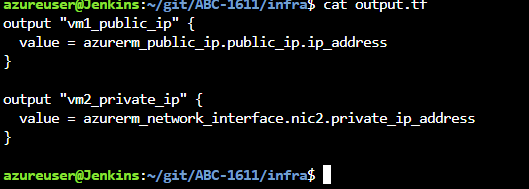


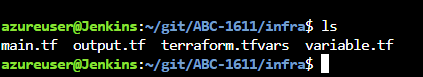
Clone the repo

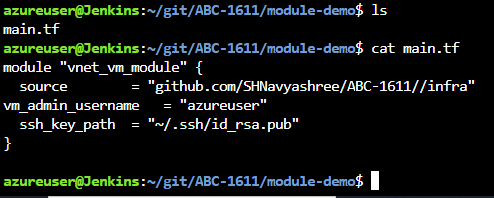












Main.tf

provider "azurerm" {

features {}

subscription\_id = "fb99e83f-61c2-4969-a2b1-eccab005dbe6"

client\_id = "ab67ff7c-2e73-40e4-a59e-9bf9bae0b78d"

client\_secret = "eHT8Q~WBSn6ZiKWPFrnjw8di1qVciLzjRC6OCbN3"

tenant\_id = "25685456-cb13-4603-8519-85d676907ffc"

}

# Resource Group

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

name = "rg-abc-1611"

location = "Korea south"

}

# Virtual Network 1

resource "azurerm\_virtual\_network" "vnet1" {

name = "vnet1"

address\_space = ["10.5.0.0/16"]

location = azurerm\_resource\_group.rg.location

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

}

# Virtual Network 2

resource "azurerm\_virtual\_network" "vnet2" {

name = "vnet2"

address\_space = ["10.15.0.0/16"]

location = azurerm\_resource\_group.rg.location

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

}

# Subnet for VNet 1

resource "azurerm\_subnet" "subnet1" {

name = "subnet1"

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

virtual\_network\_name = azurerm\_virtual\_network.vnet1.name

address\_prefixes = ["10.5.1.0/24"]

}

# Subnet for VNet 2

resource "azurerm\_subnet" "subnet2" {

name = "subnet2"

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

virtual\_network\_name = azurerm\_virtual\_network.vnet2.name

address\_prefixes = ["10.15.1.0/24"]

}

# VNet Peering: vnet1 -> vnet2

resource "azurerm\_virtual\_network\_peering" "peer1to2" {

name = "peer1to2"

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

virtual\_network\_name = azurerm\_virtual\_network.vnet1.name

remote\_virtual\_network\_id = azurerm\_virtual\_network.vnet2.id

allow\_virtual\_network\_access = true

allow\_forwarded\_traffic = true

}

# VNet Peering: vnet2 -> vnet1

resource "azurerm\_virtual\_network\_peering" "peer2to1" {

name = "peer2to1"

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

virtual\_network\_name = azurerm\_virtual\_network.vnet2.name

remote\_virtual\_network\_id = azurerm\_virtual\_network.vnet1.id

allow\_virtual\_network\_access = true

allow\_forwarded\_traffic = true

}

# Load SSH public key from local file

data "local\_file" "ssh\_key" {

filename = var.public\_key\_path

}

# Public IP for VM1

resource "azurerm\_public\_ip" "vm1\_public\_ip" {

name = "vm1-public-ip"

location = azurerm\_resource\_group.rg.location

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

allocation\_method = "static"

}

# NIC for VM1 (with public IP)

resource "azurerm\_network\_interface" "nic\_vm1" {

name = "nic-vm1"

location = azurerm\_resource\_group.rg.location

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

ip\_configuration {

name = "ipconfig1"

subnet\_id = azurerm\_subnet.subnet1.id

private\_ip\_address\_allocation = "Dynamic"

public\_ip\_address\_id = azurerm\_public\_ip.vm1\_public\_ip.id

}

}

# NIC for VM2 (private IP only)

resource "azurerm\_network\_interface" "nic\_vm2" {

name = "nic-vm2"

location = azurerm\_resource\_group.rg.location

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

ip\_configuration {

name = "ipconfig2"

subnet\_id = azurerm\_subnet.subnet2.id

private\_ip\_address\_allocation = "Dynamic"

}

}

# VM1 (with public IP)

resource "azurerm\_linux\_virtual\_machine" "vm1" {

name = "vm1"

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

location = azurerm\_resource\_group.rg.location

size = "Standard\_B1s"

admin\_username = var.vm\_admin\_username

network\_interface\_ids = [azurerm\_network\_interface.nic\_vm1.id]

disable\_password\_authentication = true

admin\_ssh\_key {

username = var.vm\_admin\_username

public\_key = data.local\_file.ssh\_key.content

}

os\_disk {

caching = "ReadWrite"

storage\_account\_type = "Standard\_LRS"

}

source\_image\_reference {

publisher = "Canonical"

offer = "UbuntuServer"

sku = "18.04-LTS"

version = "latest"

}

}

# VM2 (private IP only)

resource "azurerm\_linux\_virtual\_machine" "vm2" {

name = "vm2"

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

location = azurerm\_resource\_group.rg.location

size = "Standard\_B1s"

admin\_username = var.vm\_admin\_username

network\_interface\_ids = [azurerm\_network\_interface.nic\_vm2.id]

disable\_password\_authentication = true

admin\_ssh\_key {

username = var.vm\_admin\_username

public\_key = data.local\_file.ssh\_key.content

}

os\_disk {

caching = "ReadWrite"

storage\_account\_type = "Standard\_LRS"

}

source\_image\_reference {

publisher = "Canonical"

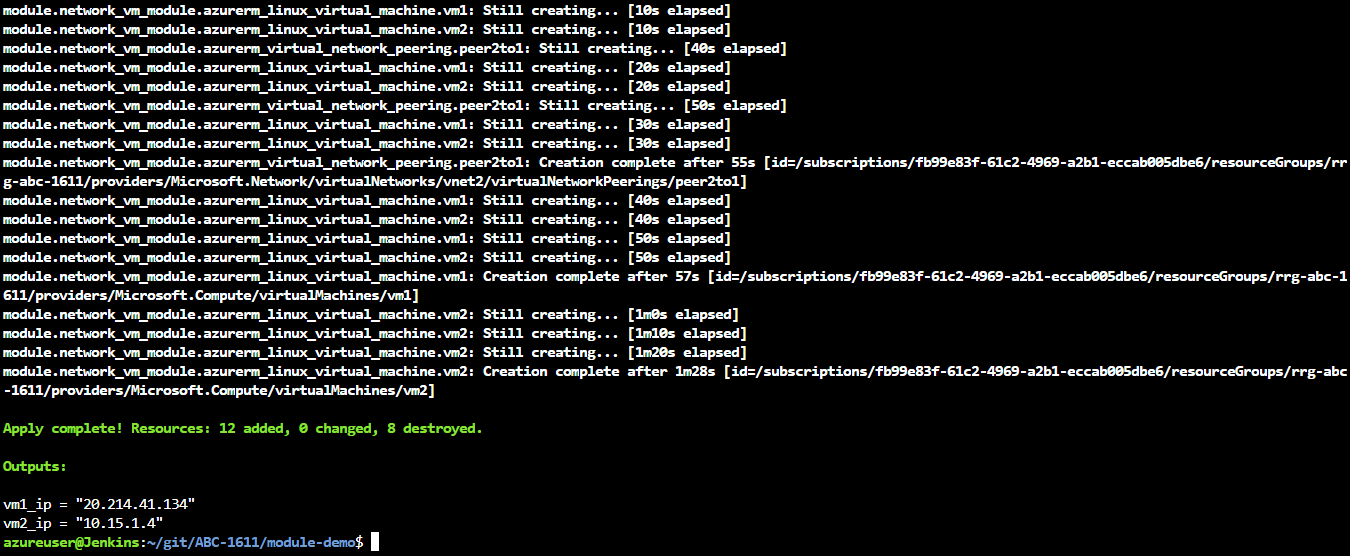
offer = "UbuntuServer"

sku = "18.04-LTS"

version = "latest"

}

}



Variable.tf

variable "vm\_admin\_username" {

description = "Admin username for both VMs"

type = string

default = "azureuser"

}

variable "public\_key\_path" {

description = "Path to the SSH public key"

type = string

default = "~/.ssh/id\_rsa.pub"

}

Output.tf

output "vm1\_public\_ip" {

description = "Public IP address of VM1"

value = azurerm\_public\_ip.vm1\_public\_ip.ip\_address

}

output "vm2\_private\_ip" {

description = "Private IP address of VM2"

value = azurerm\_network\_interface.nic\_vm2.private\_ip\_address

}

In module main.tf

module "network\_vm\_module" {

source = "../infra"

vm\_admin\_username = "azureuser"

public\_key\_path = "/home/azureuser/.ssh/id\_rsa.pub" # adjust to actual path

}

output "vm1\_ip" {

value = module.network\_vm\_module.vm1\_public\_ip

}

output "vm2\_ip" {

value = module.network\_vm\_module.vm2\_private\_ip

}

Completed output

