# Week 2 Assignment 2

Project Link – [https://github.com/shubhamsharma11/TerraformProjects](https://github.com/shubhamsharma11/TerraformProjects/raw/main/Week2%20-%20Assignment%202.zip)

## Main.tf

provider "azurerm" {

features {}

}

# Create a resource group

resource "azurerm\_resource\_group" "rg01" {

name = var.rg["name"]

location = var.rg["location"]

}

resource "azurerm\_virtual\_network" "vnet02" {

name = var.vnet\_name

resource\_group\_name = azurerm\_resource\_group.rg01.name

location = azurerm\_resource\_group.rg01.location

address\_space = ["10.0.0.0/16"]

}

resource "azurerm\_subnet" "example" {

name = var.subnet["name"]

resource\_group\_name = azurerm\_resource\_group.rg01.name

virtual\_network\_name = azurerm\_virtual\_network.vnet02.name

address\_prefixes = [var.subnet["CIDR"]]

}

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

name = var.public\_ip["name"]

resource\_group\_name = azurerm\_resource\_group.rg01.name

location = azurerm\_resource\_group.rg01.location

allocation\_method = var.public\_ip["allocation\_method"]

tags = {

environment = var.env

}

}

resource "azurerm\_network\_interface" "main" {

name = var.nic\_name

location = azurerm\_resource\_group.rg01.location

resource\_group\_name = azurerm\_resource\_group.rg01.name

ip\_configuration {

name = var.nic\_ip\_config["name"]

subnet\_id = azurerm\_subnet.example.id

private\_ip\_address\_allocation = var.nic\_ip\_config["ip\_allocation\_type"]

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

}

}

resource "azurerm\_virtual\_machine" "main" {

name = var.vm["name"]

location = azurerm\_resource\_group.rg01.location

resource\_group\_name = azurerm\_resource\_group.rg01.name

network\_interface\_ids = [azurerm\_network\_interface.main.id]

vm\_size = var.vm["size"]

# Uncomment this line to delete the OS disk automatically when deleting the VM

# delete\_os\_disk\_on\_termination = true

# Uncomment this line to delete the data disks automatically when deleting the VM

# delete\_data\_disks\_on\_termination = true

storage\_image\_reference {

publisher = var.storage\_image\_reference["publisher"]

offer = var.storage\_image\_reference["offer"]

sku = var.storage\_image\_reference["sku"]

version = var.storage\_image\_reference["version"]

}

storage\_os\_disk {

name = var.storage\_os\_disk["name"]

caching = var.storage\_os\_disk["caching"]

create\_option = var.storage\_os\_disk["create\_option"]

managed\_disk\_type = var.storage\_os\_disk["managed\_disk\_type"]

}

os\_profile {

computer\_name = var.connection["hostname"]

admin\_username = var.connection["username"]

admin\_password = var.connection["password"]

}

os\_profile\_linux\_config {

disable\_password\_authentication = false

}

tags = {

environment = "staging"

}

}

resource "null\_resource" "copy-file" {

triggers = {

always\_run = timestamp()

}

provisioner "file" {

source = var.file\_copy["srource"]

destination = var.file\_copy["destination"]

connection {

type = var.connection["type"]

user = var.connection["username"]

password = var.connection["password"]

host = azurerm\_public\_ip.example.ip\_address

}

}

}

resource "null\_resource" "remote-command" {

triggers = {

always\_run = timestamp()

}

provisioner "remote-exec" {

#scripts = "[cp test1.txt test2.txt]"

inline = [

"${var.remote\_exec\_cmd}"

]

connection {

type = var.connection["type"]

user = var.connection["username"]

password = var.connection["password"]

host = azurerm\_public\_ip.example.ip\_address

}

}

depends\_on = [ null\_resource.copy-file ]

}

## Variable.tf

variable "region" {

default = "East US"

}

variable "env" {

type = string

default = "Production"

}

variable "rg" {

type = map

default = {

"name" = "rg\_test1"

"location" = "East US"

}

}

variable "subnet" {

type = map

default = {

"name" = "sub1"

"CIDR" = "10.0.1.0/24"

}

}

variable "public\_ip" {

type = map

default = {

"name" = "acceptanceTestPublicIp1"

"allocation\_method" = "Static"

}

}

variable "nic\_name" {

type = string

default = "nic1"

}

variable "vm" {

type = map

default = {

"name" = "vm01"

"size" = "Standard\_DS1\_v2"

}

variable "nic\_ip\_config" {

type = map

default = {

"name" = "testconfiguration1"

"ip\_allocation\_type" = "Dynamic"

}

}

variable "connection" {

type = map

default = {

"hostname" = "hostname"

"type" = "ssh"

"username" = "testadmin"

"password" = "Password1234!"

}

}

variable "file\_copy" {

type = map

default = {

"source" = "test1.txt"

"destination" = "test1.txt"

}

}

variable "remote\_exec\_cmd" {

type = string

default = "cp test1.txt test2.txt"

}

variable "storage\_image\_reference" {

type = map

default = {

"publisher" = "Canonical"

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

"sku" = "22\_04-lts"

"version" = "latest"

}

}

variable "storage\_os\_disk" {

type = map

default = {

"name" = "myosdisk1"

"caching" = "ReadWrite"

"create\_option" = "FromImage"

"managed\_disk\_type" = "Standard\_LRS"

}

}