**Define the Provider:**

Terraform {

Required\_providers {

Azurerm= {

Source= ”Hashicorp/azurerm”

Version=”3.115.0”

}

}

}

Provider\_azurerm {

Features {}

}

**Define the Resource Group:**

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

name = "example-resources"

location = "East US"

}

**Define the Virtual Network:**

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

name = "example-vnet"

address\_space = ["10.0.0.0/16"]

location = azurerm\_resource\_group.example.location

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

}

**Define a Subnet:**

resource "azurerm\_subnet" "example" {

name = "example-subnet"

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

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

address\_prefixes = ["10.0.1.0/24"]

}

**Define the 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"

}

}

**Define the 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"

}

}

**Initialize Terraform**

Run terraform init to initialize the working directory and download the necessary provider plugins:

### Plan the Deployment

Generate an execution plan to review changes before applying:

### Apply the Configuration

Apply the configuration to create the resources: