terraform {  
  
 required\_version = ">=0.12"  
  
 required\_providers {  
 azurerm = {  
 source = "hashicorp/azurerm"  
 version = "~>2.0"  
 }  
 }  
}  
  
provider "azurerm" {  
 features {}  
}  
  
locals {  
 prefix-hub = "hub"  
 hub-location = "Central India"  
 hub-resource-group = "hub-RG"  
}  
  
resource "azurerm\_resource\_group" "hub-RG" {  
 name = local.hub-resource-group  
 location = local.hub-location  
}  
  
resource "azurerm\_virtual\_network" "Hub-vnet" {  
 name = "Hub-vnet"  
 location = azurerm\_resource\_group.hub-RG.location  
 resource\_group\_name = azurerm\_resource\_group.hub-RG.name  
 address\_space = ["10.4.0.0/16"]  
  
 tags = {  
 environment = "hub-spoke"  
 }  
}  
  
resource "azurerm\_subnet" "hub-work-subnet" {  
 name = "hub-work-subnet"  
 resource\_group\_name = azurerm\_resource\_group.hub-RG.name  
 virtual\_network\_name = azurerm\_virtual\_network.Hub-vnet.name  
 address\_prefixes = ["10.4.0.0/24"]  
}  
  
  
locals {  
 spoke1-location = "Central India"  
 spoke1-resource-group = "spoke1-RG"  
 prefix-spoke1 = "spoke1"  
}  
  
resource "azurerm\_resource\_group" "spoke1-RG" {  
 name = local.spoke1-resource-group  
 location = local.spoke1-location  
}  
  
resource "azurerm\_virtual\_network" "Spoke1-vnet" {  
 name = "Spoke1-vnet"  
 location = azurerm\_resource\_group.spoke1-RG.location  
 resource\_group\_name = azurerm\_resource\_group.spoke1-RG.name  
 address\_space = ["10.5.0.0/16"]  
  
 tags = {  
 environment = "hub-spoke"  
 }  
}  
  
resource "azurerm\_subnet" "spoke1-work-subnet" {  
 name = "spoke1-work-subnet"  
 resource\_group\_name = azurerm\_resource\_group.spoke1-RG.name  
 virtual\_network\_name = azurerm\_virtual\_network.Spoke1-vnet.name  
 address\_prefixes = ["10.5.0.0/24"]  
}  
  
  
locals {  
 spoke2-location = "Central India"  
 spoke2-resource-group = "spoke2-RG"  
 prefix-spoke2 = "spoke2"  
}  
  
resource "azurerm\_resource\_group" "spoke2-RG" {  
 name = local.spoke2-resource-group  
 location = local.spoke2-location  
}  
  
resource "azurerm\_virtual\_network" "Spoke2-vnet" {  
 name = "Spoke2-vnet"  
 location = azurerm\_resource\_group.spoke2-RG.location  
 resource\_group\_name = azurerm\_resource\_group.spoke2-RG.name  
 address\_space = ["10.6.0.0/16"]  
  
 tags = {  
 environment = "hub-spoke"  
 }  
}  
  
resource "azurerm\_subnet" "spoke2-work-subnet" {  
 name = "spoke2-work-subnet"  
 resource\_group\_name = azurerm\_resource\_group.spoke2-RG.name  
 virtual\_network\_name = azurerm\_virtual\_network.Spoke2-vnet.name  
 address\_prefixes = ["10.6.0.0/24"]  
}  
  
locals {  
 spoke3-location = "Central India"  
 spoke3-resource-group = "spoke3-RG"  
 prefix-spoke3 = "spoke3"  
}  
  
resource "azurerm\_resource\_group" "spoke3-RG" {  
 name = local.spoke3-resource-group  
 location = local.spoke3-location  
}  
  
resource "azurerm\_virtual\_network" "Spoke3-vnet" {  
 name = "Spoke3-vnet"  
 location = azurerm\_resource\_group.spoke3-RG.location  
 resource\_group\_name = azurerm\_resource\_group.spoke3-RG.name  
 address\_space = ["10.7.0.0/16"]  
  
 tags = {  
 environment = "hub-spoke"  
 }  
}  
  
resource "azurerm\_subnet" "spoke3-work-subnet" {  
 name = "spoke2-work-subnet"  
 resource\_group\_name = azurerm\_resource\_group.spoke3-RG.name  
 virtual\_network\_name = azurerm\_virtual\_network.Spoke3-vnet.name  
 address\_prefixes = ["10.7.0.0/24"]  
}  
  
resource "azurerm\_virtual\_network\_peering" "hubvnettospoke1vnet-peering" {  
 name = "hubvnettospoke1vnet-peering"  
 resource\_group\_name = azurerm\_resource\_group.hub-RG.name  
 virtual\_network\_name = azurerm\_virtual\_network.Hub-vnet.name  
 remote\_virtual\_network\_id = azurerm\_virtual\_network.Spoke1-vnet.id  
 allow\_virtual\_network\_access = true  
 use\_remote\_gateways = true  
}  
  
resource "azurerm\_virtual\_network\_peering" "spoke1vnettohubvnet-peering" {  
 name = "spoke1vnettohubvnet-peering"  
 resource\_group\_name = azurerm\_resource\_group.spoke1-RG.name  
 virtual\_network\_name = azurerm\_virtual\_network.Spoke1-vnet.name  
 remote\_virtual\_network\_id = azurerm\_virtual\_network.Hub-vnet.id  
 allow\_virtual\_network\_access = true  
 use\_remote\_gateways = true  
}  
  
resource "azurerm\_virtual\_network\_peering" "hubvnettospoke2vnet-peering" {  
 name = "hubvnettospoke2vnet-peering"  
 resource\_group\_name = azurerm\_resource\_group.hub-RG.name  
 virtual\_network\_name = azurerm\_virtual\_network.Hub-vnet.name  
 remote\_virtual\_network\_id = azurerm\_virtual\_network.Spoke2-vnet.id  
 allow\_virtual\_network\_access = true  
 use\_remote\_gateways = true  
}  
  
resource "azurerm\_virtual\_network\_peering" "spoke2vnettohubvnet-peering" {  
 name = "spoke2vnettohubvnet-peering"  
 resource\_group\_name = azurerm\_resource\_group.spoke2-RG.name  
 virtual\_network\_name = azurerm\_virtual\_network.Spoke2-vnet.name  
 remote\_virtual\_network\_id = azurerm\_virtual\_network.Hub-vnet.id  
 allow\_virtual\_network\_access = true  
 use\_remote\_gateways = true  
}  
  
resource "azurerm\_virtual\_network\_peering" "hubvnettospoke3vnet-peering" {  
 name = "hubvnettospoke3vnet-peering"  
 resource\_group\_name = azurerm\_resource\_group.hub-RG.name  
 virtual\_network\_name = azurerm\_virtual\_network.Hub-vnet.name  
 remote\_virtual\_network\_id = azurerm\_virtual\_network.Spoke3-vnet.id  
 allow\_virtual\_network\_access = true  
 use\_remote\_gateways = true  
}  
  
resource "azurerm\_virtual\_network\_peering" "spoke3vnettohubvnet-peering" {  
 name = "spoke3vnettohubvnet-peering"  
 resource\_group\_name = azurerm\_resource\_group.spoke3-RG.name  
 virtual\_network\_name = azurerm\_virtual\_network.Spoke3-vnet.name  
 remote\_virtual\_network\_id = azurerm\_virtual\_network.Hub-vnet.id  
 allow\_virtual\_network\_access = true  
 use\_remote\_gateways = true  
}  
  
  
resource "azurerm\_route\_table" "Spoke1-RT" {  
 name = "Spoke1-RT"  
 location = azurerm\_resource\_group.spoke1-RG.location  
 resource\_group\_name = azurerm\_resource\_group.spoke1-RG.name  
 disable\_bgp\_route\_propagation = false  
  
 route {  
 name = "route1"  
 address\_prefix = "10.6.0.0/16"  
 next\_hop\_type = "VirtualAppliance"  
 next\_hop\_in\_ip\_address = "10.4.1.4"  
 }  
  
 route {  
 name = "route2"  
 address\_prefix = "10.7.0.0/16"  
 next\_hop\_type = "VirtualAppliance"  
 next\_hop\_in\_ip\_address = "10.4.1.4"  
 }  
}  
resource "azurerm\_subnet\_route\_table\_association" "RT-Association" {  
 subnet\_id = azurerm\_subnet.spoke1-work-subnet.id  
 route\_table\_id = azurerm\_route\_table.Spoke1-RT.id  
}