COURSE END PROJECT 2

Source Code File

::Step 0: Login using azure cli

az login

:: Step 1: Create a Resource Group

az group create --name RandRG --location eastus

:: Step 2: Create Virtual Network and Subnet

az network vnet create --resource-group RandRG --name RandVNet --address-prefix 10.0.0.0/16 --subnet-name WebSubnet --subnet-prefix 10.0.1.0/24

:: Step 3: Create Public IP for Load Balancer

az network public-ip create --resource-group RandRG --name RandPublicIP --sku Standard --allocation-method static

:: Step 4: Create Load Balancer

az network lb create --resource-group RandRG --name RandLB --sku Standard --location eastus --frontend-ip-name RandFrontEnd --backend-pool-name RandBackEndPool --public-ip-address RandPublicIP

:: Step 5: Create Health Probe

az network lb probe create --resource-group RandRG --lb-name RandLB --name RandHealthProbe --protocol tcp --port 80 --interval 15 --threshold 4

:: Step 6: Create Load Balancer Rule

az network lb rule create --resource-group RandRG --lb-name RandLB --name RandHTTPRule --protocol tcp --frontend-port 80 --backend-port 80 --frontend-ip-name RandFrontEnd --backend-pool-name RandBackEndPool --probe-name RandHealthProbe

:: Step 7: Create NSG and allow HTTP traffic

az network nsg create --resource-group RandRG --name RandNSG --location eastus

az network nsg rule create --resource-group RandRG --nsg-name RandNSG --name AllowHTTP --protocol Tcp --direction Inbound --priority 1000 --source-address-prefixes '\*' --source-port-ranges '\*' --destination-address-prefixes '\*' --destination-port-ranges 80 --access Allow

:: Step 8: Associate NSG to subnet

az network vnet subnet update --vnet-name RandVNet --name WebSubnet --resource-group RandRG --network-security-group RandNSG

:: Step 9: Create two VMs without public IPs

az vm create --resource-group RandRG --name RandVM1 --image Win2019Datacenter --vnet-name RandVNet --subnet WebSubnet --admin-username azureuser --admin-password Pa$$w0rd1234! --nsg "" --size Standard\_B2s --public-ip-address "" --storage-sku Standard\_LRS

az vm create --resource-group RandRG --name RandVM2 --image Win2019Datacenter --vnet-name RandVNet --subnet WebSubnet --admin-username azureuser --admin-password Pa$$w0rd1234! --nsg "" --size Standard\_B2s --public-ip-address "" --storage-sku Standard\_LRS

:: Step 10: Get IP config names for NICs

FOR /F "delims=" %i IN ('az network nic show --name RandVM1VMNic --resource-group RandRG --query "ipConfigurations[0].name" -o tsv') DO SET IP1=%i

FOR /F "delims=" %i IN ('az network nic show --name RandVM2VMNic --resource-group RandRG --query "ipConfigurations[0].name" -o tsv') DO SET IP2=%i

:: Step 11: Attach VMs to backend pool

az network nic ip-config address-pool add --address-pool RandBackEndPool --ip-config-name %IP1% --nic-name RandVM1VMNic --resource-group RandRG --lb-name RandLB

az network nic ip-config address-pool add --address-pool RandBackEndPool --ip-config-name %IP2% --nic-name RandVM2VMNic --resource-group RandRG --lb-name RandLB

:: Step 12: Install IIS on both VMs

az vm run-command invoke --resource-group RandRG --name RandVM1 --command-id RunPowerShellScript --scripts "Install-WindowsFeature -Name Web-Server -IncludeManagementTools; Set-Content -Path C:\\inetpub\\wwwroot\\iisstart.htm -Value '<h1>Welcome from RandVM1</h1>'"

az vm run-command invoke --resource-group RandRG --name RandVM2 --command-id RunPowerShellScript --scripts "Install-WindowsFeature -Name Web-Server -IncludeManagementTools; Set-Content -Path C:\\inetpub\\wwwroot\\iisstart.htm -Value '<h1>Welcome from RandVM2</h1>'"

:: Step 13: Get Load Balancer IP

az network public-ip show --name RandPublicIP --resource-group RandRG --query "ipAddress" --output tsv

:: Step 14: See the output

curl http://52.191.117.191