**APPLICATION GAEWAY CREATION**

**#Creation of the ResourceGroup and Vnet and subnets**

**$rgname = 'myrg-02'**

**$loc = 'eastus2'**

**#create the ResourceGroup**

**New-AzResourceGroup -name $rgname -Location $loc > $null**

**#Create a Vnet with 2 subnets**

**New-AzVirtualNetwork -name 'myvnet01' -location $loc -ResourceGroupName $rgname `**

**-AddressPrefix 10.1.0.0/16 `**

**-Subnet $(New-AzVirtualNetworkSubnetConfig -name 'subnet01' -AddressPrefix 10.1.1.0/24), `**

**$(New-AzVirtualNetworkSubnetConfig -name 'subnet02' -AddressPrefix 10.1.2.0/24) > $null**

**#take this vnet,subnet1,subnet2 values into a variables (psobjects)**

**$vnet = Get-AzVirtualNetwork -name 'myvnet01' -ResourceGroupName $rgname**

**$sub1 = Get-AzVirtualNetworkSubnetConfig -name 'subnet01' -VirtualNetwork $vnet #loadbalancer**

**$sub2 = Get-AzVirtualNetworkSubnetConfig -name 'subnet02' -VirtualNetwork $vnet # vm's**

**#Step-01 : Front port , Frontip (Publicip)**

**#Creation of the Public ip**

**$mypip = New-AzPublicIpAddress -Name 'mypip' -ResourceGroupName $rgname -Location $loc `**

**-Sku Standard -AllocationMethod Static**

**$frontip = New-AzApplicationGatewayFrontendIPConfig -name 'frontdoor' -PublicIPAddress $mypip**

**$frontport = New-AzApplicationGatewayFrontendPort -Name 'frontendport1'-Port 80**

**#step-02**

**#sku**

**$s = New-AzApplicationGatewaySku -Name Standard\_v2 -Tier Standard\_v2 -Capacity 2**

**#Listner**

**$lis = New-AzApplicationGatewayHttpListener -name 'ear01' -FrontendIPConfiguration $frontip `**

**-FrontendPort $frontport -Protocol Http**

**#Routing rule (bakcenpool)**

**#Step-03**

**$pool = New-AzApplicationGatewayBackendAddressPool -name 'pool-a'**

**#backend connection**

**$PoolSetting = New-AzApplicationGatewayBackendHttpSetting -Name 'mysetting' -Port 80 -Protocol "http" -CookieBasedAffinity Disabled**

**#Loadbalancer ipconfiguration**

**$Gatewayipconfig = New-AzApplicationGatewayIPConfiguration -Name 'mygatewayip' -Subnet $sub1**

**#rule**

**$rule =New-AzApplicationGatewayRequestRoutingRule -Name 'myrule01' -RuleType Basic `**

**-Priority 200 -BackendHttpSettings $PoolSetting -HttpListener $lis `**

**-BackendAddressPool $pool**

**#Creation of Loadbalancer**

**New-AzApplicationGateway -Name 'myappgw' -ResourceGroupName $rgname -location $loc `**

**-FrontendIPConfigurations $frontip `**

**-Sku $s `**

**-FrontendPorts $frontport `**

**-BackendAddressPools $pool `**

**-HttpListeners $lis `**

**-BackendHttpSettingsCollection $PoolSetting `**

**-RequestRoutingRules $rule `**

**-GatewayIPConfigurations $Gatewayipconfig**

**#VM**

**$cr = Get-Credential**

**for($i = 1; $i -lt 4; $i++)**

**{**

**$mynic = New-AzNetworkInterface -name MyNIC$i -ResourceGroupName $rgname -Location $loc -ApplicationGatewayBackendAddressPool $Pool -Subnet $sub2**

**$vm = New-AzVMConfig -VMName VM-00$i -VMSize Standard\_DS1\_v2**

**Set-AzVMSourceImage -VM $vm -PublisherName MicrosoftWindowsServer -Offer windowsserver -Skus 2016-Datacenter -Version latest**

**Set-AzVMOperatingSystem -vm $vm -Windows -ComputerName VM-00$i -Credential $cr**

**Add-AzVMNetworkInterface -vm $vm -NetworkInterface $mynic**

**Set-AzVMBootDiagnostic -VM $vm -Disable**

**#creation**

**new-azvm -ResourceGroupName $rgname -Location $loc -vm $vm**

**#Creation of VirtualMachine with reference of $vm variablle**

**#updation of the iis webserver html webpage**

**Set-AzVMExtension -ResourceGroupName $rgname `**

**-Location $loc `**

**-Publisher Microsoft.compute `**

**-VMName VM-00$i `**

**-ExtensionName IIS `**

**-ExtensionType CustomScriptExtension `**

**-TypeHandlerVersion "1.4" `**

**-SettingString '{"commandToExecute":"powershell Add-WindowsFeature Web-Server; powershell Add-Content -Path \"C:\\inetpub\\wwwroot\\Default.htm\" -Value $($env:computername)"}'**

**}**