What we will do today is to setup a VNET inside that a firewall. Inside VNET we will also deploy a subnet and inside that a nginx and we will host a static html page.

In the azure portal:

We will create a resource group first which is a mandatory step. Give this a name. Make sure you delete the resource group after completing your task.

Next step is to create VNET for the created resource group. Give it a name. enable the azure bastion. Click on create a new public address make it standard. Enable azure firewall. Make it as basic tier. For policy create a new policy and click ok. Let it be the default version. We don’t need ddos at this point.

Click next

You will see the IP address section where the 3 subnets are already created, bastion, firewall and firewall management. You will also get a default subnet to deploy your application. Click on review and next.

Click create

Meanwhile we will create a VM in azure:

Click on create VM.

Resource group should be the same.

Name the VM.

Select a region

Avalaibility zone

Image – select free tier ubuntu

Size – give it standard

SSH public key authentication type

Generate new key pair

For now select inbound port as SSH (22)

Do not change anything for storage and disks

Next section is networking, for this your VNET should be completely created.

Select subnet as default

No public IP

Delete NIC when VM is deleted – select this option

Review and create and create.

Download the pem key and file

Go to VM and in essentials you will see there’s nothing in public IP address section. This is where bastion comes into picture.

Bastion is a service in AWS and azure which acts as a proxy between the user and the VM. This helps in configure of IAM.

Inside the connect section you will see bastion, click on that and provide username and change the authentication type to SSH Private key from local and browse the pem file and click connect.

You will get connected to the niginx web

Inside the nginx web:

Sudo su-

Apt-get update

Apt-get install nginx-y

Clear

Cd /var/www/html

Vim index.html

Within this file:

<h1> I learnt Azure Networking </h1>

Clear

Systemctl restart nginx

How to access the nginx:

Search for firewall and click on the created firewall.

Inside that click on firewall policy

Click on DNAT rules

Click add rule collection. Name it

Rule collection type – DNAT

Priority – 100

Click add

Click add rule. Name it

Source type – IP address

Source IP address – give your IP address

Destination IP address – this should be the public firewall IP address which can be found from the firewall section inside azure

Protocol – TCP

Port – 4000

Translated type – IP address

Translated address – VM IP address

Translated port – 80

Click save

Once done copy the private IP address of the firewall and :4000 and you will be able to access the html page.