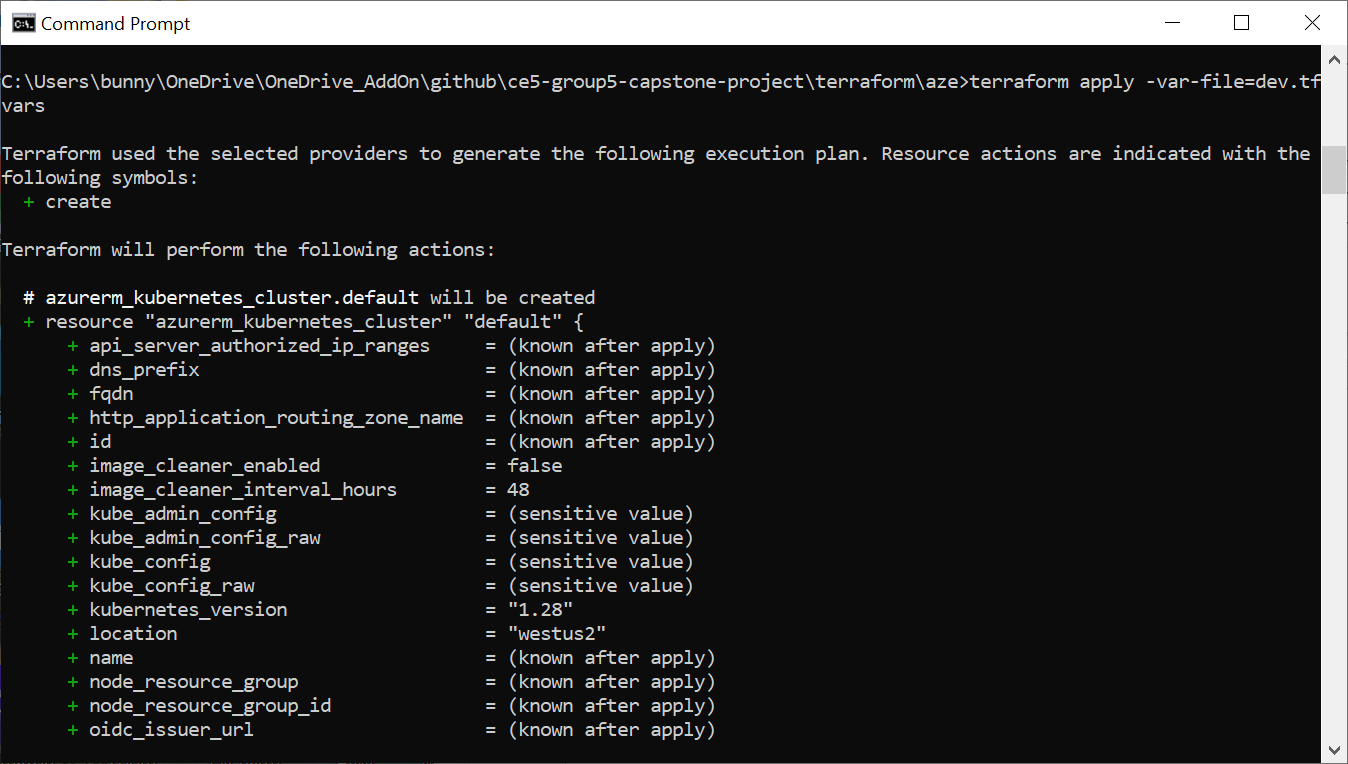
I was able to provision an AKS cluster in Azure without errors on 06 Jun 2024 Thursday 0100AM.

The codes and tutorials are taken from HashiCorp tutorial site and I updated the files to include dev.tfvars and prod.tfvars files.



**C:\Users\bunny\OneDrive\OneDrive\_AddOn\github\ce5-group5-capstone-project\terraform\aze>terraform apply -var-file=dev.tfvars**

**Terraform used the selected providers to generate the following execution plan. Resource actions are indicated with the**

**following symbols:**

**+ create**

**Terraform will perform the following actions:**

**# azurerm\_kubernetes\_cluster.default will be created**

**+ resource "azurerm\_kubernetes\_cluster" "default" {**

**+ api\_server\_authorized\_ip\_ranges = (known after apply)**

**+ dns\_prefix = (known after apply)**

**+ fqdn = (known after apply)**

**+ http\_application\_routing\_zone\_name = (known after apply)**

**+ id = (known after apply)**

**+ image\_cleaner\_enabled = false**

**+ image\_cleaner\_interval\_hours = 48**

**+ kube\_admin\_config = (sensitive value)**

**+ kube\_admin\_config\_raw = (sensitive value)**

**+ kube\_config = (sensitive value)**

**+ kube\_config\_raw = (sensitive value)**

**+ kubernetes\_version = "1.28"**

**+ location = "westus2"**

**+ name = (known after apply)**

**+ node\_resource\_group = (known after apply)**

**+ node\_resource\_group\_id = (known after apply)**

**+ oidc\_issuer\_url = (known after apply)**

**+ portal\_fqdn = (known after apply)**

**+ private\_cluster\_enabled = false**

**+ private\_cluster\_public\_fqdn\_enabled = false**

**+ private\_dns\_zone\_id = (known after apply)**

**+ private\_fqdn = (known after apply)**

**+ public\_network\_access\_enabled = true**

**+ resource\_group\_name = (known after apply)**

**+ role\_based\_access\_control\_enabled = true**

**+ run\_command\_enabled = true**

**+ sku\_tier = "Free"**

**+ tags = {**

**+ "environment" = "Demo"**

**}**

**+ workload\_identity\_enabled = false**

**+ default\_node\_pool {**

**+ kubelet\_disk\_type = (known after apply)**

**+ max\_pods = (known after apply)**

**+ name = "default"**

**+ node\_count = 2**

**+ node\_labels = (known after apply)**

**+ orchestrator\_version = (known after apply)**

**+ os\_disk\_size\_gb = 30**

**+ os\_disk\_type = "Managed"**

**+ os\_sku = (known after apply)**

**+ scale\_down\_mode = "Delete"**

**+ type = "VirtualMachineScaleSets"**

**+ ultra\_ssd\_enabled = false**

**+ vm\_size = "Standard\_D2\_v2"**

**+ workload\_runtime = (known after apply)**

**}**

**+ service\_principal {**

**+ client\_id = "829d2244-ae84-4529-8cb1-6a0049804ae5"**

**+ client\_secret = (sensitive value)**

**}**

**}**

**# azurerm\_resource\_group.default will be created**

**+ resource "azurerm\_resource\_group" "default" {**

**+ id = (known after apply)**

**+ location = "westus2"**

**+ name = (known after apply)**

**+ tags = {**

**+ "environment" = "Demo"**

**}**

**}**

**# random\_pet.prefix will be created**

**+ resource "random\_pet" "prefix" {**

**+ id = (known after apply)**

**+ length = 2**

**+ separator = "-"**

**}**

**Plan: 3 to add, 0 to change, 0 to destroy.**

**Changes to Outputs:**

**+ kubernetes\_cluster\_name = (known after apply)**

**+ resource\_group\_name = (known after apply)**

**Do you want to perform these actions?**

**Terraform will perform the actions described above.**

**Only 'yes' will be accepted to approve.**

**Enter a value: yes**

**random\_pet.prefix: Creating...**

**random\_pet.prefix: Creation complete after 0s [id=discrete-frog]**

**azurerm\_resource\_group.default: Creating...**

**azurerm\_resource\_group.default: Creation complete after 3s [id=/subscriptions/39f141c9-3bae-4327-932f-986ef3d4c888/resourceGroups/discrete-frog-rg]**

**azurerm\_kubernetes\_cluster.default: Creating...**

**azurerm\_kubernetes\_cluster.default: Still creating... [11s elapsed]**

**azurerm\_kubernetes\_cluster.default: Still creating... [21s elapsed]**

**azurerm\_kubernetes\_cluster.default: Still creating... [31s elapsed]**

**azurerm\_kubernetes\_cluster.default: Still creating... [41s elapsed]**

**azurerm\_kubernetes\_cluster.default: Still creating... [51s elapsed]**

**azurerm\_kubernetes\_cluster.default: Still creating... [1m1s elapsed]**

**azurerm\_kubernetes\_cluster.default: Still creating... [1m11s elapsed]**

**azurerm\_kubernetes\_cluster.default: Still creating... [1m21s elapsed]**

**azurerm\_kubernetes\_cluster.default: Still creating... [1m31s elapsed]**

**azurerm\_kubernetes\_cluster.default: Still creating... [1m41s elapsed]**

**azurerm\_kubernetes\_cluster.default: Still creating... [1m51s elapsed]**

**azurerm\_kubernetes\_cluster.default: Still creating... [2m1s elapsed]**

**azurerm\_kubernetes\_cluster.default: Still creating... [2m11s elapsed]**

**azurerm\_kubernetes\_cluster.default: Still creating... [2m21s elapsed]**

**azurerm\_kubernetes\_cluster.default: Still creating... [2m31s elapsed]**

**azurerm\_kubernetes\_cluster.default: Still creating... [2m41s elapsed]**

**azurerm\_kubernetes\_cluster.default: Still creating... [2m51s elapsed]**

**azurerm\_kubernetes\_cluster.default: Still creating... [3m1s elapsed]**

**azurerm\_kubernetes\_cluster.default: Still creating... [3m11s elapsed]**

**azurerm\_kubernetes\_cluster.default: Still creating... [3m21s elapsed]**

**azurerm\_kubernetes\_cluster.default: Still creating... [3m31s elapsed]**

**azurerm\_kubernetes\_cluster.default: Still creating... [3m41s elapsed]**

**azurerm\_kubernetes\_cluster.default: Still creating... [3m51s elapsed]**

**azurerm\_kubernetes\_cluster.default: Creation complete after 3m56s [id=/subscriptions/39f141c9-3bae-4327-932f-986ef3d4c888/resourceGroups/discrete-frog-rg/providers/Microsoft.ContainerService/managedClusters/discrete-frog-aks]**

**Apply complete! Resources: 3 added, 0 changed, 0 destroyed.**

**Outputs:**

**kubernetes\_cluster\_name = "discrete-frog-aks"**

**resource\_group\_name = "discrete-frog-rg"**

Command to run: **terraform apply -var-file=dev.tfvars**.

Started at 0009AM 06 Jun 2024 Thursday.

Ended at 0014AM 06 Jun 2024 Thursday.

Runtime: 5 minutes without errors.

**C:\Users\bunny\OneDrive\OneDrive\_AddOn\github\ce5-group5-capstone-project\terraform\aze>terraform destroy -var-file=dev.tfvars**

**random\_pet.prefix: Refreshing state... [id=discrete-frog]**

**azurerm\_resource\_group.default: Refreshing state... [id=/subscriptions/39f141c9-3bae-4327-932f-986ef3d4c888/resourceGroups/discrete-frog-rg]**

**azurerm\_kubernetes\_cluster.default: Refreshing state... [id=/subscriptions/39f141c9-3bae-4327-932f-986ef3d4c888/resourceGroups/discrete-frog-rg/providers/Microsoft.ContainerService/managedClusters/discrete-frog-aks]**

**Terraform used the selected providers to generate the following execution plan. Resource actions are indicated with the**

**following symbols:**

**- destroy**

**Terraform will perform the following actions:**

**# azurerm\_kubernetes\_cluster.default will be destroyed**

**- resource "azurerm\_kubernetes\_cluster" "default" {**

**- api\_server\_authorized\_ip\_ranges = [] -> null**

**- custom\_ca\_trust\_certificates\_base64 = [] -> null**

**- dns\_prefix = "discrete-frog-k8s" -> null**

**- enable\_pod\_security\_policy = false -> null**

**- fqdn = "discrete-frog-k8s-dz23uy3b.hcp.westus2.azmk8s.io" -> null**

**- id = "/subscriptions/39f141c9-3bae-4327-932f-986ef3d4c888/resourceGroups/discrete-frog-rg/providers/Microsoft.ContainerService/managedClusters/discrete-frog-aks" -> null**

**- image\_cleaner\_enabled = false -> null**

**- image\_cleaner\_interval\_hours = 48 -> null**

**- kube\_admin\_config = (sensitive value) -> null**

**- kube\_config = (sensitive value) -> null**

**- kube\_config\_raw = (sensitive value) -> null**

**- kubernetes\_version = "1.28" -> null**

**- local\_account\_disabled = false -> null**

**- location = "westus2" -> null**

**- name = "discrete-frog-aks" -> null**

**- node\_resource\_group = "MC\_discrete-frog-rg\_discrete-frog-aks\_westus2" -> null**

**- node\_resource\_group\_id = "/subscriptions/39f141c9-3bae-4327-932f-986ef3d4c888/resourceGroups/MC\_discrete-frog-rg\_discrete-frog-aks\_westus2" -> null**

**- oidc\_issuer\_enabled = false -> null**

**- portal\_fqdn = "discrete-frog-k8s-dz23uy3b.portal.hcp.westus2.azmk8s.io" -> null**

**- private\_cluster\_enabled = false -> null**

**- private\_cluster\_public\_fqdn\_enabled = false -> null**

**- public\_network\_access\_enabled = true -> null**

**- resource\_group\_name = "discrete-frog-rg" -> null**

**- role\_based\_access\_control\_enabled = true -> null**

**- run\_command\_enabled = true -> null**

**- sku\_tier = "Free" -> null**

**- tags = {**

**- "environment" = "Demo"**

**} -> null**

**- workload\_identity\_enabled = false -> null**

**# (7 unchanged attributes hidden)**

**- default\_node\_pool {**

**- custom\_ca\_trust\_enabled = false -> null**

**- enable\_auto\_scaling = false -> null**

**- enable\_host\_encryption = false -> null**

**- enable\_node\_public\_ip = false -> null**

**- fips\_enabled = false -> null**

**- kubelet\_disk\_type = "OS" -> null**

**- max\_count = 0 -> null**

**- max\_pods = 110 -> null**

**- min\_count = 0 -> null**

**- name = "default" -> null**

**- node\_count = 2 -> null**

**- node\_labels = {} -> null**

**- node\_taints = [] -> null**

**- only\_critical\_addons\_enabled = false -> null**

**- orchestrator\_version = "1.28" -> null**

**- os\_disk\_size\_gb = 30 -> null**

**- os\_disk\_type = "Managed" -> null**

**- os\_sku = "Ubuntu" -> null**

**- scale\_down\_mode = "Delete" -> null**

**- tags = {} -> null**

**- type = "VirtualMachineScaleSets" -> null**

**- ultra\_ssd\_enabled = false -> null**

**- vm\_size = "Standard\_D2\_v2" -> null**

**- zones = [] -> null**

**# (9 unchanged attributes hidden)**

**- upgrade\_settings {**

**- max\_surge = "10%" -> null**

**}**

**}**

**- network\_profile {**

**- dns\_service\_ip = "10.0.0.10" -> null**

**- ip\_versions = [**

**- "IPv4",**

**] -> null**

**- load\_balancer\_sku = "standard" -> null**

**- network\_plugin = "kubenet" -> null**

**- outbound\_type = "loadBalancer" -> null**

**- pod\_cidr = "10.244.0.0/16" -> null**

**- pod\_cidrs = [**

**- "10.244.0.0/16",**

**] -> null**

**- service\_cidr = "10.0.0.0/16" -> null**

**- service\_cidrs = [**

**- "10.0.0.0/16",**

**] -> null**

**# (5 unchanged attributes hidden)**

**- load\_balancer\_profile {**

**- effective\_outbound\_ips = [**

**- "/subscriptions/39f141c9-3bae-4327-932f-986ef3d4c888/resourceGroups/MC\_discrete-frog-rg\_discrete-frog-aks\_westus2/providers/Microsoft.Network/publicIPAddresses/c3b1990c-5d06-4fa5-86b7-b03e309df80e",**

**] -> null**

**- idle\_timeout\_in\_minutes = 0 -> null**

**- managed\_outbound\_ip\_count = 1 -> null**

**- managed\_outbound\_ipv6\_count = 0 -> null**

**- outbound\_ip\_address\_ids = [] -> null**

**- outbound\_ip\_prefix\_ids = [] -> null**

**- outbound\_ports\_allocated = 0 -> null**

**}**

**}**

**- service\_principal {**

**- client\_id = "829d2244-ae84-4529-8cb1-6a0049804ae5" -> null**

**- client\_secret = (sensitive value) -> null**

**}**

**}**

**# azurerm\_resource\_group.default will be destroyed**

**- resource "azurerm\_resource\_group" "default" {**

**- id = "/subscriptions/39f141c9-3bae-4327-932f-986ef3d4c888/resourceGroups/discrete-frog-rg" -> null**

**- location = "westus2" -> null**

**- name = "discrete-frog-rg" -> null**

**- tags = {**

**- "environment" = "Demo"**

**} -> null**

**# (1 unchanged attribute hidden)**

**}**

**# random\_pet.prefix will be destroyed**

**- resource "random\_pet" "prefix" {**

**- id = "discrete-frog" -> null**

**- length = 2 -> null**

**- separator = "-" -> null**

**}**

**Plan: 0 to add, 0 to change, 3 to destroy.**

**Changes to Outputs:**

**- kubernetes\_cluster\_name = "discrete-frog-aks" -> null**

**- resource\_group\_name = "discrete-frog-rg" -> null**

**Do you really want to destroy all resources?**

**Terraform will destroy all your managed infrastructure, as shown above.**

**There is no undo. Only 'yes' will be accepted to confirm.**

**Enter a value: yes**

**azurerm\_kubernetes\_cluster.default: Destroying... [id=/subscriptions/39f141c9-3bae-4327-932f-986ef3d4c888/resourceGroups/discrete-frog-rg/providers/Microsoft.ContainerService/managedClusters/discrete-frog-aks]**

**azurerm\_kubernetes\_cluster.default: Still destroying... [id=/subscriptions/39f141c9-3bae-4327-932f-...vice/managedClusters/discrete-frog-aks, 10s elapsed]**

**azurerm\_kubernetes\_cluster.default: Still destroying... [id=/subscriptions/39f141c9-3bae-4327-932f-...vice/managedClusters/discrete-frog-aks, 20s elapsed]**

**azurerm\_kubernetes\_cluster.default: Still destroying... [id=/subscriptions/39f141c9-3bae-4327-932f-...vice/managedClusters/discrete-frog-aks, 30s elapsed]**

**azurerm\_kubernetes\_cluster.default: Still destroying... [id=/subscriptions/39f141c9-3bae-4327-932f-...vice/managedClusters/discrete-frog-aks, 40s elapsed]**

**azurerm\_kubernetes\_cluster.default: Still destroying... [id=/subscriptions/39f141c9-3bae-4327-932f-...vice/managedClusters/discrete-frog-aks, 50s elapsed]**

**azurerm\_kubernetes\_cluster.default: Still destroying... [id=/subscriptions/39f141c9-3bae-4327-932f-...vice/managedClusters/discrete-frog-aks, 1m0s elapsed]**

**azurerm\_kubernetes\_cluster.default: Still destroying... [id=/subscriptions/39f141c9-3bae-4327-932f-...vice/managedClusters/discrete-frog-aks, 1m10s elapsed]**

**azurerm\_kubernetes\_cluster.default: Still destroying... [id=/subscriptions/39f141c9-3bae-4327-932f-...vice/managedClusters/discrete-frog-aks, 1m20s elapsed]**

**azurerm\_kubernetes\_cluster.default: Still destroying... [id=/subscriptions/39f141c9-3bae-4327-932f-...vice/managedClusters/discrete-frog-aks, 1m30s elapsed]**

**azurerm\_kubernetes\_cluster.default: Still destroying... [id=/subscriptions/39f141c9-3bae-4327-932f-...vice/managedClusters/discrete-frog-aks, 1m40s elapsed]**

**azurerm\_kubernetes\_cluster.default: Still destroying... [id=/subscriptions/39f141c9-3bae-4327-932f-...vice/managedClusters/discrete-frog-aks, 1m51s elapsed]**

**azurerm\_kubernetes\_cluster.default: Still destroying... [id=/subscriptions/39f141c9-3bae-4327-932f-...vice/managedClusters/discrete-frog-aks, 2m1s elapsed]**

**azurerm\_kubernetes\_cluster.default: Still destroying... [id=/subscriptions/39f141c9-3bae-4327-932f-...vice/managedClusters/discrete-frog-aks, 2m11s elapsed]**

**azurerm\_kubernetes\_cluster.default: Still destroying... [id=/subscriptions/39f141c9-3bae-4327-932f-...vice/managedClusters/discrete-frog-aks, 2m21s elapsed]**

**azurerm\_kubernetes\_cluster.default: Still destroying... [id=/subscriptions/39f141c9-3bae-4327-932f-...vice/managedClusters/discrete-frog-aks, 2m31s elapsed]**

**azurerm\_kubernetes\_cluster.default: Still destroying... [id=/subscriptions/39f141c9-3bae-4327-932f-...vice/managedClusters/discrete-frog-aks, 2m41s elapsed]**

**azurerm\_kubernetes\_cluster.default: Still destroying... [id=/subscriptions/39f141c9-3bae-4327-932f-...vice/managedClusters/discrete-frog-aks, 2m51s elapsed]**

**azurerm\_kubernetes\_cluster.default: Still destroying... [id=/subscriptions/39f141c9-3bae-4327-932f-...vice/managedClusters/discrete-frog-aks, 3m1s elapsed]**

**azurerm\_kubernetes\_cluster.default: Destruction complete after 3m9s**

**azurerm\_resource\_group.default: Destroying... [id=/subscriptions/39f141c9-3bae-4327-932f-986ef3d4c888/resourceGroups/discrete-frog-rg]**

**azurerm\_resource\_group.default: Still destroying... [id=/subscriptions/39f141c9-3bae-4327-932f-...d4c888/resourceGroups/discrete-frog-rg, 10s elapsed]**

**azurerm\_resource\_group.default: Still destroying... [id=/subscriptions/39f141c9-3bae-4327-932f-...d4c888/resourceGroups/discrete-frog-rg, 20s elapsed]**

**azurerm\_resource\_group.default: Still destroying... [id=/subscriptions/39f141c9-3bae-4327-932f-...d4c888/resourceGroups/discrete-frog-rg, 30s elapsed]**

**azurerm\_resource\_group.default: Still destroying... [id=/subscriptions/39f141c9-3bae-4327-932f-...d4c888/resourceGroups/discrete-frog-rg, 40s elapsed]**

**azurerm\_resource\_group.default: Still destroying... [id=/subscriptions/39f141c9-3bae-4327-932f-...d4c888/resourceGroups/discrete-frog-rg, 50s elapsed]**

**azurerm\_resource\_group.default: Still destroying... [id=/subscriptions/39f141c9-3bae-4327-932f-...d4c888/resourceGroups/discrete-frog-rg, 1m0s elapsed]**

**azurerm\_resource\_group.default: Still destroying... [id=/subscriptions/39f141c9-3bae-4327-932f-...d4c888/resourceGroups/discrete-frog-rg, 1m10s elapsed]**

**azurerm\_resource\_group.default: Still destroying... [id=/subscriptions/39f141c9-3bae-4327-932f-...d4c888/resourceGroups/discrete-frog-rg, 1m20s elapsed]**

**azurerm\_resource\_group.default: Still destroying... [id=/subscriptions/39f141c9-3bae-4327-932f-...d4c888/resourceGroups/discrete-frog-rg, 1m30s elapsed]**

**azurerm\_resource\_group.default: Still destroying... [id=/subscriptions/39f141c9-3bae-4327-932f-...d4c888/resourceGroups/discrete-frog-rg, 1m40s elapsed]**

**azurerm\_resource\_group.default: Still destroying... [id=/subscriptions/39f141c9-3bae-4327-932f-...d4c888/resourceGroups/discrete-frog-rg, 1m50s elapsed]**

**azurerm\_resource\_group.default: Destruction complete after 1m57s**

**random\_pet.prefix: Destroying... [id=discrete-frog]**

**random\_pet.prefix: Destruction complete after 0s**

**Destroy complete! Resources: 3 destroyed.**

**C:\Users\bunny\OneDrive\OneDrive\_AddOn\github\ce5-group5-capstone-project\terraform\aze>LENOVO**

Command to run: **terraform destroy** **-var-file=dev.tfvars**.

Started at 0021AM 06 Jun 2024 Thursday.

Ended at 0027AM 06 Jun 2024 Thursday.

Runtime: 6 minutes without errors.