After installing Terraform and accessing Azure, the main.tf file is created.

```
EXPLORER
                                     ⋈ Welcome
                                                       main.tf
OPEN EDITORS 1 unsaved
                                      🍸 main.tf > ધ provider "azurerm" > 🖭 subscription_id
   ⋈ Welcome
                                               subscription_id = ""
/ LAB-TERRAFORM
> .terraform
resource "azurerm_resource_group" "jm-fist" {
                                            name = "my-fist"
main.tf
                                               location = "East US"
{} terraform.tfstate
name = "jm-aks1"

location = azurerm_resource_group.jm-fist.location
resource_group_name = azurerm_resource_group.jm-fist.name
dns_prefix = "jmaks1"
                                              name = "default"
node_count = 1
                                                 vm_size = "Standard_D2_v2"
                                              identity {
   type = "SystemAssigned"
                                              tags = {
                                                 Environment = "Production"
```

I initialize the environment with:

terraform init

I verify that the syntax and configuration are correct with:

terraform validate

To ensure the code follows a consistent and organized style, I run:

terraform fmt

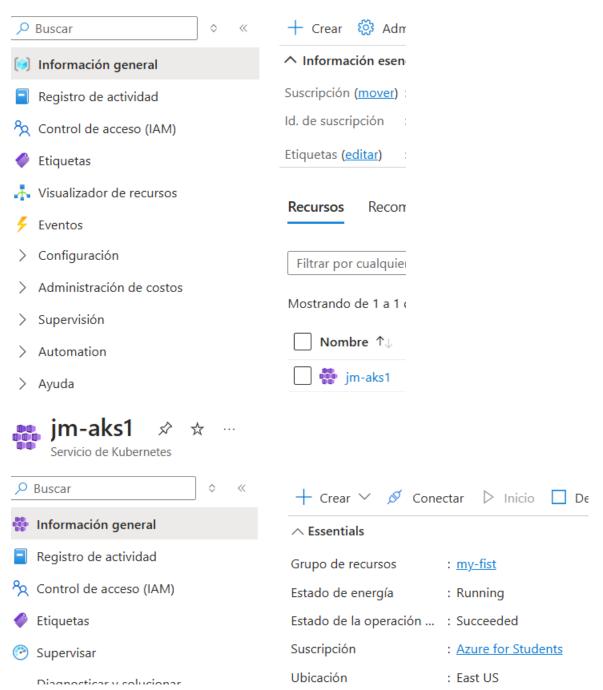
To get a preview of the resources that will be created, I use:

terraform plan

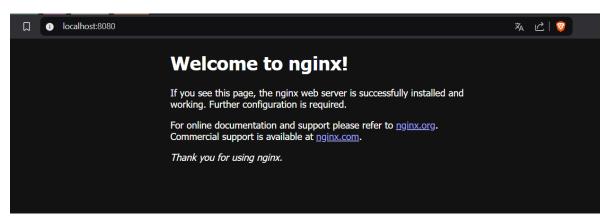
Finally, I apply the configuration to deploy the infrastructure:

terraform apply

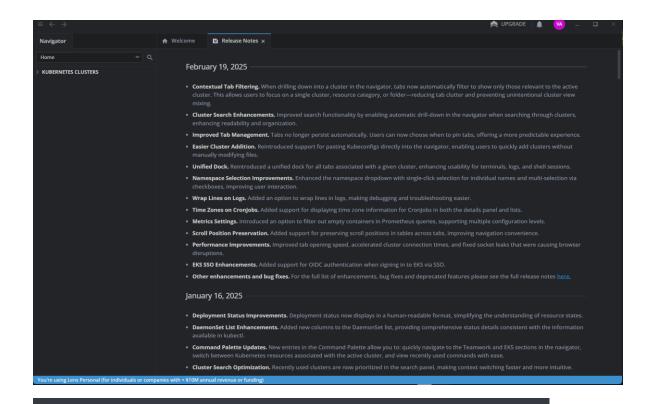


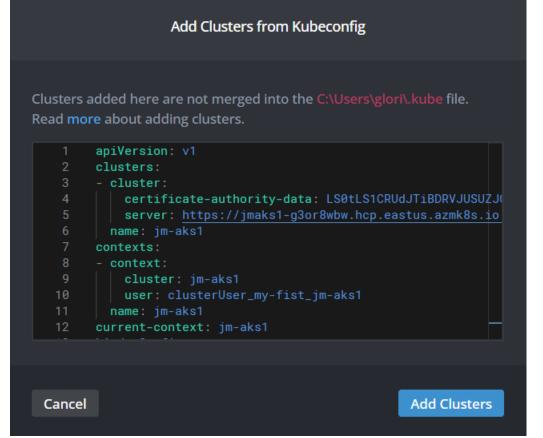


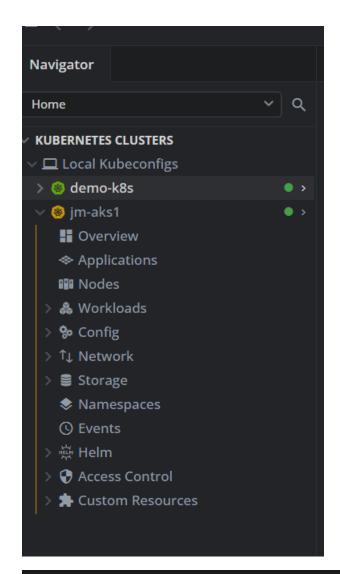
```
oria@Glori:~$ kubectl config get-contexts
CURRENT
                     CLUSTER AUTHINFO
                                                                NAMESPACE
          NAME
          jm-aks1
                     jm-aks1
                               clusterUser_my-fist_jm-aks1
gloria@Glori:~$ kubectl config current-context
gloria@Glori:~$ kubectl config get-contexts
CURRENT NAME CLUSTER AUTHINFO
                    CLUSTER AUTHINFO
jm-aks1 clusterUser_my-fist_jm-aks1
                                                                NAMESPACE
          jm-aks1 jm-aks1
gloria@Glori:~$ kubectl run nginx --image=nginx --port=80
pod/nginx created
gloria@Glori:~$ kubectl get pods
        READY
                STATUS
                           RESTARTS
                                       AGE
                Running
nginx 1/1
                                       22s
                           0
gloria@Glori:~$ kubectl expose pod nginx --type=LoadBalancer --port=80 --target-port=80
service/nginx exposed
```



```
Glori:~$ kubectl get svc nginx
TYPE CLUSTER-IP EXTERNAL-IP PORT(S)
LoadBalancer 10.0.191.210 48.216.151.143 80:30208/TCP
    IΔMF
                                                        LoadBalancer
    nainx
                                                      LoadBalancer 10.0.1
Glori:~$ kubectl get pods
READY STATUS RESTARTS AGE
                                                   Glori:~$ kubects | RESTARIS | READY STATUS | RESTARIS | 1/1 | Running | 0 | 69s | Glori:~$ kubectl get pods -o wide | Glori:~$ kubectl get RESTARIS | AGE | 
    VAME
    nginx
VAME READ
ATES
Inginx 1/1 Running 0
gloria@Glori:~$ kubectl get services
NAME TYPE CLUSTER-IP
Lubernetes ClusterIP 10.0.0.1
LeadRalancer 10.0.191.210
   NAME
                                                                                                                                                                                                                                                                                                                           ΙP
                                                                                                                                                                                                                                                                                                                                                                                                                                           NODE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NOMINATED NODE READINESS G
                                                                                                                                                                                                                                                                                                                            10.244.0.190
                                                                                                                                                                                                                                                                                                                                                                                                                                         aks-default-27033426-vmss000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       <none>
                                                                                                                                                                                                                                                                                                                                                                                                                                                          PORT(S)
443/TCP
                                                                                                                                                                                                                                                                                                                            EXTERNAL-IP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AGE
                                                                                                                                                                                                                                                                                                                            48.216.151.143
                                                                                                                                                                                                                                                                                                                                                                                                                                                          80:30208/TCP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3m46s
```







Destroy complete! Resources: 2 destroyed.

PS C:\Users\glori\Desktop\Proyectos\Lab-terraform> []