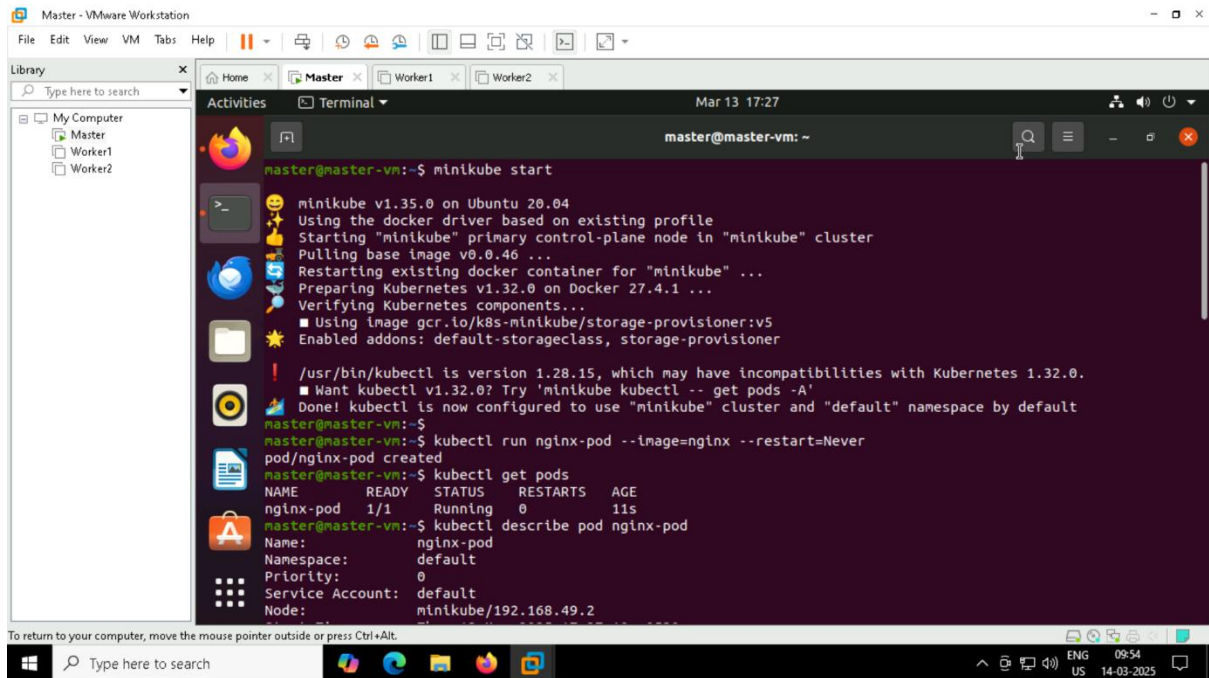


# KUBERNETES ASSIGNMENTS 1

## Exercise 1: Deploy an Nginx Pod



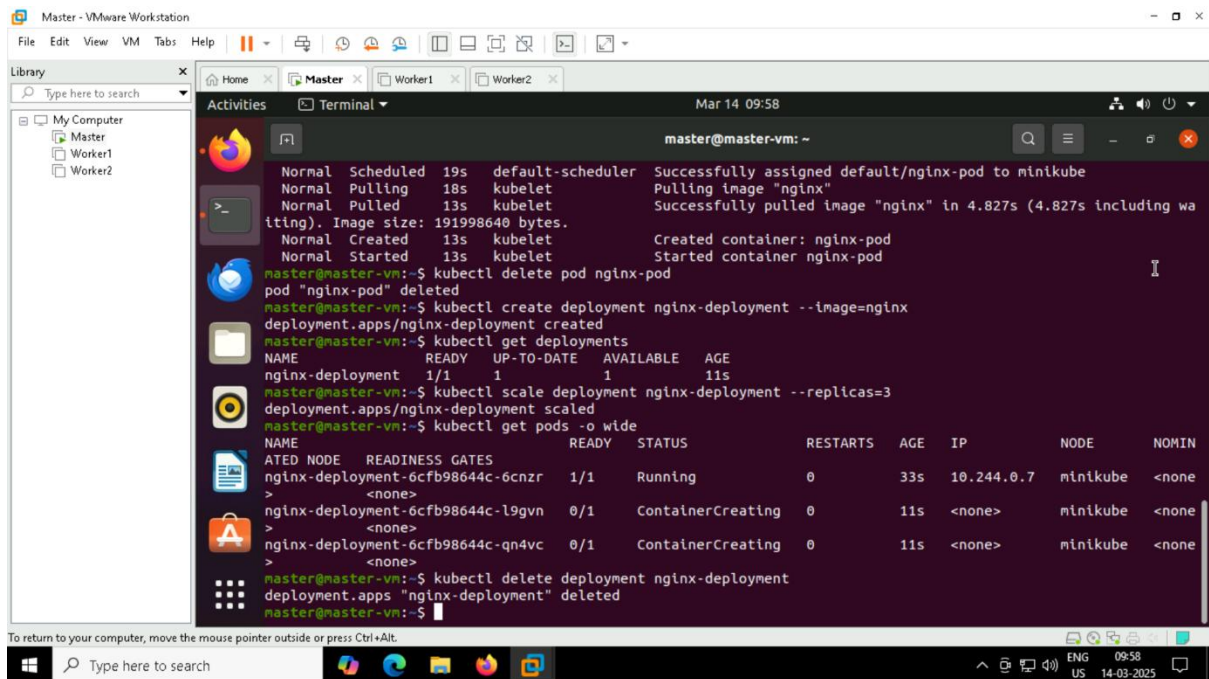
The screenshot shows a terminal window in VMware Workstation with the following commands and output:

```
master@master-vm:~$ minikube start
minikube v1.35.0 on Ubuntu 20.04
Using the docker driver based on existing profile
Starting "minikube" primary control-plane node in "minikube" cluster
Pulling base image v0.0.46 ...
Restarting existing docker container for "minikube" ...
Preparing Kubernetes v1.32.0 on Docker 27.4.1 ...
Verifying Kubernetes components...
  Using image gcr.io/k8s-minikube/storage-provisioner:v5
Enabled addons: default-storageclass, storage-provisioner

! /usr/bin/kubectl is version 1.28.15, which may have incompatibilities with Kubernetes 1.32.0.
  Want kubectl v1.32.0? Try 'minikube kubectl -- get pods -A'
Done! kubectl is now configured to use "minikube" cluster and "default" namespace by default

master@master-vm:~$ kubectl run nginx-pod --image=nginx --restart=Never
pod/nginx-pod created
master@master-vm:~$ kubectl get pods
NAME      READY   STATUS    RESTARTS   AGE
nginx-pod 1/1     Running   0          11s
master@master-vm:~$ kubectl describe pod nginx-pod
Name:      nginx-pod
Namespace: default
Priority:   0
Service Account: default
Node:      minikube/192.168.49.2
```

## Exercise 2: Create an Nginx Deployment and Scale It



The screenshot shows a terminal window in VMware Workstation with the following commands and output:

```
Normal Scheduled 19s default-scheduler Successfully assigned default/nginx-pod to minikube
Normal Pulling   18s kubelet          Pulling image "nginx"
Normal Pulled    13s kubelet          Successfully pulled image "nginx" in 4.827s (4.827s including wait
ing). Image size: 191998640 bytes.
Normal Created   13s kubelet          Created container: nginx-pod
Normal Started   13s kubelet          Started container nginx-pod

master@master-vm:~$ kubectl delete pod nginx-pod
pod "nginx-pod" deleted
master@master-vm:~$ kubectl create deployment nginx-deployment --image=nginx
deployment.apps/nginx-deployment created
master@master-vm:~$ kubectl get deployments
NAME      READY   UP-TO-DATE   AVAILABLE   AGE
nginx-deployment 1/1      1            1          11s
master@master-vm:~$ kubectl scale deployment nginx-deployment --replicas=3
deployment.apps/nginx-deployment scaled
master@master-vm:~$ kubectl get pods -o wide
NAME                                READY   STATUS    RESTARTS   AGE   IP            NODE       NOMINATED NODE
nginx-deployment-6cfb98644c-6cnzr    1/1     Running   0          33s   10.244.0.7    minikube   <none>
nginx-deployment-6cfb98644c-l9gvn    0/1     ContainerCreating 0       11s   <none>        minikube   <none>
nginx-deployment-6cfb98644c-qn4vc    0/1     ContainerCreating 0       11s   <none>        minikube   <none>

master@master-vm:~$ kubectl delete deployment nginx-deployment
deployment.apps "nginx-deployment" deleted
master@master-vm:~$
```