

3) Create a Pod using a YAML Manifest

```
master@master-vm: ~  
Normal Pulling 48s kubelet Pulling image "nginx"  
Normal Pulled 18s kubelet Successfully pulled image "nginx" in 29.975s (29.975s including waiting). Image size:  
191998640 bytes.  
Normal Created 17s kubelet Created container: nginx-pod  
Normal Started 17s 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 17s  
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 READINESS GATES  
nginx-deployment-6cfb98644c-4q8qw 1/1 Running 0 74s 10.244.0.4 minikube <none> <none>  
nginx-deployment-6cfb98644c-6s7tk 1/1 Running 0 43s 10.244.0.5 minikube <none> <none>  
nginx-deployment-6cfb98644c-k5kgh 1/1 Running 0 43s 10.244.0.6 minikube <none> <none>  
master@master-vm:~$ kubectl delete deployment nginx-deployment  
deployment.apps/nginx-deployment deleted  
master@master-vm:~$ nano nginx-pod.yaml  
master@master-vm:~$ kubectl apply -f nginx-pod.yaml  
pod/nginx-pod created  
master@master-vm:~$ kubectl get pods  
NAME READY STATUS RESTARTS AGE  
nginx-pod 1/1 Running 0 13s  
master@master-vm:~$ ^C  
: command not found  
master@master-vm:~$ kubectl delete -f nginx-pod.yaml  
pod "nginx-pod" deleted  
master@master-vm:~$ history  
1 sudo apt-get update  
2 sudo apt update  
3 sudo apt install openssh-server  
4 sudo apt install net-tools
```

4) Create and Use a ConfigMap

```
master@master-vm: ~/Desktop  
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: storage-provisioner, default-storageclass  
  
! /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:~/Desktop$ kubectl create configmap app-config --from-literal=APP_ENV=production  
configmap/app-config created  
master@master-vm:~/Desktop$ kubectl get configmaps app-config -o yaml  
apiVersion: v1  
data:  
  APP_ENV: production  
kind: ConfigMap  
metadata:  
  creationTimestamp: "2025-03-14T04:06:05Z"  
  name: app-config  
  namespace: default  
  resourceVersion: "3173"  
  uid: 2ae74a7b-753a-4282-b6e8-00ecdf239423  
master@master-vm:~/Desktop$ nano nginx-config-pod.yaml  
master@master-vm:~/Desktop$ kubectl apply -f nginx-config-pod.yaml  
pod/nginx-config-pod created  
master@master-vm:~/Desktop$ kubectl get pods  
NAME READY STATUS RESTARTS AGE  
nginx-config-pod 1/1 Running 0 17s  
master@master-vm:~/Desktop$ kubectl delete -f nginx-config-pod.yaml  
pod "nginx-config-pod" deleted  
master@master-vm:~/Desktop$ kubectl delete configmap app-config  
configmap "app-config" deleted  
master@master-vm:~/Desktop$
```