

# Kubernetes Assignment-02

## Exercise 3: Create a Pod using a YAML Manifest

Step 1: Create a YAML file (nginx-pod.yaml)

Step 2: Apply the YAML file

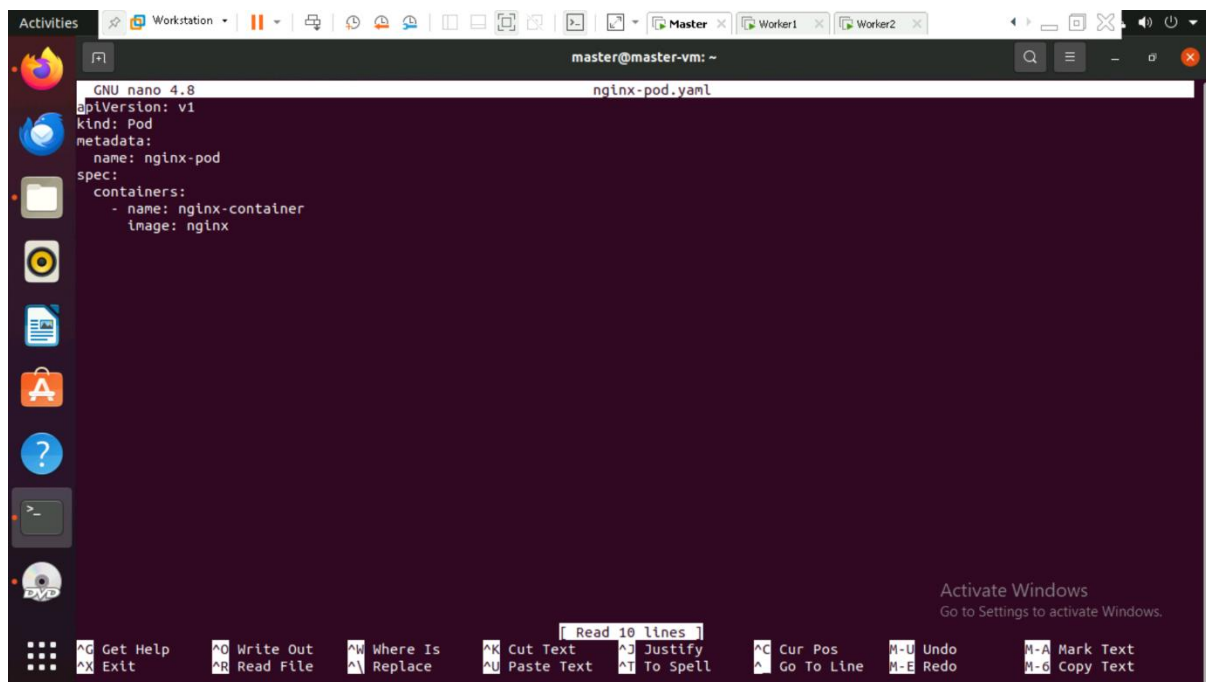
- `kubectl apply -f nginx-pod.yaml`

Step 3: Check if the pod is running

- `kubectl get pods`

Step 4: Delete the pod using YAML

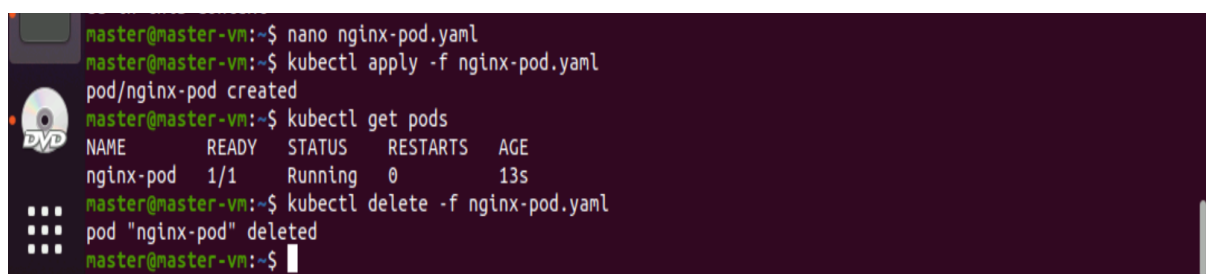
- `kubectl delete -f nginx-pod.yaml`



The screenshot shows a terminal window titled 'master@master-vm: ~' with a dark purple background. The terminal is running the GNU nano 4.8 text editor, editing a file named 'nginx-pod.yaml'. The content of the file is as follows:

```
apiVersion: v1
kind: Pod
metadata:
  name: nginx-pod
spec:
  containers:
  - name: nginx-container
    image: nginx
```

The terminal window includes a sidebar on the left with various application icons and a bottom status bar with keyboard shortcuts. A message in the bottom right corner says 'Activate Windows Go to Settings to activate Windows.'



The screenshot shows a terminal window titled 'master@master-vm: ~' with a dark purple background. The terminal shows the following commands and output:

```
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:~$ kubectl delete -f nginx-pod.yaml
pod "nginx-pod" deleted
master@master-vm:~$
```

## Exercise 4: Create and Use a ConfigMap

### Step 1: Create a ConfigMap:

```
kubectl create configmap app-config --from-literal=APP_ENV=production
```

### Step 2: Verify ConfigMap:

```
kubectl get configmaps app-config -o yaml
```

### Step 3: Create a pod that uses the ConfigMap (nginx-config-pod.yaml):

### Step 4: Deploy the pod:

```
kubectl apply -f nginx-config-pod.yaml
```

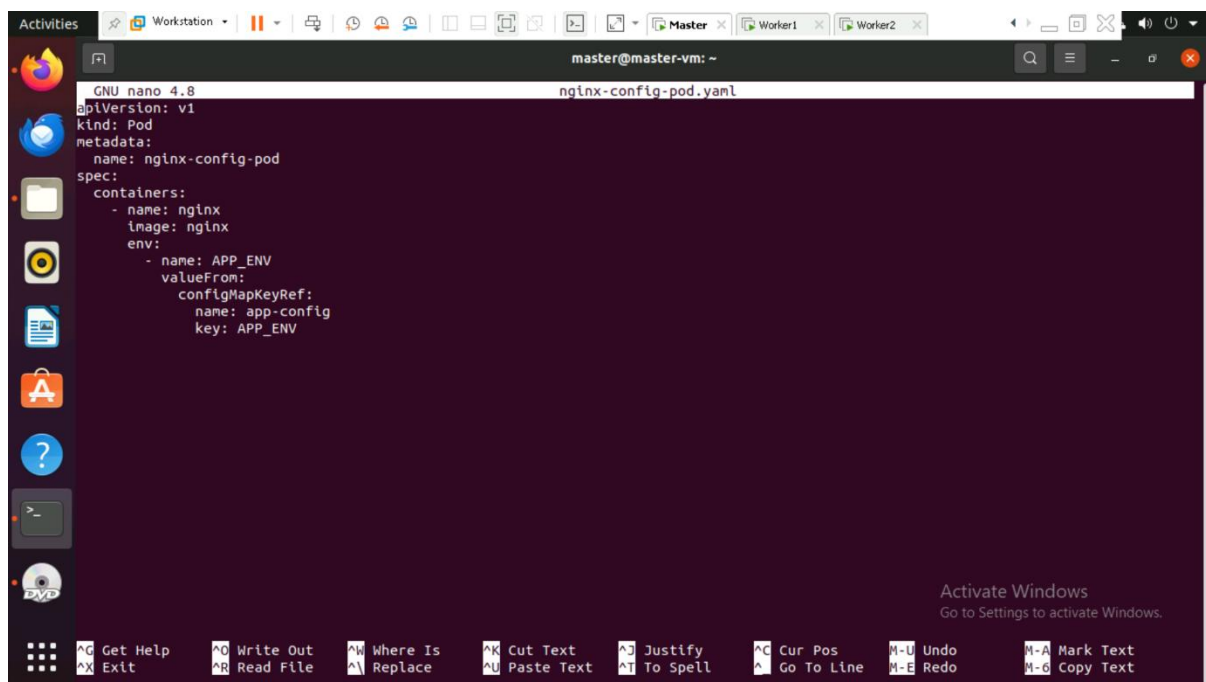
### Step 5: Check if the pod is running:

```
kubectl get pods
```

### Step 6: Delete the pod and ConfigMap:

```
kubectl delete -f nginx-config-pod.yaml
```

```
kubectl delete configmap app-config
```



```
master@master-vn:~$ kubectl create configmap app-config --from-literal=APP_ENV=production
configmap/app-config created
master@master-vn:~$ kubectl get configmaps app-config -o yaml
apiVersion: v1
data:
  APP_ENV: production
kind: ConfigMap
metadata:
  creationTimestamp: "2025-03-13T09:58:01Z"
  name: app-config
  namespace: default
  resourceVersion: "13759"
  uid: a11712f9-11a2-425b-8745-f4ddb6710fd2
master@master-vn:~$ nano nginx-config-pod.yaml
master@master-vn:~$ kubectl apply -f nginx-config-pod.yaml
pod/nginx-config-pod created
master@master-vn:~$ kubectl get pods
NAME                READY   STATUS    RESTARTS   AGE
nginx-config-pod    1/1     Running   0           17s
master@master-vn:~$ kubectl delete -f nginx-config-pod.yaml
pod "nginx-config-pod" deleted
master@master-vn:~$ kubectl delete configmap app-config
configmap "app-config" deleted
master@master-vn:~$
```

Activate Windows  
Go to Settings to activate Windows.