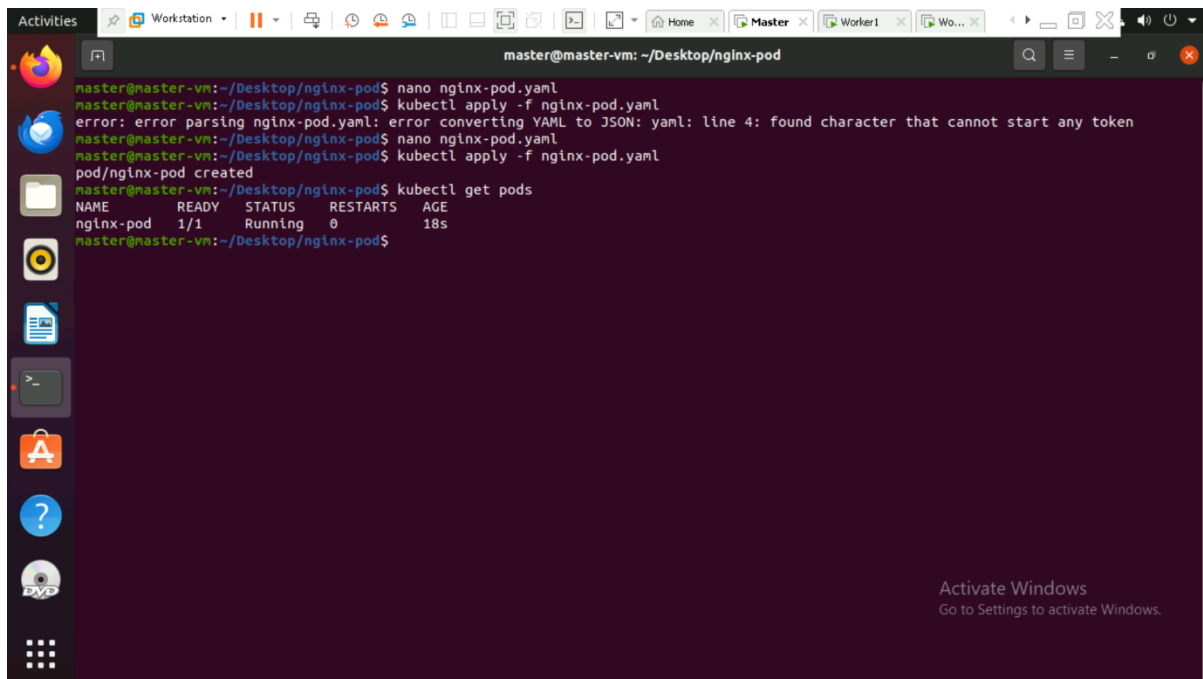


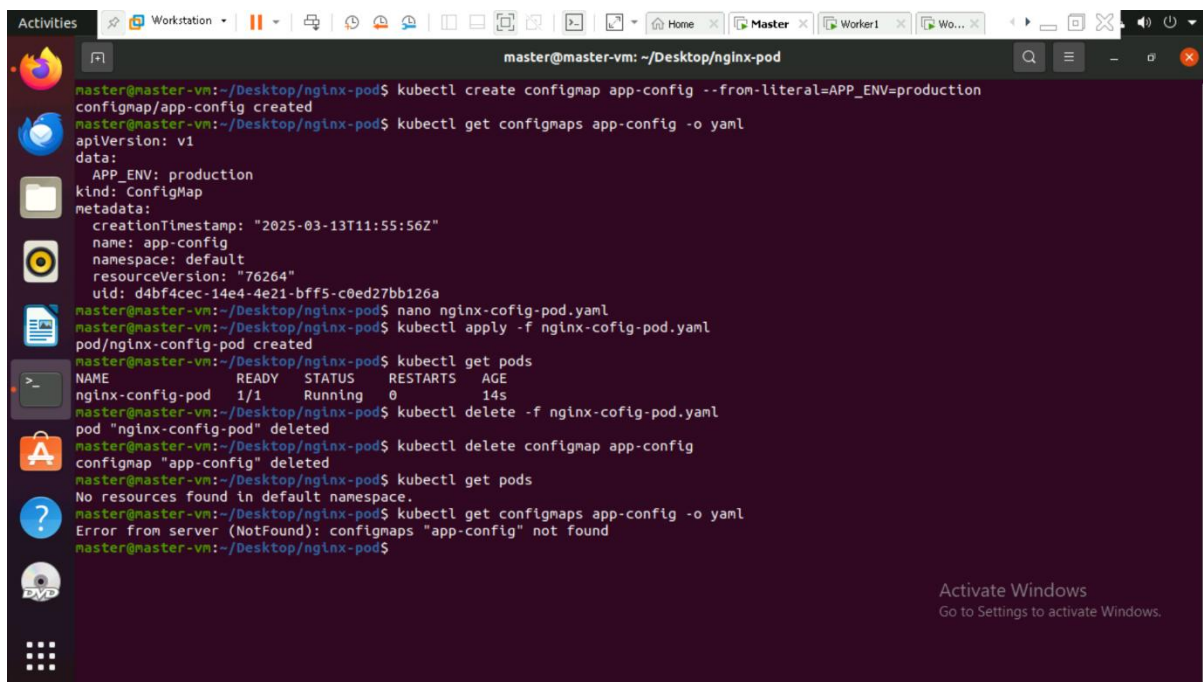
## Q. Create a pod using a YAML Manifest



A terminal window titled 'master@master-vm: ~/Desktop/nginx-pod' showing the process of creating a pod. The user attempts to apply a manifest file 'nginx-pod.yaml' using 'kubectl apply -f nginx-pod.yaml', but receives an error: 'error: error parsing nginx-pod.yaml: error converting YAML to JSON: yaml: line 4: found character that cannot start any token'. After correcting the manifest, the user successfully applies it, and the pod 'nginx-pod' is created in a 'Running' state. The terminal output is as follows:

```
master@master-vm:~/Desktop/nginx-pod$ nano nginx-pod.yaml
master@master-vm:~/Desktop/nginx-pod$ kubectl apply -f nginx-pod.yaml
error: error parsing nginx-pod.yaml: error converting YAML to JSON: yaml: line 4: found character that cannot start any token
master@master-vm:~/Desktop/nginx-pod$ nano nginx-pod.yaml
master@master-vm:~/Desktop/nginx-pod$ kubectl apply -f nginx-pod.yaml
pod/nginx-pod created
master@master-vm:~/Desktop/nginx-pod$ kubectl get pods
NAME      READY   STATUS    RESTARTS   AGE
nginx-pod  1/1     Running   0           18s
master@master-vm:~/Desktop/nginx-pod$
```

## Q. Create and Use a ConfigMap



A terminal window titled 'master@master-vm: ~/Desktop/nginx-pod' showing the process of creating and using a ConfigMap. The user creates a ConfigMap 'app-config' with the value 'APP\_ENV=production' using 'kubectl create configmap app-config --from-literal=APP\_ENV=production'. They then create a pod 'nginx-config-pod' using a manifest file 'nginx-config-pod.yaml' that references the ConfigMap. The pod is successfully created and is in a 'Running' state. Finally, the user deletes the pod and the ConfigMap, and then attempts to get the ConfigMap, receiving a 'NotFound' error. The terminal output is as follows:

```
master@master-vm:~/Desktop/nginx-pod$ kubectl create configmap app-config --from-literal=APP_ENV=production
configmap/app-config created
master@master-vm:~/Desktop/nginx-pod$ kubectl get configmaps app-config -o yaml
apiVersion: v1
data:
  APP_ENV: production
kind: ConfigMap
metadata:
  creationTimestamp: "2025-03-13T11:55:56Z"
  name: app-config
  namespace: default
  resourceVersion: "76264"
  uid: d4bf4cec-14e4-4e21-bff5-c0ed27bb126a
master@master-vm:~/Desktop/nginx-pod$ nano nginx-config-pod.yaml
master@master-vm:~/Desktop/nginx-pod$ kubectl apply -f nginx-config-pod.yaml
pod/nginx-config-pod created
master@master-vm:~/Desktop/nginx-pod$ kubectl get pods
NAME            READY   STATUS    RESTARTS   AGE
nginx-config-pod  1/1     Running   0           14s
master@master-vm:~/Desktop/nginx-pod$ kubectl delete -f nginx-config-pod.yaml
pod "nginx-config-pod" deleted
master@master-vm:~/Desktop/nginx-pod$ kubectl delete configmap app-config
configmap "app-config" deleted
master@master-vm:~/Desktop/nginx-pod$ kubectl get pods
No resources found in default namespace.
master@master-vm:~/Desktop/nginx-pod$ kubectl get configmaps app-config -o yaml
Error from server (NotFound): configmaps "app-config" not found
master@master-vm:~/Desktop/nginx-pod$
```