Kubernetes Assignment-3

Exercise 5: Create and Use a Secret

Step 1: Create a Secret for database credentials

- kubectl create secret generic db-secret --from-literal=DB_USER=admin --from-literal=DB_PASS=password123

Step 2: Verify the Secret

- kubectl get secrets
- kubectl describe secret db-secret

Step 3: Create a Pod that uses the Secret (`nginx-secret-pod.yaml`):

Step 4: Deploy the pod

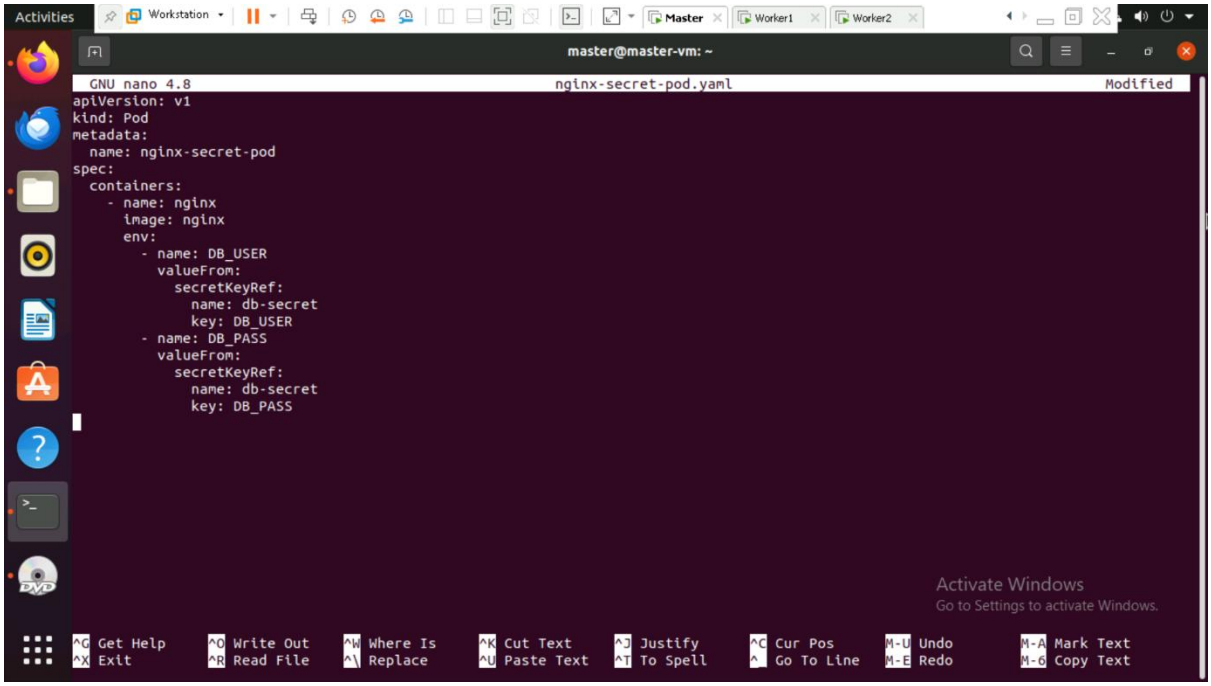
- kubectl apply -f nginx-secret-pod.yaml

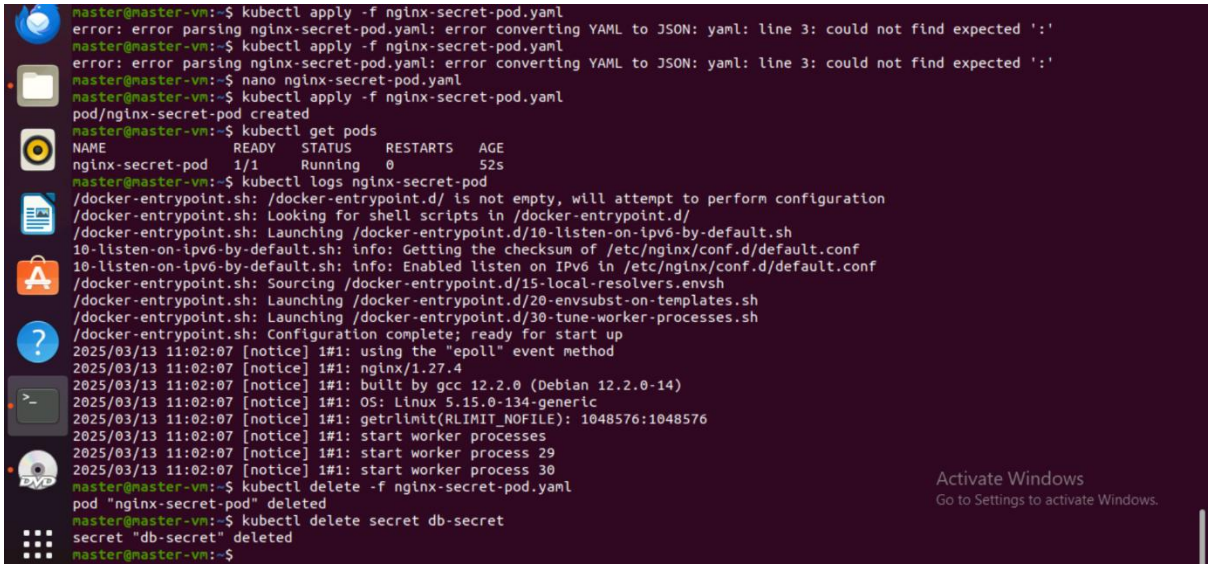
Step 5: Check the pod and logs

- kubectl get pods
- kubectl logs nginx-secret-pod

Step 6: Delete the pod and Secret

- kubectl delete -f nginx-secret-pod.yaml
- kubectl delete secret db-secret





Exercise 6: Create and Expose a Service

Step 1: Create a deployment

- kubectl create deployment webapp --image=nginx

Step 2: Expose the deployment using a service

- kubectl expose deployment webapp --type=NodePort --port=80

Step 3: Get service details

- kubectl get svc webapp

Step 4: Access the service (Minikube users):

- minikube service webapp --url

Step 5: Delete the service and deployment:

- kubectl delete svc webapp
- kubectl delete deployment webapp