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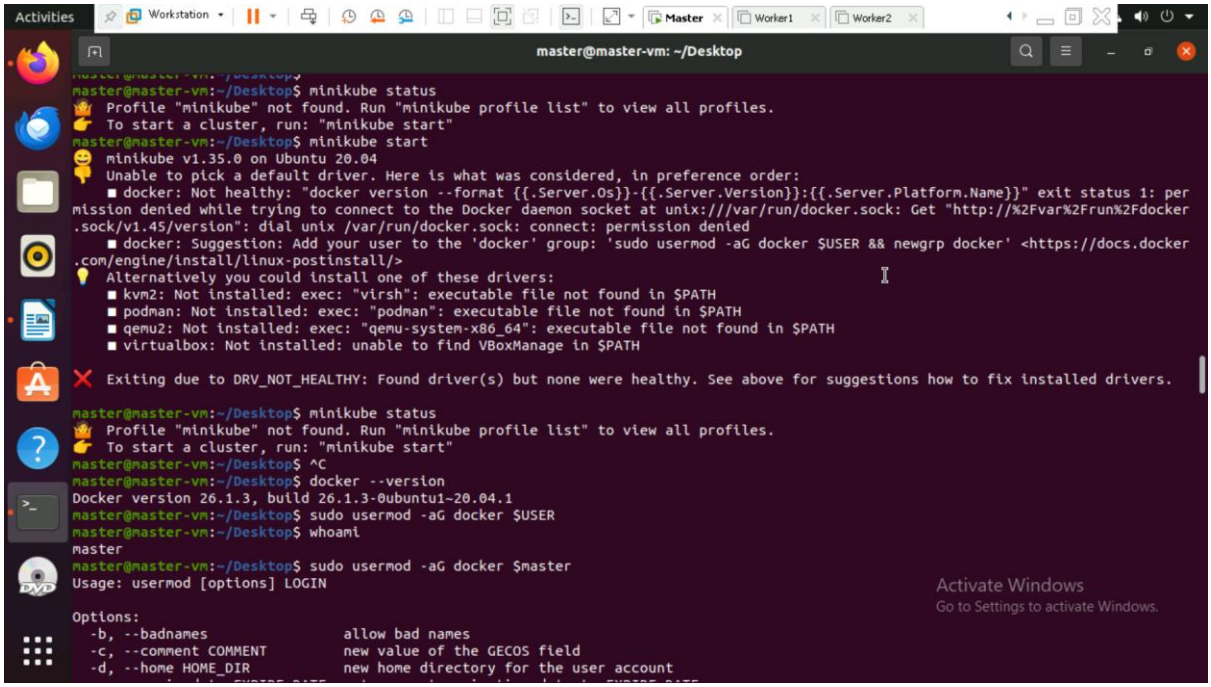
KUBERNETES ASSIGNMENT -1

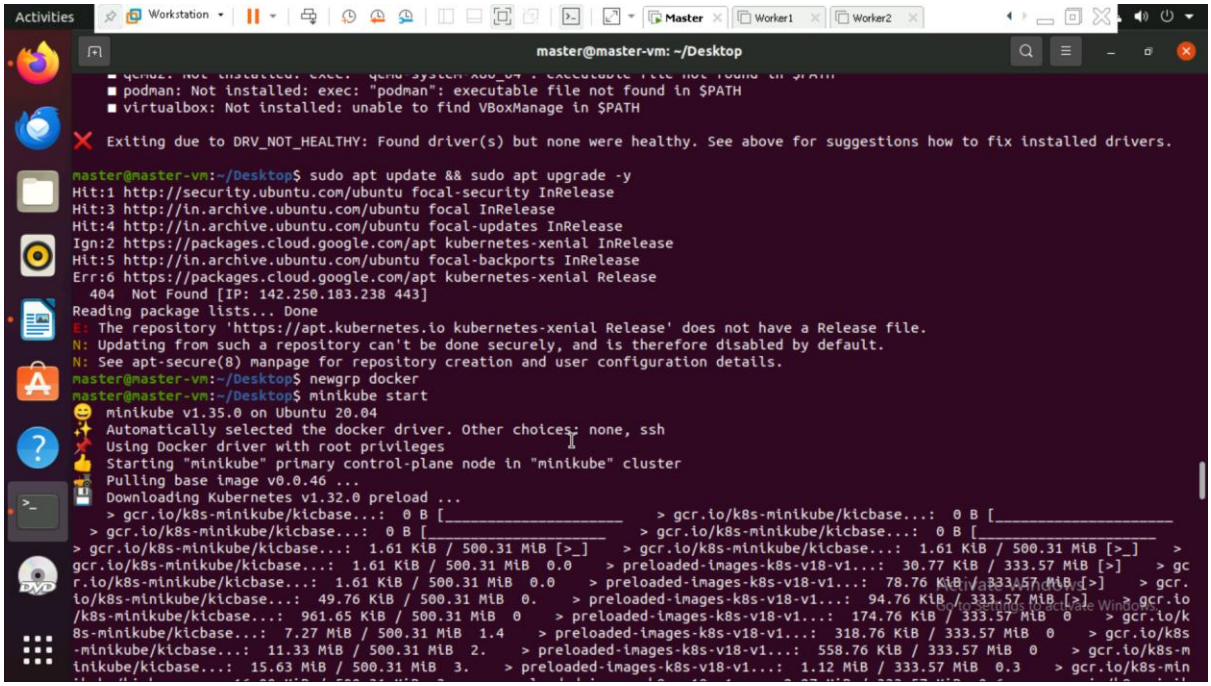
Exercise 1: Deploy an Nginx Pod

Objective: Deploy a simple Nginx pod and access it.

1. **Start a Kubernetes cluster (Minikube or other cluster):**

```
minikube start
```





2. **Create an Nginx pod:**

```
kubectl run nginx-pod --image=nginx --restart=Never
```

3. **Verify the pod is running:**

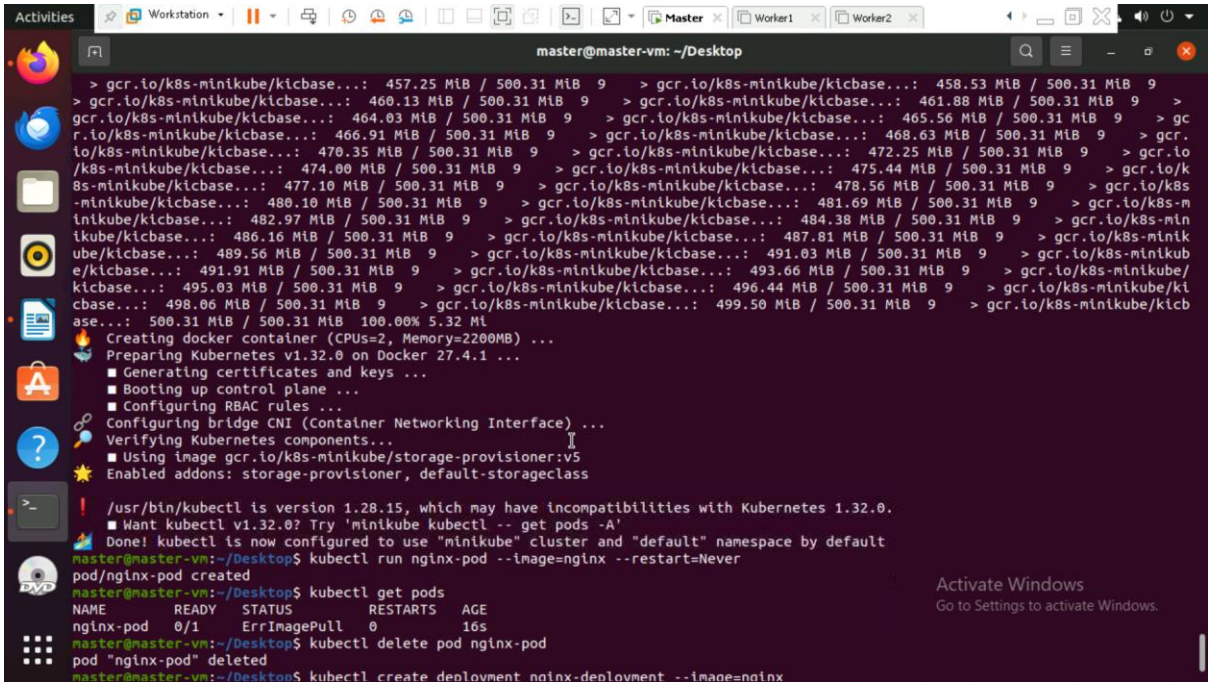
```
kubectl get pods
```

4. **Check pod details:**

```
kubectl describe pod nginx-pod
```

5. **Delete the pod:**

```
kubectl delete pod nginx-pod
```



Exercise 2: Create an Nginx Deployment and Scale It

Objective: Create an Nginx deployment and scale it up.

Steps & Commands:

1. **Create a deployment with Nginx:**

   ```
   kubectl create deployment nginx-deployment --image=nginx
   ```

2. **Check the deployment:**

   ```
   kubectl get deployments
   ```

3. **Scale the deployment to 3 replicas:**

   ```
   kubectl scale deployment nginx-deployment --replicas=3
   ```

4. **Check the running pods:**

```
kubectl get pods -o wide
```

5. **Delete the deployment:**

```
kubectl delete deployment nginx-deployment
```