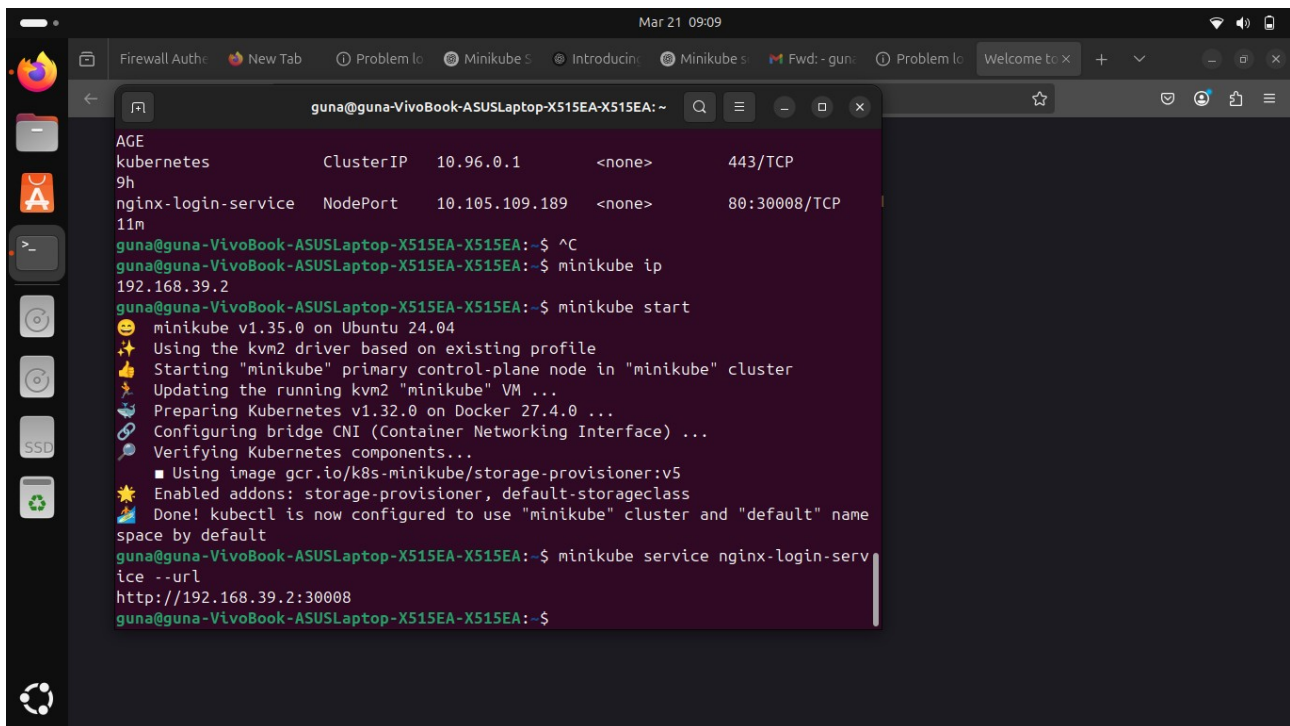


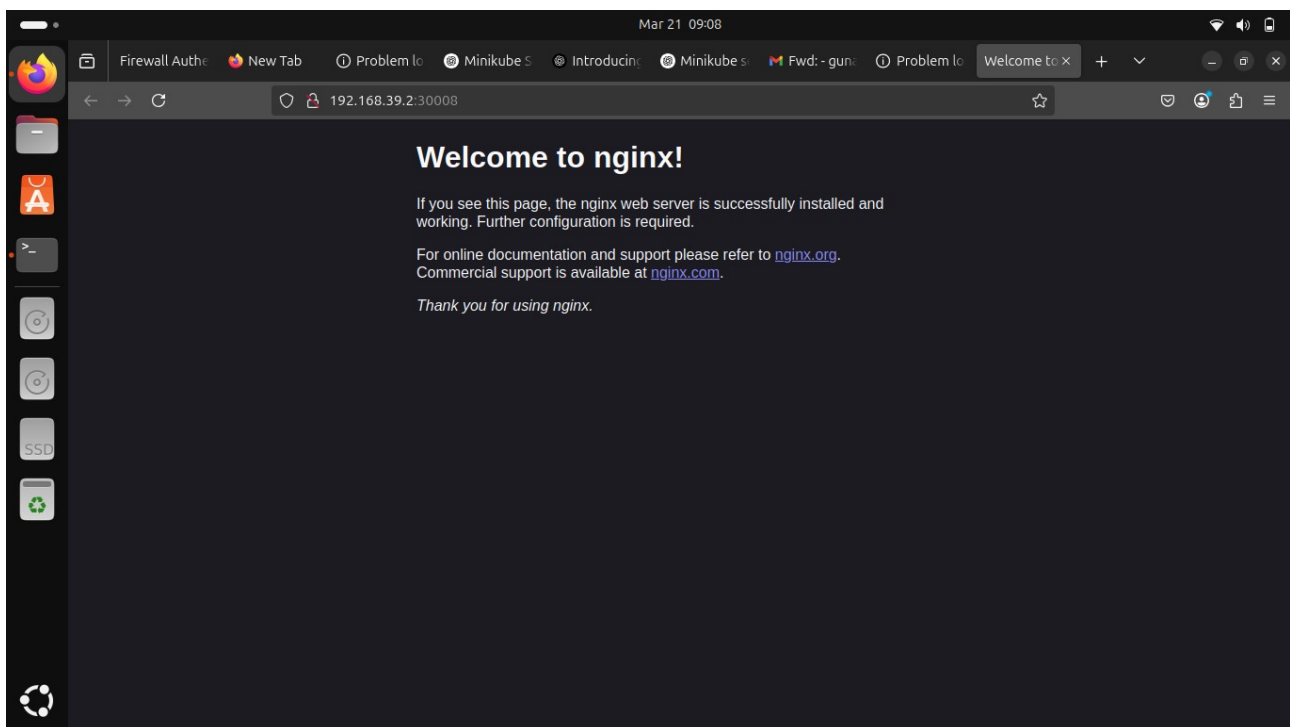
TASK-3

MINIKUBE PROCESS



A terminal window on a Linux system showing the installation and configuration of Minikube. The user runs `minikube ip` to get the IP address, then `minikube start` to initialize the cluster. The output shows the cluster is created using the `kvm2` driver. Finally, the user runs `minikube service nginx-login-service --url http://192.168.39.2:30008` to expose the service.

```
gun@guna-VivoBook-ASUSLaptop-X515EA-X515EA: ~  
AGE  
kubernetes      ClusterIP  10.96.0.1    <none>      443/TCP  
9h  
nginx-login-service NodePort  10.105.109.189 <none>      80:30008/TCP  
11m  
gun@guna-VivoBook-ASUSLaptop-X515EA-X515EA:~$ ^C  
gun@guna-VivoBook-ASUSLaptop-X515EA-X515EA:~$ minikube ip  
192.168.39.2  
gun@guna-VivoBook-ASUSLaptop-X515EA-X515EA:~$ minikube start  
🐳 minikube v1.35.0 on Ubuntu 24.04  
🌟 Using the kvm2 driver based on existing profile  
👉 Starting "minikube" primary control-plane node in "minikube" cluster  
🔄 Updating the running kvm2 "minikube" VM ...  
🔄 Preparing Kubernetes v1.32.0 on Docker 27.4.0 ...  
🔗 Configuring bridge CNI (Container Networking Interface) ...  
🔍 Verifying Kubernetes components...  
   ■ Using image gcr.io/k8s-minikube/storage-provisioner:v5  
🌟 Enabled addons: storage-provisioner, default-storageclass  
👉 Done! kubectl is now configured to use "minikube" cluster and "default" name  
space by default  
gun@guna-VivoBook-ASUSLaptop-X515EA-X515EA:~$ minikube service nginx-login-serv  
ice --url  
http://192.168.39.2:30008  
gun@guna-VivoBook-ASUSLaptop-X515EA-X515EA:~$
```



DEPLOYMENT CODE:

```
    apiVersion: apps/v1
kind: Deployment
metadata:
  name: nginx-login
spec:
  replicas: 1
  selector:
    matchLabels:
      app: nginx-login
  template:
    metadata:
      labels:
        app: nginx-login
    spec:
      containers:
        - name: nginx-login
          image: nginx:latest # Public Nginx image from Docker Hub
          ports:
            - containerPort: 80
---
apiVersion: v1
kind: Service
metadata:
  name: nginx-login-service
spec:
  type: NodePort
  selector:
    app: nginx-login
  ports:
    - protocol: TCP
      port: 80
      targetPort: 80
      nodePort: 30008
```