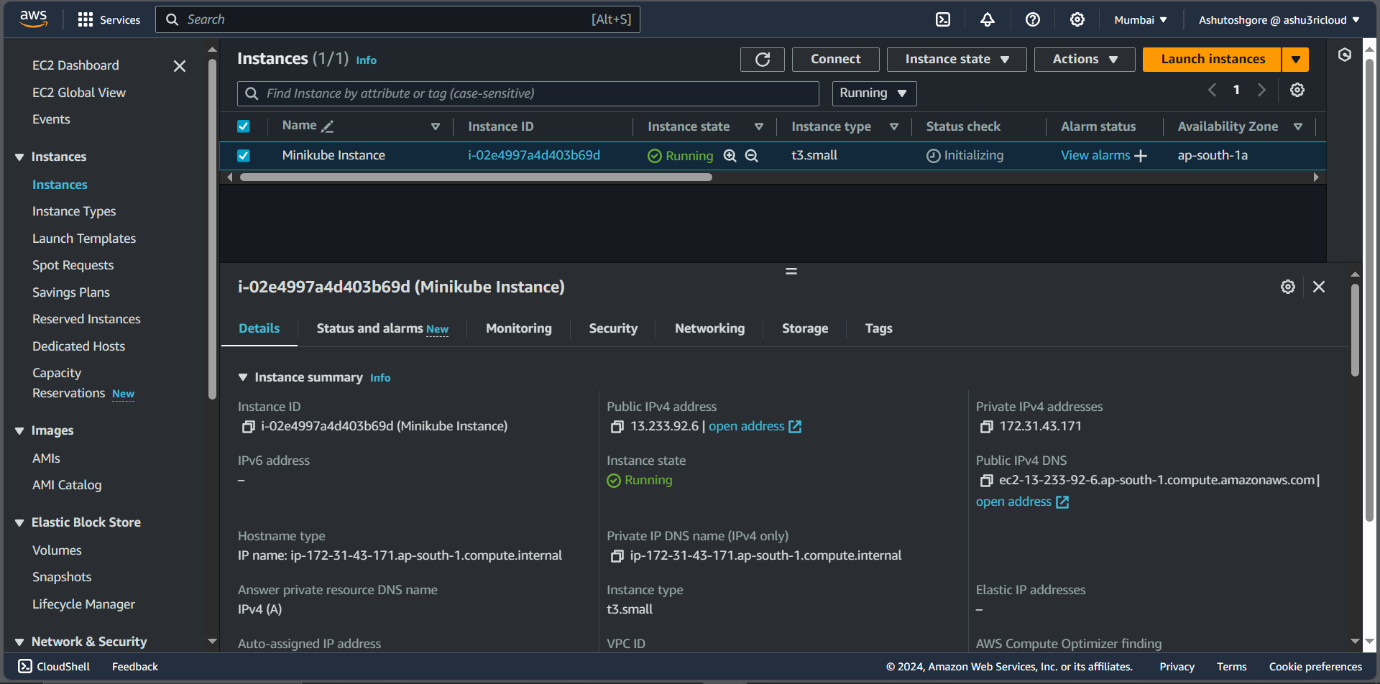
🚀 Project Update: Installing Kubernetes Using Minikube on AWS 🚀

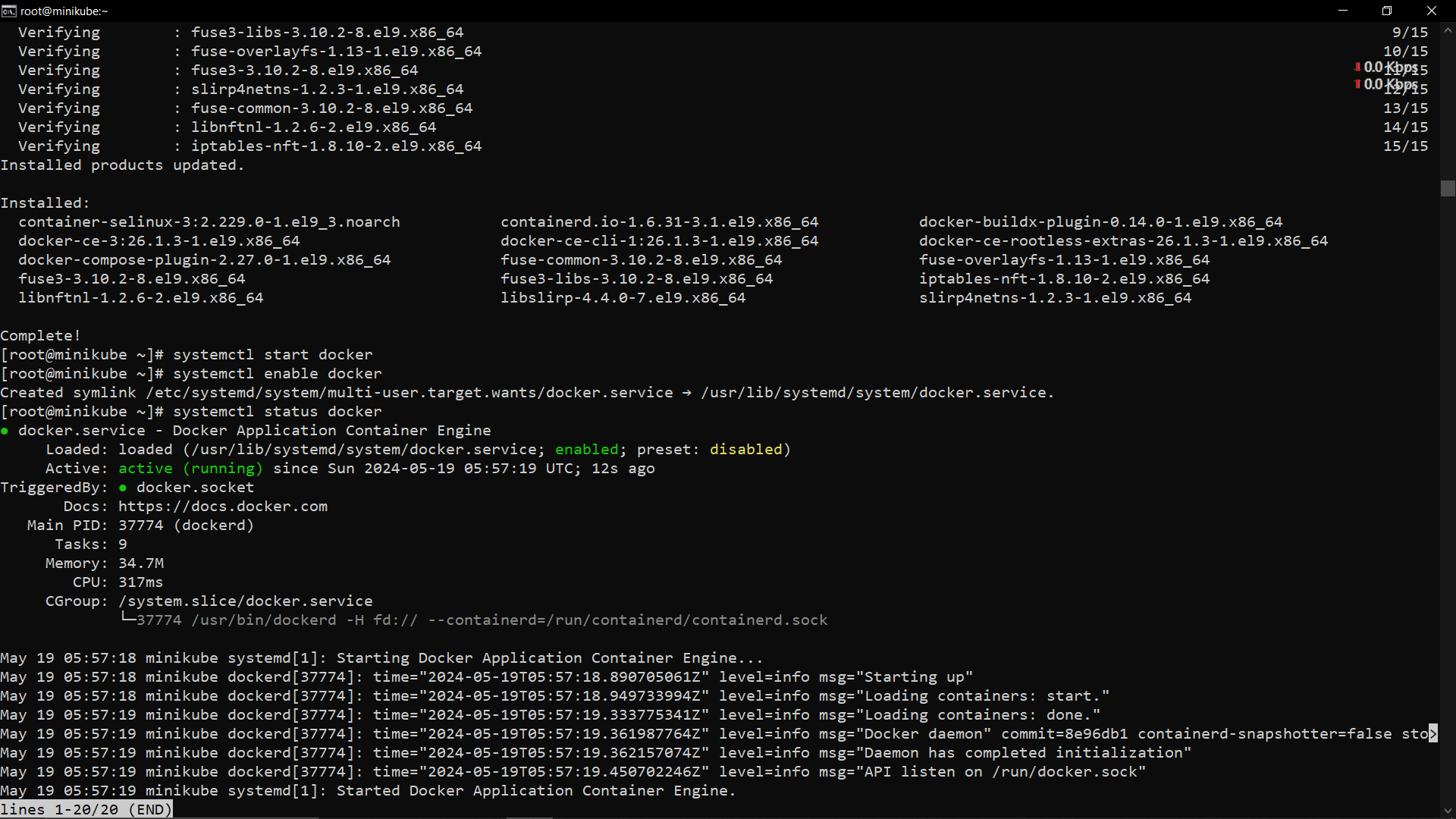
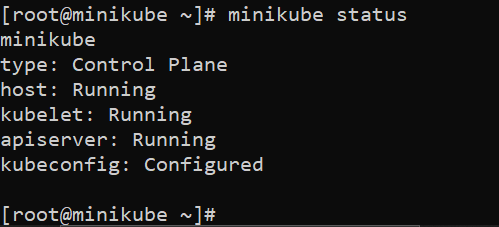
I'm excited to share my latest project where I successfully installed Kubernetes using Minikube on an AWS t3.small RHEL 9 instance. Here's a detailed guide on how I accomplished this, including creating a YAML file for Nginx replicas and scaling them.

1. Launching the AWS Instance:

* Instance Type: AWS t3.small
* OS: RHEL 9



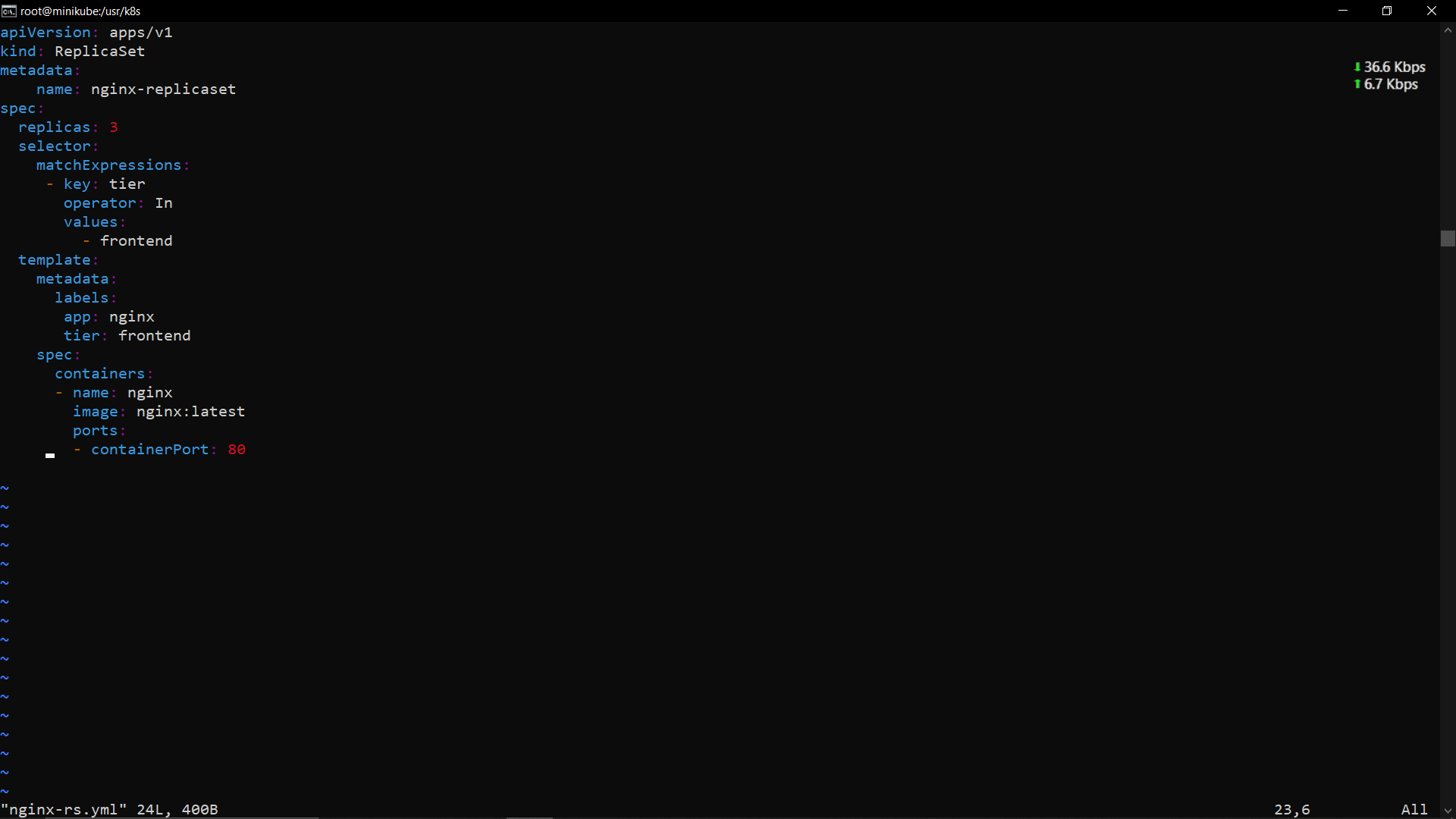
1. Setting Up the Environment:

* Installing Docker
  + yum install -y yum-utils
  + yum-config-manager --add-repo <https://download.docker.com/linux/rhel/docker-ce.repo>
  + yum install docker-ce docker-ce-cli containerd.io docker-buildx-plugin docker-compose-plugin
  + systemctl start docker
  + systemctl enable docker
  + systemctl status docker
  + 
* Installing Vim
  + yum install vim -y
* Installing Minikube
  + curl -LO https://storage.googleapis.com/minikube/releases/latest/minikube-linux-amd64
  + install minikube-linux-amd64 /usr/local/bin/minikube && rm minikube-linux-amd64
  + minikube start --force
  + 

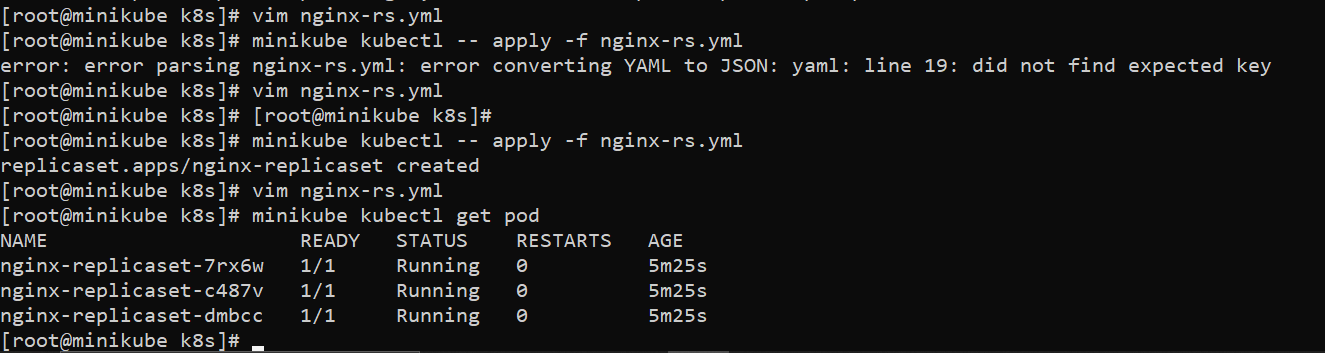
1. Starting Minikube

* Starting Minikube with Docker Driver
  + minikube start --force (here --force is used to use a docker with root privileges. This command will automatically pick docker)

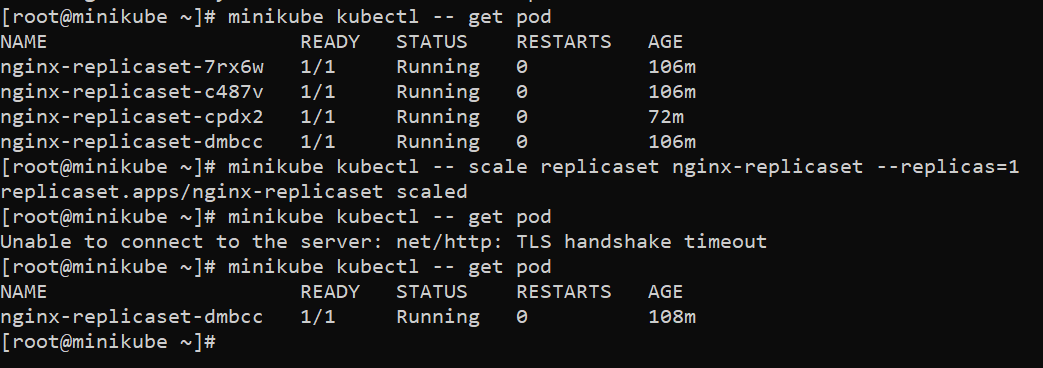
1. Creating the YAML File:

* vim nginx-rs.yaml
  + 

1. Deploying Nginx:

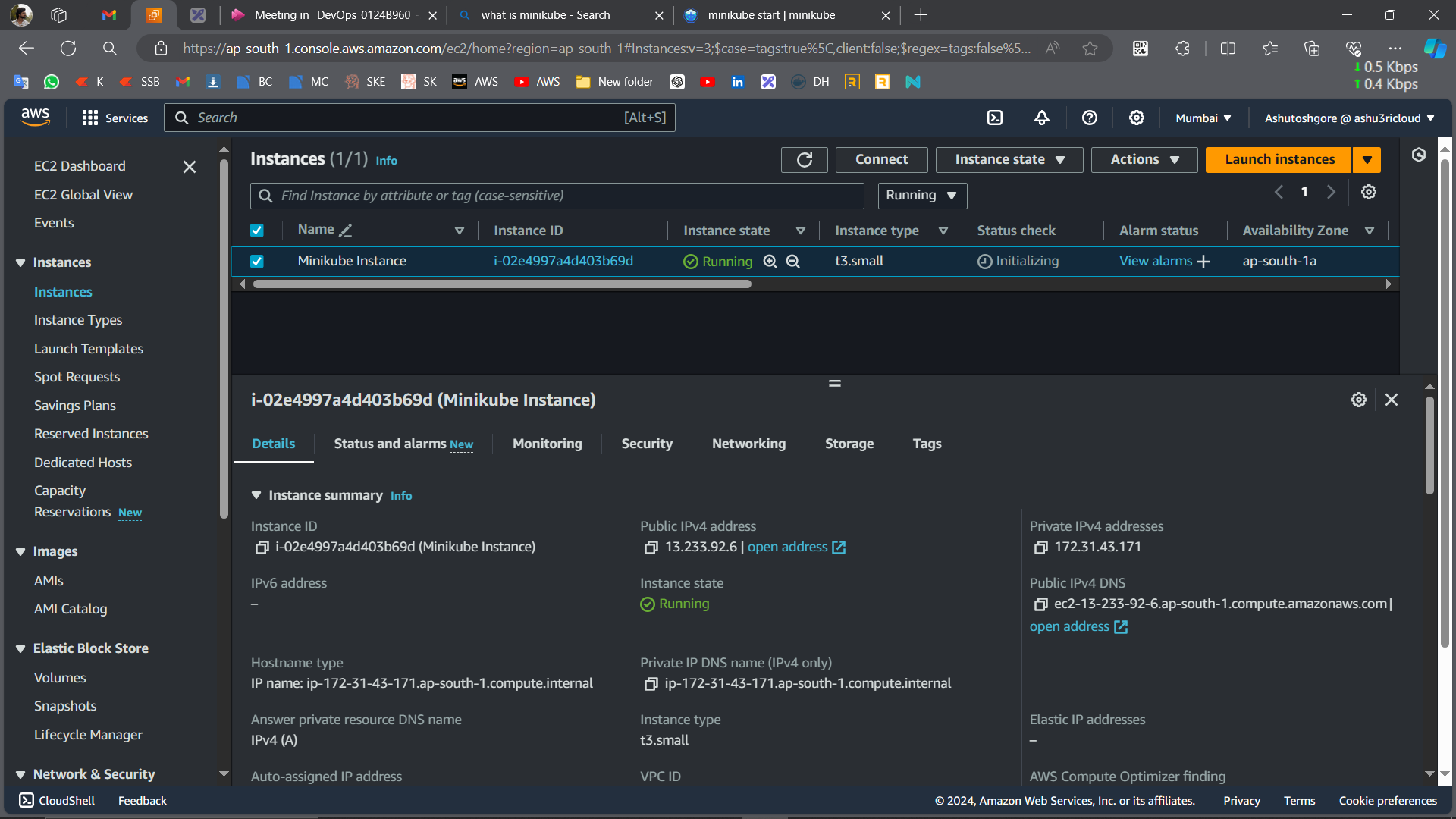
* Applying the YAML File
  + minikube kubectl -- apply -f nginx-rs.yml
* Verifying the Deployment
  + minikube kubectl get pod
* 

1. Scaling the Deployment:

* Scaling to 4 Replicas, and again scaling out to 1
  + Scaling to 4
    - minikube kubectl -- scale replicaset nginx-replicaset --replicas=4
  + scaling out to 1
    - minikube kubectl -- scale replicaset nginx-replicaset --replicas=1
* Verifying the Scaling
  + minikube kubectl get pod
* 

1. Success!

* Seeing the Nginx replicas scale seamlessly was incredibly rewarding. This project not only enhanced my understanding of Kubernetes but also demonstrated the power and flexibility of cloud infrastructure.



--Minikube installation

-First install docker

yum install -y yum-utils

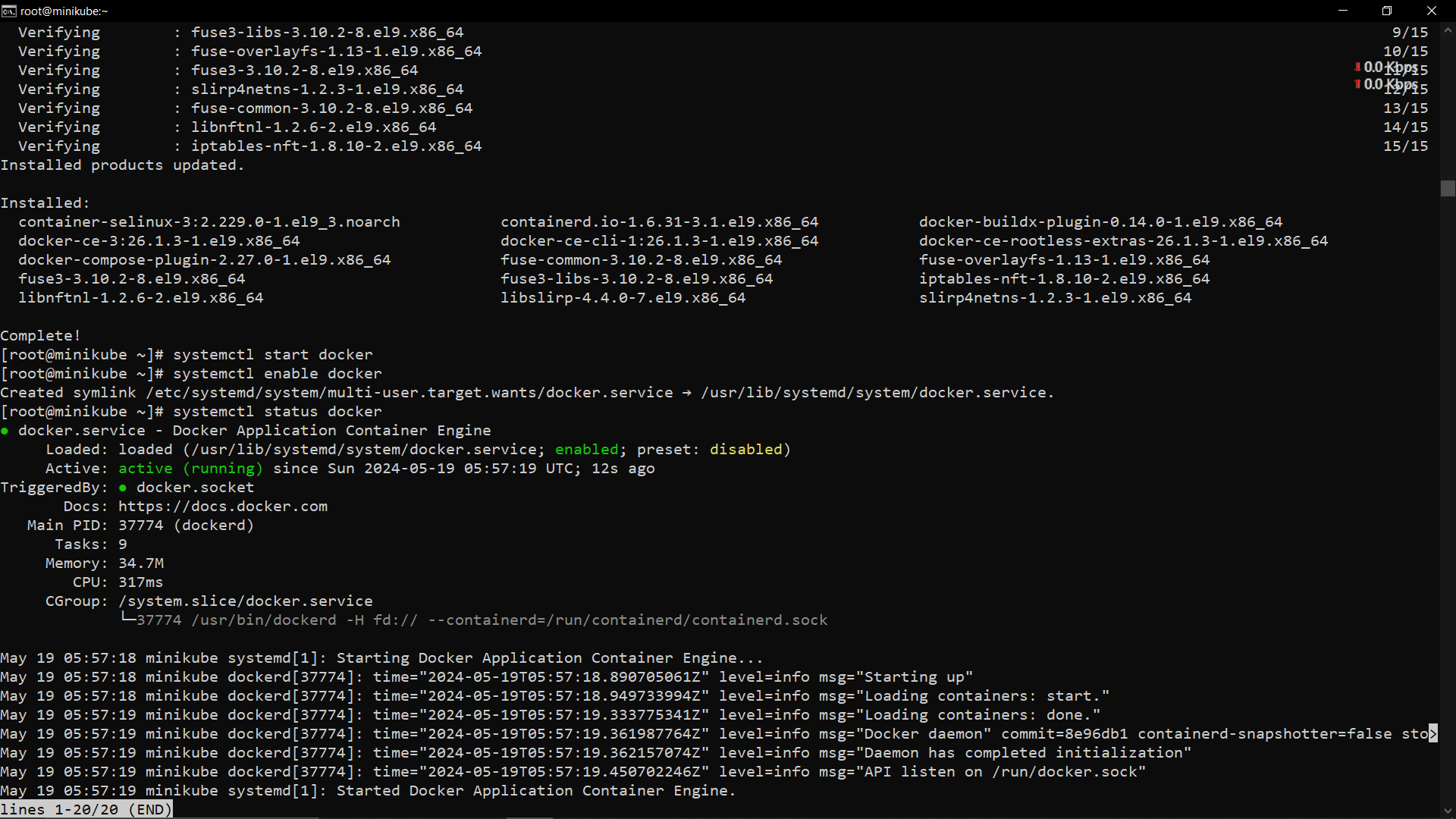
yum-config-manager --add-repo <https://download.docker.com/linux/rhel/docker-ce.repo>

yum install docker-ce docker-ce-cli containerd.io docker-buildx-plugin docker-compose-plugin

systemctl start docker

systemctl enable docker

systemctl status docker

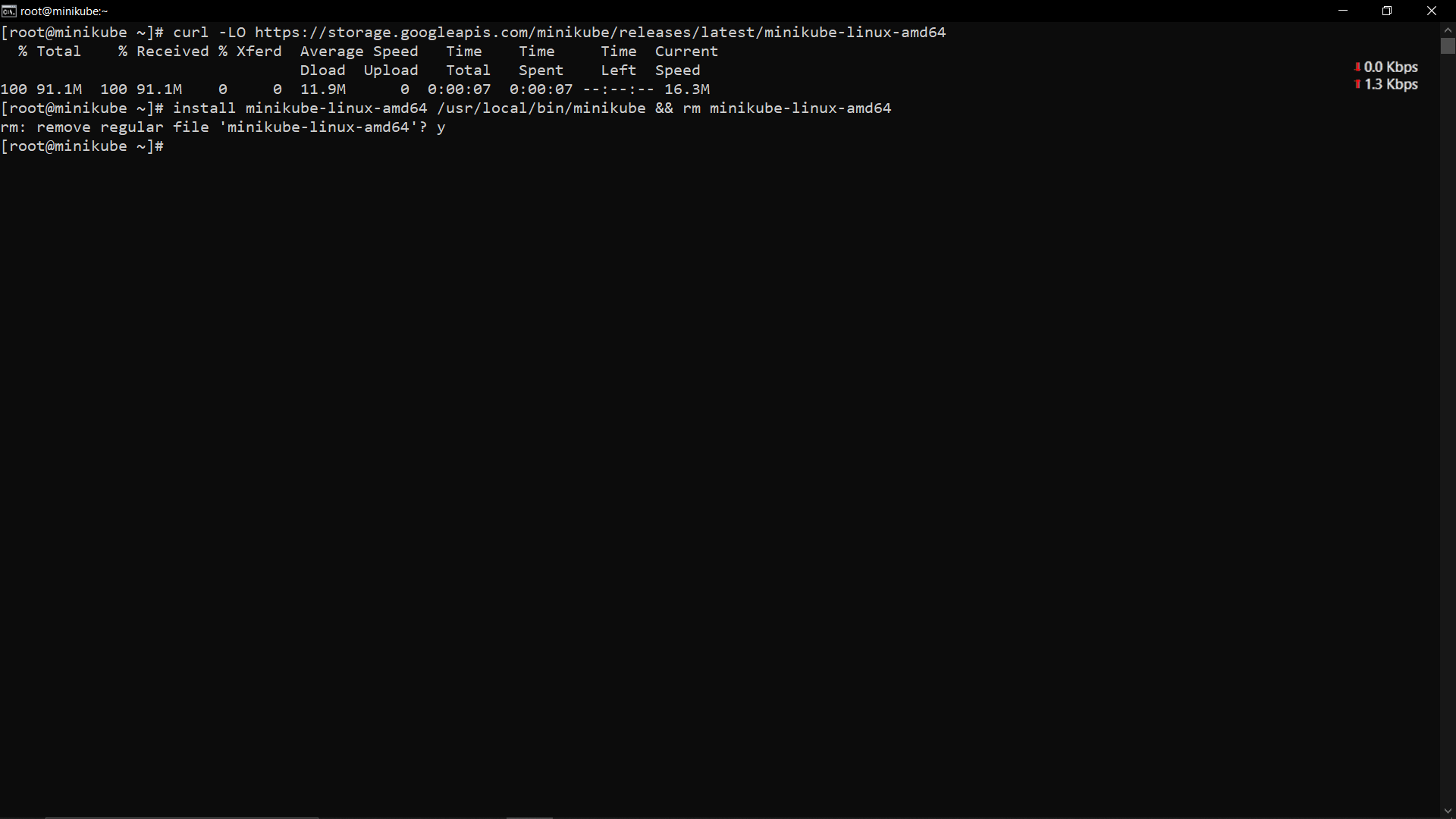


-Install vim

-install minikube

curl -LO https://storage.googleapis.com/minikube/releases/latest/minikube-linux-amd64

install minikube-linux-amd64 /usr/local/bin/minikube && rm minikube-linux-amd64

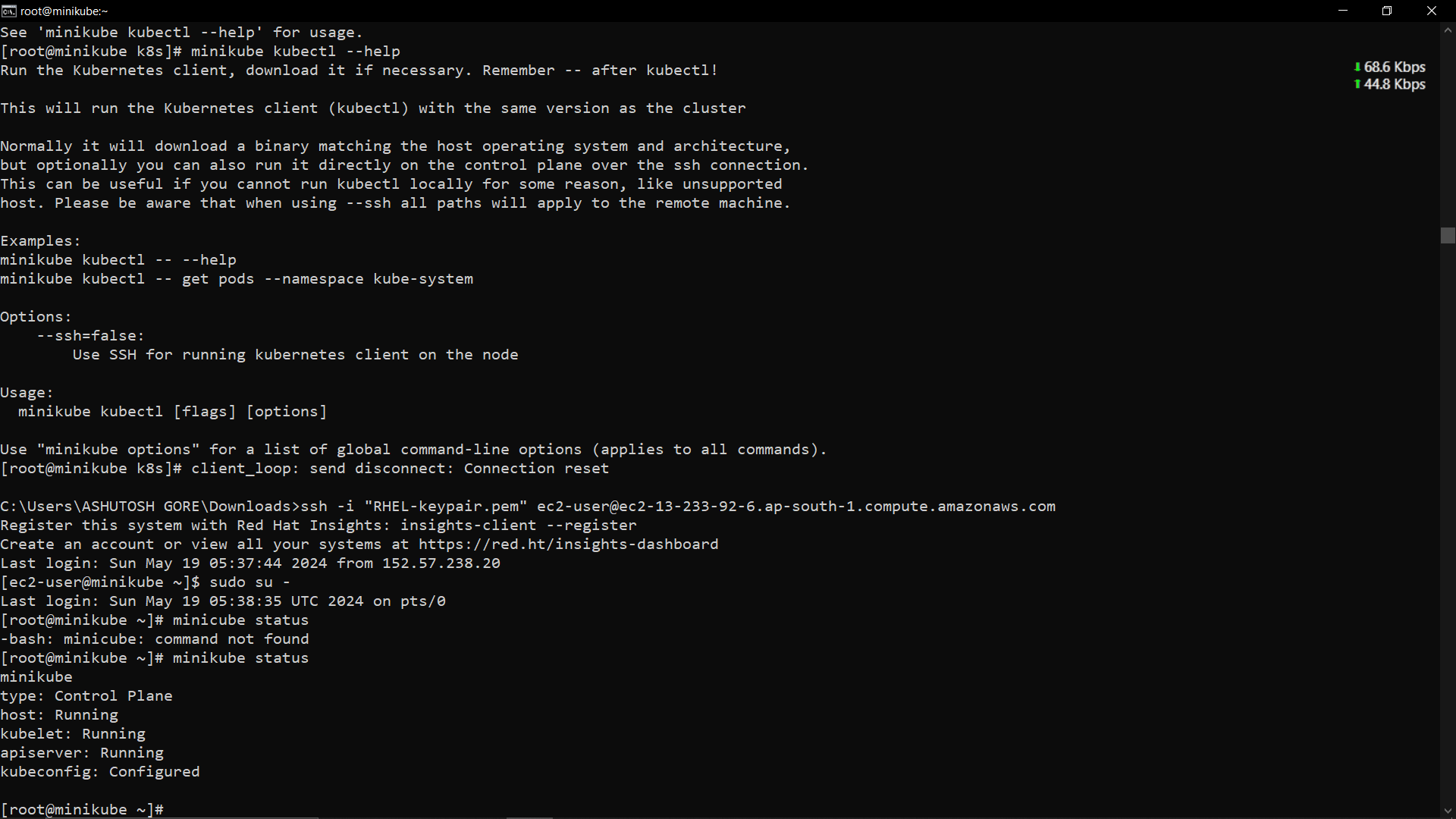


minikube start --force (here --force is used to use a docker with root privileges)

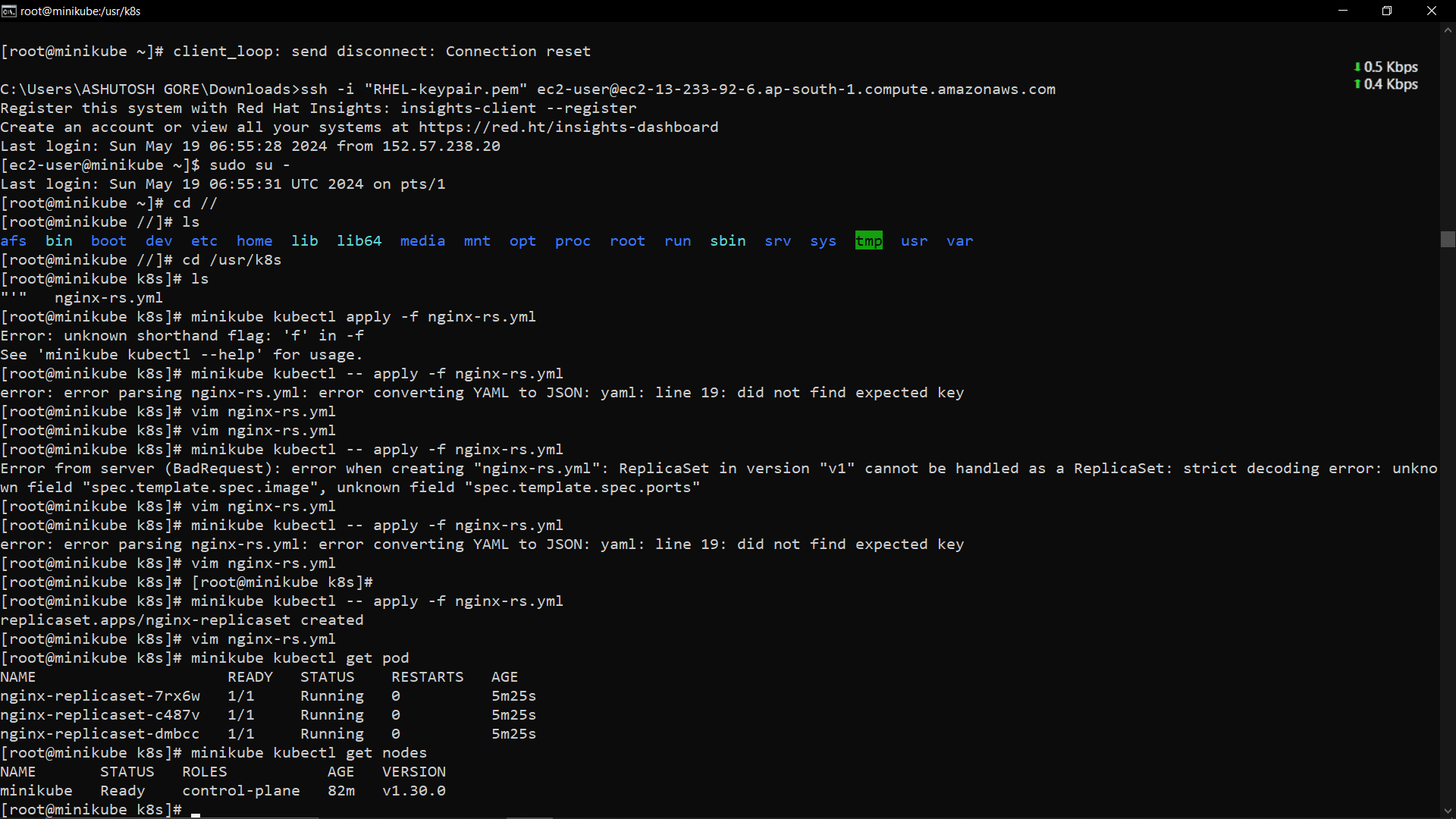
minikube kubectl -- get po -A

minikube dashboard

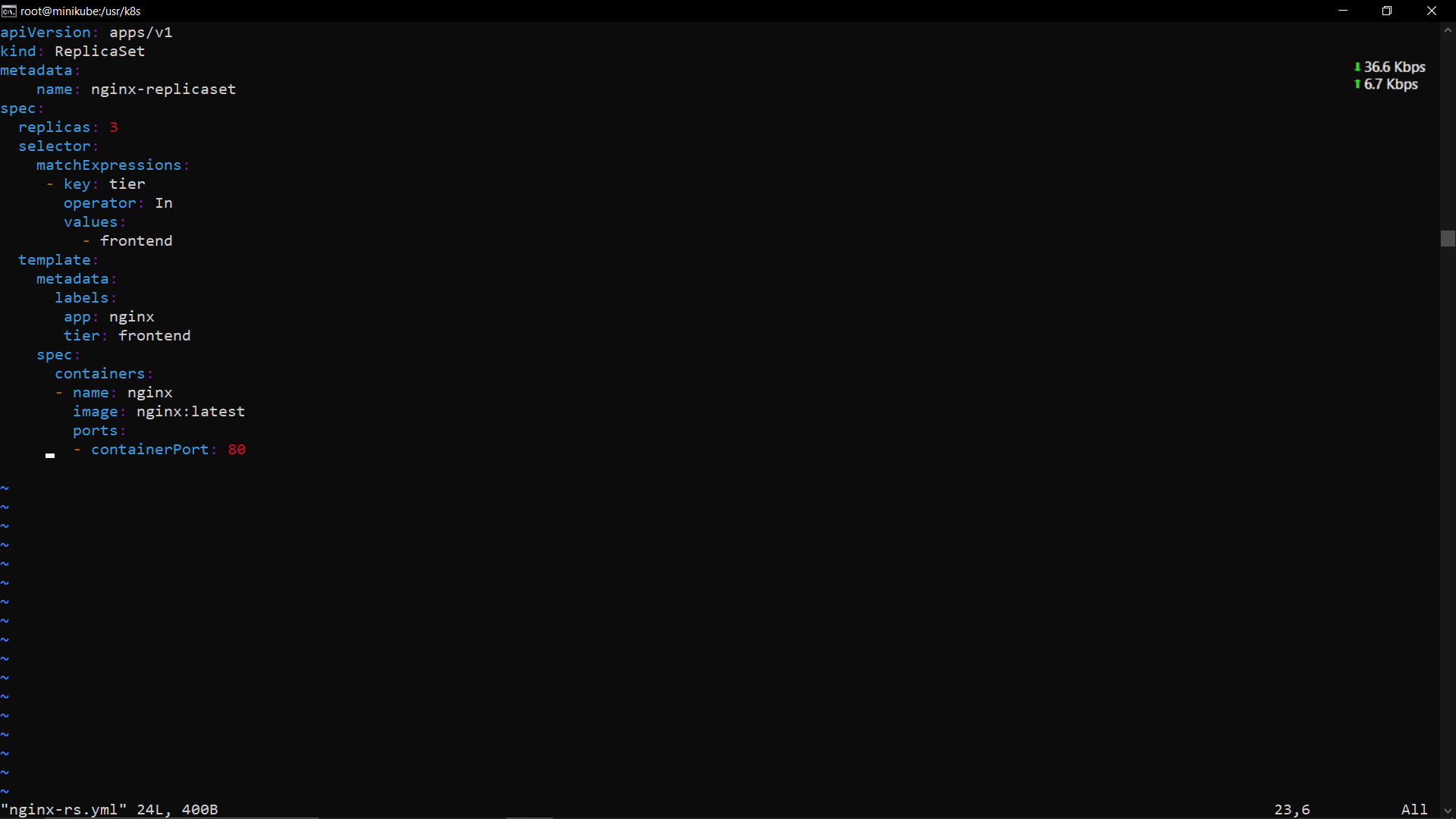
minikube status



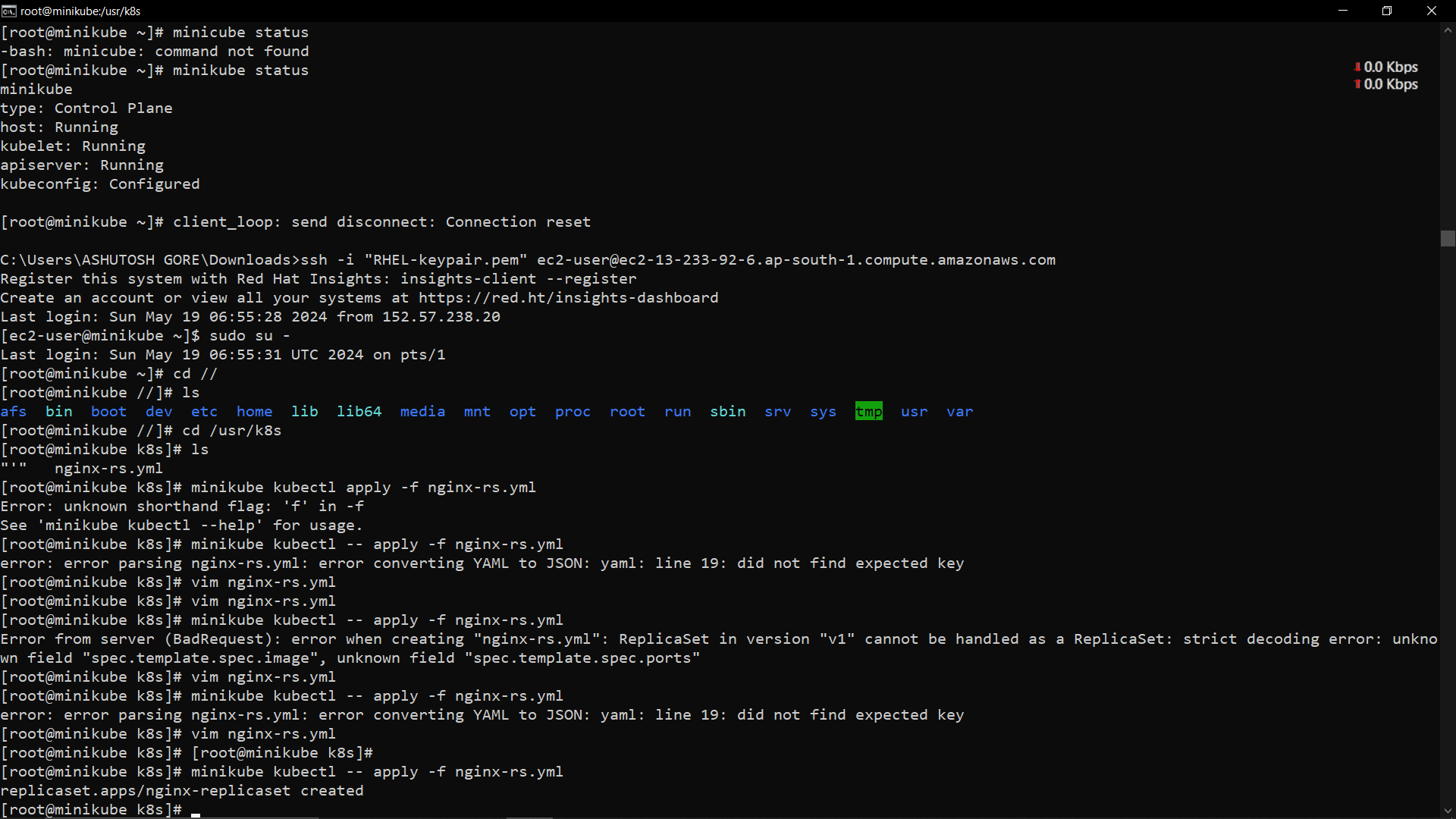
Minikube node



* Create a directory name as ‘K8s’
* Make vim Yamal file

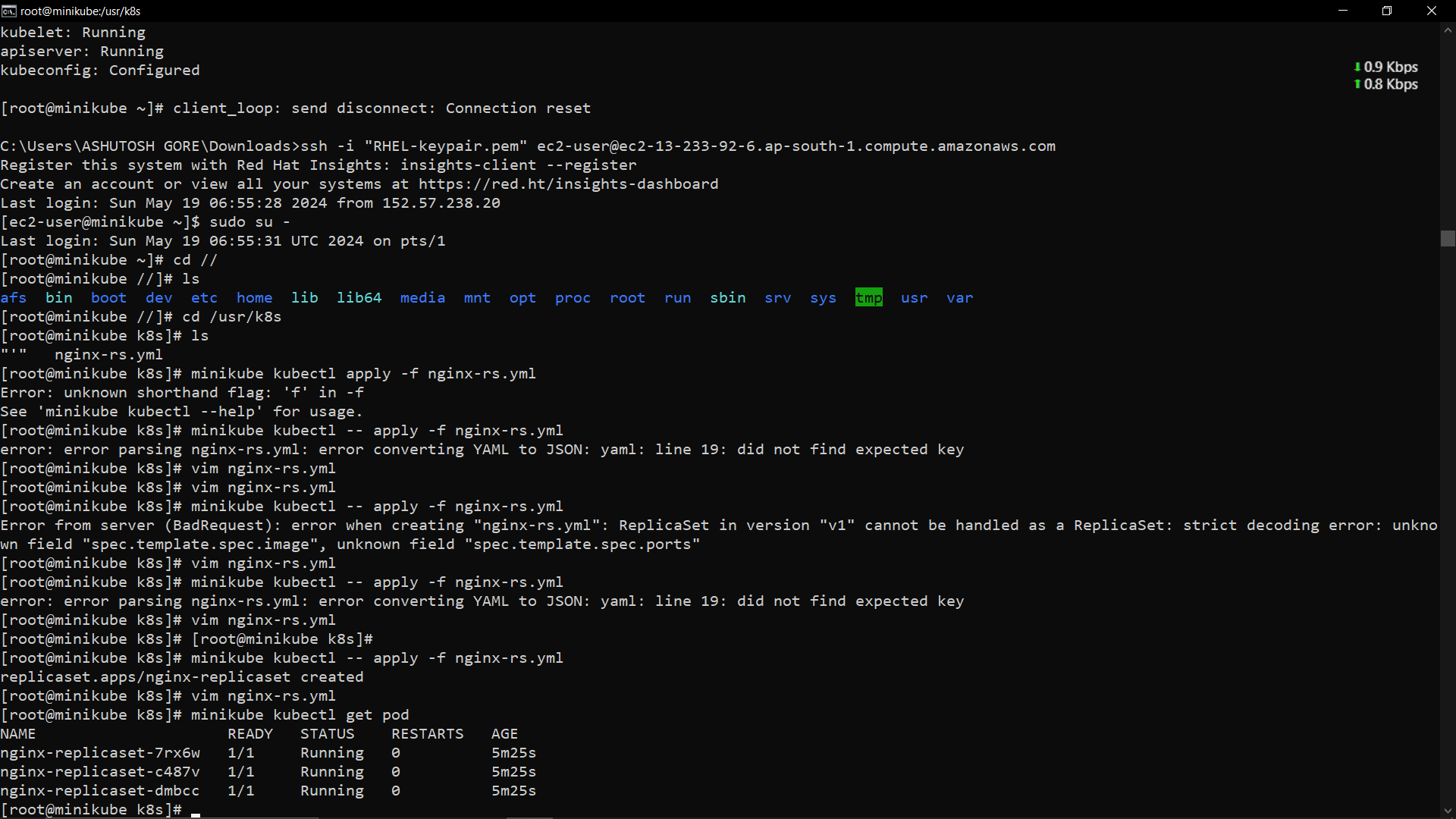


* Yaml file run successfully

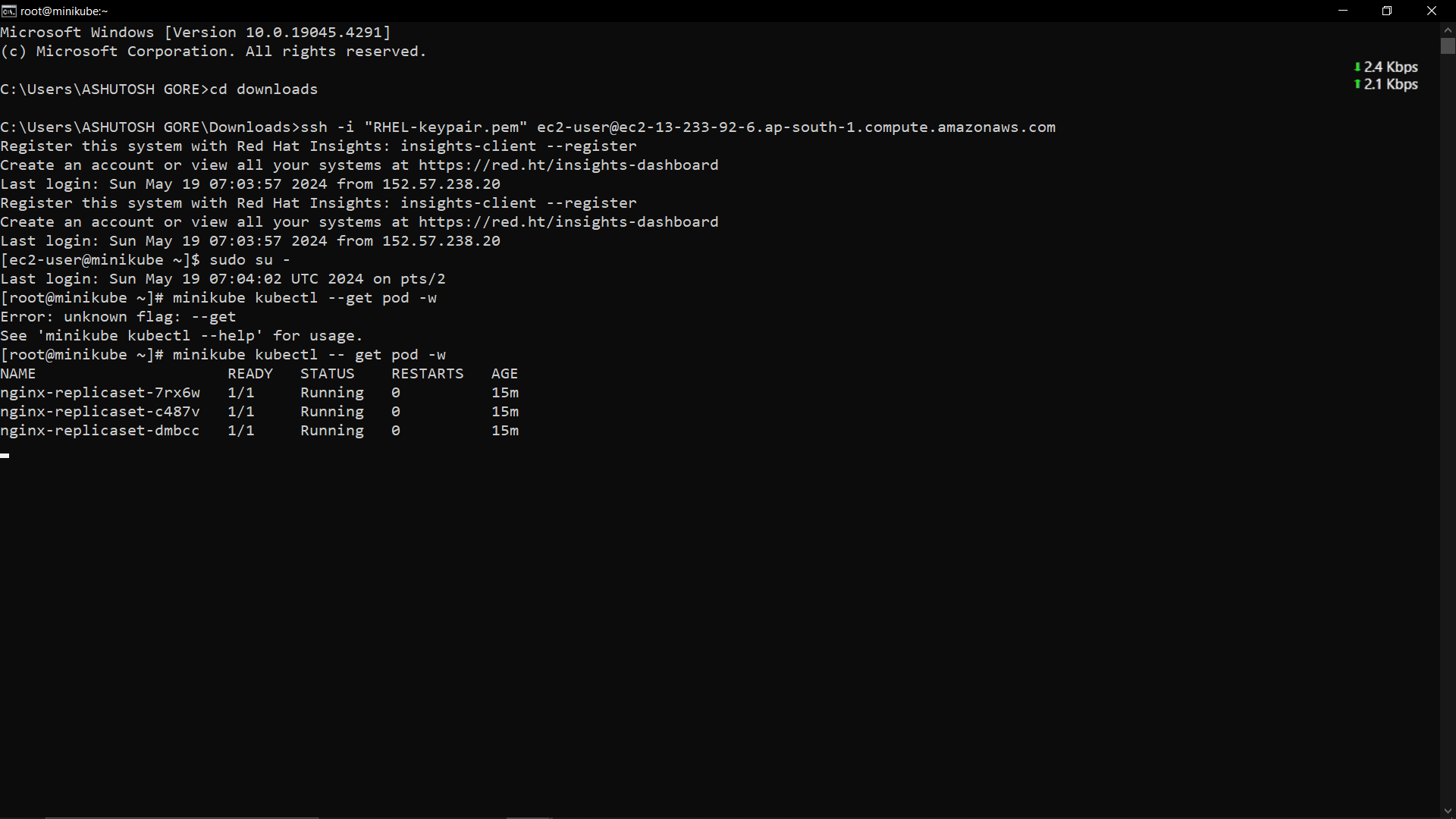


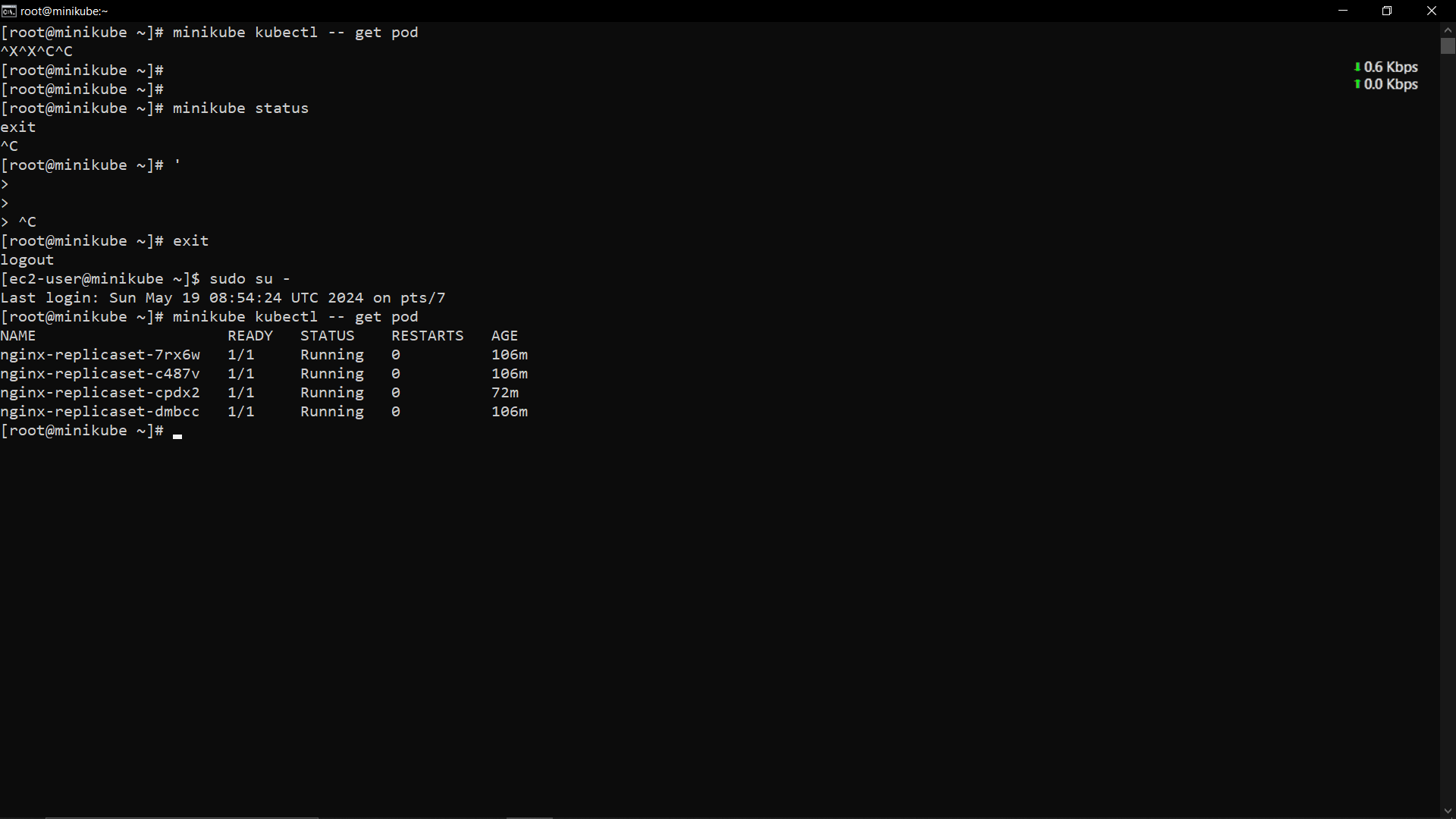
* RS

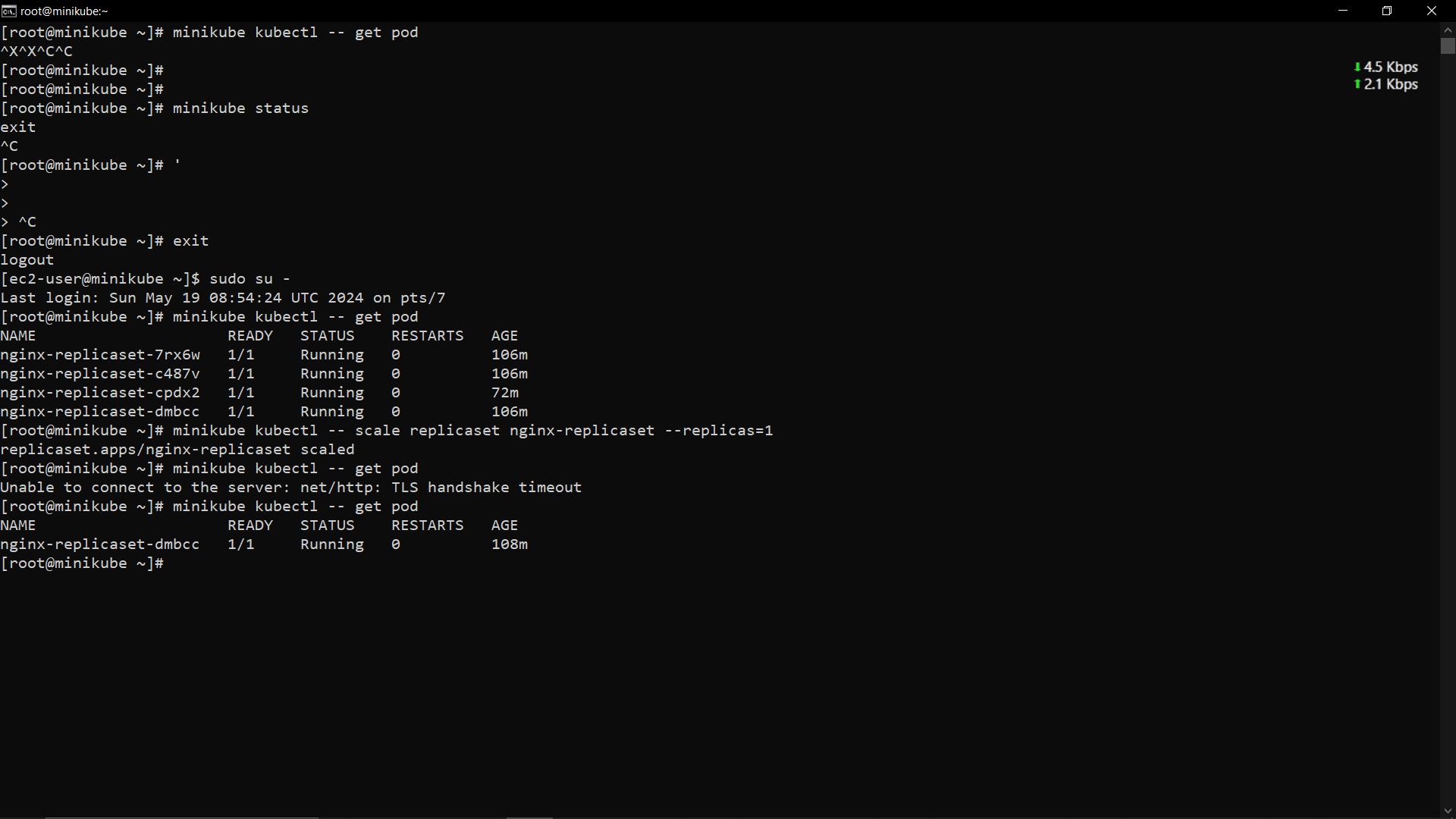
3 pods are get created



minikube kubectl -- get pod -w: -







minikube kubectl -- scale replicaset nginx-replicaset --replicas=4