**`**

CAPSTONE PROJECT  
Cloud Devops Final Project - Infrastructure Deployment

The document has two sections:

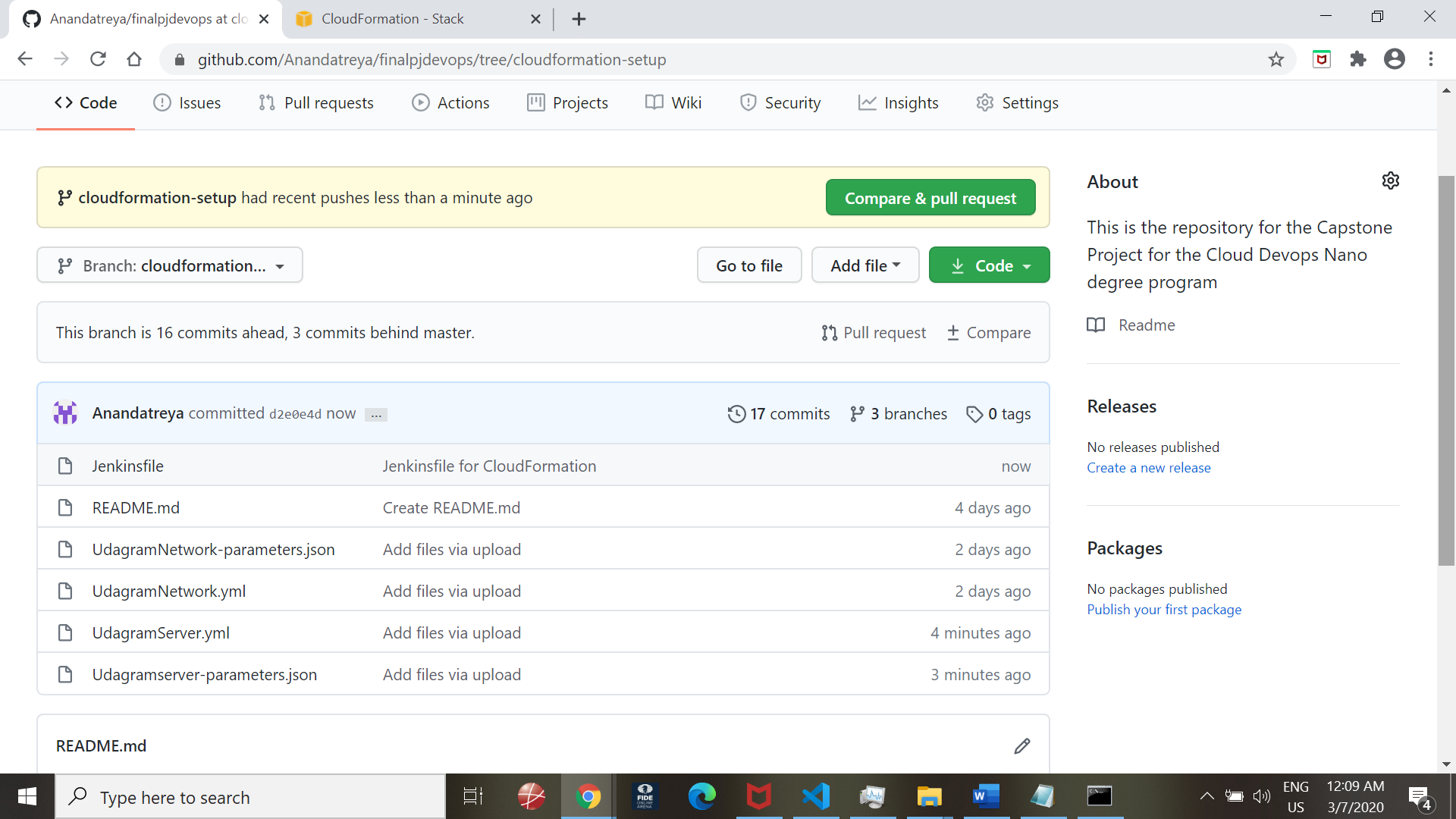
Cloud Formation scripts & Setup Kubernetes cluster on each of the EC2 Instances

Section 1 describes the Cloud Formation scripts used to deploy the EC2 instances for the Blue and Green Deployment.

Section 2 of the document explains how to setup and configure a Kubernetes cluster.

1. **CLOUD FORMATION SCRIPTS:**

Setup GitHub repository (branch) called Cloudformation-setup. This is a sub-branch under the master branch

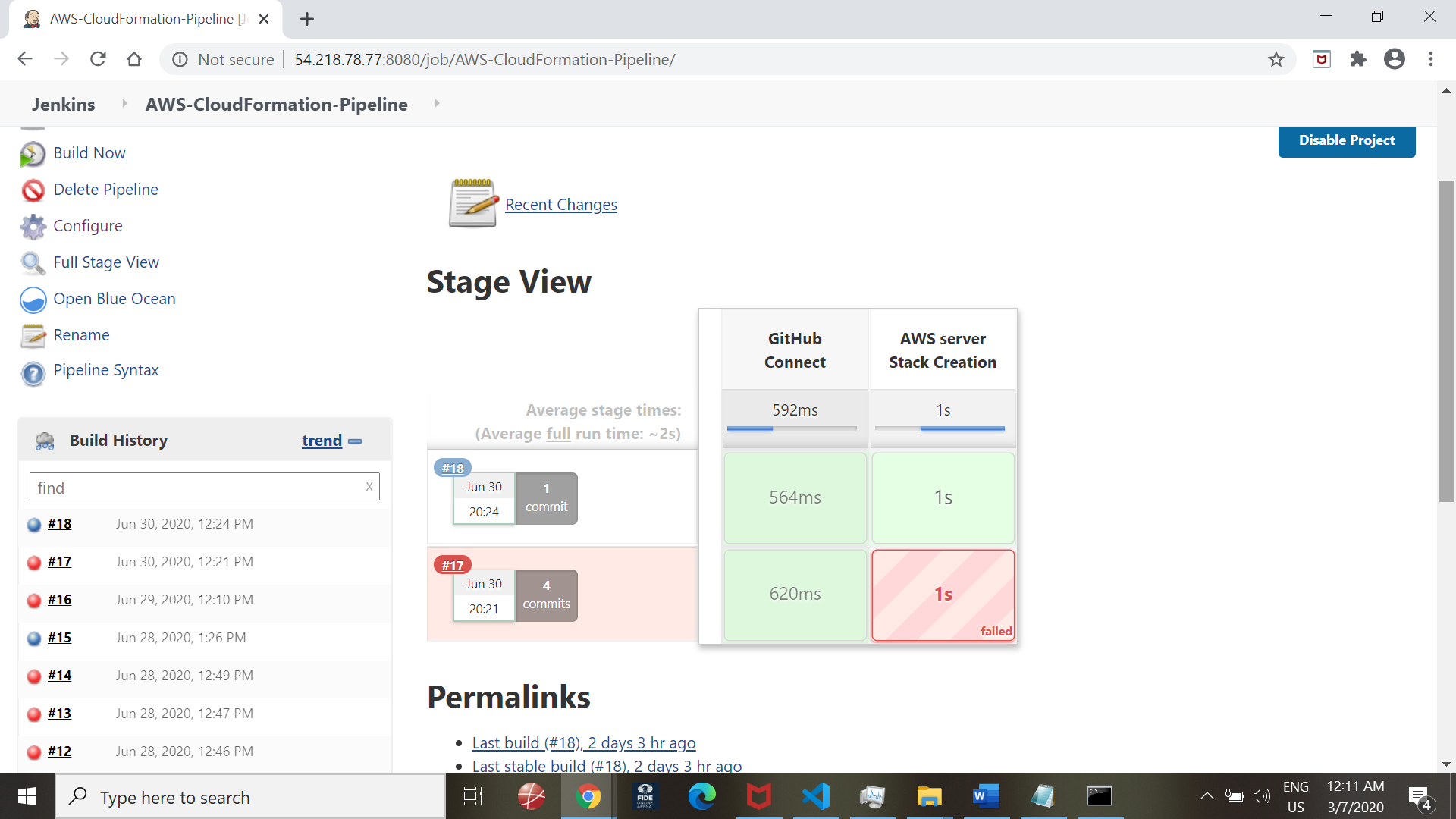


Cloudformation script will have two parameter files:

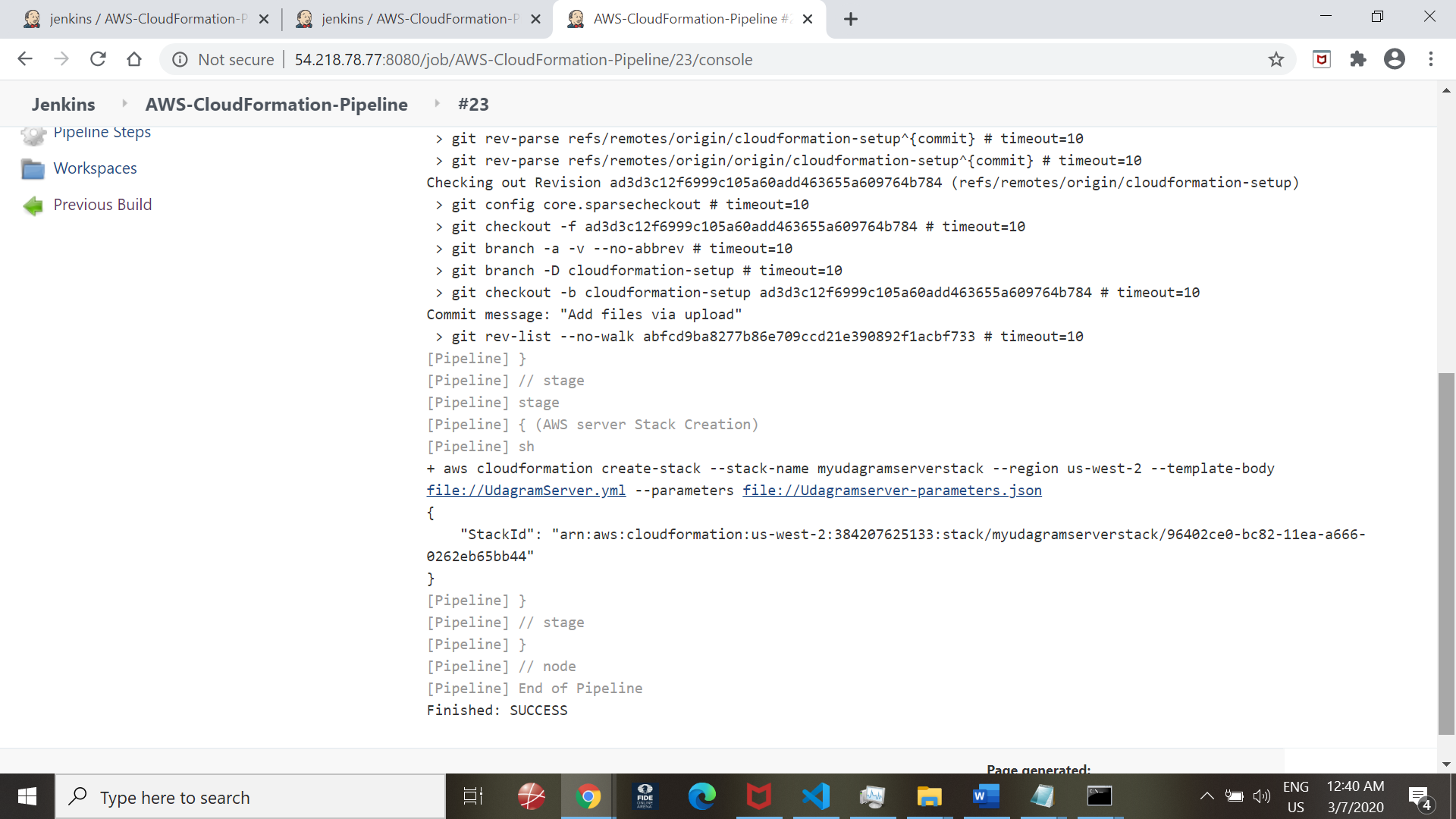
UdagramServer.yml - Configuration file

Udagramserver-parametes.json – Parameters file

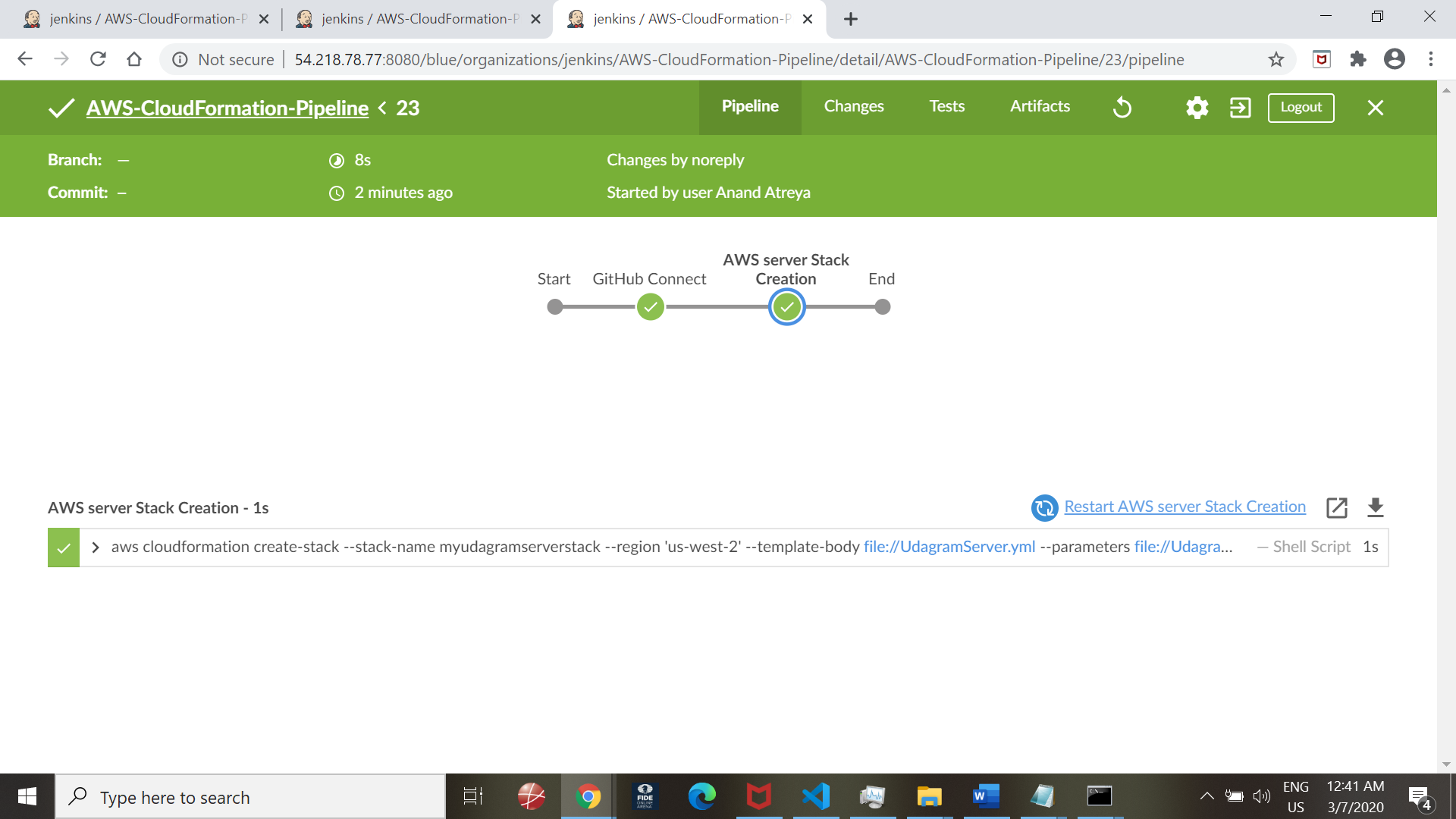
View of the Build job in Jenkins:



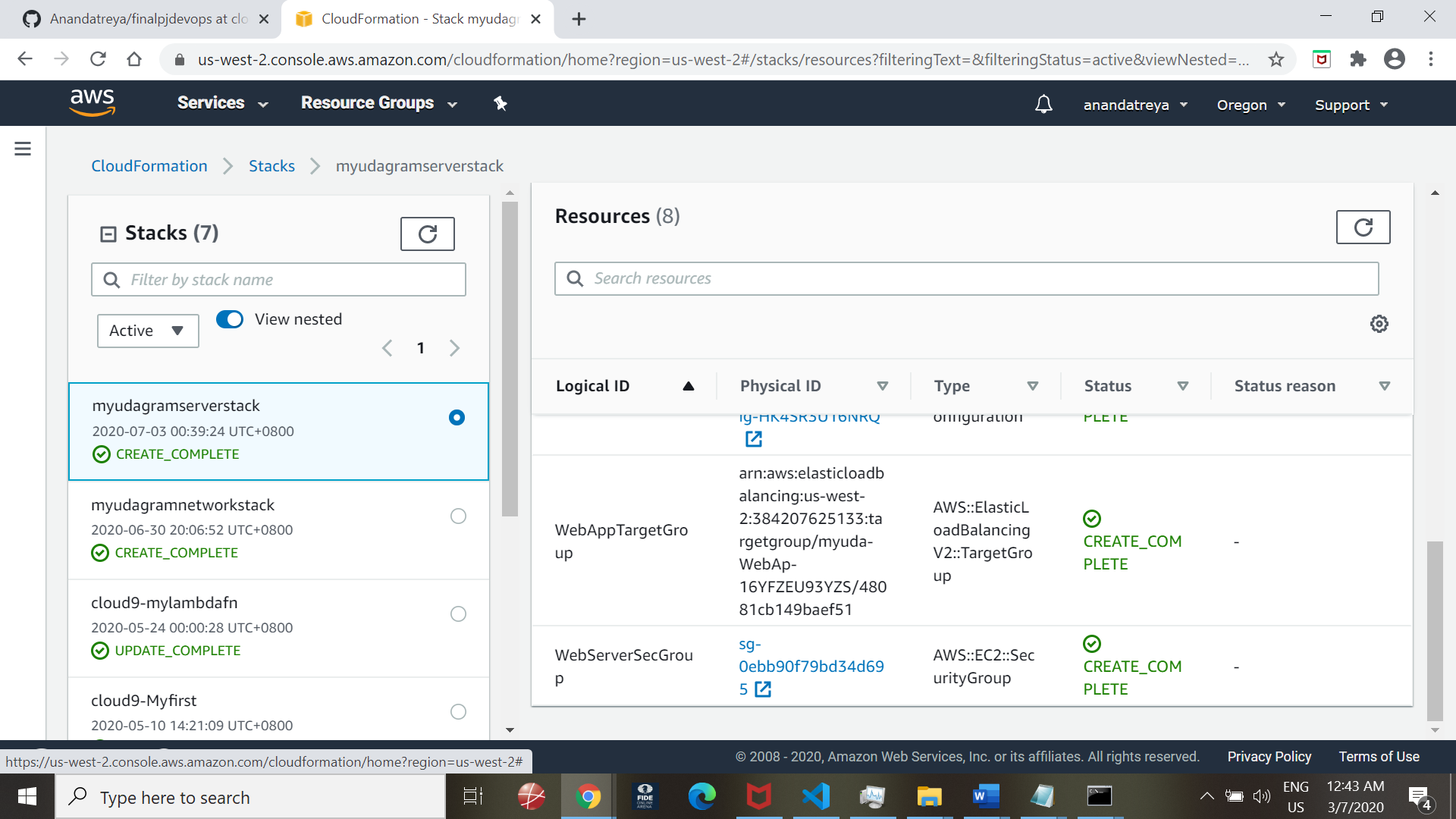
Succcessful Stack Creation:



BlueOcean Workflow View:



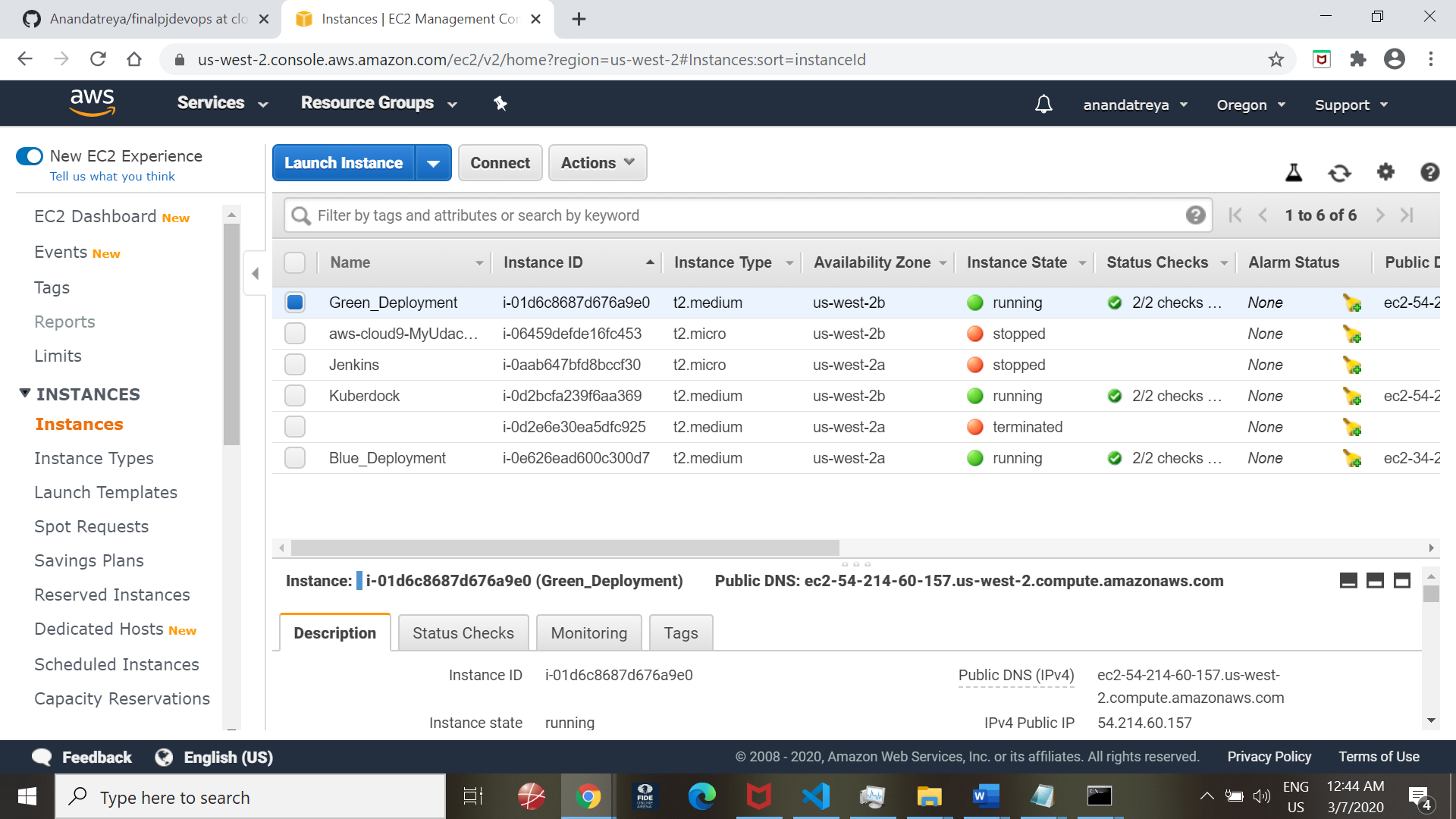
**Cloudformation View:**



Ec2 Instance View:

Created a 2 servers under a Load Balancer

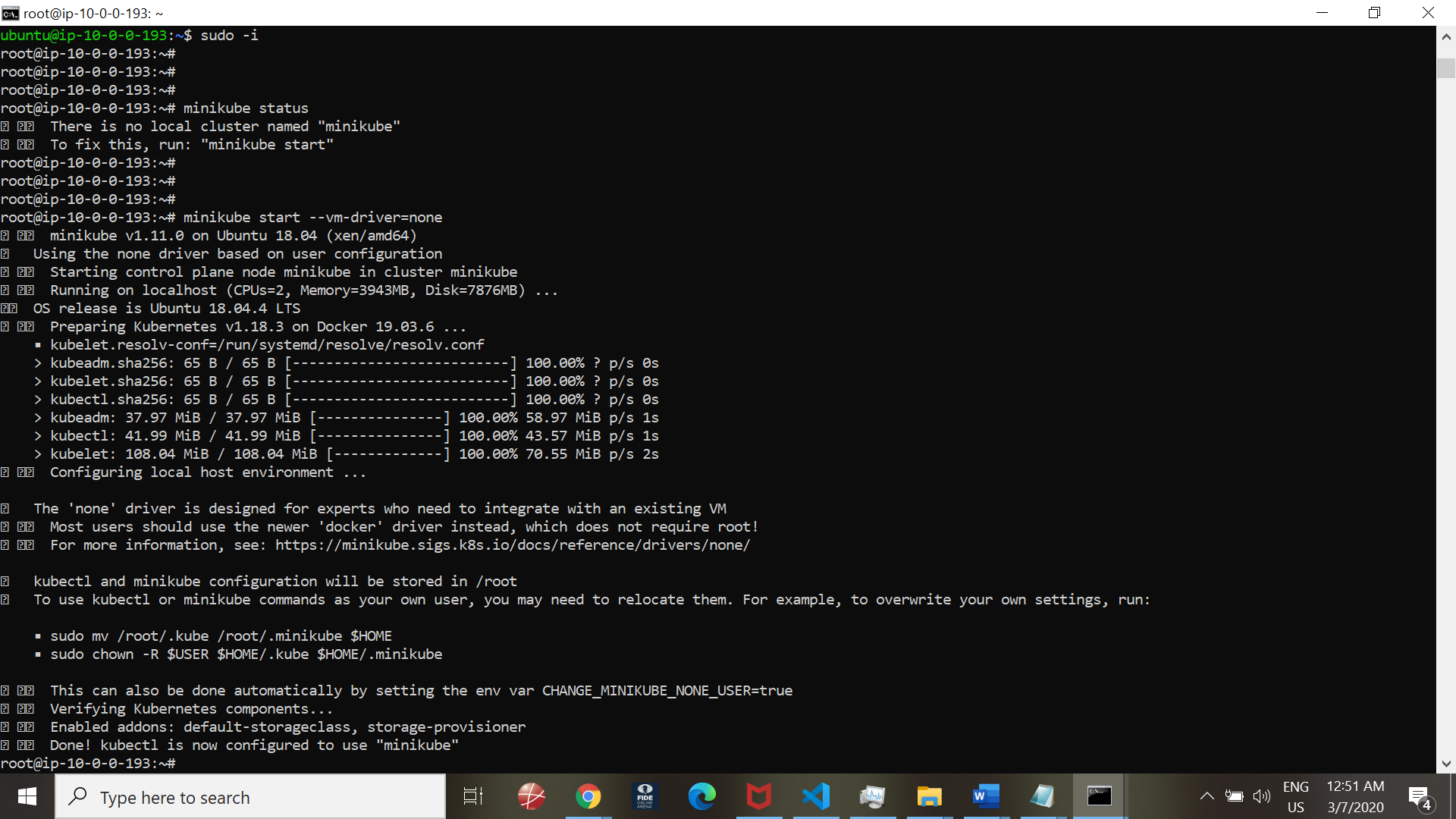
Named server as : Blue\_Deployment and Green\_Deployment



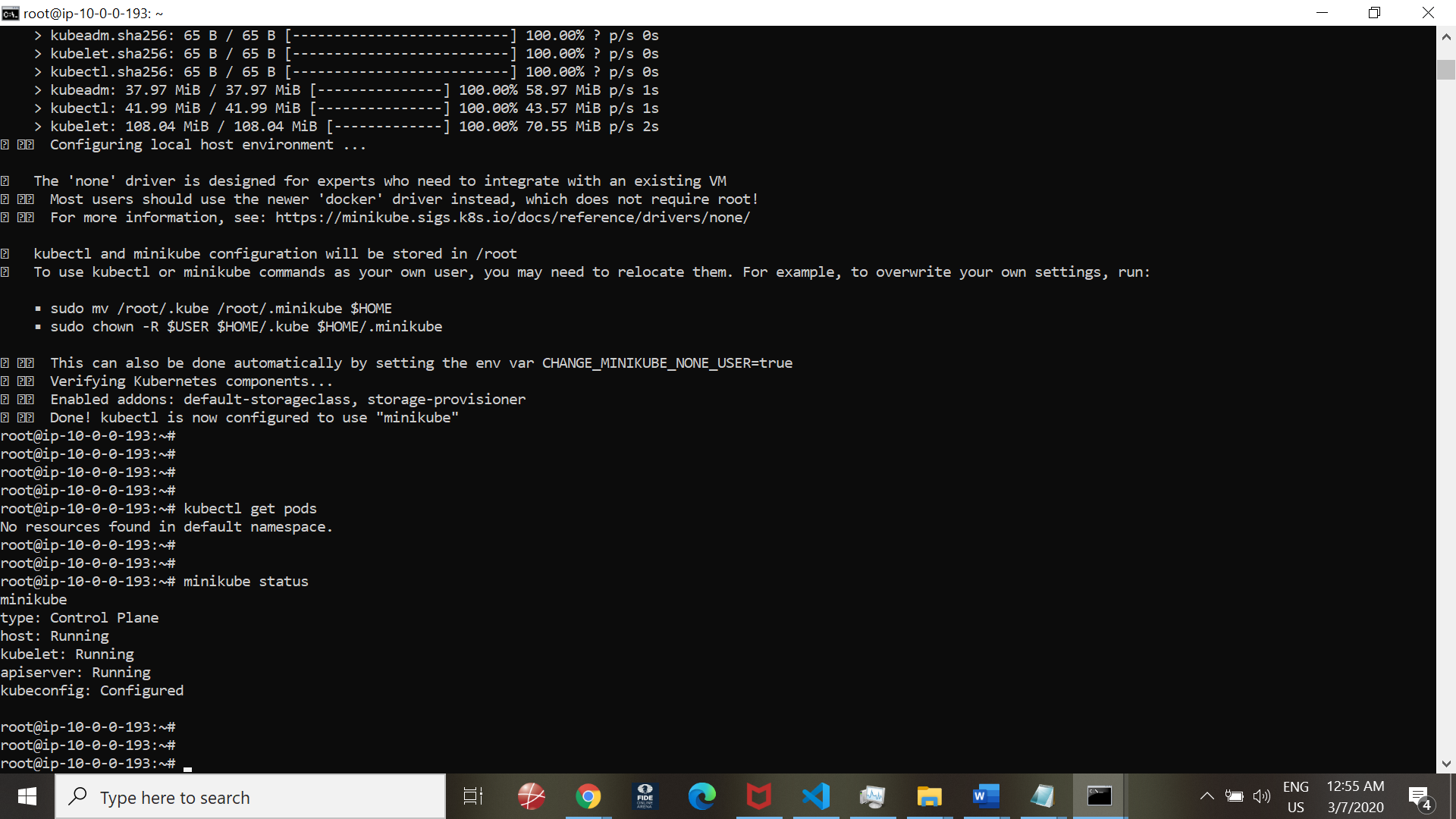
1. **Setup Kubernetes cluster on each of the Instances**

Login to Blue Server console:

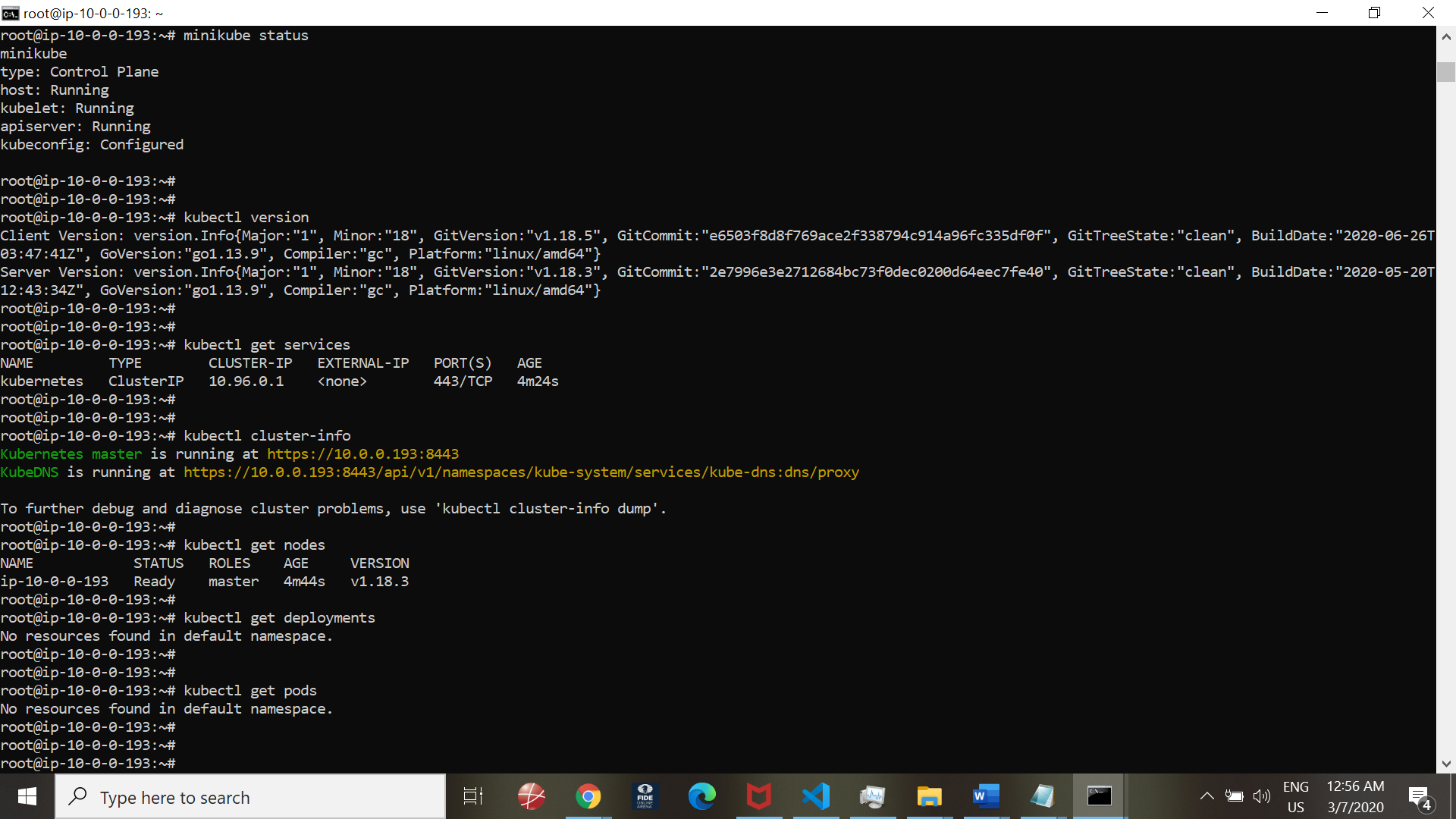
Run Minikube initialisation commands:



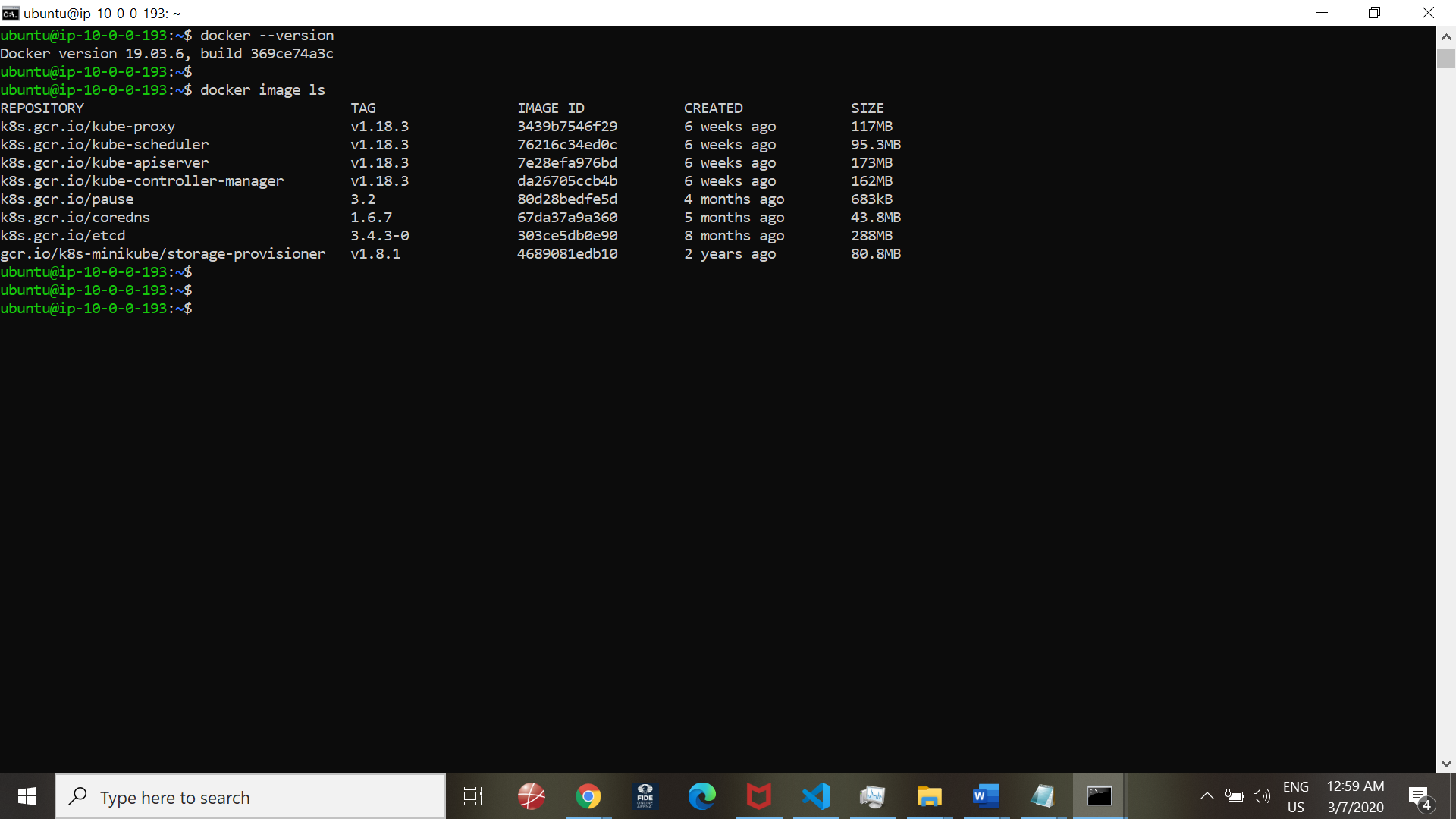
Minikube status is running on Blue Deployment server:



Other kubectl commands:

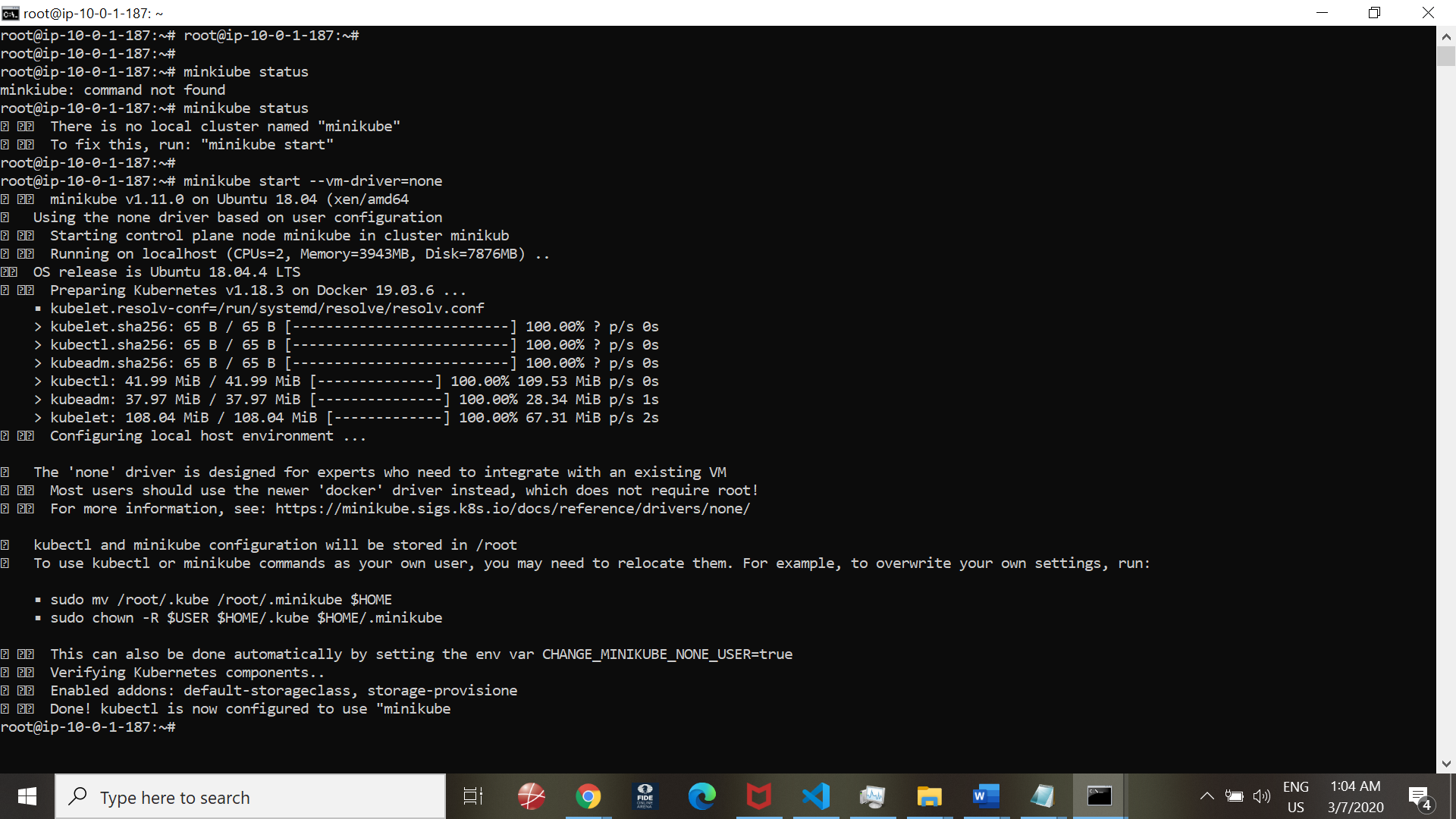


Docker commands and checks:

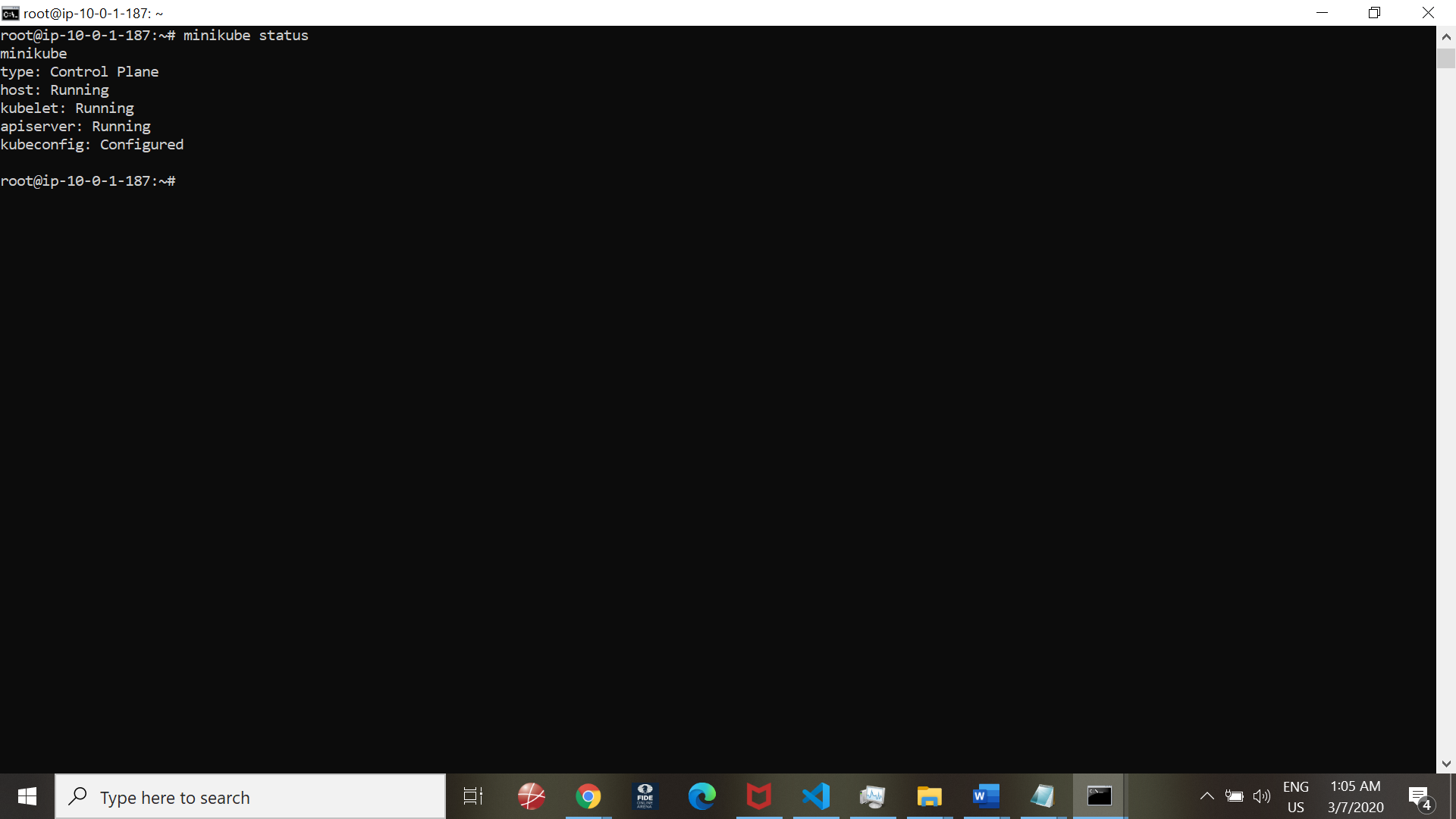


Do same checks for Green Deployment server

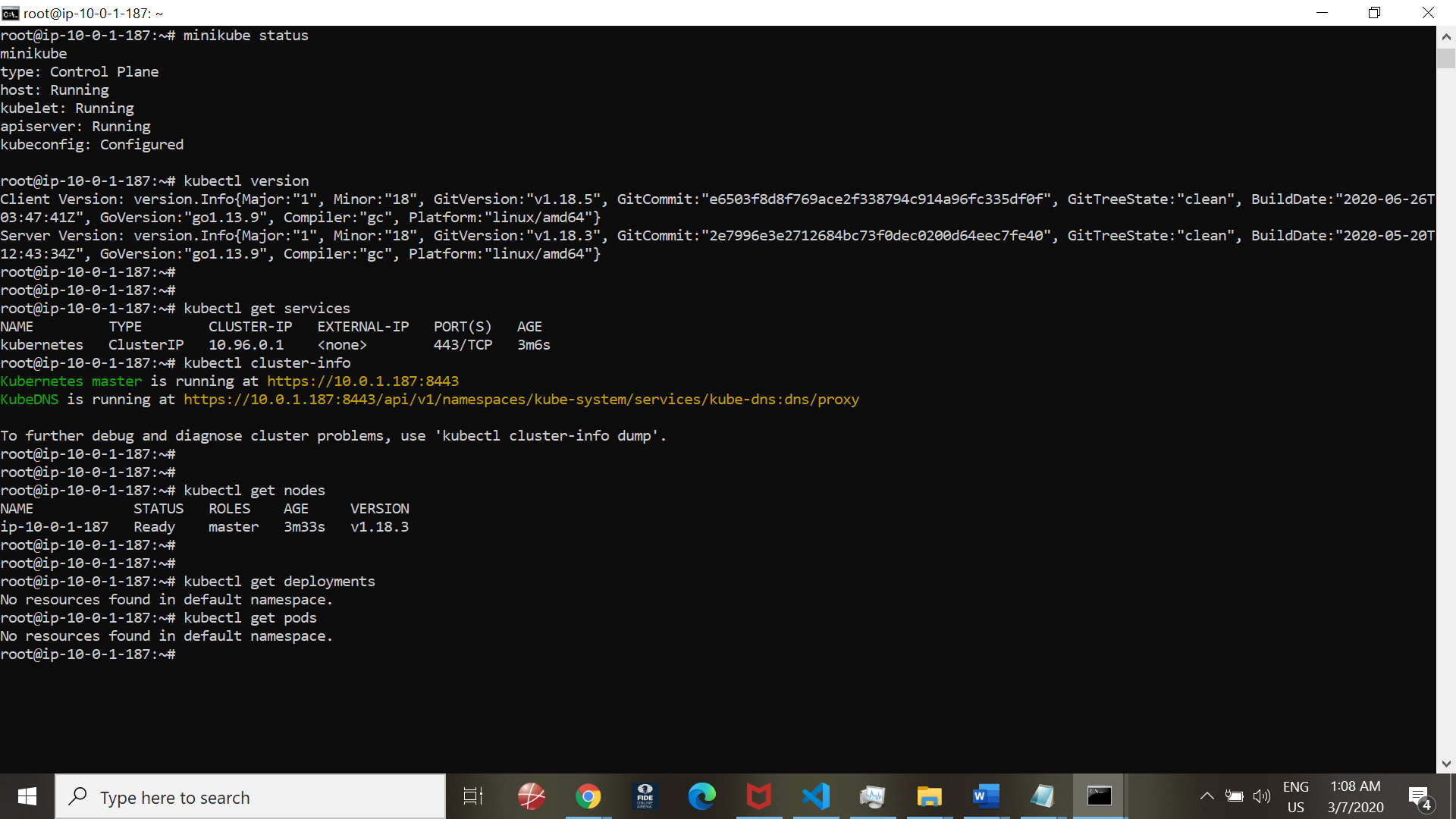
Start minikube cluster service



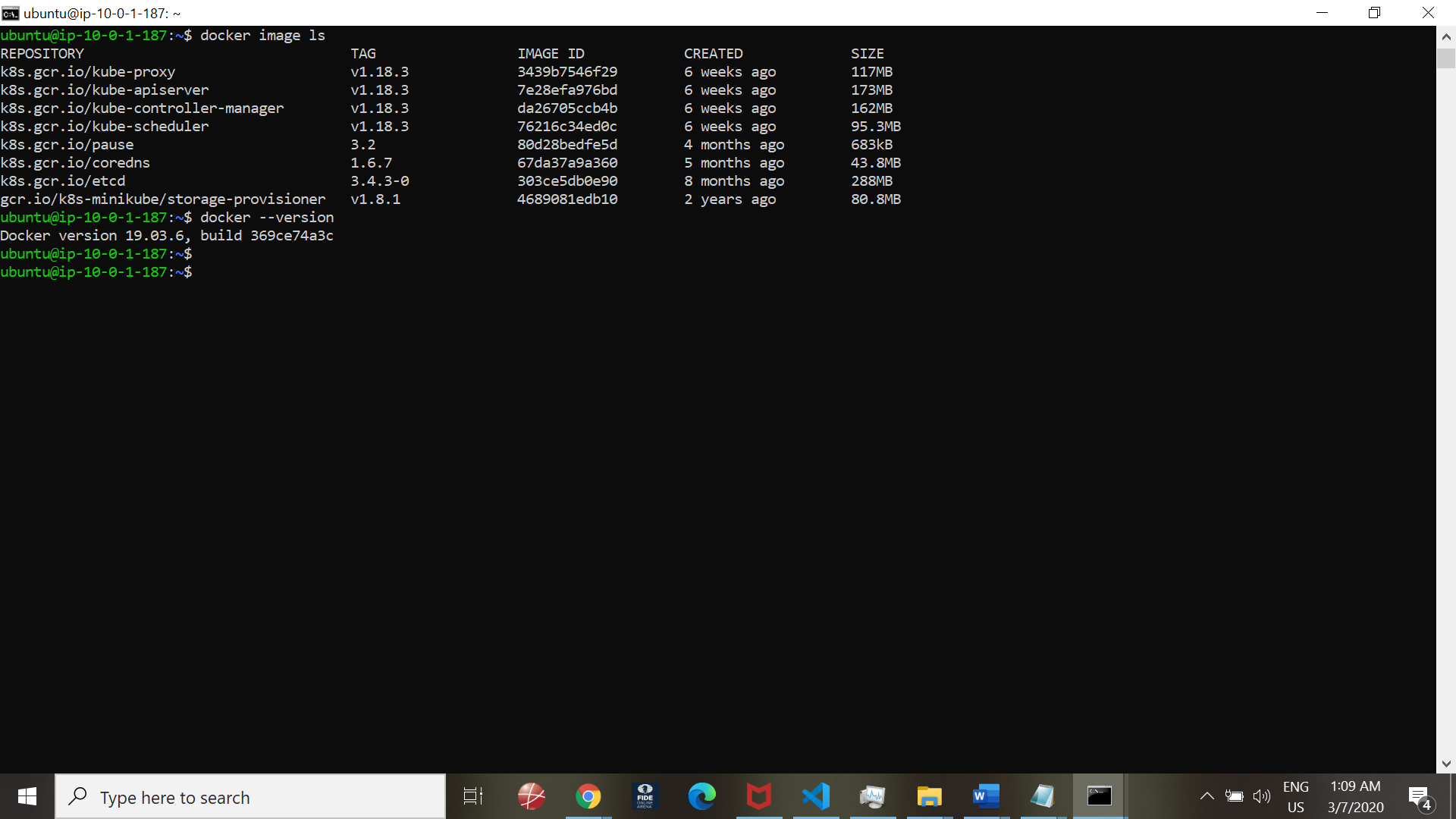
Verify minikube status

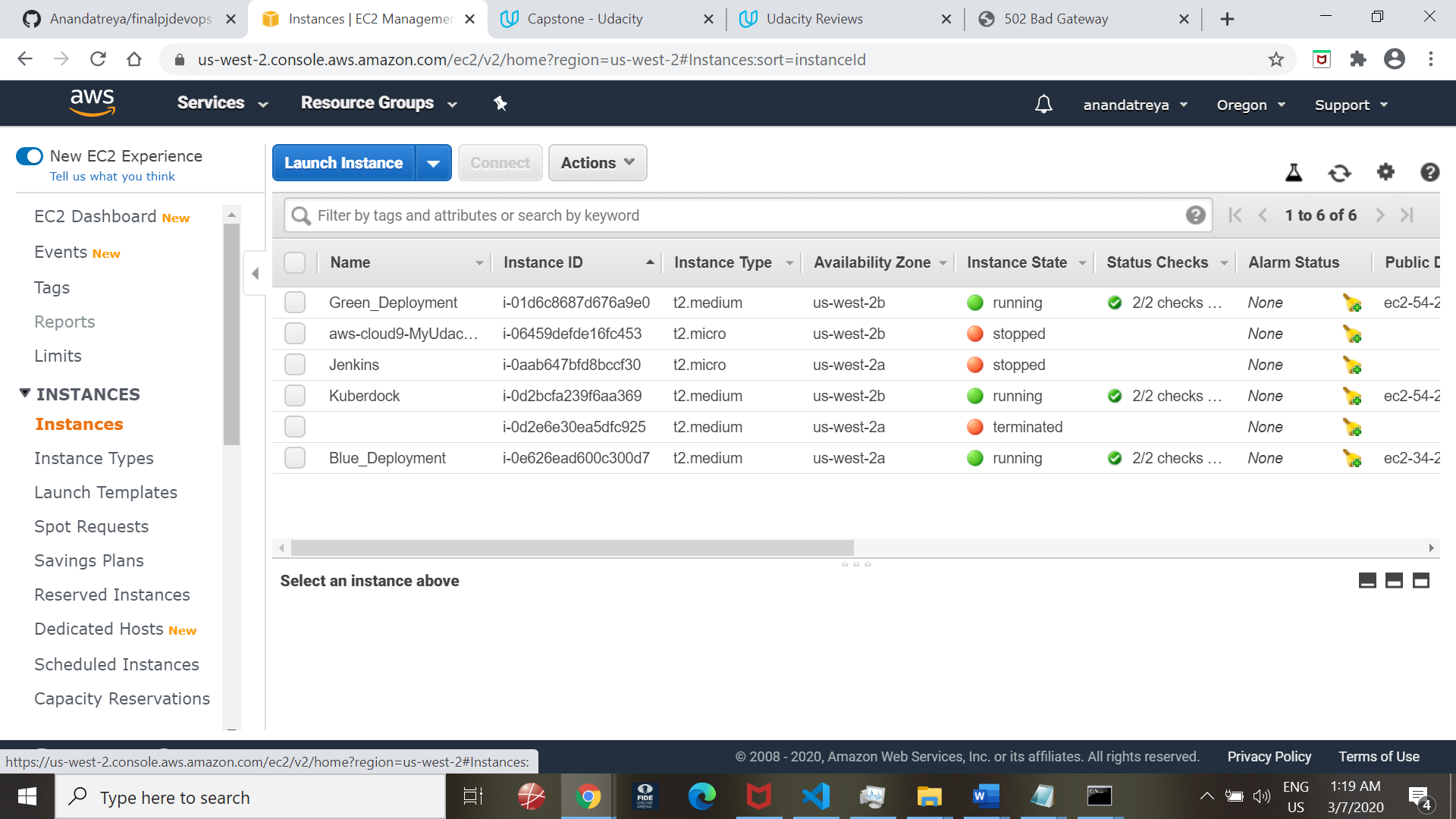


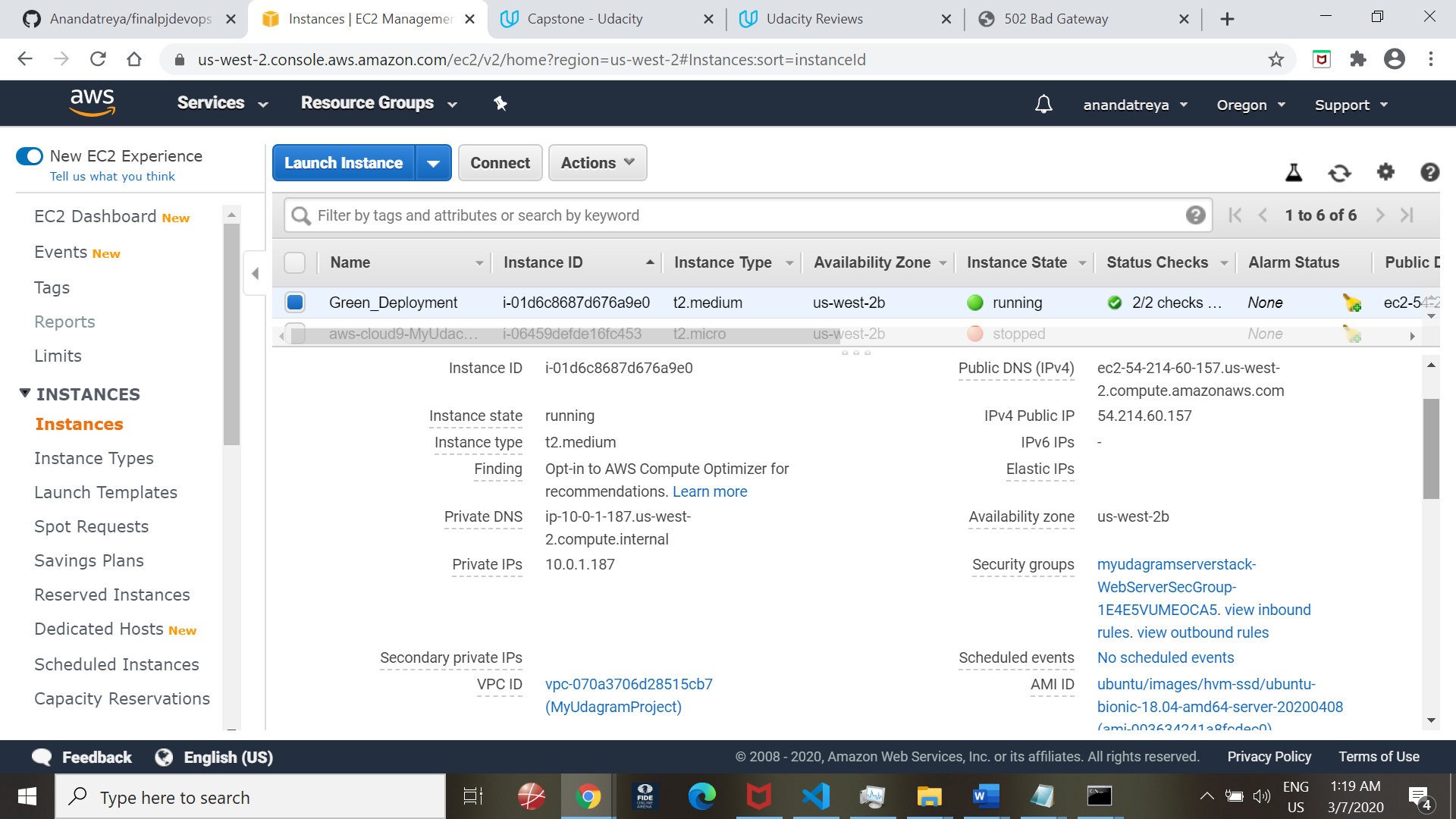
Check status of cluster and commands:

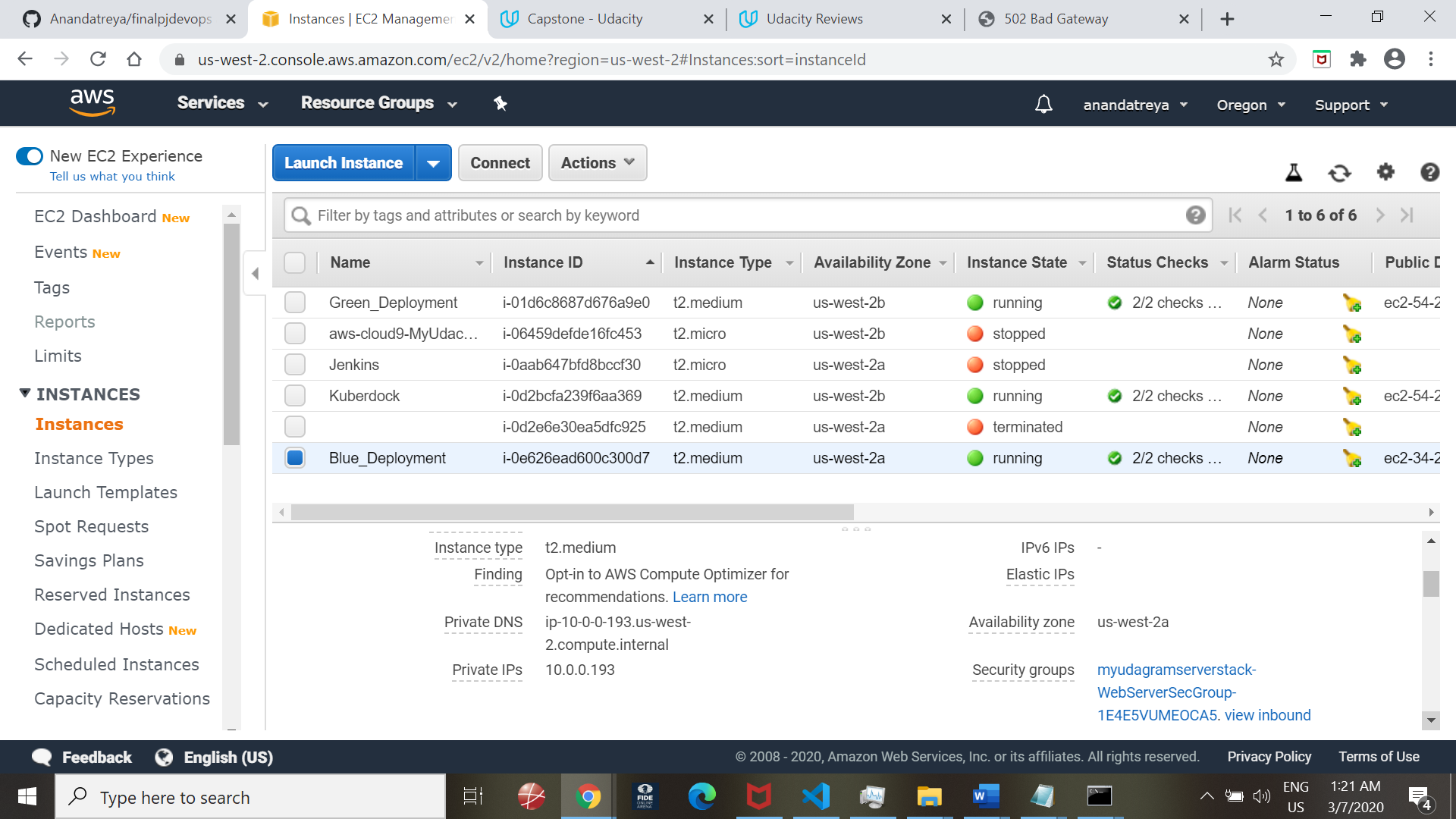


Check Docker version and commands:









END--