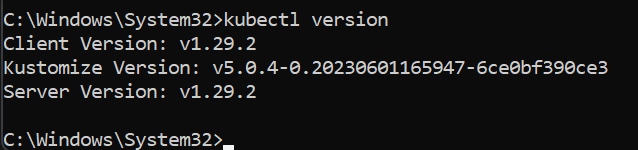
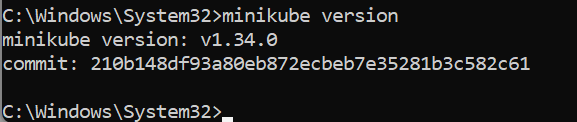
**Install Minikube and kubectl**

1. Check the version of kubectl installed



1. Install minikube. winget install Kubernetes.minikubeA screen shot of a computer

   Description automatically generated
2. Install kubectl code: winget install -e --id Kubernetes.kubectl
3. Check if minikube is installed: minikube version

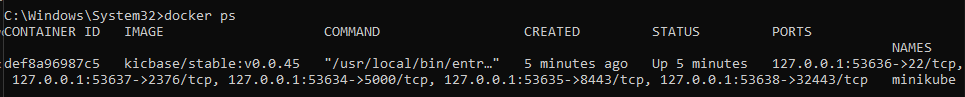


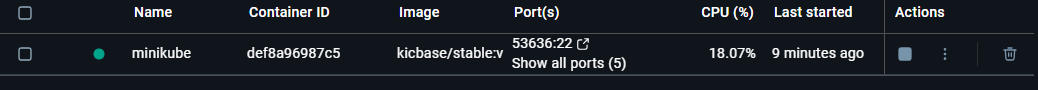
1. Minikube needs to be started with a driver. We use docker driver: minikube start --driver=docker

A screenshot of a computer program

Description automatically generated

1. Docker ps: Check if the minikube container is running





1. To check if control (worker) node is created: minikube status

A screen shot of a computer program

Description automatically generated

1. Running a pre-existing application (example nginx) on Kubernetes. Go to Docker hub-search nginx and click the official image

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Description automatically generated with medium confidence

1. Now pull this image to create a deployment with Kubernetes

Code: kubectl create deployment abc --image=nginx:latest



1. Check if the deployment was created

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Description automatically generated

1. Check if the pod was created: kubectl get pods

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Description automatically generated

1. Expose the pod to minikube: kubectl expose deployment my-nginx --port=80 --type=LoadBalancer



1. Check if your nginx service is running: kubectl get services

A screenshot of a computer screen

Description automatically generated

1. Link your service with minikube: minikube service my-nginx

A screen shot of a computer

Description automatically generated

A screenshot of a computer

Description automatically generated

1. To delete the existing pods and container:

minikube delete

Run this and repeat everything here(follow everything above):

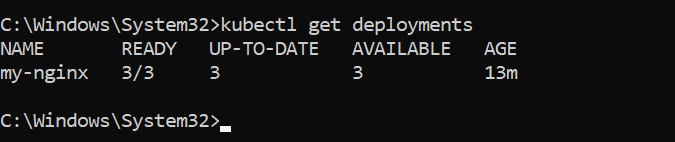
minikube start --driver=docker

1. Scaling on Kubernetes
2. Scaling nginx 3 replicas: kubectl scale deployment my-nginx –replicas=3



1. Check the number of pods: kubectl get deployments

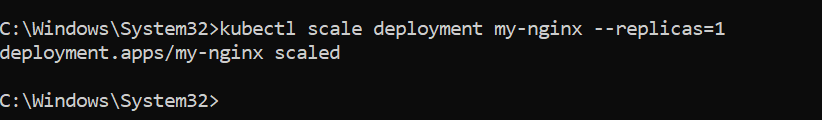
Kubectl get pods



A black screen with white text

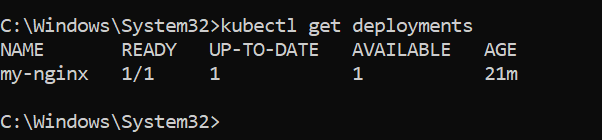
Description automatically generated

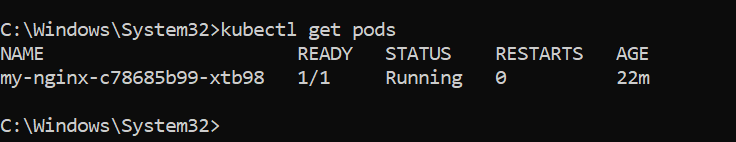
1. Scaling down: kubectl scale deployment my-nginx - -replicas=1



1. Check the no of pods: kubectl get deployments

Kubectl get pods





1. Running a hello world program…..