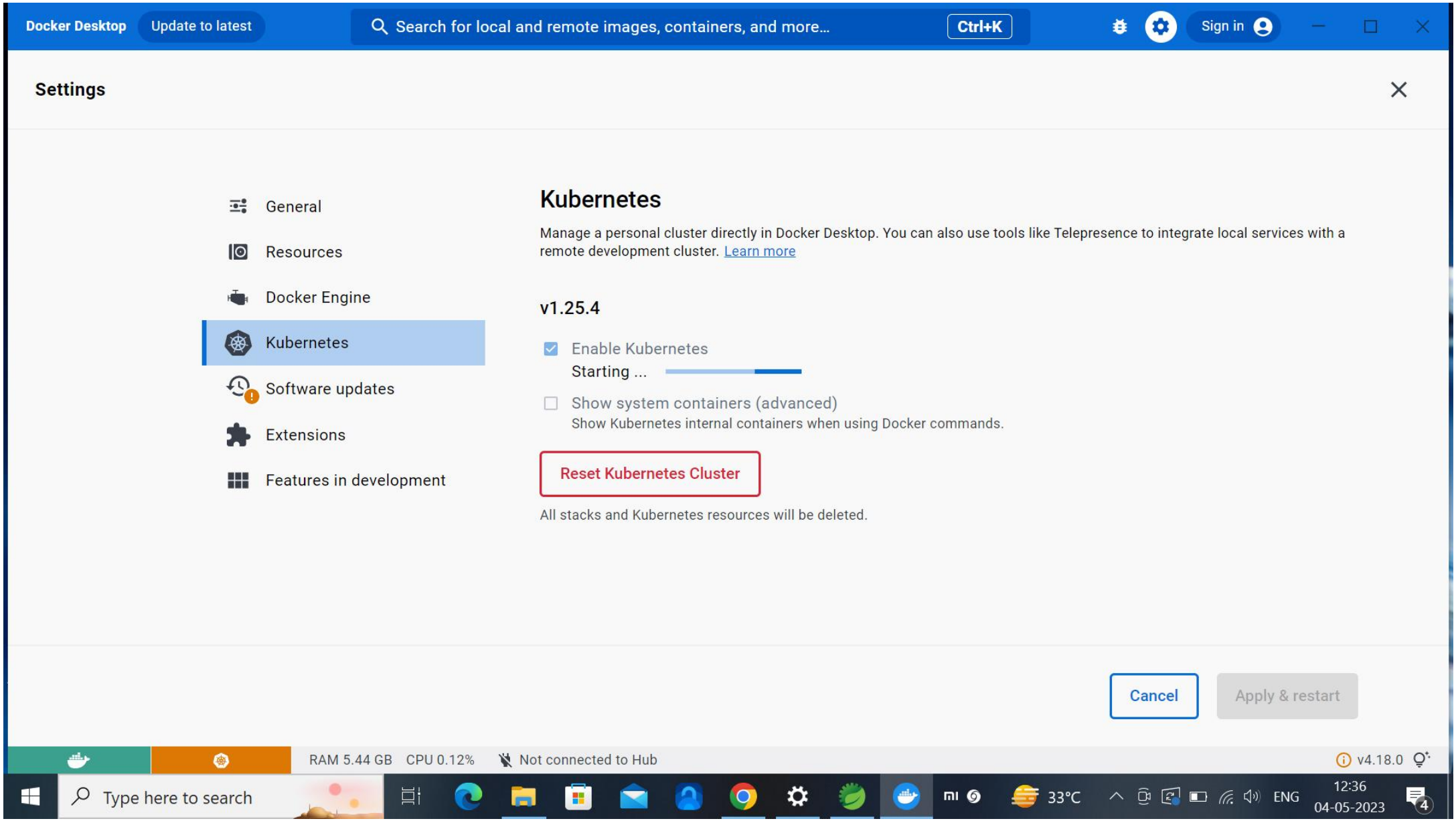
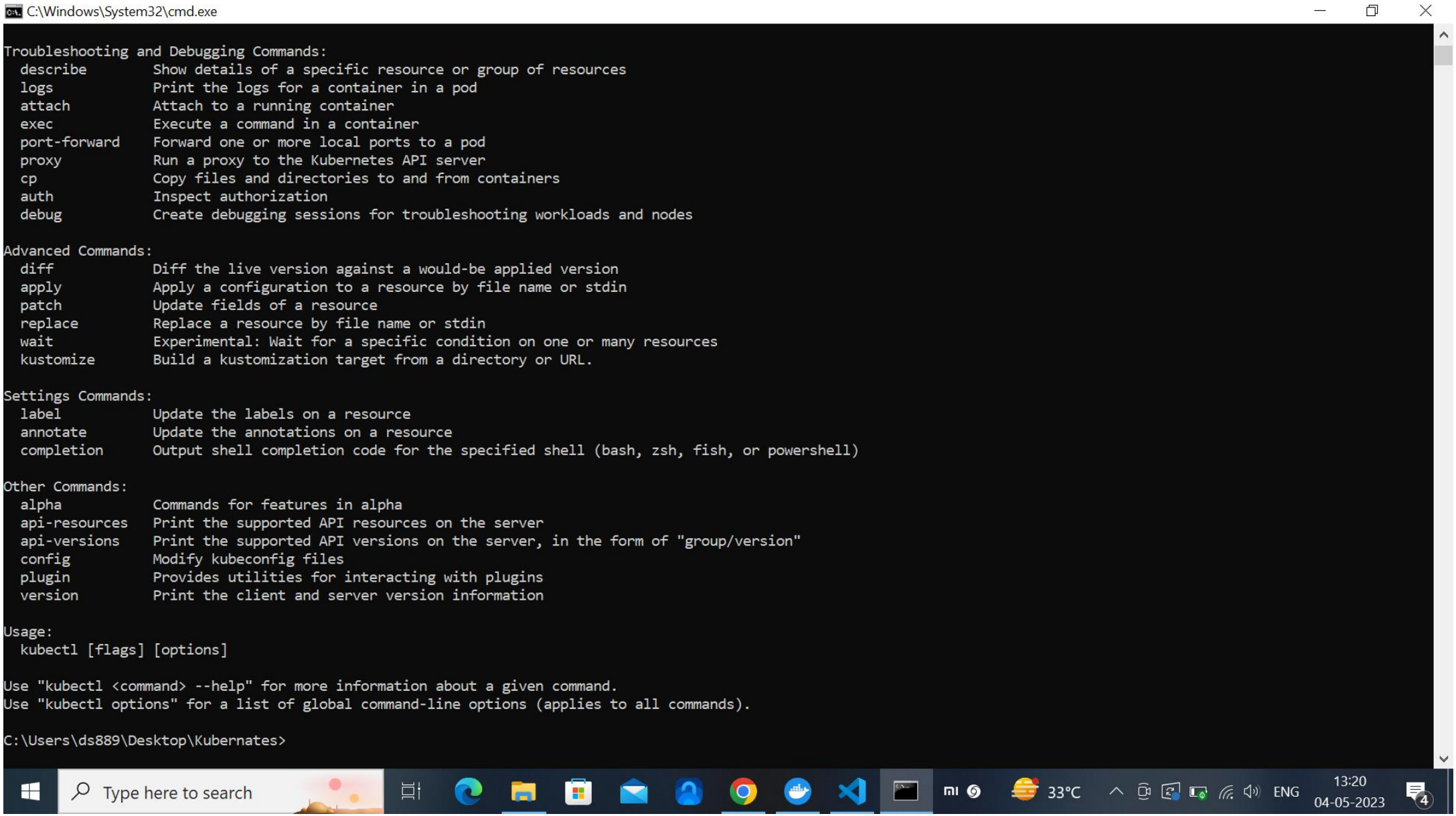
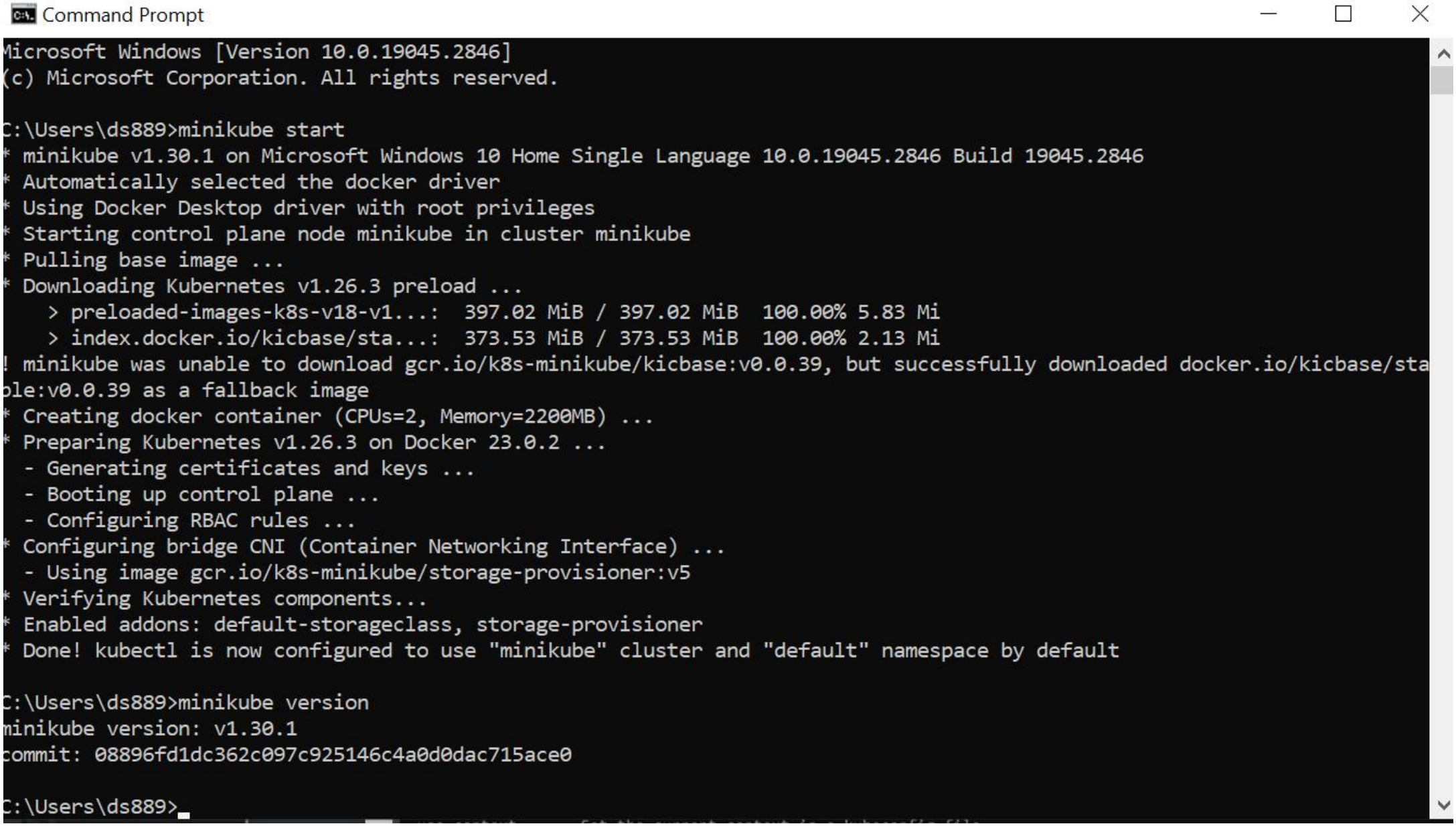

Docker Desktop
Update to latest
Search for local and remote images, containers, and more...
Ctrl+K
Sign in
Settings
General
Resources
Docker Engine
Kubernetes
Software updates
Extensions
Features in development
Kubernetes
Manage a personal cluster directly in Docker Desktop. You can also use tools like Telepresence to integrate local services with a remote development cluster. Learn more
v1.25.4
Enable Kubernetes
Starting ...
Show system containers (advanced)
Show Kubernetes internal containers when using Docker commands.
Reset Kubernetes Cluster
All stacks and Kubernetes resources will be deleted.
Cancel
Apply & restart
RAM 5.44 GB CPU 0.12%
Not connected to Hub
v4.18.0
Type here to search
33°C
ENG
12:36
04-05-2023

C:\Windows\System32\cmd.exe

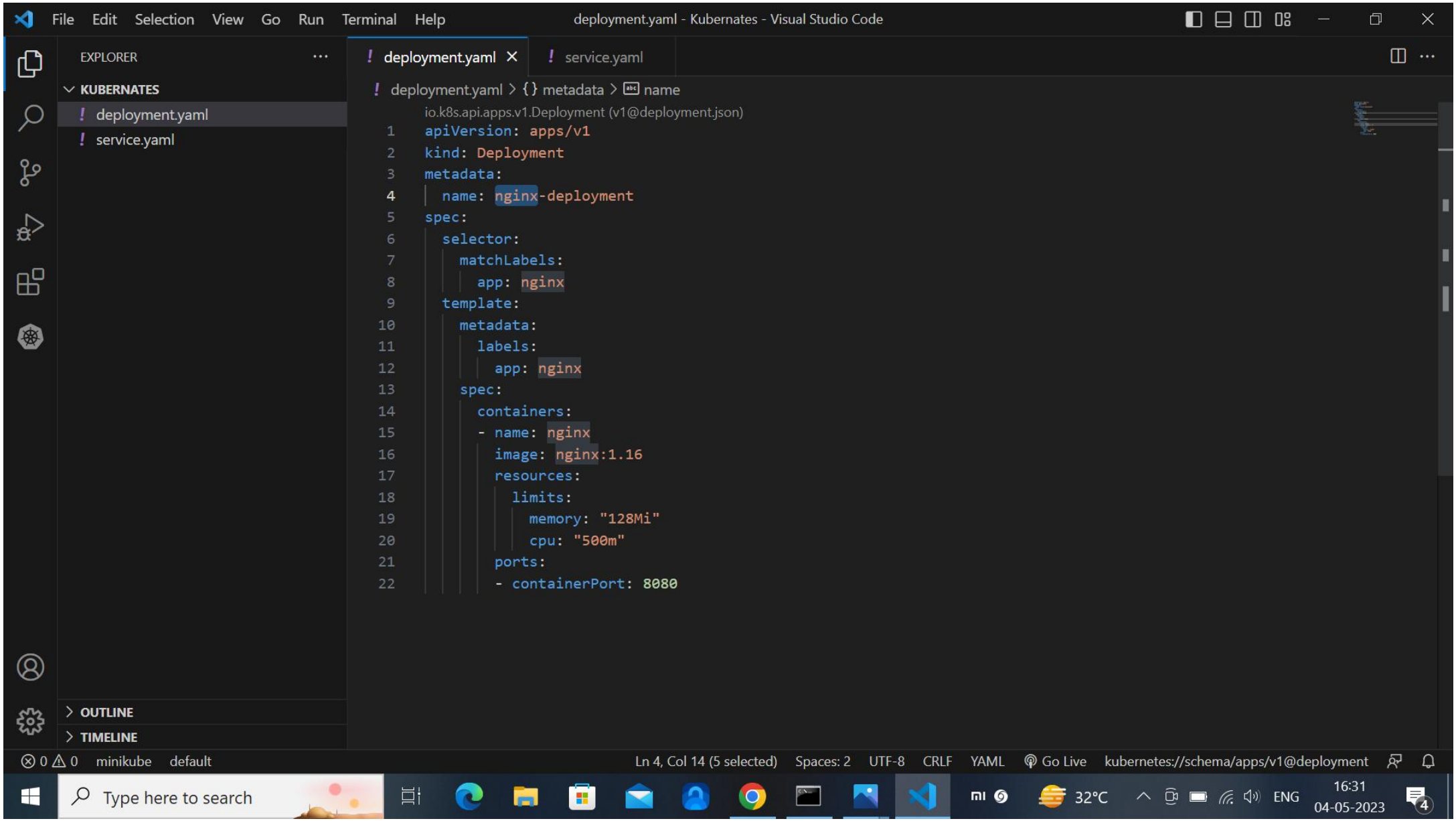
```
Microsoft Windows [Version 10.0.19045.2846]
(c) Microsoft Corporation. All rights reserved.

C:\Users\ds889\Desktop\Kubernates>kubectl
kubectl controls the Kubernetes cluster manager.

 Find more information at: https://kubernetes.io/docs/reference/kubectl/

Basic Commands (Beginner):
  create          Create a resource from a file or from stdin
  expose          Take a replication controller, service, deployment or pod and expose it as a new Kubernetes service
  run             Run a particular image on the cluster
  set             Set specific features on objects

Basic Commands (Intermediate):
  explain         Get documentation for a resource
  get             Display one or many resources
  edit            Edit a resource on the server
  delete          Delete resources by file names, stdin, resources and names, or by resources and label selector

Deploy Commands:
  rollout         Manage the rollout of a resource
  scale           Set a new size for a deployment, replica set, or replication controller
  autoscale       Auto-scale a deployment, replica set, stateful set, or replication controller

Cluster Management Commands:
  certificate     Modify certificate resources.
  cluster-info    Display cluster information
  top             Display resource (CPU/memory) usage
  cordon          Mark node as unschedulable
  uncordon        Mark node as schedulable
  drain           Drain node in preparation for maintenance
  taint           Update the taints on one or more nodes

Troubleshooting and Debugging Commands:
  describe        Show details of a specific resource or group of resources
  logs            Print the logs for a container in a pod
  attach          Attach to a running container
  exec            Execute a command in a container
  port-forward    Forward one or more local ports to a pod
  proxy           Run a proxy to the Kubernetes API server
```

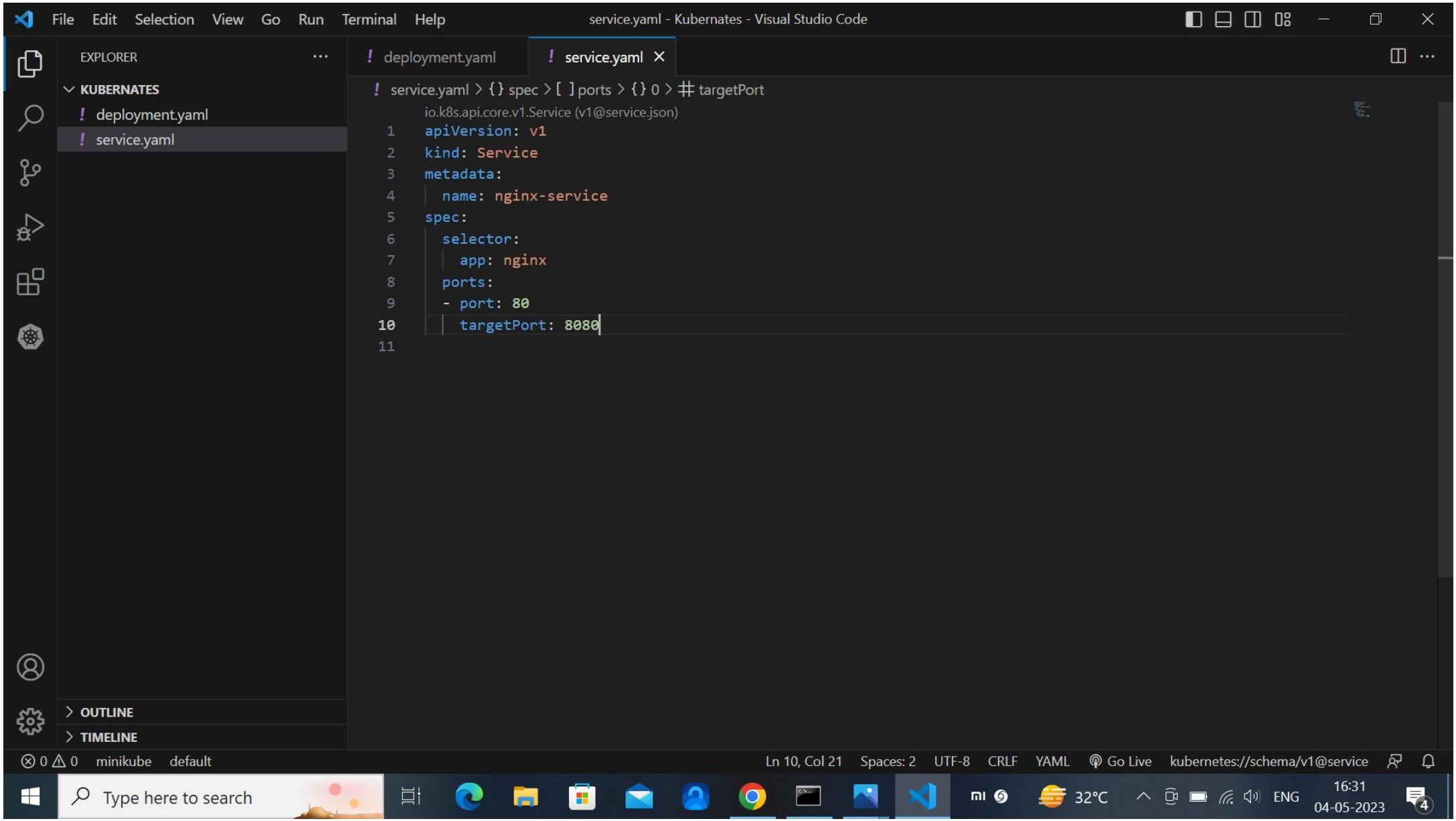

C:\Windows\System32\cmd.exe
Troubleshooting and Debugging Commands:
describe Show details of a specific resource or group of resources
logs Print the logs for a container in a pod
attach Attach to a running container
exec Execute a command in a container
port-forward Forward one or more local ports to a pod
proxy Run a proxy to the Kubernetes API server
cp Copy files and directories to and from containers
auth Inspect authorization
debug Create debugging sessions for troubleshooting workloads and nodes
Advanced Commands:
diff Diff the live version against a would-be applied version
apply Apply a configuration to a resource by file name or stdin
patch Update fields of a resource
replace Replace a resource by file name or stdin
wait Experimental: Wait for a specific condition on one or many resources
kustomize Build a kustomization target from a directory or URL.
Settings Commands:
label Update the labels on a resource
annotate Update the annotations on a resource
completion Output shell completion code for the specified shell (bash, zsh, fish, or powershell)
Other Commands:
alpha Commands for features in alpha
api-resources Print the supported API resources on the server
api-versions Print the supported API versions on the server, in the form of "group/version"
config Modify kubeconfig files
plugin Provides utilities for interacting with plugins
version Print the client and server version information
Usage:
kubectl [flags] [options]
Use "kubectl <command> --help" for more information about a given command.
Use "kubectl options" for a list of global command-line options (applies to all commands).
C:\Users\ds889\Desktop\Kubernates>
Type here to search
33°C
ENG
13:20
04-05-2023

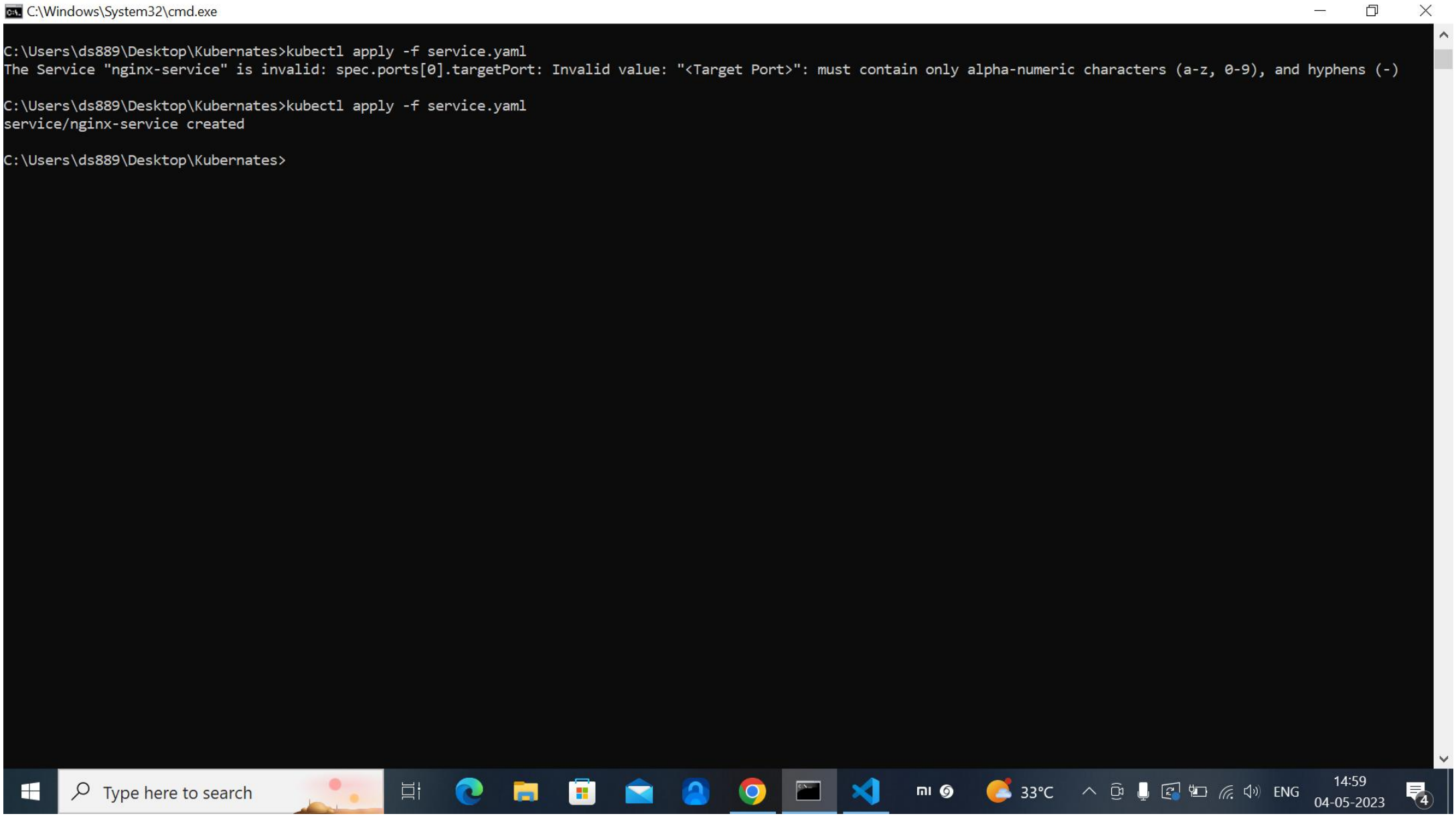

Command Prompt
Microsoft Windows [Version 10.0.19045.2846]
(c) Microsoft Corporation. All rights reserved.
C:\Users\ds889>minikube start
* minikube v1.30.1 on Microsoft Windows 10 Home Single Language 10.0.19045.2846 Build 19045.2846
* Automatically selected the docker driver
* Using Docker Desktop driver with root privileges
* Starting control plane node minikube in cluster minikube
* Pulling base image ...
* Downloading Kubernetes v1.26.3 preload ...
> preloaded-images-k8s-v18-v1...: 397.02 MiB / 397.02 MiB 100.00% 5.83 Mi
> index.docker.io/kicbase/sta...: 373.53 MiB / 373.53 MiB 100.00% 2.13 Mi
! minikube was unable to download gcr.io/k8s-minikube/kicbase:v0.0.39, but successfully downloaded docker.io/kicbase/sta
ble:v0.0.39 as a fallback image
* Creating docker container (CPUs=2, Memory=2200MB) ...
* Preparing Kubernetes v1.26.3 on Docker 23.0.2 ...
- Generating certificates and keys ...
- Booting up control plane ...
- Configuring RBAC rules ...
* Configuring bridge CNI (Container Networking Interface) ...
- Using image gcr.io/k8s-minikube/storage-provisioner:v5
* Verifying Kubernetes components...
* Enabled addons: default-storageclass, storage-provisioner
* Done! kubectl is now configured to use "minikube" cluster and "default" namespace by default
C:\Users\ds889>minikube version
minikube version: v1.30.1
commit: 08896fd1dc362c097c925146c4a0d0dac715ace0
C:\Users\ds889>

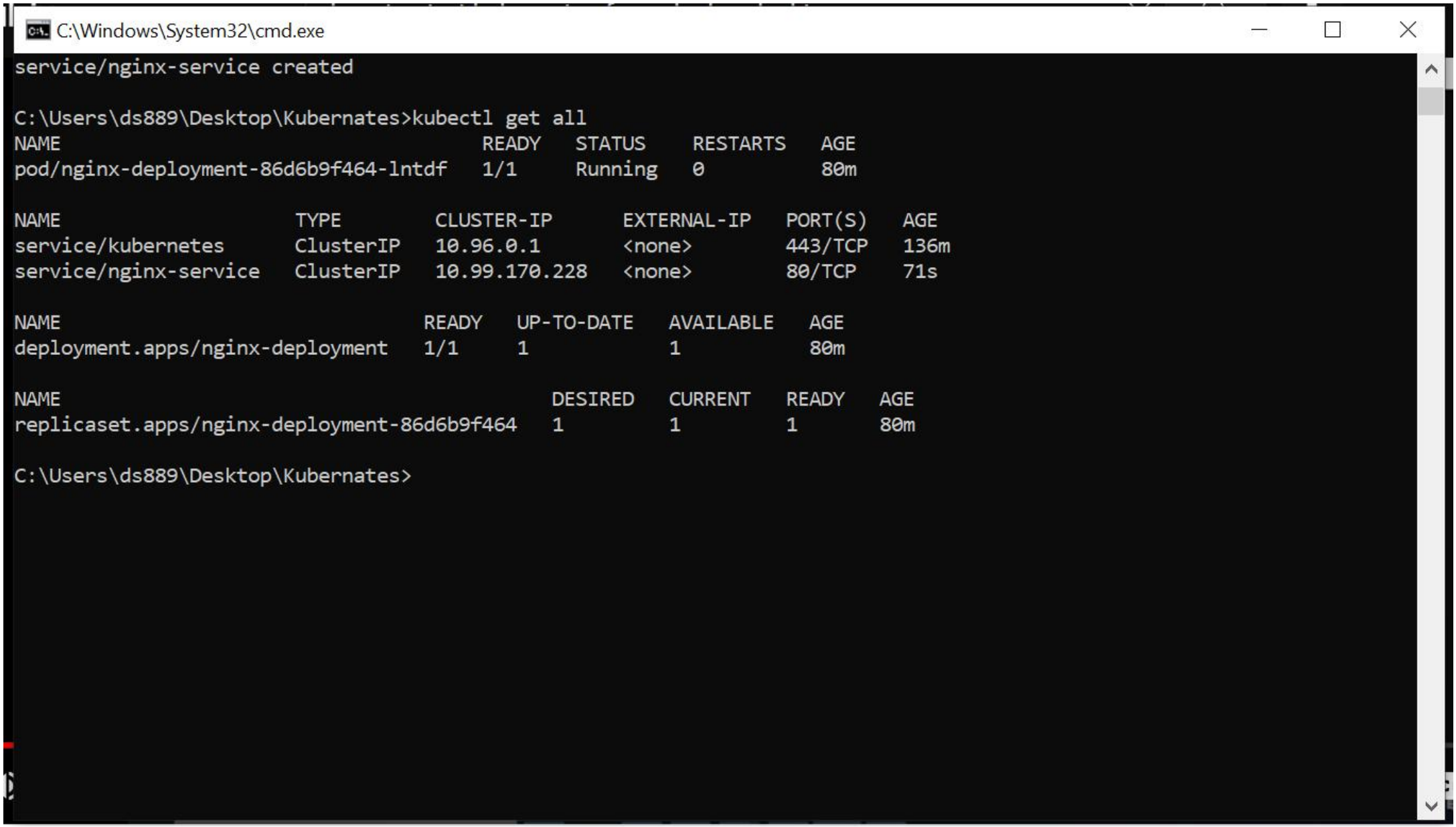
Command Prompt

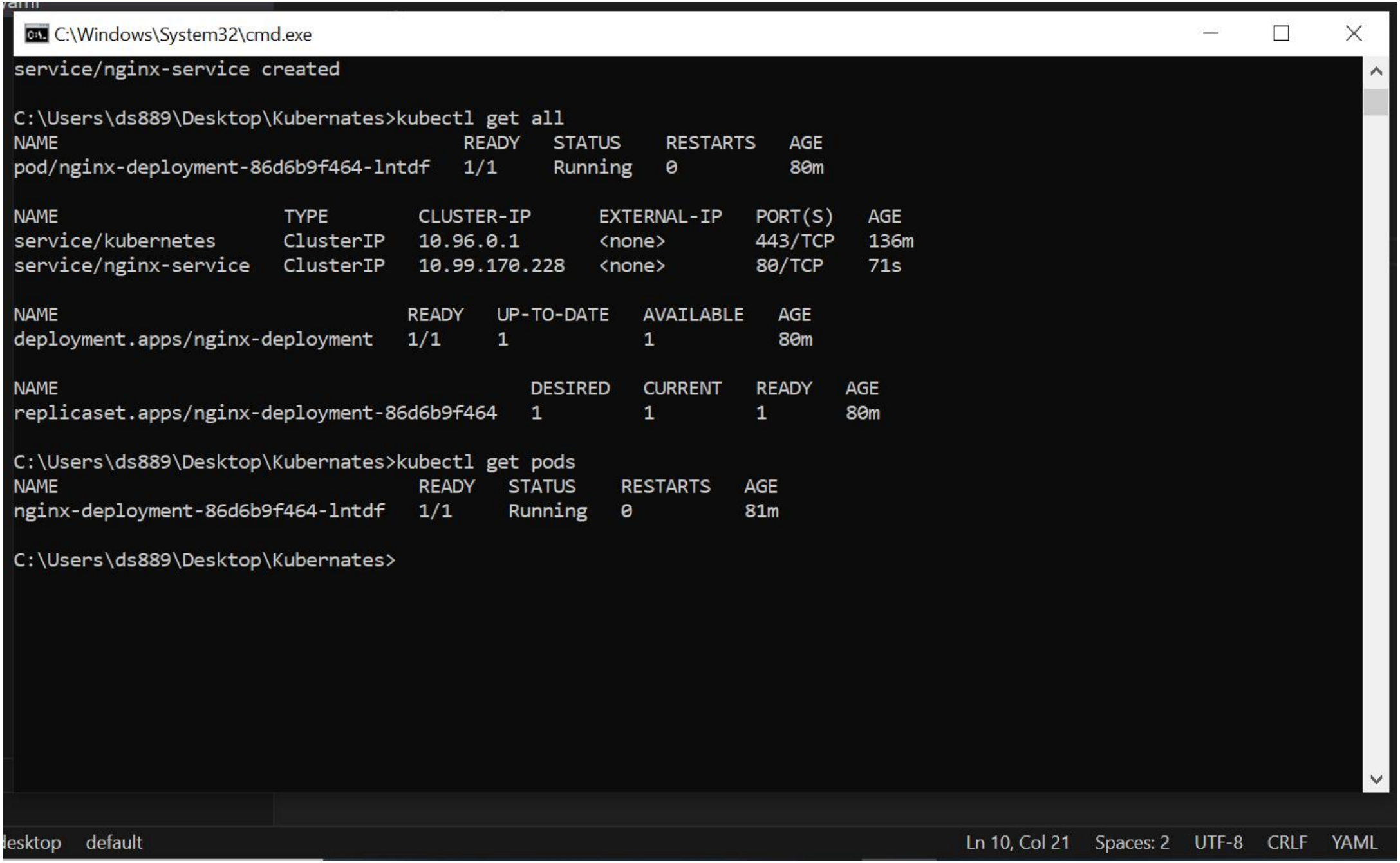
```
* Done! kubectl is now configured to use "minikube" cluster and "default" namespace by default

C:\Users\ds889>minikube version
minikube version: v1.30.1
commit: 08896fd1dc362c097c925146c4a0d0dac715ace0

C:\Users\ds889>kubectl config
Modify kubeconfig files using subcommands like "kubectl config set current-context my-context"

 The loading order follows these rules:

  1.  If the --kubeconfig flag is set, then only that file is loaded. The flag may only be set once and no merging takes
place.
  2.  If $KUBECONFIG environment variable is set, then it is used as a list of paths (normal path delimiting rules for
your system). These paths are merged. When a value is modified, it is modified in the file that defines the stanza. When
a value is created, it is created in the first file that exists. If no files in the chain exist, then it creates the
last file in the list.
  3.  Otherwise, ${HOME}/.kube/config is used and no merging takes place.

Available Commands:
  current-context   Display the current-context
  delete-cluster    Delete the specified cluster from the kubeconfig
  delete-context    Delete the specified context from the kubeconfig
  delete-user       Delete the specified user from the kubeconfig
  get-clusters      Display clusters defined in the kubeconfig
  get-contexts      Describe one or many contexts
  get-users         Display users defined in the kubeconfig
  rename-context    Rename a context from the kubeconfig file
  set               Set an individual value in a kubeconfig file
  set-cluster       Set a cluster entry in kubeconfig
  set-context       Set a context entry in kubeconfig
  set-credentials   Set a user entry in kubeconfig
  unset             Unset an individual value in a kubeconfig file
  use-context       Set the current-context in a kubeconfig file
  view              Display merged kubeconfig settings or a specified kubeconfig file

Usage:
  kubectl config SUBCOMMAND [options]

Use "kubectl <command> --help" for more information about a given command.
Use "kubectl options" for a list of global command-line options (applies to all commands).
```


File Edit Selection View Go Run Terminal Help
deployment.yaml - Kubernates - Visual Studio Code
EXPLORER
KUBERNATES
deployment.yaml
service.yaml
deployment.yaml
service.yaml
deployment.yaml > {} metadata > name
io.k8s.api.apps.v1.Deployment (v1@deployment.json)
apiVersion: apps/v1
kind: Deployment
metadata:
name: nginx-deployment
spec:
selector:
matchLabels:
app: nginx
template:
metadata:
labels:
app: nginx
spec:
containers:
- name: nginx
image: nginx:1.16
resources:
limits:
memory: "128Mi"
cpu: "500m"
ports:
- containerPort: 8080
OUTLINE
TIMELINE
0 0 minikube default
Ln 4, Col 14 (5 selected) Spaces: 2 UTF-8 CRLF YAML Go Live kubernetes://schema/apps/v1@deployment
Type here to search
32°C
ENG
16:31
04-05-2023


File Edit Selection View Go Run Terminal Help
service.yaml - Kubernates - Visual Studio Code
EXPLORER
KUBERNATES
deployment.yaml
service.yaml
deployment.yaml
service.yaml
service.yaml > {} spec > [ ] ports > {} 0 > # targetPort
io.k8s.api.core.v1.Service (v1@service.json)
1 apiVersion: v1
2 kind: Service
3 metadata:
4 name: nginx-service
5 spec:
6 selector:
7 app: nginx
8 ports:
9 - port: 80
10 targetPort: 8080
11
OUTLINE
TIMELINE
0 0 minikube default
Ln 10, Col 21 Spaces: 2 UTF-8 CRLF YAML Go Live kubernetes://schema/v1@service
Type here to search
32°C
ENG
16:31
04-05-2023


C:\Windows\System32\cmd.exe
C:\Users\ds889\Desktop\Kubernates>kubectl apply -f service.yaml
The Service "nginx-service" is invalid: spec.ports[0].targetPort: Invalid value: "<Target Port>": must contain only alpha-numeric characters (a-z, 0-9), and hyphens (-)
C:\Users\ds889\Desktop\Kubernates>kubectl apply -f service.yaml
service/nginx-service created
C:\Users\ds889\Desktop\Kubernates>
Type here to search
33°C
ENG
14:59
04-05-2023


C:\Windows\System32\cmd.exe
service/nginx-service created
C:\Users\ds889\Desktop\Kubernates>kubectl get all
NAME READY STATUS RESTARTS AGE
pod/nginx-deployment-86d6b9f464-lntdf 1/1 Running 0 80m
NAME TYPE CLUSTER-IP EXTERNAL-IP PORT(S) AGE
service/kubernetes ClusterIP 10.96.0.1 <none> 443/TCP 136m
service/nginx-service ClusterIP 10.99.170.228 <none> 80/TCP 71s
NAME READY UP-TO-DATE AVAILABLE AGE
deployment.apps/nginx-deployment 1/1 1 1 80m
NAME DESIRED CURRENT READY AGE
replicaset.apps/nginx-deployment-86d6b9f464 1 1 1 80m
C:\Users\ds889\Desktop\Kubernates>


C:\Windows\System32\cmd.exe
service/nginx-service created
C:\Users\ds889\Desktop\Kubernates>kubectl get all
NAME READY STATUS RESTARTS AGE
pod/nginx-deployment-86d6b9f464-lntdf 1/1 Running 0 80m
NAME TYPE CLUSTER-IP EXTERNAL-IP PORT(S) AGE
service/kubernetes ClusterIP 10.96.0.1 <none> 443/TCP 136m
service/nginx-service ClusterIP 10.99.170.228 <none> 80/TCP 71s
NAME READY UP-TO-DATE AVAILABLE AGE
deployment.apps/nginx-deployment 1/1 1 1 80m
NAME DESIRED CURRENT READY AGE
replicaset.apps/nginx-deployment-86d6b9f464 1 1 1 80m
C:\Users\ds889\Desktop\Kubernates>kubectl get pods
NAME READY STATUS RESTARTS AGE
nginx-deployment-86d6b9f464-lntdf 1/1 Running 0 81m
C:\Users\ds889\Desktop\Kubernates>
desktop default
Ln 10, Col 21 Spaces: 2 UTF-8 CRLF YAML