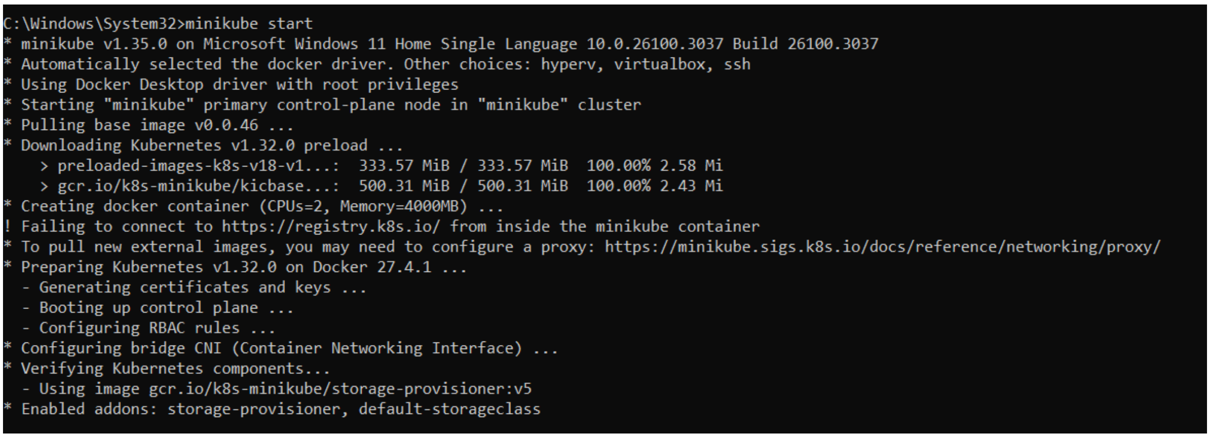
SANMATHI S

22ISR045

minikube start

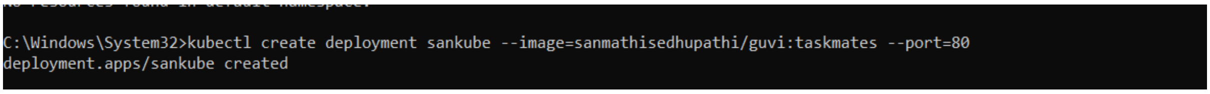
Starts a Minikube cluster.

Creates a single-node Kubernetes cluster in a VM or container.



```
C:\Windows\System32>minikube start
* minikube v1.35.0 on Microsoft Windows 11 Home Single Language 10.0.26100.3037 Build 26100.3037
* Automatically selected the docker driver. Other choices: hyperv, virtualbox, ssh
* Using Docker Desktop driver with root privileges
* Starting "minikube" primary control-plane node in "minikube" cluster
* Pulling base image v0.0.46 ...
* Downloading Kubernetes v1.32.0 preload ...
    > preloaded-images-k8s-v18-v1...:  333.57 MiB / 333.57 MiB  100.00% 2.58 Mi
    > gcr.io/k8s-minikube/kicbase...:  500.31 MiB / 500.31 MiB  100.00% 2.43 Mi
* Creating docker container (CPUs=2, Memory=4000MB) ...
! Failing to connect to https://registry.k8s.io/ from inside the minikube container
* To pull new external images, you may need to configure a proxy: https://minikube.sigs.k8s.io/docs/reference/networking/proxy/
* Preparing Kubernetes v1.32.0 on Docker 27.4.1 ...
  - Generating certificates and keys ...
  - Booting up control plane ...
  - Configuring RBAC rules ...
* Configuring bridge CNI (Container Networking Interface) ...
* Verifying Kubernetes components...
  - Using image gcr.io/k8s-minikube/storage-provisioner:v5
* Enabled addons: storage-provisioner, default-storageclass
```

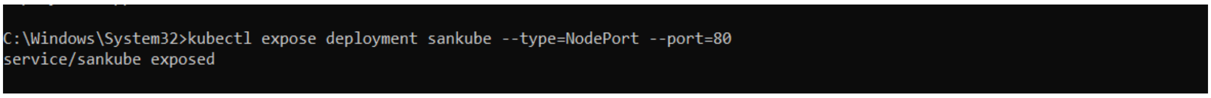
Command	**Description**
kubectl expose deployment <name> --type=NodePort --port=80	Creates a service to expose a deployment.
kubectl get services	Lists all services.
kubectl describe service <service-name>	Shows details about a service.



```
No resources found in default namespace.

C:\Windows\System32>kubectl create deployment sankube --image=sanmathisedhupathi/guvi:taskmates --port=80
deployment.apps/sankube created
```

The kubectl expose command is used to create a **Kubernetes Service** for an existing resource (Pod, Deployment, ReplicaSet, etc.), allowing network access.

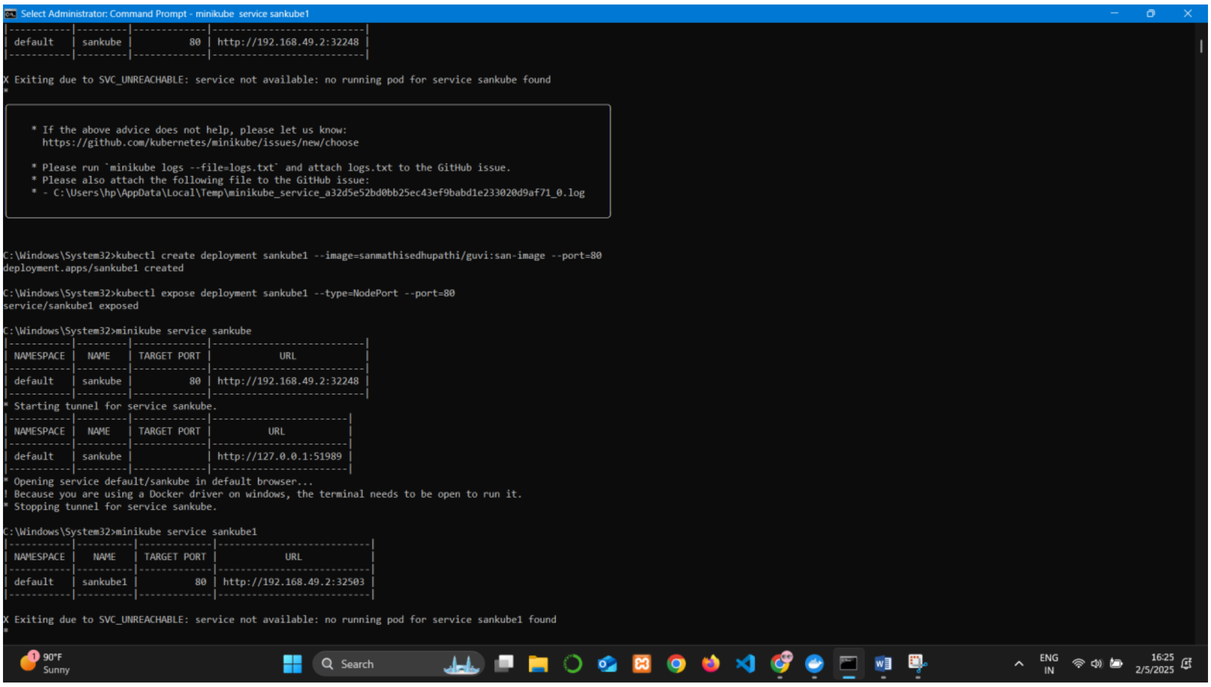


```
C:\Windows\System32>kubectl expose deployment sankube --type=NodePort --port=80
service/sankube exposed
```

minikube service <service-name>

Opens a service in a browser.

Finds the service and launches it.


Select Administrator: Command Prompt - minikube service sankube1
90°F
Sunny
Search
ENG
IN
16:25
2/5/2025

```
|-----------|---------|-------------|---------------------------|
| default   | sankube |          80 | http://192.168.49.2:32248 |
|-----------|---------|-------------|---------------------------|

X Exiting due to SVC_UNREACHABLE: service not available: no running pod for service sankube found
*
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│                                                                                                 │
│    * If the above advice does not help, please let us know:                                     │
│      https://github.com/kubernetes/minikube/issues/new/choose                                   │
│                                                                                                 │
│    * Please run `minikube logs --file=logs.txt` and attach logs.txt to the GitHub issue.        │
│    * Please also attach the following file to the GitHub issue:                                 │
│    * - C:\Users\hp\AppData\Local\Temp\minikube_service_a32d5e52bd0bb25ec43ef9babd1e233020d9af71_0.log │
│                                                                                                 │
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C:\Windows\System32>kubectl create deployment sankube1 --image=sanmathisedhupathi/guvi:san-image --port=80
deployment.apps/sankube1 created

C:\Windows\System32>kubectl expose deployment sankube1 --type=NodePort --port=80
service/sankube1 exposed

C:\Windows\System32>minikube service sankube
|-----------|---------|-------------|---------------------------|
| NAMESPACE |  NAME   | TARGET PORT |            URL            |
|-----------|---------|-------------|---------------------------|
| default   | sankube |          80 | http://192.168.49.2:32248 |
|-----------|---------|-------------|---------------------------|
* Starting tunnel for service sankube.
|-----------|---------|-------------|------------------------|
| NAMESPACE |  NAME   | TARGET PORT |          URL           |
|-----------|---------|-------------|------------------------|
| default   | sankube |             | http://127.0.0.1:51989 |
|-----------|---------|-------------|------------------------|
* Opening service default/sankube in default browser...
! Because you are using a Docker driver on windows, the terminal needs to be open to run it.
* Stopping tunnel for service sankube.

C:\Windows\System32>minikube service sankube1
|-----------|----------|-------------|---------------------------|
| NAMESPACE |   NAME   | TARGET PORT |            URL            |
|-----------|----------|-------------|---------------------------|
| default   | sankube1 |          80 | http://192.168.49.2:32503 |
|-----------|----------|-------------|---------------------------|

X Exiting due to SVC_UNREACHABLE: service not available: no running pod for service sankube1 found
*
```
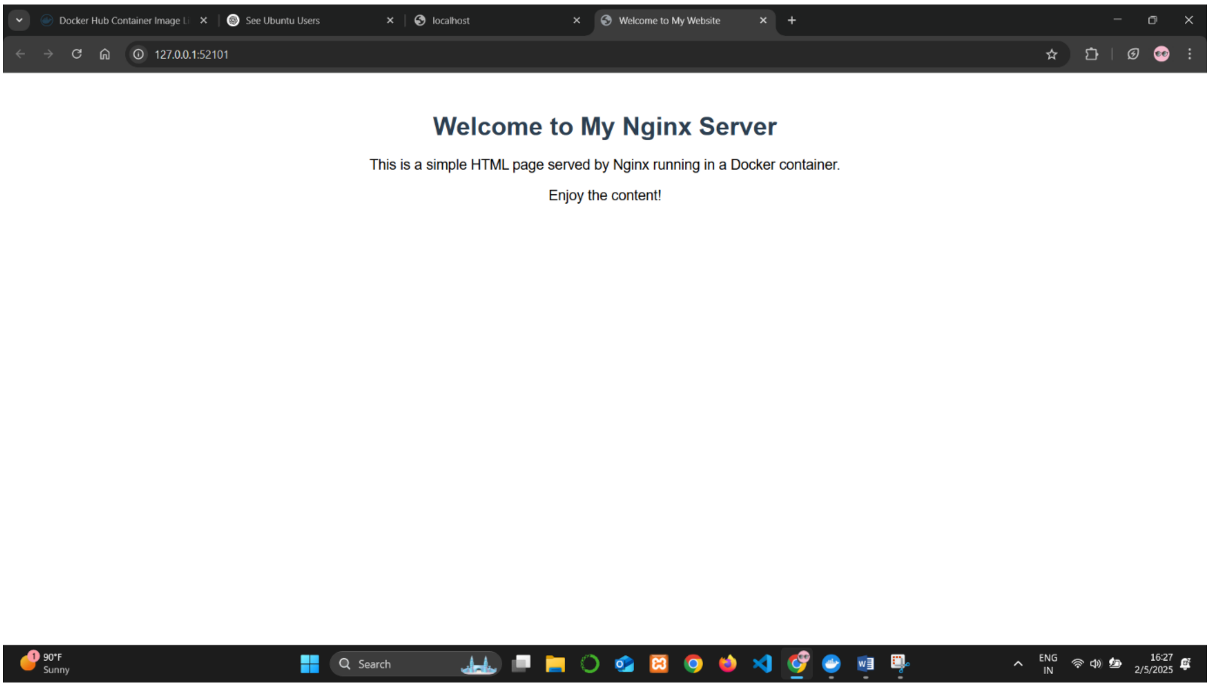

Output in Chrome



Welcome to My Nginx Server

This is a simple HTML page served by Nginx running in a Docker container.

Enjoy the content!