

Narendiran S-22CSR128 ||CSE C

DevOps Day 3 Task

<https://kubernetes.io/docs/tasks/tools/install-kubectl-linux/>

```
curl -LO https://dl.k8s.io/release/v1.32.0/bin/linux/amd64/kubectl
```

```
sudo install -o root -g root -m 0755 kubectl /usr/local/bin/kubectl
```

```
chmod +x kubectl
```

```
mkdir -p ~/.local/bin
```

```
mv ./kubectl ~/.local/bin/kubectl
```

```
kubectl version --client
```

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<https://minikube.sigs.k8s.io/docs/start/?arch=%2Fwindows%2Fx86-64%2Fstable%2F.exe+download>

<https://github.com/kubernetes/minikube/releases/latest/download/minikube-linux-amd64>

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

```
minikube start
```

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```
naren@DESKTOP-3ELNUUV:~$ minikube start
minikube v1.35.0 on Ubuntu 24.04 (amd64)
Using the docker driver based on existing profile
Starting "minikube" primary control-plane node in "minikube" cluster
Pulling base image v0.0.46 ...
Updating the running docker "minikube" container ...
Preparing Kubernetes v1.32.0 on Docker 27.4.1 ...
Verifying Kubernetes components...
  * Using image gcr.io/k8s-minikube/storage-provisioner:v5
Enabled addons: default-storageclass, storage-provisioner
Done! kubectl is now configured to use "minikube" cluster and "default" namespace by default
naren@DESKTOP-3ELNUUV:~$ kubectl get pods --all-namespaces
NAMESPACE   NAME                                     READY   STATUS    RESTARTS   AGE
kube-system  coredns-668d6bf9bc-j2mdx              1/1     Running   2 (54s ago) 24h
kube-system  etcd-minikube                         1/1     Running   2 (58s ago) 24h
kube-system  kube-apiserver-minikube               1/1     Running   2 (49s ago) 24h
kube-system  kube-controller-manager-minikube      1/1     Running   2 (59s ago) 24h
kube-system  kube-proxy-vjg5j                     1/1     Running   2 (59s ago) 24h
kube-system  kube-scheduler-minikube              1/1     Running   2 (59s ago) 24h
kube-system  storage-provisioner                   1/1     Running   4 (59s ago) 24h
naren@DESKTOP-3ELNUUV:~$ kubectl get pods -n kube-system
NAME                                     READY   STATUS    RESTARTS   AGE
coredns-668d6bf9bc-j2mdx              1/1     Running   2 (57s ago) 24h
etcd-minikube                         1/1     Running   2 (61s ago) 24h
kube-apiserver-minikube               1/1     Running   2 (52s ago) 24h
kube-controller-manager-minikube      1/1     Running   2 (62s ago) 24h
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kube-scheduler-minikube              1/1     Running   2 (62s ago) 24h
storage-provisioner                   1/1     Running   4 (62s ago) 24h
naren@DESKTOP-3ELNUUV:~$ kubectl create deployment nginx-deployment --image=nginx
deployment.apps/nginx-deployment created
naren@DESKTOP-3ELNUUV:~$ kubectl get pods
NAME                                     READY   STATUS    RESTARTS   AGE
nginx-deployment-6cfb9864c-9q5px       0/1     ContainerCreating   0           4s
```

minikube status

kubectl get pod

kubectlt get deploy

kubectlt get replica

kubectlt get pod -o wide

version: '3'

services:

web:

image: nginx:latest

ports:

- 80:80

db:

image: mysql:latest

environment:

- MYSQL_ROOT_PASSWORD=secret

docker exec -it david-db-1 /bin/bash

mysql -u root -p

DevOps Day 3 Task

Tasks Completed:

- I have installed minikube and executed several commands.

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```