

# Kubernetes commands:

## 1. Cluster Management:

`kubectl cluster-info` : Display cluster info.

`kubectl get nodes` : List all nodes in the cluster.

`kubectl describe node [node-name]` : Show details about a specific node.

## 2. Pod Management:

`kubectl get pods` : List all pods in the current namespace.

`kubectl describe pod [pod-name]` : Display detailed information about a pod.

`kubectl logs [pod-name]` : Show the logs of a pod.

`kubectl exec -it [pod-name] [container-name] -- /bin/sh` : Open a shell in a running pod.

## 3. Deployment Management:

`kubectl get deployments` : List all deployments.

`kubectl describe deployment [deployment-name]` : Display details about a deployment.

`kubectl scale deployment [deployment-name] --replicas=[number]` : Scale the number of replicas.

## 4. Service Management :

`kubectl get services` : List all services.

`kubectl describe service [service-name]` : Show details about a service.

`kubectl port-forward [pod-name] [local-port]:[remote-port]` : Forward a local port to a pod.

## 5. ConfigMap and Secret :

`kubectl create configmap [configmap-name] --from-file=[path/to/file]` : Create a ConfigMap from a file.

`kubectl create secret generic [secret-name] --from-literal=[key]=[value]` : Create a secret.

## 6. Namespace Management:

`kubectl get namespaces` : List all namespaces.

`kubectl create namespace [namespace-name]` : Create a new namespace.

`kubectl config set-context --current --namespace=[namespace-name]` : Set the default namespace for the current context.

## 7. Scaling :

`kubectl scale deployment [deployment-name] --replicas=[number]` : Scale the number of replicas in a deployment.  
`kubectl autoscale deployment [deployment-name] --min=[min-replicas] --max=[max-replicas]` : Create a Horizontal Pod Autoscaler.

## **8. Rolling Updates and Rollbacks :**

`kubectl set image deployment/[deployment-name] [container-name]=[new-image]` : Trigger a rolling update.  
`kubectl rollout status deployment [deployment-name]` : Check the status of a rollout.  
`kubectl rollout history deployment [deployment-name]` : View rollout history.  
`kubectl rollout undo deployment [deployment-name] --to-revision=[revision]` : Rollback to a specific revision.

## **9. Deleting Resources :**

`kubectl delete pod [pod-name]` : Delete a pod.  
`kubectl delete deployment [deployment-name]` : Delete a deployment.  
`kubectl delete service [service-name]` : Delete a service.

## **10. Advanced Commands:**

`kubectl apply -f [file.yaml]` : Apply a configuration file.  
`kubectl get all --all-namespaces` : List resources in all namespaces.  
`kubectl describe [resource-type] [resource-name]` : Display detailed information about a resource.