Kubernetes Commands with Uses

1. Cluster Information

Command: kubectl cluster-info

Use: Displays information about the Kubernetes cluster (master and services).

2. Show All Nodes

Command: kubectl get nodes

Use: Lists all nodes in the Kubernetes cluster.

3. Create a Pod

Command: kubectl run <pod_name> --image=<image>

Use: Creates a new pod with the specified name and image.

4. Example - Create a Pod

Command: kubectl run my-first-pod --image=nginx

Use: Creates a pod named 'my-first-pod' with the 'nginx' image.

5. Pod Related Information

Command: kubectl get pods

Use: Lists all the pods running in the current namespace.

6. Detailed Pod Info

Command: kubectl get -o wide pods

Use: Displays detailed information about all the pods.

7. Detailed Node Info

Command: kubectl get -o wide nodes

Use: Displays detailed information about all the nodes.

8. Describe a Pod

Command: kubectl describe pod my-first-pod

Use: Provides detailed information about the 'my-first-pod'.

9. Run Pod with Port Mapping

Command: kubectl run my-pod --port=80 --image=nginx

Use: Creates a pod named 'my-pod' with port 80 exposed and 'nginx' image.

10. List All Resources

Command: kubectl get all

Use: Lists all resources (pods, services, deployments, etc.) in the current namespace.

11. Apply a YAML File

Command: kubectl apply -f <filename>.yaml

Use: Creates or updates a resource defined in a YAML file.

12. Get Pod Logs

Command: kubectl logs <pod-name>

Use: Displays the logs of the specified pod.

13. Execute Command in a Pod

Command: kubectl exec -it <pod-name> -- /bin/bash

Use: Executes a command inside a running pod interactively.

14. Scale a Deployment

Command: kubectl scale deployment <deployment-name> --replicas=<number>

Use: Scales the specified deployment to the desired number of replicas.

15. Delete a Pod

Command: kubectl delete pod <pod-name>

Use: Deletes the specified pod.