

## Kubernetes Commands & Usage

### 1. Basic Cluster Information

- **Kubectl Cluster-info:** Display information about the cluster.
- **Kubectl version:** Display version info

### 2. Working with Pods:

- **Kubectl get pods:** List all pods in all namespaces.
- **Kubectl run <name> --image=<image>:** Deploy a new pod with a given image.
- **Kubectl describe pod <pod-name>:** Describe a specific pod.
- **Kubectl logs <pod-name>:** Fetch the logs from a pod.
- **Kubectl delete pod <pod-name>:** Delete a specific pod.

### 3. Working with Nodes and Cluster:

- **Kubectl get Nodes:** List nodes in a Cluster.
- **Kubectl describe node <node-name>:** show details of a specific node.

### 4. Working with Deployments:

- **Kubectl Create deployment <name>--image=<image>:** Create a new deployment.
- **Kubectl get deployment:** list all deployment.
- **Kubectl describe deployment <deployment-Name>:** Describe a specific deployment.
- **Kubectl scale deployment <deployment-Name>--replicas=<num>:** scale up/down a deployment.

## 5. Working with Services:

- **Kubecttl expose deployment <name> --type =Load balancer --port=8080:** Expose a Deployment as a service.
- **Kubecttl get services:** List all service.
- **Kubecttl describe service <service-name>:** Describe a specific service.

## 6. Config and Storage:

- **Kubecttl get Configmaps:** List all Config maps.
- **Kubecttl Create Configmap <name> --from-file=<path>:** Create a config map from a file.
- **Kubecttl get Secrets:** List all secrets.
- **Kubecttl create secrets:** Create a secrets.
- **Kubecttl get pv:** list all persistent volumes.
- **Kubecttl get pvc:** List all persistent volume claims.

## 7. Namespaces and Context:

- **Kubecttl get Namespaces:** list all Namespaces.
- **Kubecttl Config get-contexts:** show all contexts.
- **Kubecttl Config use-context <context-name>:** Switch to a different context.

## 8. Monitoring & Logging:

- **Kubecttl top nodes:** Display resource (Cpu/Memory/Storage) usage of nodes.
- **Kubecttl top pods:** Display resource (Cpu/Memory/Storage) Usage of pods.

## 9. Working with Helm:

- **Helm list:** list release.
- **Helm install < chart >:** Install a helm chart.
- **Helm uninstall < release-name>:** uninstall a helm release.

