Name	Commands
Run a two-replica nginx deployment	kubectl run my-nginx –image=nginx –replicas=5 –port=80
Run and expose the Nginx pod	kubectl run my-nginx –restart=Never –image=nginx –port=80 –expose
Run nginx deployment and expose it	kubectl run my-nginx –image=nginx –port=80 –expose
List of nodes and pods	kubectl get pod -o wide
List all of them.	kubectl get all –all-namespaces
Get every service	kubectl get service –all-namespaces
Show labeled nodes	kubectl get nodes –show-labels
Using a dry run, verify the yaml file	kubectl create –dry-run –validate -f pod-GFG.yaml

2. Check Performance

Name	Command
learn about node resource use	kubectl top node
Obtain pod resource use.	kubectl top pod
Get the resource utilization for the specified pod.	kubectl top <podname> –containers

Name	Command
List each container’s resource usage.	kubectl top pod –all-namespaces –containers=true

3. Label & Annontation

Name	Commands
By label, sort the pods	kubectl get pods -l owner=gfg
Add a label by hand to a pod.	kubectl label pods <podname> owner=gfg
Remove label	kubectl label pods <podname> owner- GFG

4. Secrets

Name	Commands
List secrets	kubectl get secrets –all-namespaces
Obtain a certain hidden field of sceret.	kubectl get secret GFG-cluster-kubeconfig

5. Service

Name	Commands
List all services	kubectl get services
List service endpoints	kubectl get endpoints
Get service detail	kubectl get service <servicename> -o yaml

6. Volumes & Volume Claims

Name	Commands
List storage class	kubectl get storageclass
Check the mounted volumes	kubectl exec storage<nameofpv>
Check to persist volume	kubectl describe <nameofpv>

Kubectl apply

We can update or apply the configuration to a cluster with the aid of **“kubectl apply”**. With the help of the apply command, Kubernetes resources can be modified and created using a configuration file or a collection of configurations from a directory.

```
kubectl apply -f <filename.yaml>
kubectl delete -f [file-name]
kubectl logs [pod-name]
kubectl exec -it [pod-name] -- bin/bash
```

```
kubectl port-forward MYPOD 8888:8080
```

```
echo -n “123456789” | base64  ( increatped password for)
```

Kubectl is a command line tool for Kubernetes that allows you to communicate and control Kubernetes clusters.

Kubectl works by communicating with the Kubernetes API server: It authenticates with the Master Node of your cluster and makes API calls to perform management actions. You can use kubectl to create, inspect, update, and delete Kubernetes objects, deploy applications, inspect and manage cluster resources, and view logs.

Kubectl offers three technique