K8S 101 Training commands cheat sheet

Cluster Information

```
$ kubectl cluster-info
$ kubectl get nodes
$ kubectl describe nodes
$ kubectl get pods -n kube-system
```

Create resources

```
$ kubectl apply -f filename.yaml -n namespace
$ kubectl delete -f filename.yaml -n namespace
```

List resources

```
$ kubectl get namespace
$ kubectl get pods -n namespace
$ kubectl get pods -n namespace -o wide
$ kubectl get deployment -n namespace
```

Secret Management

```
# Create a Container Image Registry token
$ kubectl create secret docker-registry secretName --docker-server=registry.gitlab.com --docker-username=tokenUsername --docker-password=tokenPassword -n nameSpace

# Verify container registry secret content
$ kubectl get secret secretName --output="jsonpath={.data.\.dockerconfigjson}" -n namespace | base64 --decode
```

Execute a command on a pod

```
$ kubectl -n namespace exec podName - shell/command
$ kubectl -n namespace exec -it podName - sh
```

Troubleshoot resources

```
$ kubectl describe pods podName -n namespace
$ kubectl logs podName -n namespace
$ kubectl run multitool --image=praqma/network-multitool -n namespace
```

Short name	Full Name
deploy	deployment
ns	namespace
po	pods
rs	replicaset
svc	service
no	nodes
ep	endpoints

Execute a command

```
kubectl port-forward -n frontns deployment/webapp
5000:80

kubectl port-forward -n frontns pods/webapp-
7dd5ff6788-t8xdt 5000:80

kubectl port-forward -n frontnsns service/webapp
5000:80
```

Build Container Image

```
docker login registry.gitlab.com
docker build -t registry.gitlab.com/f.chmainy/toremove/backend:v1 .
docker push registry.gitlab.com/f.chmainy/toremove/backend:v1
```

GIT Commands

```
git clone https://github.com/fchmainy/k8s-
trainings-101.git
```