Setup minikube at your local and explore creating namespaces (Go through official documentation).

```
root@ip-172-31-10-246:~# minikube kubectl -- get pods -A
    > kubectl.sha256:  64 B / 64 B [------------------------] 100.00% ? p/s 0s
    > kubectl:  57.75 MiB / 57.75 MiB [-------------------] 100.00% ? p/s 100ms
NAMESPACE      NAME                                  READY   STATUS    RESTARTS   AGE
kube-system    coredns-66bc5c9577-gp7s4              0/1     Running   0          16s
kube-system    etcd-minikube                         1/1     Running   0          21s
kube-system    kube-apiserver-minikube               1/1     Running   0          22s
kube-system    kube-controller-manager-minikube      1/1     Running   0          21s
kube-system    kube-proxy-wslbq                      1/1     Running   0          16s
kube-system    kube-scheduler-minikube               1/1     Running   0          21s
kube-system    storage-provisioner                   1/1     Running   0          19s
root@ip-172-31-10-246:~#
```

Installed aws cli,kubectl,eksctl and minicube

```
root@ip-172-31-10-246:~# aws --version
aws-cli/2.32.14 Python/3.13.9 Linux/6.14.0-1015-aws exe/x86_64.ubuntu.24
root@ip-172-31-10-246:~# kubectl version
Client Version: v1.34.3
Kustomize Version: v5.7.1
Server Version: v1.34.0
root@ip-172-31-10-246:~# eksctl version
0.220.0
root@ip-172-31-10-246:~# minicube version
Command 'minicube' not found, did you mean:
  command 'minitube' from deb minitube (3.9.3-2)
Try: apt install <deb name>
root@ip-172-31-10-246:~# minikube version
minikube version: v1.37.0
commit: 65318f4cfff9c12cc87ec9eb8f4cdd57b25047f3
root@ip-172-31-10-246:~#
```

Checking for nodes:

```
root@ip-172-31-10-246:~# kubectl get nodes
NAME       STATUS   ROLES           AGE   VERSION
minikube   Ready    control-plane   24m   v1.34.0
root@ip-172-31-10-246:~#
```

Created namespace UAT,PROD and COB using yaml file

```
root@ip-172-31-10-246:~# cat minikube.yaml
apiVersion: v1
kind: Namespace
metadata:
  name: uat
---
apiVersion: v1
kind: Namespace
metadata:
  name: cob
---
apiVersion: v1
kind: Namespace
metadata:
  name: prod
root@ip-172-31-10-246:~#
```

```
root@ip-172-31-10-246:~# kubectl apply -f minikube.yaml
namespace/uat created
namespace/cob created
namespace/prod created
root@ip-172-31-10-246:~#
```

Namespaces created:

```
root@ip-172-31-10-246:~# kubectl get ns
NAME              STATUS   AGE
cob               Active   2m5s
default           Active   33m
kube-node-lease   Active   33m
kube-public       Active   33m
kube-system       Active   33m
prod              Active   2m5s
uat               Active   2m5s
root@ip-172-31-10-246:~#
```

Deployed nginix in UAT namespace:

```
root@ip-172-31-10-246:~# kubectl get pods -n uat
NAME                     READY   STATUS    RESTARTS   AGE
nginx-66686b6766-5czjz   1/1     Running   0          17s
root@ip-172-31-10-246:~#
```

Deleted prod namespace :

```
root@ip-172-31-10-246:~# kubectl get ns
NAME              STATUS   AGE
cob               Active   9m3s
default           Active   40m
kube-node-lease   Active   40m
kube-public       Active   40m
kube-system       Active   40m
prod              Active   9m3s
uat               Active   9m3s
root@ip-172-31-10-246:~# kubectl delete namespace prod
namespace "prod" deleted
root@ip-172-31-10-246:~# kubectl get ns
NAME              STATUS   AGE
cob               Active   9m33s
default           Active   40m
kube-node-lease   Active   40m
kube-public       Active   40m
kube-system       Active   40m
uat               Active   9m33s
root@ip-172-31-10-246:~#
```