

1st question:

Create NS and SA

```
controlplane $  
controlplane $  
controlplane $ k create ns app-team1  
namespace/app-team1 created  
controlplane $  
controlplane $ k create sa cicd-token -n app-team1  
serviceaccount/cicd-token created  
controlplane $  
controlplane $ k get sa -n app-team1  
NAME          SECRETS  AGE  
cicd-token    0        8s  
default       0        30s  
controlplane $
```

```
controlplane $  
controlplane $ kubectl create clusterrole deployment-clusterrole --verb=create --resource=Deployments,StatefulSets,DaemonSets  
clusterrole.rbac.authorization.k8s.io/deployment-clusterrole created  
controlplane $  
controlplane $ kubectl create clusterrolebinding deployment-clusterrole-binding --clusterrole=deployment-clusterrole  
--serviceaccount=app-team1:cicd-token --namespace=app-team1  
clusterrolebinding.rbac.authorization.k8s.io/deployment-clusterrole-binding created  
controlplane $  
controlplane $ k get clusterrolebinding  
NAME                                AGE                                ROLE  
calico-kube-controllers             5d14h                             ClusterRole/calico-kube-controllers  
canal-calico                       5d14h                             ClusterRole/calico-node  
canal-flannel                      5d14h                             ClusterRole/flannel  
cluster-admin                      5d14h                             ClusterRole/cluster-admin  
deployment-clusterrole-binding      14s                               ClusterRole/deployment-clusterrole  
kubeadm:cluster-admins             ClusterRole/cluster-admin
```

```
controlplane $  
controlplane $ kubectl auth can-i list deployments --as=system:serviceaccount:app-team1:cicd-token -n app-team1  
no  
controlplane $  
controlplane $ kubectl auth can-i create deployments --as=system:serviceaccount:app-team1:cicd-token -n app-team1  
yes  
controlplane $  
controlplane $
```

2nd question:

```
controlplane $ k create sa pvviewer
serviceaccount/pvviewer created
controlplane $
controlplane $ k get sa
NAME      SECRETS  AGE
default   0        5d14h
pvviewer   0        3s
controlplane $
controlplane $ kubectl create clusterrole pvviewer-role --verb=list --resource=PersistentVolumes
clusterrole.rbac.authorization.k8s.io/pvviewer-role created
controlplane $
controlplane $ kubectl create clusterrolebinding pvviewer-role-binding --clusterrole=pvviewer-role --serviceaccount=default:pvviewer
clusterrolebinding.rbac.authorization.k8s.io/pvviewer-role-binding created
controlplane $
controlplane $
```

```
controlplane $
controlplane $ kubectl auth can-i list PersistentVolumes --as=system:serviceaccount:default:pvviewer
Warning: resource 'persistentvolumes' is not namespace scoped

yes
controlplane $ kubectl auth can-i list pods --as=system:serviceaccount:default:pvviewer
no
controlplane $ kubectl auth can-i create PersistentVolumes --as=system:serviceaccount:default:pvviewer
Warning: resource 'persistentvolumes' is not namespace scoped

no
controlplane $
```