Q:16:

Configure a network policy.

Configure a network policy using the dalhousie and calicut projects with the following

requirements:

The dalhousie project has network policy with the name db-allow-mysql-conn based

on pod selector label network.openshift.io/policy-group

Connections to the dalhousie project are restricted to deployments from the calicut project

The network policy is filtered by project selector using the team:devsecops label and

pod selector using the deploymentdb-mysql label

The application can establish a connection to port 3306/TCP

You can check your work by examining the logs in the calicut project.

Answer:

1. List all the Labels for the below.

$ oc get pods-n dalhousie--show-labels

$ oc get namespace calicut--show-labels

$ oc get pods-n calicut--show-labels

```
[student@workstation ~]$ oc get namespace calicut --show-labels
NAME       STATUS   AGE   LABELS
calicut    Active   12s   kubernetes.io/metadata.name=calicut,pod-s
ecurity.kubernetes.io/audit-version=v1.24,pod-security.kubernetes.
io/audit=restricted,pod-security.kubernetes.io/warn-version=v1.24,
pod-security.kubernetes.io/warn=restricted
```

```
[student@workstation ~]$ oc apply -f mysql-deployment.yaml -n dalh
ousie
deployment.apps/db-mysql created
```

```
[student@workstation ~]$ oc apply -f checker.yaml
deployment.apps/checker created
[student@workstation ~]$ oc get pod
NAME                         READY    STATUS             RESTARTS
AGE
checker-58c44dc9d8-l4lfw     0/1      ContainerCreating   0
5s
[student@workstation ~]$ oc get deployment
NAME       READY   UP-TO-DATE   AVAILABLE   AGE
checker    0/1     1            0           11s
```

```
student@workstation ~]$ oc get pods -n dalhousie
AME                              READY     STATUS      RESTARTS    AGE
b-mysql-7cf5c8468d-gx76l         1/1       Running     0           21m
student@workstation ~]$ oc get pods -n calicut
AME                              READY     STATUS               RESTARTS    A
E
hecker-58c44dc9d8-l4lfw          0/1       ImagePullBackOff     0           7
s
student@workstation ~]$ oc get pods -n dalhousie --show-labels
c get pods -n calicut --show-labels
c get namespace calicut --show-labels
```

```
student@workstation ~]$ vim network-policy.yaml
student@workstation ~]$ oc apply -f network-policy.yaml
etworkpolicy.networking.k8s.io/db-allow-mysql-conn created
student@workstation ~]$ oc get networkpolicy -n dalhousie
c describe networkpolicy db-allow-mysql-conn -n dalhousie
AME                    POD-SELECTOR             AGE
b-allow-mysql-conn     deployment=db-mysql      23s
ame:          db-allow-mysql-conn
amespace:     dalhousie
reated on:    2025-12-09 23:51:05 -0500 EST
abels:        <none>
```

```
student@workstation ~]$ oc run test --image=busybox --restart=Ne
r -- sh -c "sleep 3600"
Warning: would violate PodSecurity "restricted:v1.24": allowPrivi
geEscalation != false (container "test" must set securityContext
llowPrivilegeEscalation=false), unrestricted capabilities (conta
er "test" must set securityContext.capabilities.drop=["ALL"]), r
AsNonRoot != true (pod or container "test" must set securityCont
t.runAsNonRoot=true), seccompProfile (pod or container "test" mu
 set securityContext.seccompProfile.type to "RuntimeDefault" or
ocalhost")
od/test created
student@workstation ~]$ oc exec test -- nc -zv mysql.dalhousie.s
.cluster.local 3306
rror: unable to upgrade connection: container not found ("test")
student@workstation ~]$
```