

# Lab 7

## Q1:

```
controlplane $ kubectl get namespaces > /opt/namespaces
controlplane $ cat /opt/namespaces
NAME      STATUS   AGE
default   Active   35d
earth     Active   2m22s
kube-node-lease  Active   35d
kube-public  Active   35d
kube-system  Active   35d
controlplane $
```

## Q2:

```
salmamyousssef@salmamyousssef-Satellite-C55-B:~$ kubectl create serviceaccount neptune-sa-v2 -n pluto
serviceaccount/neptune-sa-v2 created
salmamyousssef@salmamyousssef-Satellite-C55-B:~$ kubectl get serviceaccounts -n pluto
NAME      SECRETS   AGE
default   0          8h
neptune-sa-v2  0          15s
salmamyousssef@salmamyousssef-Satellite-C55-B:~$
```

## Q3:

```
service-lab7.yaml U ! config-map.yaml U X ! pod-lab7.yaml 1, U
config-map.yaml > {} data > DB_PORT
io.k8s.api.core.v1.ConfigMap (v1@configmap.json)
1  apiVersion: v1
2  kind: ConfigMap
3  metadata:
4    name: cm-3392845
5  data:
6    DB_NAME: SQL3322
7    DB_HOST: sql322.mycompany.com
8    DB_PORT: "3306"
9
```

```

salmamyoussef@salmamyoussef-Satellite-C55-B:~$ kubectl get configmaps -n pluto
NAME          DATA      AGE
cm-3392845    3          2m21s
kube-root-ca.crt 1          8h
salmamyoussef@salmamyoussef-Satellite-C55-B:~$ kubectl describe configmaps ^C
salmamyoussef@salmamyoussef-Satellite-C55-B:~$ kubectl describe configmaps cm-3392845 -n pluto
Name:         cm-3392845
Namespace:    pluto
Labels:       <none>
Annotations:  <none>

Data
====
DB_PORT:
----
3306
DB_HOST:
----
sql322.mycompany.com
DB_NAME:
----
SQL3322

BinaryData
====

Events:  <none>
salmamyoussef@salmamyoussef-Satellite-C55-B:~$ █

```

## Q4:

```

! service-lab7.yaml U    ! pod-lab7.yaml 1, U X
! pod-lab7.yaml > {} spec > [ ] containers
  io.k8s.api.core.v1.Pod (v1@pod.json)
1  apiVersion: v1
2  kind: Pod
3  metadata:
4    name: project-plt-6cc-api
5    namespace: pluto
6    labels:
7      name: pod-to-be-exposed
8  spec:
9
10  containers:
11    - image: nginx:1.17.3-alpine
12      name: nginx-container
13
14

```

! service-lab7.yaml U X ! pod-lab7.yaml 1, U

```
1 service-lab7.yaml > {} metadata > [abc] name
2 io.k8s.api.core.v1.Service (v1@service.json)
3
4 1 apiVersion: v1
5 2 kind: Service
6 3 metadata:
7   | name: project-plt-6cc-svc
8   | namespace: pluto
9 4 spec:
10  | type: ClusterIP
11  | ports:
12  |   - protocol: TCP
13  |     port: 3333
14  |     targetPort: 80
15  | selector:
16  |   name: pod-to-be-exposed
```

**Q5:**

```
Editor  Tab1  +
apiVersion: v1
kind: PersistentVolume
metadata:
  name: earth-project-earthflower-pv
spec:
  capacity:
    storage: 2Gi
  accessModes:
    - ReadWriteOnce
  hostPath:
    path: "/Volumes/Data"
  persistentVolumeReclaimPolicy: Retain
```

"pv-lab7.yaml" 12L, 233C

1,1

All



```
dep-lab7.yaml U ! pvc-earth.yaml U ! nginx-deployment.yaml 1, U ! dep-lab7.yaml 1, U X
dep-lab7.yaml > {} spec > {} template > {} spec > [ ] containers > {} 0 > name
io.k8s.api.apps.v1.Deployment (v1@deployment.json)
1  apiVersion: apps/v1
2  kind: Deployment
3  metadata:
4    name: project-earthflower
5    namespace: earth
6  spec:
7    selector:
8      matchLabels:
9        app: httpd
10   template:
11     metadata:
12       labels:
13         app: httpd
14     spec:
15       containers:
16         - name: httpd
17           image: httpd:2.4.41-alpine
18           volumeMounts:
19             - mountPath: /tmp/project-data
20               name: volume
21       volumes:
22         - name: volume
23           persistentVolumeClaim:
24             claimName: earth-project-earthflower-pvc
```