

# LAB 6

Q1:

```
lab5.md 9+,U ! webapp-lab6.yaml 1,U X ! webapp-volume.yaml 1,U ! webapp.yaml 1,U
! webapp-lab6.yaml > {} spec > [ ] containers > {} 0 > name
io.k8s.api.core.v1.Pod (v1@pod.json)
1  apiVersion: v1
2  kind: Pod
3  metadata:
4    name: webapp
5  spec:
6    containers:
7    - env:
8      - name: LOG HANDLERS
9        value: file
10      image: kodekloud/event-simulator
11      imagePullPolicy: Always
12      name: event-simulator

PROBLEMS 14 OUTPUT DEBUG CONSOLE TERMINAL
bash + - [ ] [ ] ^ X
• salmamyoussef@salmamyoussef-Satellite-C55-B:~/Documents/ITI-devops/Kubernetes/lab1$ kubectl create
-f webapp-lab6.yaml
pod/webapp created
```

Q2:

```
lab5.md 9+,U ! webapp-lab6.yaml 1,U X ! webapp-volume.yaml 1,U ! webapp.yaml 1,U
! webapp-lab6.yaml > {} spec > [ ] containers > {} 0 > [ ] volumeMounts > {} 0 > name
io.k8s.api.core.v1.Pod (v1@pod.json)
1  apiVersion: v1
2  kind: Pod
3  metadata:
4    name: webapp
5  spec:
6
7    volumes:
8      - name: webapp-volume
9        hostPath:
10          path: /var/log/webapp
11    containers:
12    - env:
13      - name: LOG HANDLERS
14        value: file
15      image: kodekloud/event-simulator
16      imagePullPolicy: Always
17      name: event-simulator
18      volumeMounts:
19      - name: webapp-volume
20        mountPath: /log
21
```

```

Mounts:
  /log from webapp-volume (rw)
  /var/run/secrets/kubernetes.io/serviceaccount from kube-api-access-7wspx (ro)
Conditions:
  Type              Status
  Initialized        True
  Ready              True
  ContainersReady    True
  PodScheduled       True
Volumes:
  webapp-volume:
    Type:          HostPath (bare host directory volume)
    Path:           /var/log/webapp
    HostPathType:

```

### Q3:

```

lab5.md 9+,U  ! webapp-lab6.yaml 1,U  ! pv.yaml U  ! webapp-volume.yaml 1,U  ! webapp.yaml
! pv.yaml > {} spec > persistentVolumeReclaimPolicy
io.k8s.api.core.v1.PersistentVolume (v1@persistentvolume.json)
1  apiVersion: v1
2  kind: PersistentVolume
3  metadata:
4    name: pv-log
5  spec:
6    capacity:
7      storage: 100Gi
8    accessModes:
9      - ReadWriteMany
10   hostPath:
11     path: /pv/log
12   persistentVolumeReclaimPolicy: Retain

salmamyousssef@salmamyousssef-Satellite-C55-B:~/Documents/ITI-devops/Kubernetes/lab1$ kubectl create
-f pv.yaml
persistentvolume/pv-log created
salmamyousssef@salmamyousssef-Satellite-C55-B:~/Documents/ITI-devops/Kubernetes/lab1$ kubectl get pv
NAME      CAPACITY  ACCESS MODES  RECLAIM POLICY  STATUS   CLAIM  STORAGECLASS  REASON  AG
E
pv-log    100Gi     RWX           Retain          Available
salmamyousssef@salmamyousssef-Satellite-C55-B:~/Documents/ITI-devops/Kubernetes/lab1$

```

### Q4:

```

! pvc.yaml > {} spec
io.k8s.api.core.v1.PersistentVolumeClaim (v1@persistentvolumeclaim.json)
1  apiVersion: v1
2  kind: PersistentVolumeClaim
3  metadata:
4    name: claim-log-1
5  spec:
6    accessModes:
7      - ReadWriteOnce
8    resources:
9      requests:
10       storage: 50Mi

```

```
salmamyoussef@salmanyoussef-Satellite-C55-B:~/Documents/ITI-devops/Kubernetes/lab1$ kubectl create -f pvc.yaml
persistentvolumeclaim/claim-log-1 created
salmamyoussef@salmanyoussef-Satellite-C55-B:~/Documents/ITI-devops/Kubernetes/lab1$ kubectl get pv
NAME          STATUS    VOLUME                                     CAPACITY   ACCESS MODES   STORAGECLASS   AGE
claim-log-1   Bound    pvc-08360e55-9b57-4560-a1ff-8a33293247ad   50Mi       RWO            standard       11s
salmamyoussef@salmanyoussef-Satellite-C55-B:~/Documents/ITI-devops/Kubernetes/lab1$
```

Q5:

```
salmamyoussef@salmanyoussef-Satellite-C55-B: ~/Docume...
salmamyoussef@salmanyoussef-Satellite-C55-B:~/Documents/ITI-devops/Kubernetes/lab1$ kubectl describe pvc claim-log-1
Name:          claim-log-1
Namespace:     default
StorageClass:  standard
Status:        Bound
Volume:        pvc-08360e55-9b57-4560-a1ff-8a33293247ad
Labels:        <none>
Annotations:   pv.kubernetes.io/bind-completed: yes
               pv.kubernetes.io/bound-by-controller: yes
               volume.beta.kubernetes.io/storage-provisioner: k8s.io/minikube-hostpath
HostPath:      volume.kubernetes.io/storage-provisioner: k8s.io/minikube-hostpath
Finalizers:    [kubernetes.io/pvc-protection]
Capacity:      50Mi
Access Modes:  RWO
VolumeMode:    Filesystem
Used By:       <none>
Events:
  Type     Reason          Age    From
  ----     -
  
```

Q6:

```
salmayoussef@salmayoussef-Satellite-C55-B:~/Documents/ITI-devops/Kubernetes/la
bs_solutions$ kubectl describe pv pv-log
Name:          pv-log
Labels:        <none>
Annotations:    <none>
Finalizers:     [kubernetes.io/pv-protection]
StorageClass:
Status:         Available
Claim:
Reclaim Policy: Retain
Access Modes:   RWX
VolumeMode:     Filesystem
Capacity:       100Gi
Node Affinity:  <none>
Message:
Source:
  Type:          HostPath (bare host directory volume)
  Path:          /pv/log
  HostPathType:
Events:         <none>
salmayoussef@salmayoussef-Satellite-C55-B:~/Documents/ITI-devops/Kubernetes/la
bs_solutions$
```

**Q8:**  
**because, they have different access modes**