

LAB 4

1- Create a pod red with redis image and use an initContainer that uses the busybox image and sleeps for 20 seconds

2- Create a pod named print-envvars-greeting.

1. Configure spec as, the container name should be print-env-container and use bash image.

2. Create three environment variables:

a. GREETING and its value should be "Welcome to"

b. COMPANY and its value should be "DevOps"

c. GROUP and its value should be "Industries"

3. Use command to echo ["\$(GREETING) \$(COMPANY) \$(GROUP)"] message.

4. You can check the output using <kubctl logs -f [pod-name]>command

3- Create a Persistent Volume with the given specification.

Volume Name: pv-log

Storage: 100Mi

Access Modes: ReadWriteMany

Host Path: /pv/log

4- Create a Persistent Volume Claim with the given specification.

Volume Name: claim-log-1

Storage Request: 50Mi

Access Modes: ReadWriteMany

5- Create a webapp pod to use the persistent volume claim as its storage.

Name: webapp

Image Name: nginx

Volume: PersistentVolumeClaim=claim-log-1

Volume Mount: /var/log/nginx

6- How many DaemonSets are created in the cluster in all namespaces?

7- what DaemonSets exist on the kube-system namespace?

8- What is the image used by the POD deployed by the kube-proxy

DaemonSet

9- Deploy a DaemonSet for FluentD Logging. Use the given specifications.

Name: elasticsearch

Namespace: kube-system

Image: k8s.gcr.io/fluentd-elasticsearch:1.20

10- Create a multi-container pod with 2 containers.

Name: yellow

Container 1 Name: lemon

Container 1 Image: busybox

Container 2 Name: gold

Container 2 Image: redis

Bonus Question OR if you couldn't Pull MongoDB image yesterday ;)

11- create a POD called db-pod with the image mysql:5.7 then check the POD status

12- why the db-pod status not ready

13- Create a new secret named db-secret with the data given below.

Secret Name: db-secret

Secret 1: MYSQL_DATABASE=sql01

Secret 2: MYSQL_USER=user1

Secret3: MYSQL_PASSWORD=password

Secret 4: MYSQL_ROOT_PASSWORD=password123

14- Configure db-pod to load environment variables from the newly created secret.

Delete and recreate the pod if required.