Free Questions for CKAD by certscare

Shared by Walters on 18-01-2024

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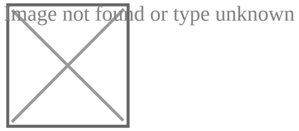
Question 1

Question Type: **MultipleChoice**

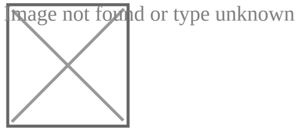
Refer to Exhibit:



Task:

A Dockerfile has been prepared at -/human-stork/build/Dockerfile

1) Using the prepared Dockerfile, build a container image with the name macque and lag 3.0. You may install and use the tool of your choice.



2) Using the tool of your choice export the built container image in OC-format and store it at -/human stork/macque 3.0 tar

Options:

A) Explanation:

Solution:

Image not found or type unknown

Image not found or type unknown

Image not found or type unknown

Answer:

A

Question 2

Question Type: **MultipleChoice**

Refer to Exhibit:

Image not found or type unknown

Context

A web application requires a specific version of redis to be used as a cache.

Task

Create a pod with the following characteristics, and leave it running when complete:

* The pod must run in the web namespace.

The namespace has already been created

* The name of the pod should be cache

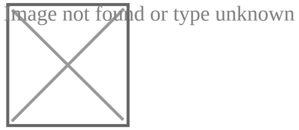
* Use the Ifccncf/redis image with the 3.2 tag

* Expose port 6379

Options:

A) Explanation:

Solution:



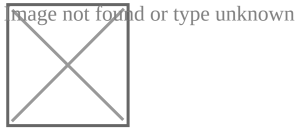
Answer:

A

Question 3

Question Type: MultipleChoice

Refer to Exhibit:



Context

You are tasked to create a secret and consume the secret in a pod using environment variables as follow:

Task

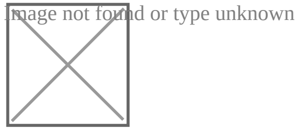
* Create a secret named another-secret with a key/value pair; key1/value4

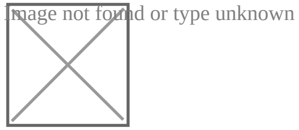
* Start an nginx pod named nginx-secret using container image nginx, and add an environment variable exposing the value of the secret key key 1, using COOL_VARIABLE as the name for the environment variable inside the pod

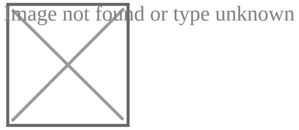
Options:

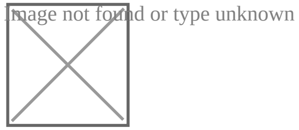
A) Explanation:

Solution:









Answer:

A

Question 4

Question Type: MultipleChoice

Refer to Exhibit:

Image not found or type unknown

Context

You are tasked to create a ConfigMap and consume the ConfigMap in a pod using a volume mount.

Task

Please complete the following:

* Create a ConfigMap named another-config containing the key/value pair: key4/value3

* start a pod named nginx-configmap containing a single container using the

nginx image, and mount the key you just created into the pod under directory /also/a/path

Options:

A) Explanation:

Solution:

Image not found or type unknown

Image not found or type unknown

Image not found or type unknown

Image not found or type unknown

Image not found or type unknown

Image not found or type unknown

Answer:

A

Question 5

Question Type: **MultipleChoice**

Refer to Exhibit:

Image not found or type unknown

Task

You are required to create a pod that requests a certain amount of CPU and memory, so it gets scheduled to-a node that has those resources available.

* Create a pod named nginx-resources in the pod-resources namespace that requests a minimum of 200m CPU and 1Gi memory for its container

* The pod should use the nginx image

* The pod-resources namespace has already been created

Options:

A) Explanation:

Solution:

Image not found or type unknown

Image not found or type unknown

Image not found or type unknown

Image not found or type unknown

Image not found or type unknown

Answer:

A

Question 6

Question Type: MultipleChoice

Refer to Exhibit:

Image not found or type unknown

Context

Your application's namespace requires a specific service account to be used.

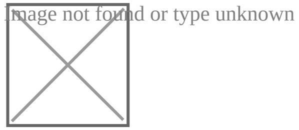
Task

Update the app-a deployment in the production namespace to run as the restrictedservice service account. The service account has already been created.

Options:

A) Explanation:

Solution:



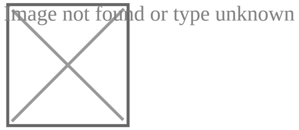
Answer:

A

Question 7

Question Type: MultipleChoice

Refer to Exhibit:



Context

A pod is running on the cluster but it is not responding.

Task

The desired behavior is to have Kubemetes restart the pod when an endpoint returns an HTTP 500 on the /healthz endpoint. The service, probe-pod, should never send traffic to the pod while it is failing. Please complete the following:

* The application has an endpoint, /started, that will indicate if it can accept traffic by returning an HTTP 200. If the endpoint returns an HTTP 500, the application has not yet finished initialization.

* The application has another endpoint /healthz that will indicate if the application is still working as expected by returning an HTTP 200. If the endpoint returns an HTTP 500 the application is no longer responsive.

* Configure the probe-pod pod provided to use these endpoints

* The probes should use port 8080

Options:

A) Explanation:

Solution:

```
apiVersion: v1
kind: Pod
metadata:
labels:
test: liveness
name: liveness-exec
spec:
containers:
- name: liveness
```

```
image: k8s.gcr.io/busybox
args:
- /bin/sh
- -c
- touch /tmp/healthy; sleep 30; rm -rf /tmp/healthy; sleep 600
livenessProbe:
exec:
command:
- cat
- /tmp/healthy
initialDelaySeconds: 5
periodSeconds: 5
```

In the configuration file, you can see that the Pod has a singleContainer. TheperiodSecondsfield specifies that the kubelet should perform a liveness probe every 5 seconds. TheinitialDelaySecondsfield tells the kubelet that it should wait 5 seconds before performing the first probe. To perform a probe, the kubelet executes the commandcat /tmp/healthyin the target container. If the command succeeds, it returns 0, and the kubelet considers the container to be alive and healthy. If the command returns a non-zero value, the kubelet kills the container and restarts it.

When the container starts, it executes this command:

```
/bin/sh -c 'touch /tmp/healthy; sleep 30; rm -rf /tmp/healthy; sleep 600'
```

For the first 30 seconds of the container's life, there is a/tmp/healthyfile. So during the first 30 seconds, the commandcat /tmp/healthyreturns a success code. After 30 seconds,cat /tmp/healthyreturns a failure code.

Create the Pod:

```
kubectl apply -f https://k8s.io/examples/pods/probe/exec-liveness.yaml
```

Within 30 seconds, view the Pod events:

```
kubectl describe pod liveness-exec
```

The output indicates that no liveness probes have failed yet:

```
FirstSeen LastSeen Count From SubobjectPath Type Reason Message
--------- -------- ----- ---- ------------- -------- ------ -------
24s 24s 1 {default-scheduler } Normal Scheduled Successfully assigned liveness-exec to worker0
23s 23s 1 {kubelet worker0} spec.containers{liveness} Normal Pulling pulling image 'k8s.gcr.io/busybox'
23s 23s 1 {kubelet worker0} spec.containers{liveness} Normal Pulled Successfully pulled image 'k8s.gcr.io/busybox'
23s 23s 1 {kubelet worker0} spec.containers{liveness} Normal Created Created container with docker id 86849c15382e;
Security:[seccomp=unconfined]
23s 23s 1 {kubelet worker0} spec.containers{liveness} Normal Started Started container with docker id 86849c15382e
```

After 35 seconds, view the Pod events again:

```
kubectl describe pod liveness-exec
```

At the bottom of the output, there are messages indicating that the liveness probes have failed, and the containers have been killed and recreated.

```
FirstSeen LastSeen Count From SubobjectPath Type Reason Message
--------- -------- ----- ---- ------------- -------- ------ -------
37s 37s 1 {default-scheduler } Normal Scheduled Successfully assigned liveness-exec to worker0
36s 36s 1 {kubelet worker0} spec.containers{liveness} Normal Pulling pulling image 'k8s.gcr.io/busybox'
36s 36s 1 {kubelet worker0} spec.containers{liveness} Normal Pulled Successfully pulled image 'k8s.gcr.io/busybox'
36s 36s 1 {kubelet worker0} spec.containers{liveness} Normal Created Created container with docker id 86849c15382e;
Security:[seccomp=unconfined]
36s 36s 1 {kubelet worker0} spec.containers{liveness} Normal Started Started container with docker id 86849c15382e
2s 2s 1 {kubelet worker0} spec.containers{liveness} Warning Unhealthy Liveness probe failed: cat: can't open '/tmp/healthy': No such file or directory
```

Wait another 30 seconds, and verify that the container has been restarted:

```
kubectl get pod liveness-exec
```

The output shows thatRESTARTShas been incremented:

```
NAME READY STATUS RESTARTS AGE
```

```
liveness-exec 1/1 Running 1 1m
```

Answer:

A

Question 8

Question Type: MultipleChoice

Refer to Exhibit:

Image not found or type unknown

Context

You sometimes need to observe a pod's logs, and write those logs to a file for further analysis.

Task

Please complete the following;

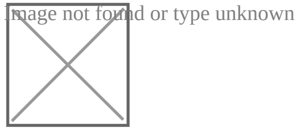
* Deploy the counter pod to the cluster using the provided YAMLspec file at /opt/KDOB00201/counter.yaml

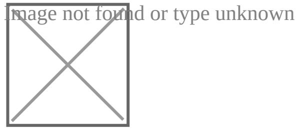
* Retrieve all currently available application logs from the running pod and store them in the file /opt/KDOB0020l/log_Output.txt, which has already been created

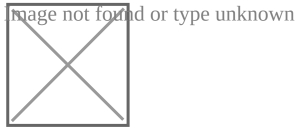
Options:

A) Explanation:

Solution:







Answer:

A