

## CKAD<sup>Q&As</sup>

Certified Kubernetes Application Developer (CKAD) Program

# Pass Linux Foundation CKAD Exam with 100% Guarantee

Free Download Real Questions & Answers PDF and VCE file from:

https://www.pass2lead.com/ckad.html

100% Passing Guarantee 100% Money Back Assurance

Following Questions and Answers are all new published by Linux Foundation Official Exam Center

- Instant Download After Purchase
- 100% Money Back Guarantee
- 365 Days Free Update
- 800,000+ Satisfied Customers





#### **CORRECT TEXT**



#### Context

You have been tasked with scaling an existing deployment for availability, and creating a service to expose the deployment within your infrastructure.

Task

Start with the deployment named kdsn00101-deployment which has already been deployed to the namespace kdsn00101. Edit it to:

1.

Add the func=webFrontEnd key/value label to the pod template metadata to identify the pod for the service definition

2.

Have 4 replicas

Next, create and deploy in namespace kdsn00l01 a service that accomplishes the following:

1.

Exposes the service on TCP port 8080

2.

is mapped to me pods defined by the specification of kdsn00l01-deployment

3.

Is of type NodePort

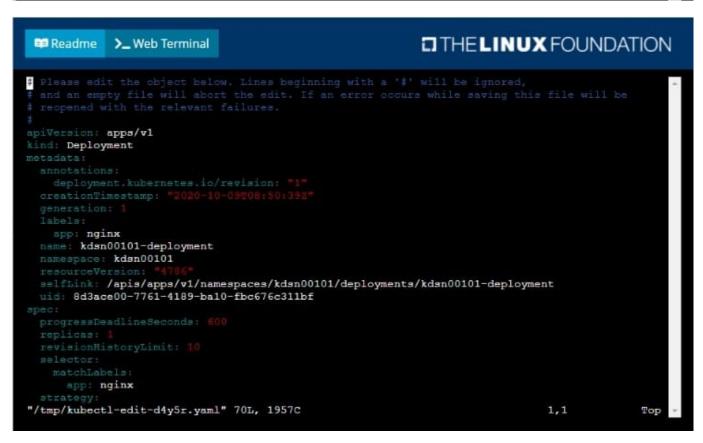
4.

2023 Latest pass2lead CKAD PDF and VCE dumps Download

Has a name of cherry

- A. Please check explanations
- B. Place Holder

```
student@node-1:~$ kubectl edit deployment kdsn00101-deployment -n kdsn00101
```





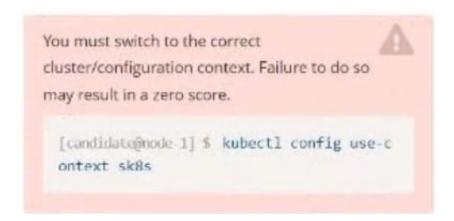
```
wid: 8d3ace00-7761-4189-ba10-fbc676c311bf

spec:
    progressDeadlineSeconds: 600
    replicas: 4
    revisionHistoryLimit: 10
    selector:
    matchLabels:
    app: nginx
    strategy:
    rollingUpdate:
    maxMurge: 256
    maxMurge: 256
    twpe: RollingUpdate

template:
    metadata:
    creationTimestamp: null
    labels:
    app: nginx
    func: webFrontEnd
    spec:
    containers:
        image: nginx:latest
        image: nginx
    ports:
        - containerFort: 80
```

```
student@node-1:~$ kubectl edit deployment kdsn00101-deployment -n kdsn00101
deployment.apps/kdsn00101-deployment edited
student@node-1:~$ kubectl get deployment kdsn00101-deployment -n kdsn00101
NAME READY UP-TO-DATE AVAILABLE AGE
kdsn00101-deployment 4/4 4 7h17m
student@node-1:~$ kubectl expose deployment kdsn00101-deployment -n kdsn00101 --type NodePort --
port 8080 --name cherry
service/cherry exposed
```

#### **CORRECT TEXT**



#### Task:

Modify the existing Deployment named broker-deployment running in namespace quetzal so that its containers.

2023 Latest pass2lead CKAD PDF and VCE dumps Download

The broker-deployment is manifest file can be found at:

```
-/daring-moccasin/broker-deployment.yaml
```

- A. Please check explanations
- B. Place Holder

Correct Answer: A

```
candidate@node-1:~$ kubectl config use-context k8s
Switched to context "k8s".
candidate@node-1:~$ vim
```

```
File Edit View Terminal Yabs Help

containers:
    name: broker
    image: redisralpine
    ports:
        - containerPort: 6379
    securityContext:
        runAsbser: 30000
        privileged: false
```

```
candidate@node-1:-$ kubectl config use-context k8s

Switched to context "k8s".

candidate@node-1:-$ vim -/daring-moccasin/broker-deployment.yaml

candidate@node-1:-$ kubectl apply -f -/daring-moccasin/broker-deployment.yaml

deployment.apps/broker-deployment configured

candidate@node-1:-$ kubectl get pods -n quetzal

NAME READY STATUS RESTARTS AGE

broker-deployment-65446d6d94-868p6 1/1 Running 0 30s

broker-deployment-65446d6d94-8dn7l 1/1 Running 0 32s

broker-deployment-65446d6d94-p4h4l 1/1 Running 0 31s

candidate@node-1:-$ kubectl get deploy -n quetzal

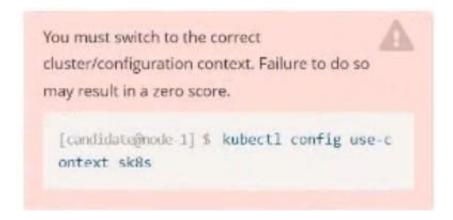
NAME READY UP-TO-DATE AVAILABLE AGE

broker-deployment 3/3 3 3 7h3m

candidate@node-1:-$
```

#### **QUESTION 3**

2023 Latest pass2lead CKAD PDF and VCE dumps Download



Task: Create a Deployment named expose in the existing ckad00014 namespace running 6 replicas of a Pod. Specify a single container using the ifccncf/nginx: 1.13.7 image Add an environment variable named NGINX\_PORT with the value 8001 to the container then expose port 8001

A. Please check explanations

B. Place Holder

```
candidate@node-1:-$ kubectl config use-context k8s

Switched to context "k8s".

candidate@node-1:-$ kubectl create deploy expose -n ckad00014 --image lfccncf/nginx:1.13.7 --dry-run=client -o yaml> dep.yaml

candidate@node-1:-$

candidate@node-1:-$
```



```
File Edit View Terminal Tabs Help apiVersion: apps/v1
cind: Deployment
 etadata:
  creationTimestamp: null
  labels:
   app: expose
  name: expose
 namespace: ckad00014
 pec:
  replicas: 6
  selector
    matchLabels:
     app: expose
  strategy: ()
    metadata:
      creationTimestamp: null
      labels:
        app: expose
    spec:
      containers:
      - image: lfccncf/nginx:1.13.7
        name: nginx
        ports:
              containerPort: 8001
             - name: NGINX PORT
               value: "8001"
```

```
File Edit View Terminal Tabs Help
candidate@node-1:-$ kubectl config use-context k8s
Switched to context "k8s".
candidate@node-1:~$ kubectl create deploy expose -n ckad00014 --image lfccncf/nginx:1.13.7 --dry-run≔client -o yaml> d
candidate@node-1:-$
candidate@node-1:-$
candidate@node-1:-$
candidate@node-1:-$
candidate@node-1:-$
candidate@node-1:-$
candidate@node-1:-$
candidate@node-1:-$
candidate@node-1:-$
candidate@node-1:-5
candidate@node-1:-$
candidate@node-1:-$
candidate@node-1:-$ vim dep.yaml
candidate@node-1:-$ kubectl create -f dep.yaml
deployment.apps/expose created
candidate@node-1:-$ kubectl get pods -n ckad00014
                                      STATUS
NAME
                               READY
                                                                 RESTARTS
expose-85dd99d4d9-25675
                                         ContainerCreating
expose-85dd99d4d9-4fhcc 0/1
expose-85dd99d4d9-fld7j 0/1
                                         ContainerCreating
                                         ContainerCreating
                                                                               65
                                         ContainerCreating
ContainerCreating
                              0/1
0/1
expose-85dd99d4d9-tt6rm
                                                                               6s
expose-85dd99d4d9-vjd8b
expose-85dd99d4d9-vtzpq
                                         ContainerCreating
                                                                               65
candidate@node-1:-5 kubectl get deploy -n ckad00014
NAME READY UP-TO-DATE AVAILABLE AGE
expose 6/6 6 15s
candidate@node-1:~$
```

2023 Latest pass2lead CKAD PDF and VCE dumps Download

You must switch to the correct
cluster/configuration context. Failure to do so
may result in a zero score.

[candidate@node-1] \$ kubectl config use-c
ontext sk8s

Task:

Key3: value1

Add an environment variable named BEST\_VARIABLE consuming the value of the secret key3.

A. Please check explanations

B. Place Holder

2023 Latest pass2lead CKAD PDF and VCE dumps Download

```
File Edit View Terminal Tabs Help
apiVersion: vl
ind: Pod
netadata:
 creationTimestamp: null
  labels:
   run: nginx-secret
 name: nginx-secret
 namespace: default
spec:
 containers:

    image: nginx:stable

   name: nginx-secret
       - name: BEST_VARIABLE
         valueFrom
            secretKeyRef:
               name: app-secret
key: key3
```

#### **QUESTION 5**





#### Context

As a Kubernetes application developer you will often find yourself needing to update a running application.

Task

Please complete the following:

1.

Update the app deployment in the kdpd00202 namespace with a maxSurge of 5% and a maxUnavailable of 2%

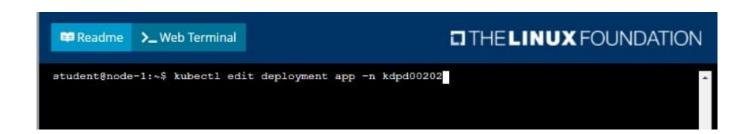
2.

Perform a rolling update of the web1 deployment, changing the Ifccncf/ngmx image version to 1.13

3.

Roll back the app deployment to the previous version

- A. Please check explanations
- B. Place Holder





```
uid: 1dfa2527-5c61-46a9-8dd3-e24643d3ce14

spec:
    progressDeadlineSeconds: 600
    replicas: 18
    revisionHistoryLimit: 10
    selector:
    matchLabels:
        app: nginx
    strategy:
    rollingUpdate:
    maxSurge: 56
    maxUnavailable: 2
    type: RollingUpdate
template:
    metadata:
        creationTimestamp: null
    labeis:
        app: nginx
    spec:
    containers:
        - image: lfcencf/nginx:1-13
        imagePulPolicy: IfNotPresent
        name: nginx
    ports:
        - containerPort: 80
    protocol: TCP
```

```
student@node-1:~$ kubectl edit deployment app -n kdpd00202

deployment.apps/app edited

student@node-1:~$ kubectl rollout status deployment app -n kdpd00202

Waiting for deployment "app" rollout to finish: 6 out of 10 new replicas have been updated...

Waiting for deployment "app" rollout to finish: 7 out of 10 new replicas have been updated...

Waiting for deployment "app" rollout to finish: 7 out of 10 new replicas have been updated...

Waiting for deployment "app" rollout to finish: 7 out of 10 new replicas have been updated...

Waiting for deployment "app" rollout to finish: 8 out of 10 new replicas have been updated...

Waiting for deployment "app" rollout to finish: 8 out of 10 new replicas have been updated...

Waiting for deployment "app" rollout to finish: 8 out of 10 new replicas have been updated...

Waiting for deployment "app" rollout to finish: 8 out of 10 new replicas have been updated...

Waiting for deployment "app" rollout to finish: 9 out of 10 new replicas have been updated...

Waiting for deployment "app" rollout to finish: 9 out of 10 new replicas have been updated...

Waiting for deployment "app" rollout to finish: 9 out of 10 new replicas have been updated...

Waiting for deployment "app" rollout to finish: 9 out of 10 new replicas have been updated...

Waiting for deployment "app" rollout to finish: 9 out of 10 new replicas have been updated...

Waiting for deployment "app" rollout to finish: 9 out of 10 new replicas have been updated...

Waiting for deployment "app" rollout to finish: 9 out of 10 new replicas have been updated...

Waiting for deployment "app" rollout to finish: 9 out of 10 new replicas have been updated...

Waiting for deployment "app" rollout to finish: 9 out of 10 new replicas have been updated...

Waiting for deployment "app" rollout to finish: 9 out of 10 new replicas have been updated...

Waiting for deployment "app" rollout to finish: 9 out of 10 new replicas have been updated...

Waiting for deployment "app" rollout to finish: 9 out of 10 new replicas have been
```

```
Student@node-1:~$ kubectl rollout status deployment app -n kdpd00202

Waiting for deployment "app" rollout to finish: 6 out of 10 new replicas have been updated...

Waiting for deployment "app" rollout to finish: 6 out of 10 new replicas have been updated...

Waiting for deployment "app" rollout to finish: 6 out of 10 new replicas have been updated...

Waiting for deployment "app" rollout to finish: 7 out of 10 new replicas have been updated...

Waiting for deployment "app" rollout to finish: 7 out of 10 new replicas have been updated...

Waiting for deployment "app" rollout to finish: 9 out of 10 new replicas have been updated...

Waiting for deployment "app" rollout to finish: 9 out of 10 new replicas have been updated...

Waiting for deployment "app" rollout to finish: 9 out of 10 new replicas have been updated...

Waiting for deployment "app" rollout to finish: 9 out of 10 new replicas have been updated...

Waiting for deployment "app" rollout to finish: 1 old replicas are pending termination...

Waiting for deployment "app" rollout to finish: 1 old replicas are pending termination...

Waiting for deployment "app" rollout to finish: 1 old replicas are pending termination...

Waiting for deployment "app" rollout to finish: 9 of 10 updated replicas are available...

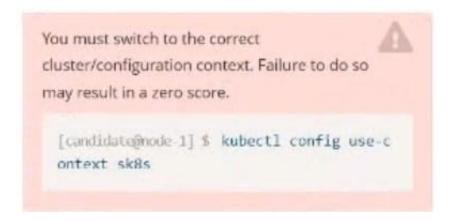
Waiting for deployment "app" rollout to finish: 9 of 10 updated replicas are available...

Waiting for deployment "app" rollout to finish: 9 of 10 updated replicas are available...

Waiting for deployment "app" rollout to finish: 9 of 10 updated replicas are available...
```



#### **CORRECT TEXT**



#### Task:

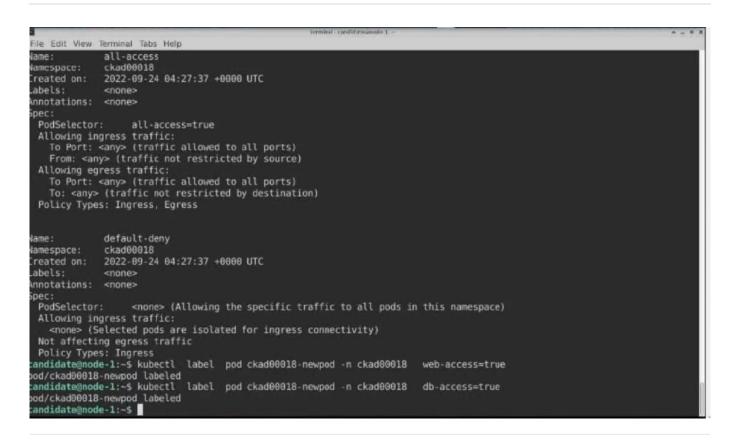
Update the Pod ckad00018-newpod in the ckad00018 namespace to use a NetworkPolicy allowing the Pod to send and receive traffic only to and from the pods web and db



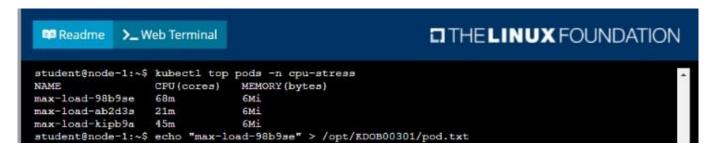
- A. Please check explanations
- B. Place Holder

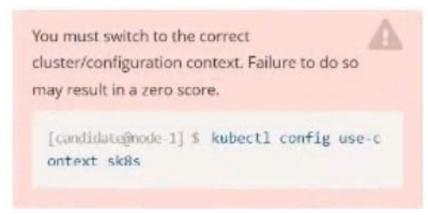






#### **CORRECT TEXT**





Task:



Update the Deployment app-1 in the frontend namespace to use the existing ServiceAccount app.

- A. Please check explanations
- B. Place Holder

Correct Answer: A

```
File Edit View Terminal Tabs Help
The programs included with the Ubuntu system are free software
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.
Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.
candidate@node-1:-$ vi ~/spicy-pikachu/backend-deployment.yaml
candidate@node-1:-$ kubectl config use-context sk8s
Switched to context "sk8s".
candidate@node-1:-$ vim .vimrc
candidate@node-1:-$ vim -/spicy-pikachu/backend-deployment.yaml
candidate@node-1:-$ kubectl apply f -/spicy-pikachu/backend-deployment.yaml
deployment.apps/backend-deployment configured
candidate@node-1:~$ kubectl get pods -n staging
NAME READY ST
                                                READY
                                                          STATUS
                                                                       RESTARTS
                                                                                      AGE
backend-deployment-59d449b99d-cxct6
                                                          Running
                                                                                      20s
backend-deployment-59d449b99d-h2zjq
                                                                                      95
                                                           Running
                                                                       0
backend-deployment-78976f74f5-b8c85
backend-deployment-78976f74f5-flfsj
                                              1/1 1/1
                                                          Running
                                                                                      6h40m
                                                          Running
                                                                                      6h46m
candidate@node-1:-$ kubectl get deploy -n staging
NAME READY UP-TO-DATE AVAILABLE
backend-deployment 3/3 3 3
                                                                     AGE
                                                                     6h40m
candidate@node-1:-$ kubectl get deploy -n staging
NAME READY UP-TO-DATE AVAILABLE
NAME
                                                                     AGE
backend-deployment
                          3/3
                                                                     6h41m
candidate@node-1:-$ vim -/spicy-pikachu/backend-deployment.yaml
candidate@node-1:~$ kubectl config use-context k8s
Switched to context "k8s".
andidate@node-1:~$ kubectl set serviceaccount deploy app-1 app -n frontend
deployment.apps/app-1 serviceaccount updated 
candidate@node-1:~$
```

#### **QUESTION 8**





2023 Latest pass2lead CKAD PDF and VCE dumps Download

#### 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.

1.

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

2.

The pod should use the nginx image

3.

The pod-resources namespace has already been created

- A. Please check explanations
- B. Place Holder







2023 Latest pass2lead CKAD PDF and VCE dumps Download

```
## Readme >_ Web Terminal

Student@node-1:~$ kubectl run nginx-resources -n pod-resources --image=nginx --dry-run=client -o yaml > nginx_resources.yml

student@node-1:~$ vim nginx_resources.yml

student@node-1:~$ kubectl create -g nginx_resources.yml

Error: unknown shorthand flag: 'g' in -g

See 'kubectl create --help' for usage.

student@node-1:~$ kubectl create -f nginx_resources.yml

pod/nginx-resources created

student@node-1:~$ kubectl get pods -n pod-re
```

```
## Readme >_Web Terminal

student@node-1:~$ kubectl get pods -n pod-resources
NAME READY STATUS RESTARTS AGE
nginx-resources 1/1 Running 0 8s
student@node-1:~$ []
```

#### **QUESTION 9**

#### **CORRECT TEXT**



#### 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:

1.

The application has an endpoint, /started, that will indicate if it can accept traffic by returning an HTTP 200. If the



https://www.pass2lead.com/ckad.html 2023 Latest pass2lead CKAD PDF and VCE dumps Download

endpoint returns an HTTP 500, the application has not yet finished initialization.

2.

The application has another endpoint /healthz that will indicate if the application is still working as expected by return an HTTP 200. If the endpoint returns an HTTP 500 the application is no longer responsive.
3.
Configure the probe-pod pod provided to use these endpoints
4.
The probes should use port 8080
A. Please check explanations
B. Place Holder
Correct Answer: A
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



2023 Latest pass2lead CKAD PDF and VCE dumps Download

initialDelaySeconds: 5

periodSeconds: 5

In the configuration file, you can see that the Pod has a single Container. The periodSeconds field specifies that the kubelet should perform a liveness probe every 5 seconds. The initialDelaySeconds field tells the kubelet that it should wait 5

seconds before performing the first probe. To perform a probe, the kubelet executes the command cat /tmp/healthy in 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/healthy file. So during the first 30 seconds, the command cat /tmp/healthy returns a success code. After 30

seconds, cat /tmp/healthy returns 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;

#### https://www.pass2lead.com/ckad.html 2023 Latest pass2lead CKAD PDF and VCE dumps Download

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

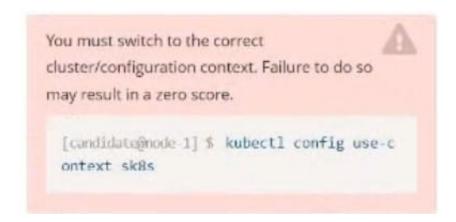
The output shows that RESTARTS has been incremented:

NAME READY STATUS RESTARTS AGE

liveness-exec 1/1 Running 1 1m

#### **QUESTION 10**

#### **CORRECT TEXT**



Task:

Create a Pod named nginx resources in the existing pod resources namespace.

Specify a single container using nginx:stable image.

Specify a resource request of 300m cpus and 1Gi of memory for the Pod\\'s container.

A. Please check explanations

B. Place Holder



2023 Latest pass2lead CKAD PDF and VCE dumps Download

```
candidate@node-1:-$ kubectl config use-context k8s
Switched to context "k8s".
candidate@node-1:-$ kubectl run nginx-resources -n pod-resources --image≔nginx:stable --dry-run≔client -o yaml > hw.yaml
candidate@node-1:-$ vim hw.yaml ■
```



2023 Latest pass2lead CKAD PDF and VCE dumps Download

```
candidate@node-1:-$ kubectl config use-context k8s
Switched to context "k8s".
candidate@node-1:-$ kubectl run nginx-resources -- pod-resources -- image=nginx:stable -- dry-run=client -o yaml > hw.yaml
candidate@node-1:-$ vim hw.yaml
candidate@node-1:-$ kubectl create -f hw.yaml
pod/nginx-resources created
candidate@node-1:-$ kubectl get pods -n pod-resources
NAME READY STATUS RESTARTS AGE
nginx-resources 1/1 Running 0 13s
candidate@node-1:-$ kubectl describe pods -n pod-resources
```

```
File Edit View Terminal Tabs Help
      memory:
    Environment: <none>
      /var/run/secrets/kubernetes.io/serviceaccount from kube-api-access-dmx9j (ro)
Conditions:
 Type
                     True
 Ready
ContainersReady
                     True
  PodScheduled
/olumes:
 kube-api-access-dmx9j:
                              Projected (a volume that contains injected data from multiple sources)
   Type:
    TokenExpirationSeconds:
                              3607
   ConfigMapName:
ConfigMapOptional:
                              kube-root-ca.crt
   DownwardAPI:
                              true
QoS Class:
                              Burstable
Node-Selectors:
                              <none:
Tolerations:
                              node.kubernetes.io/not-ready:NoExecute op=Exists for 300s
                              node.kubernetes.io/unreachable:NoExecute op=Exists for 300s
Events:
                            From
 Type
          Reason
                     Age
                                                Message
                            default-scheduler Successfully assigned pod-resources/nginx-resources to k8s-node-0
 Normal
          Scheduled 20s
                                                Pulling image "nginx:stable"
Successfully pulled image "nginx:stable" in 6.55664052s
 Normal
          Pulling
                            kubelet
 Normal
         Pulled
                            kubelet
 Normal
         Created
                     135
                            kubelet
                                                Created container nginx-resources
 Normal Started
                     125
                            kubelet
                                                Started container nginx-resources
andidate@node-1:~$ kubectl config use-context k8s
Switched to context "k8s"
andidate@node-1:~$ kubectl create deploy expose -n ckad00014 --image lfccncf/nginx:1.13.7 --dry-run≔client -o yaml>
```

Latest CKAD Dumps

**CKAD Practice Test** 

**CKAD Study Guide**