QUESTIONS & ANSWERS

Kill your exam at first Attempt

KILL EXAMS

CNCF

CKA

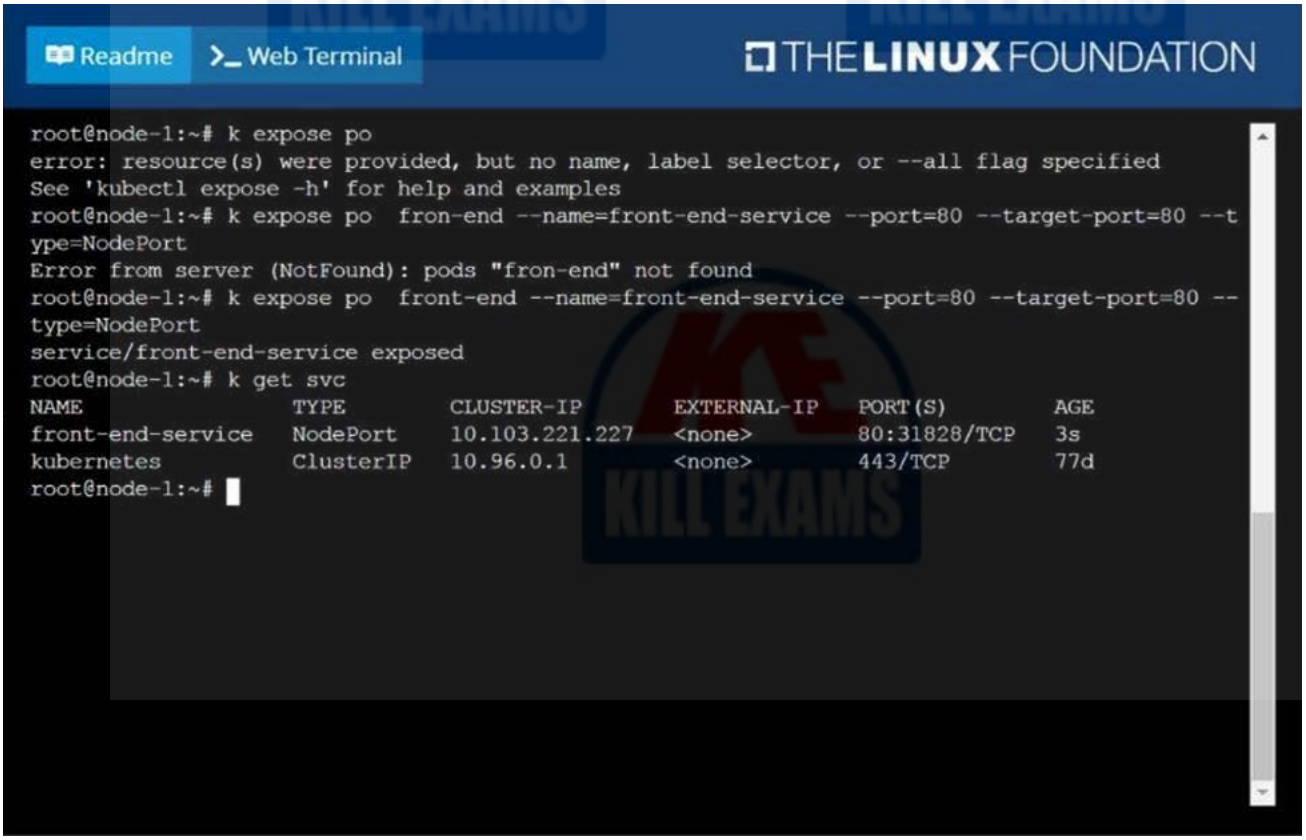
Certified Kubernetes Administrator

Question: 11

CORRECT TEXT

Create and configure the service front-end-service so it's accessiblethrough NodePort and routes to the existing pod named front-end.

Answer: solution



Question: 12

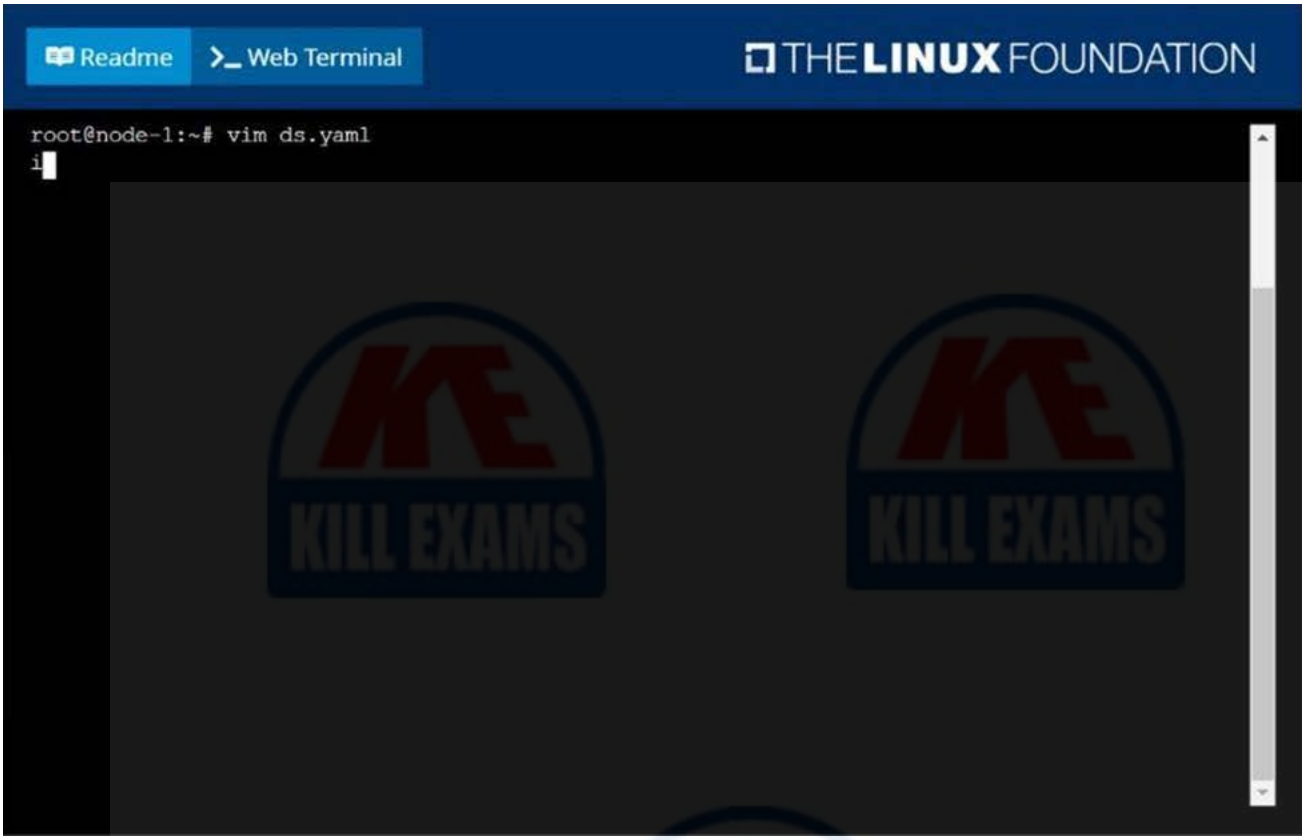
CORRECT TEXT

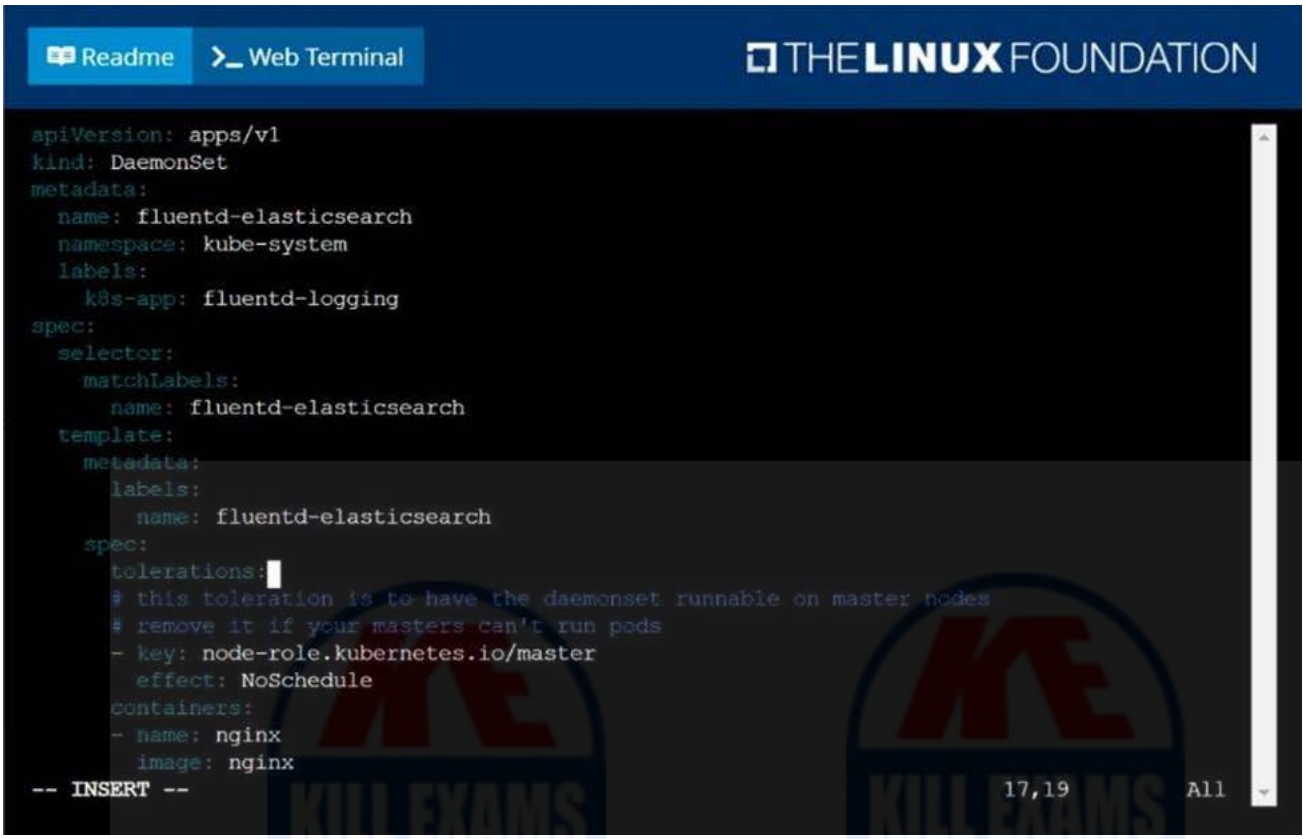
Ensure a single instance of pod nginx is running on each node of the Kubernetes cluster where nginx also represents the Image name which has to be used. Do not

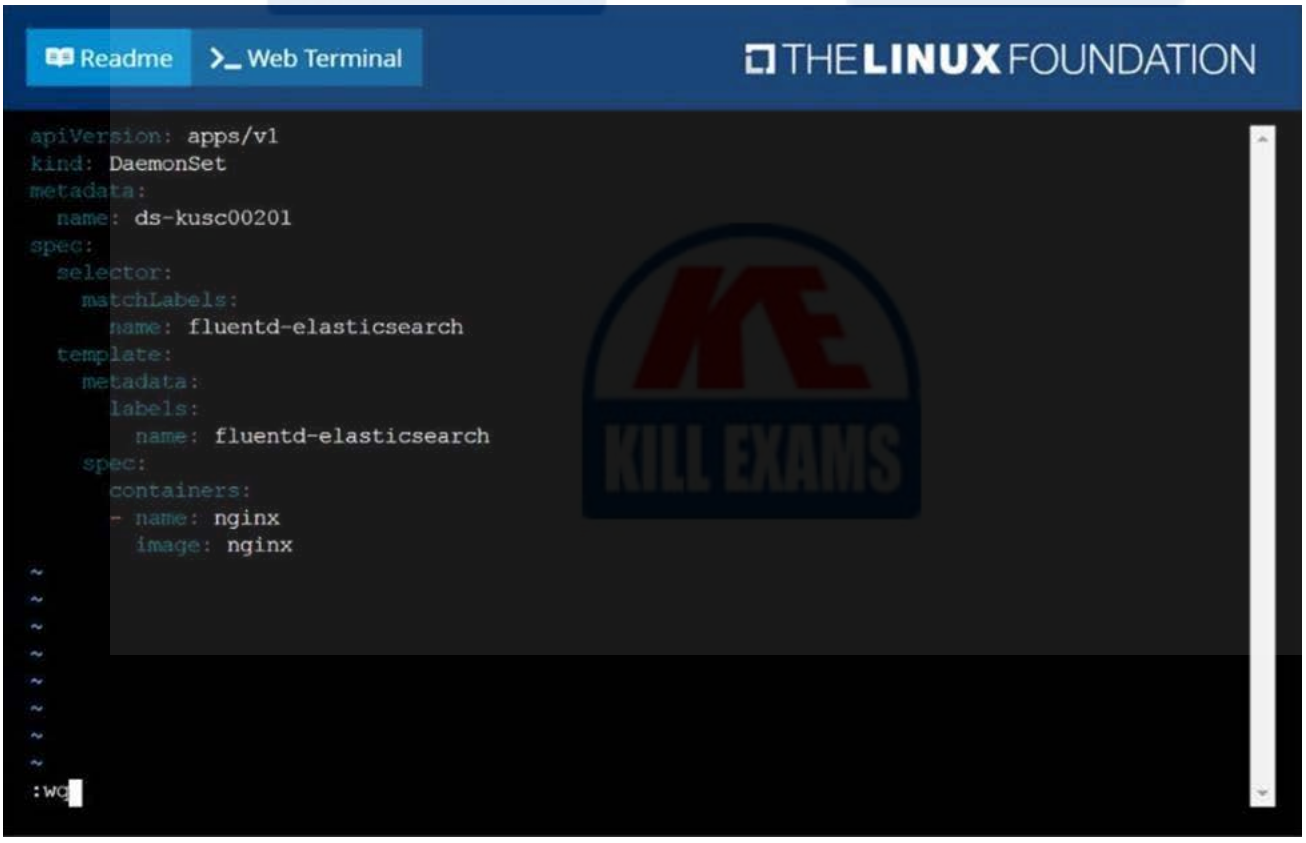
override any taints currently in place.

Use DaemonSet to complete this task and use ds-kusc00201 as DaemonSet name.

Answer: solution




Readme
Web Terminal
THE LINUX FOUNDATION
apiVersion: apps/v1
kind: DaemonSet
metadata:
name: fluentd-elasticsearch
namespace: kube-system
labels:
k8s-app: fluentd-logging
spec:
selector:
matchLabels:
name: fluentd-elasticsearch
template:
metadata:
labels:
name: fluentd-elasticsearch
spec:
tolerations:
this toleration is to have the daemonset runnable on master nodes
remove it if your masters can't run pods
- key: node-role.kubernetes.io/master
effect: NoSchedule
containers:
- name: nginx
image: nginx
-- INSERT --
17,19
All


Readme
Web Terminal
THE LINUX FOUNDATION
apiVersion: apps/v1
kind: DaemonSet
metadata:
name: ds-kusc00201
spec:
selector:
matchLabels:
name: fluentd-elasticsearch
template:
metadata:
labels:
name: fluentd-elasticsearch
spec:
containers:
- name: nginx
image: nginx
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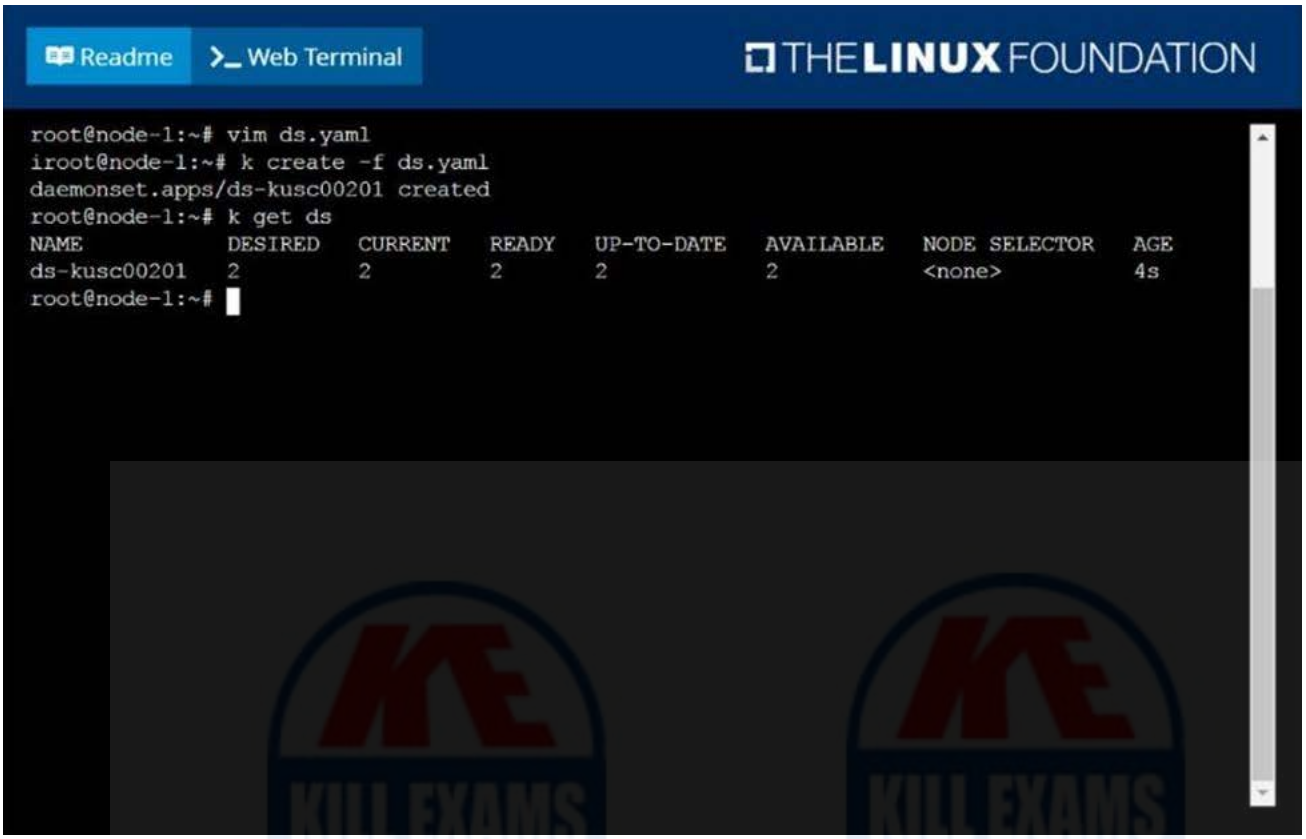
:wq

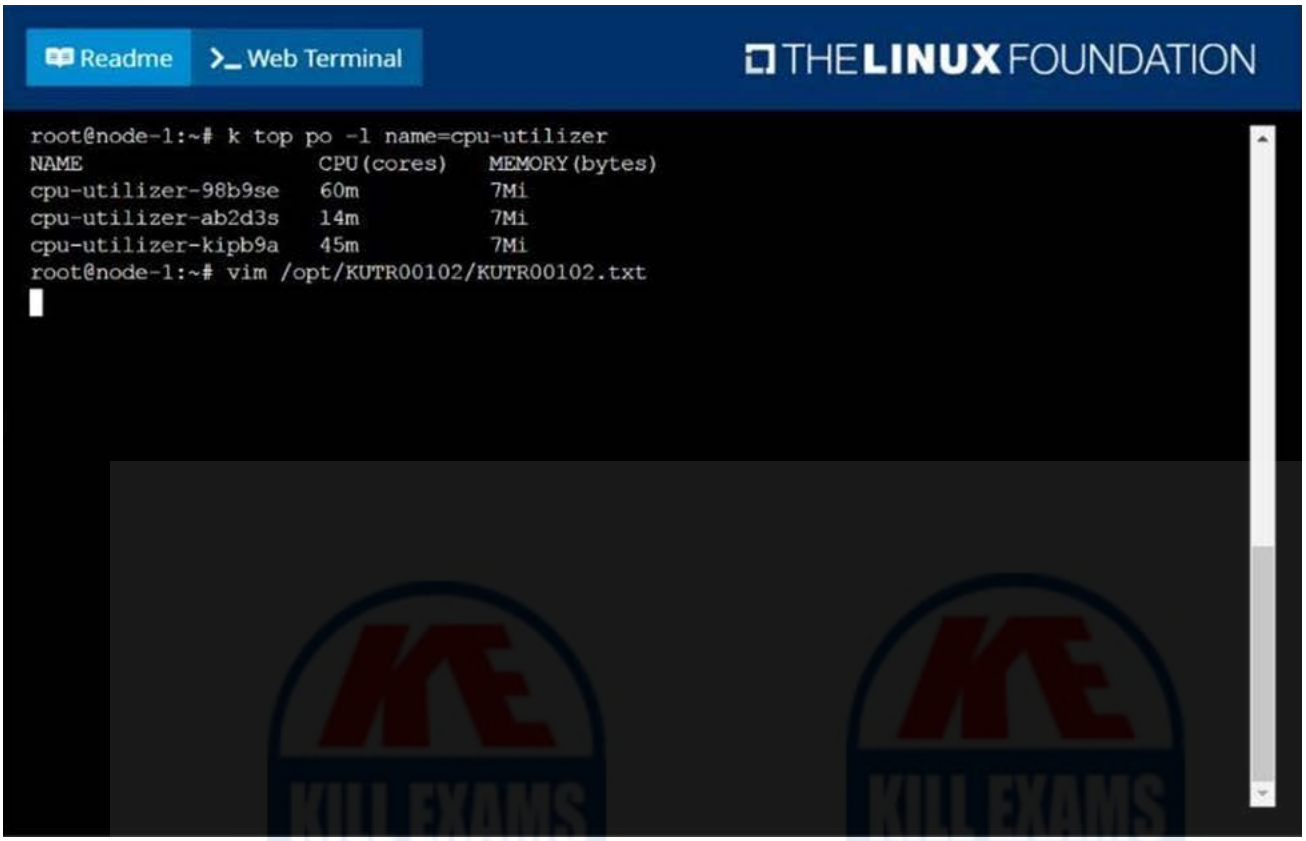


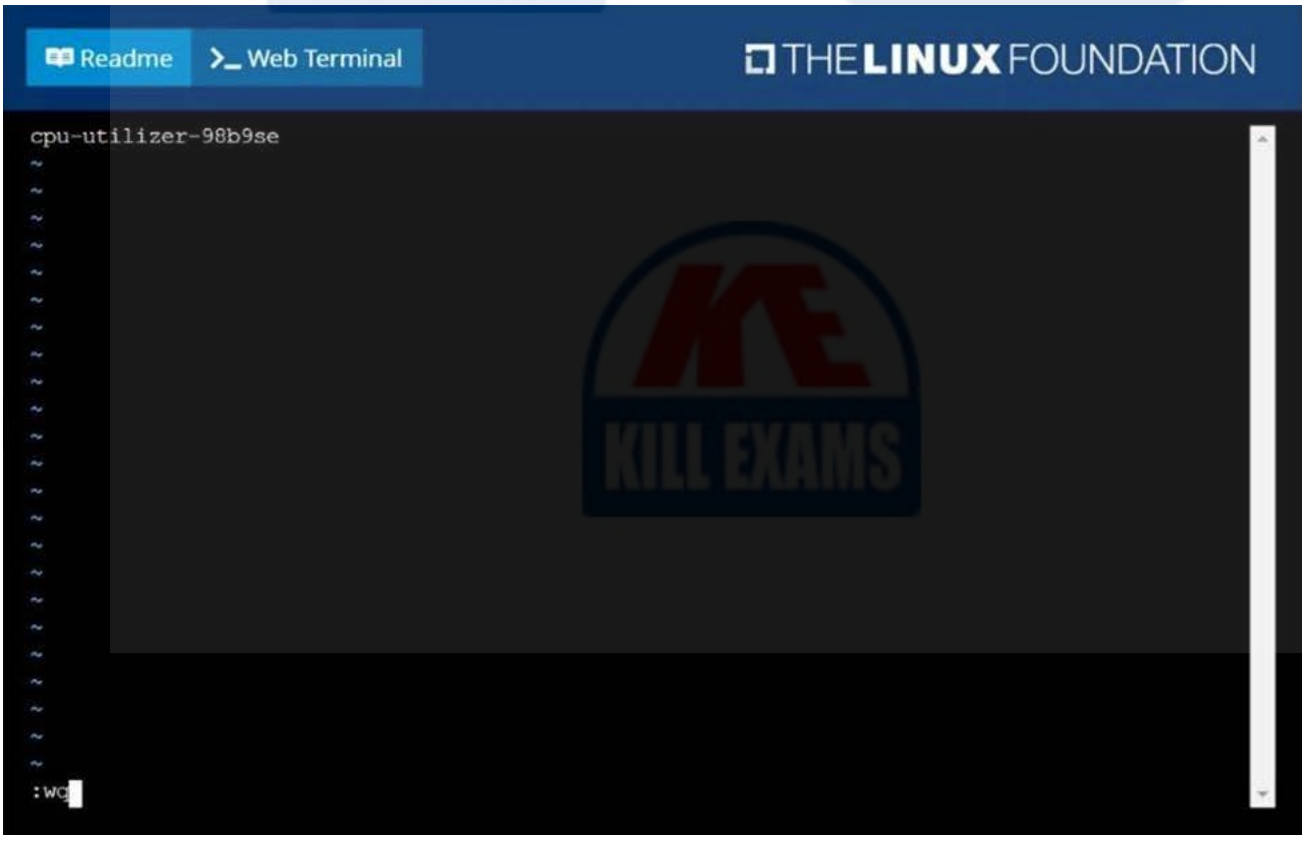
Question: 13

CORRECT TEXT

From the pod label name=cpu-utilizer, find pods running high CPU workloads and write the name of the pod consuming most CPU to the file /opt/KUTR00102/KUTR00102.txt (which already exists).

Answer: solution





Question: 14

CORRECT TEXT

Perform the following tasks:

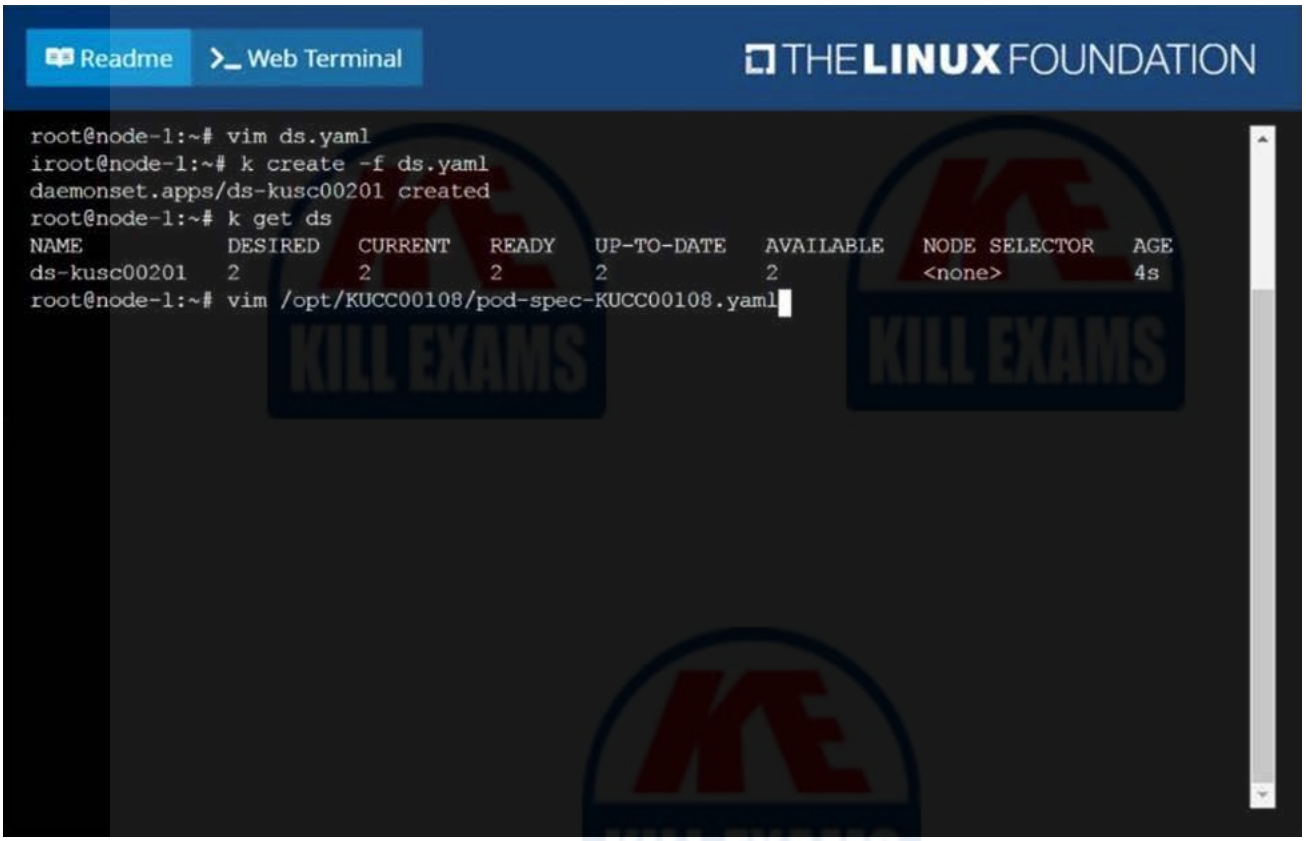
Add an init container to hungry-bear (which has been defined in spec file /opt/KUCC00108/pod-spec-KUCC00108.yaml)

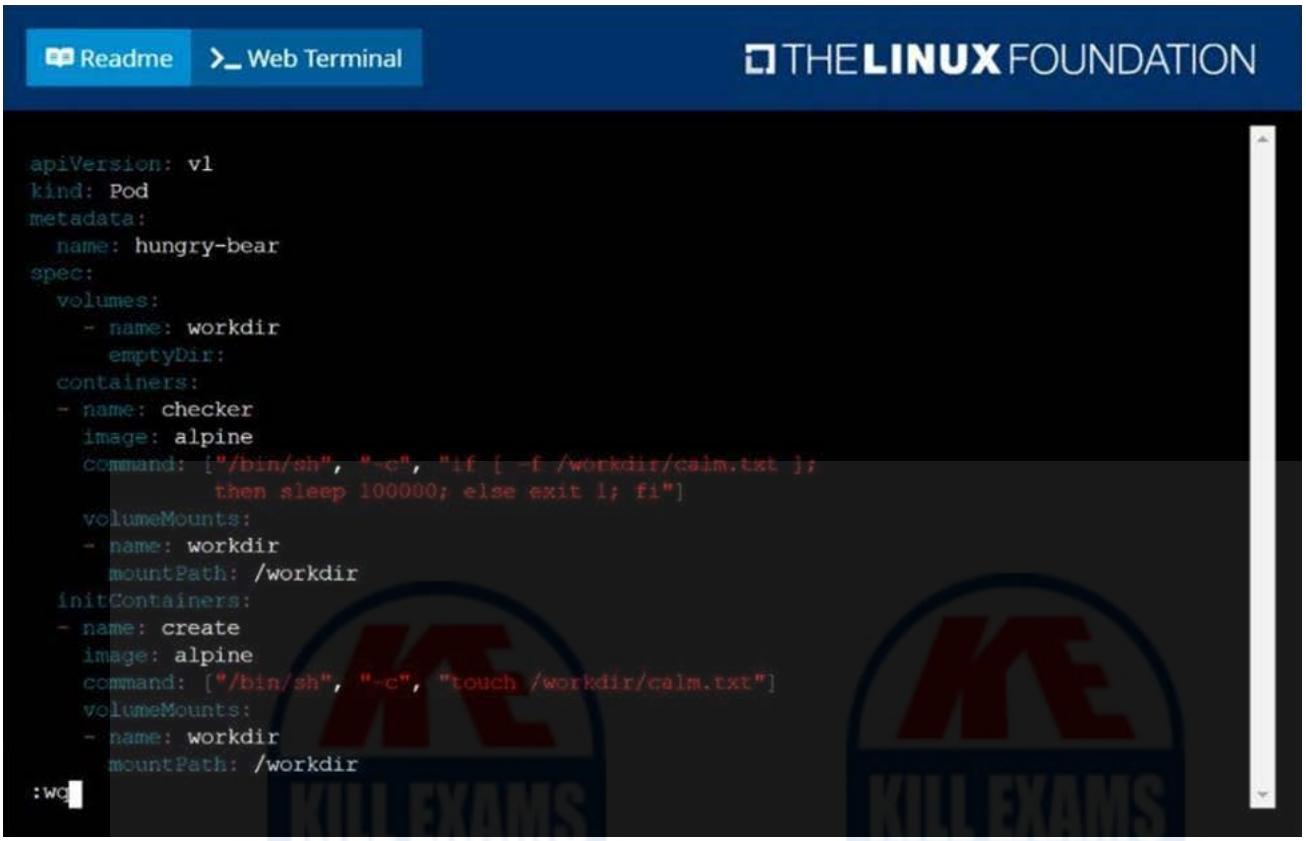
The init container should create an empty file named/workdir/calm.txt

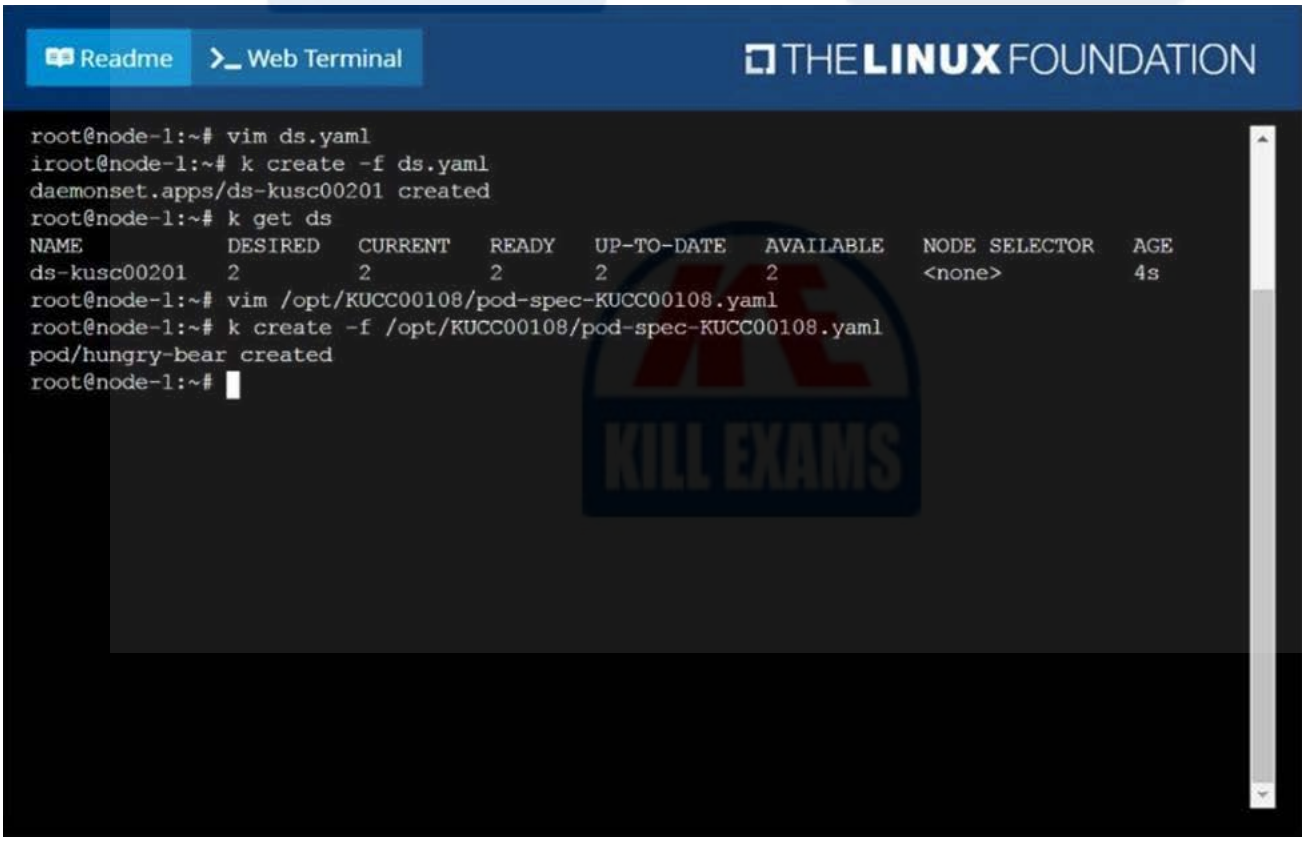
If /workdir/calm.txt is not detected, the pod should exit

Once the spec file has been updated with the init container definition, the pod should be created

Answer: solution







Question: 15

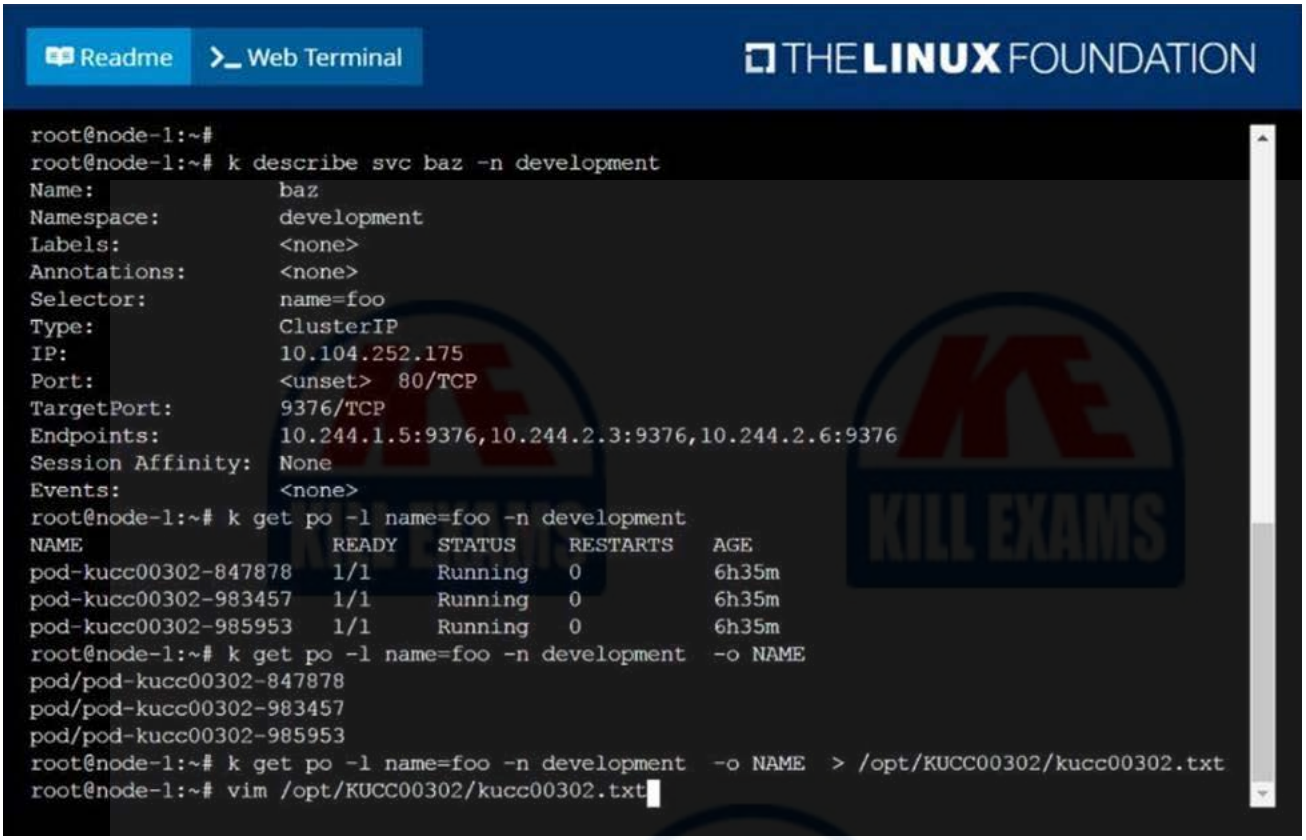
CORRECT TEXT

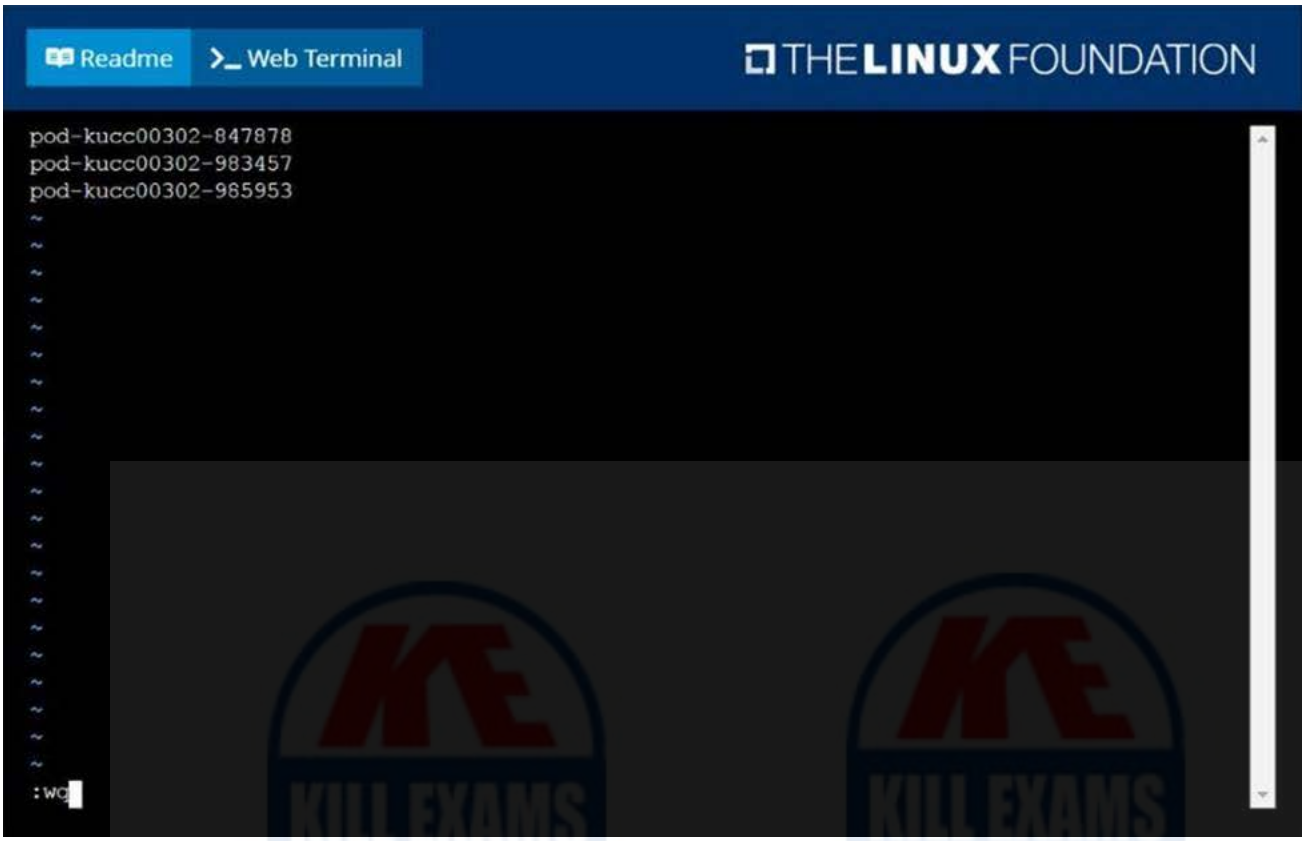
Create a file:

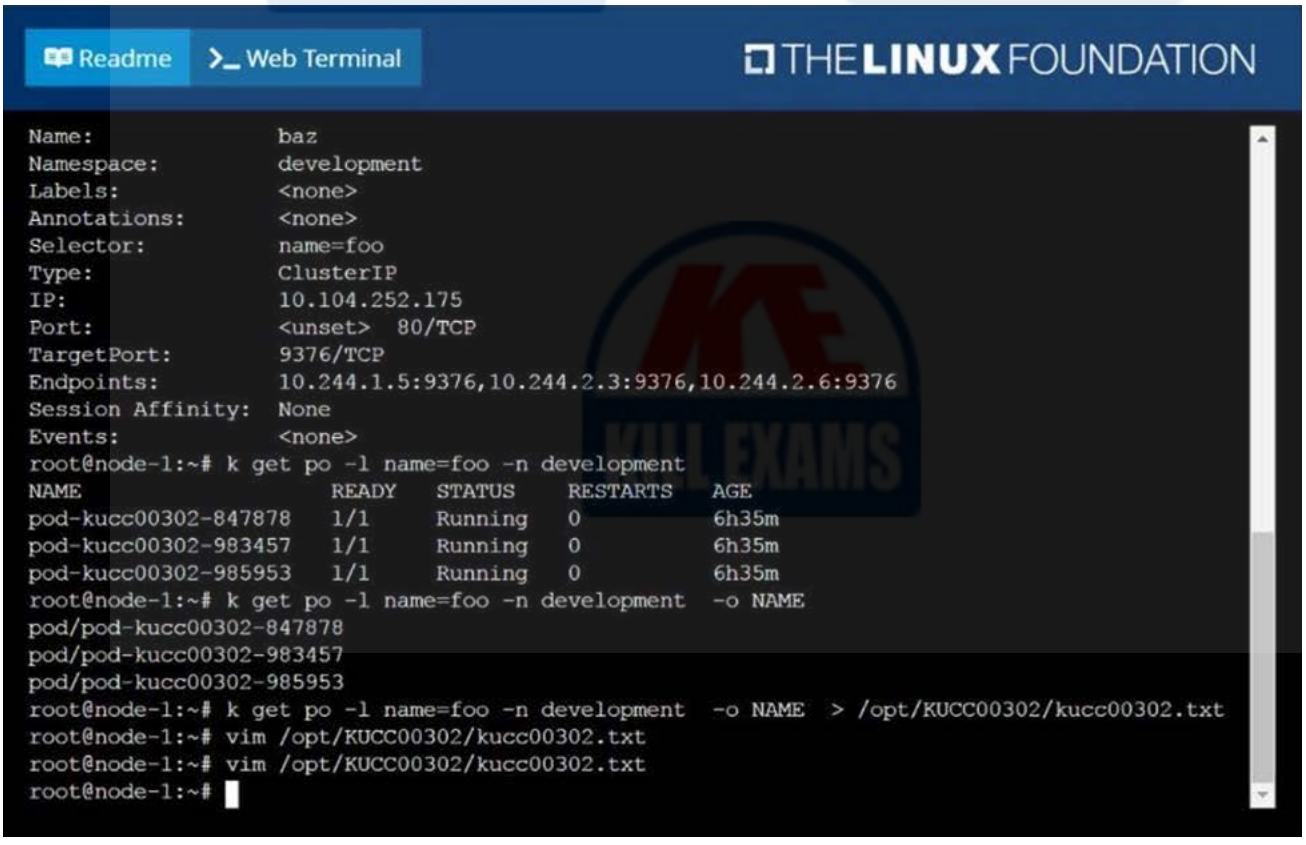
/opt/KUCC00302/kucc00302.txt that lists all pods that implement service baz in namespace development.

The format of the file should be one pod name per line.

Answer: solution







Question: 16

CORRECT TEXT

Create a deployment spec file that will:

Launch 7 replicas of the nginx Image with the labelapp_runtime_stage=dev

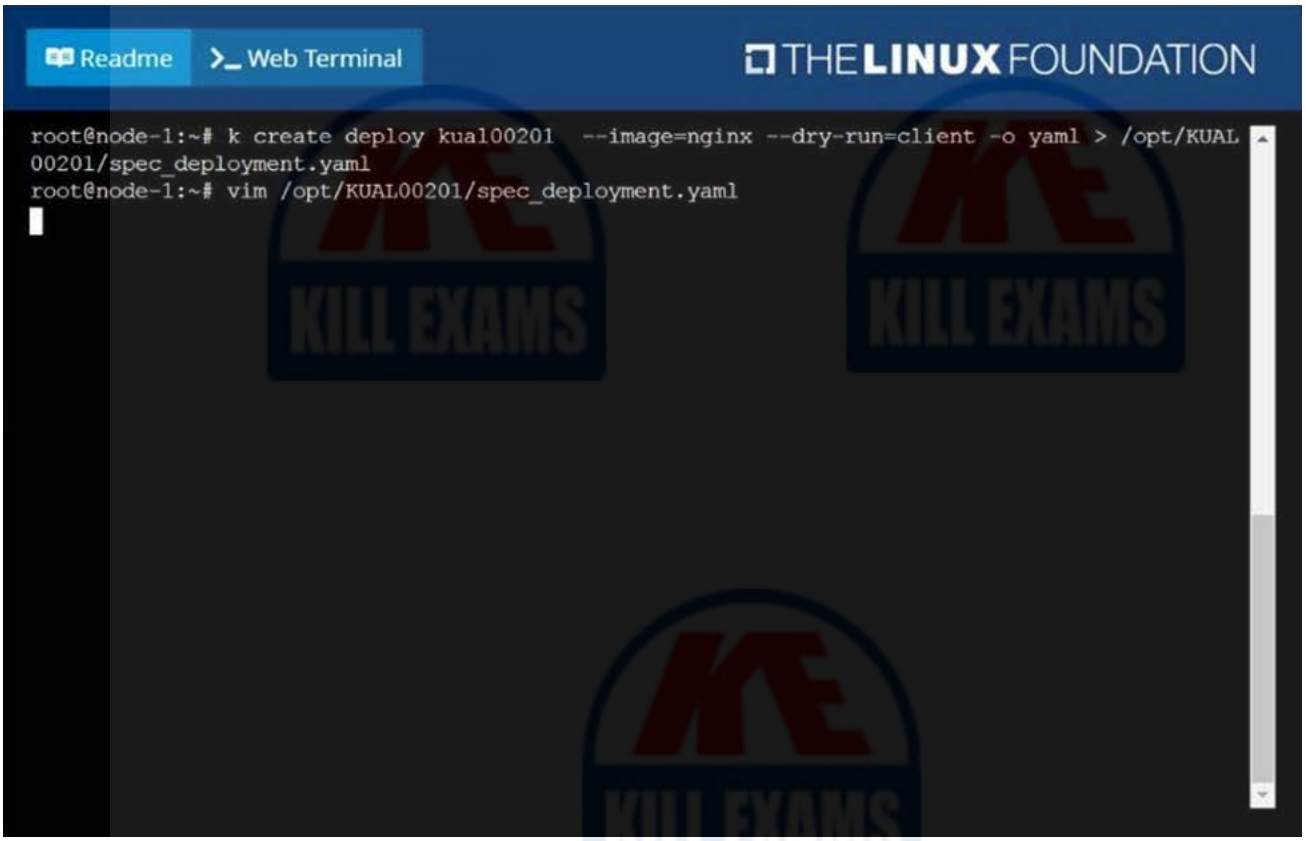
deployment name: kual00201

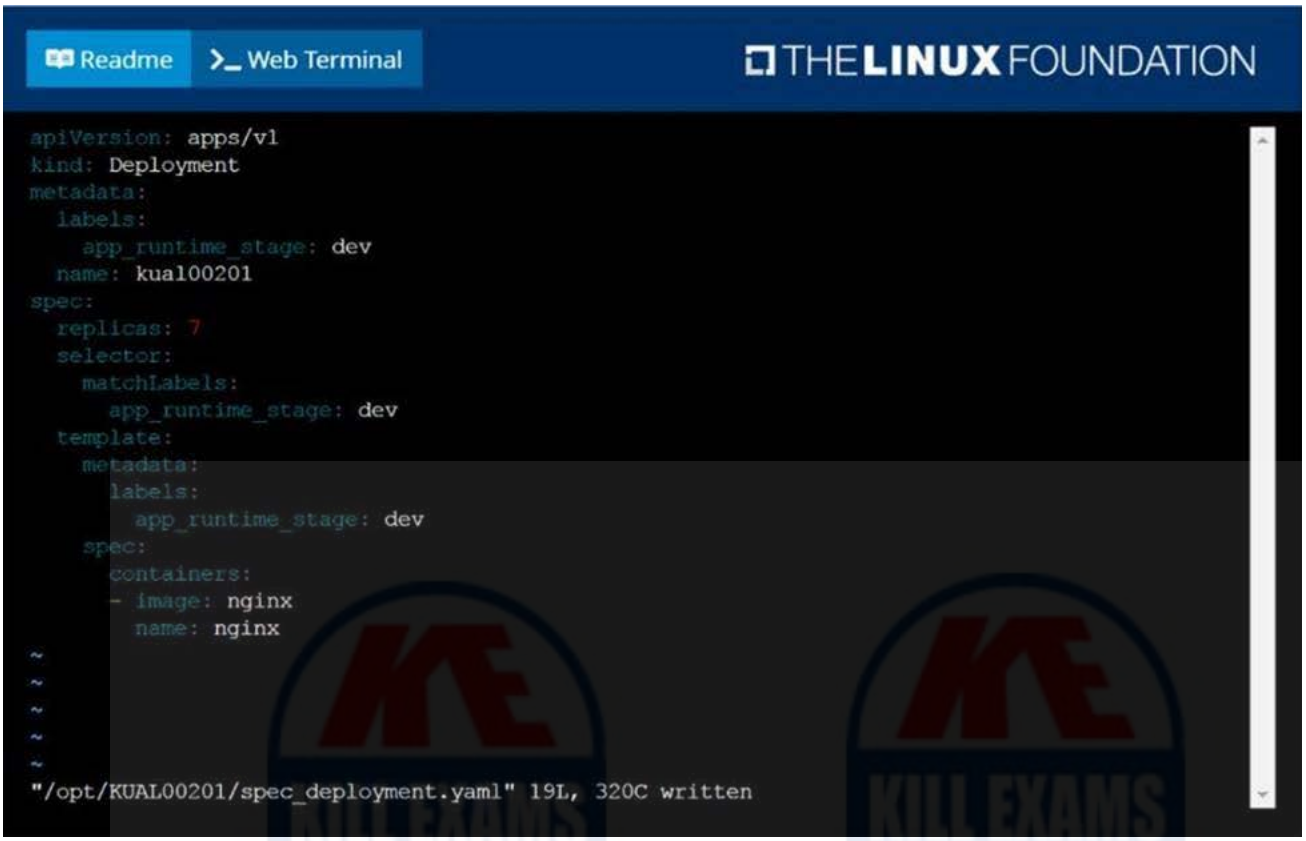
Save a copy of this spec file to /opt/KUAL00201/spec_deployment.yaml

(or /opt/KUAL00201/spec_deployment.json).

When you are done, clean up (delete) any new Kubernetes API object that you produced during this task.

Answer: solution





Question: 17

CORRECT TEXT

Create a Kubernetes secret as follows:

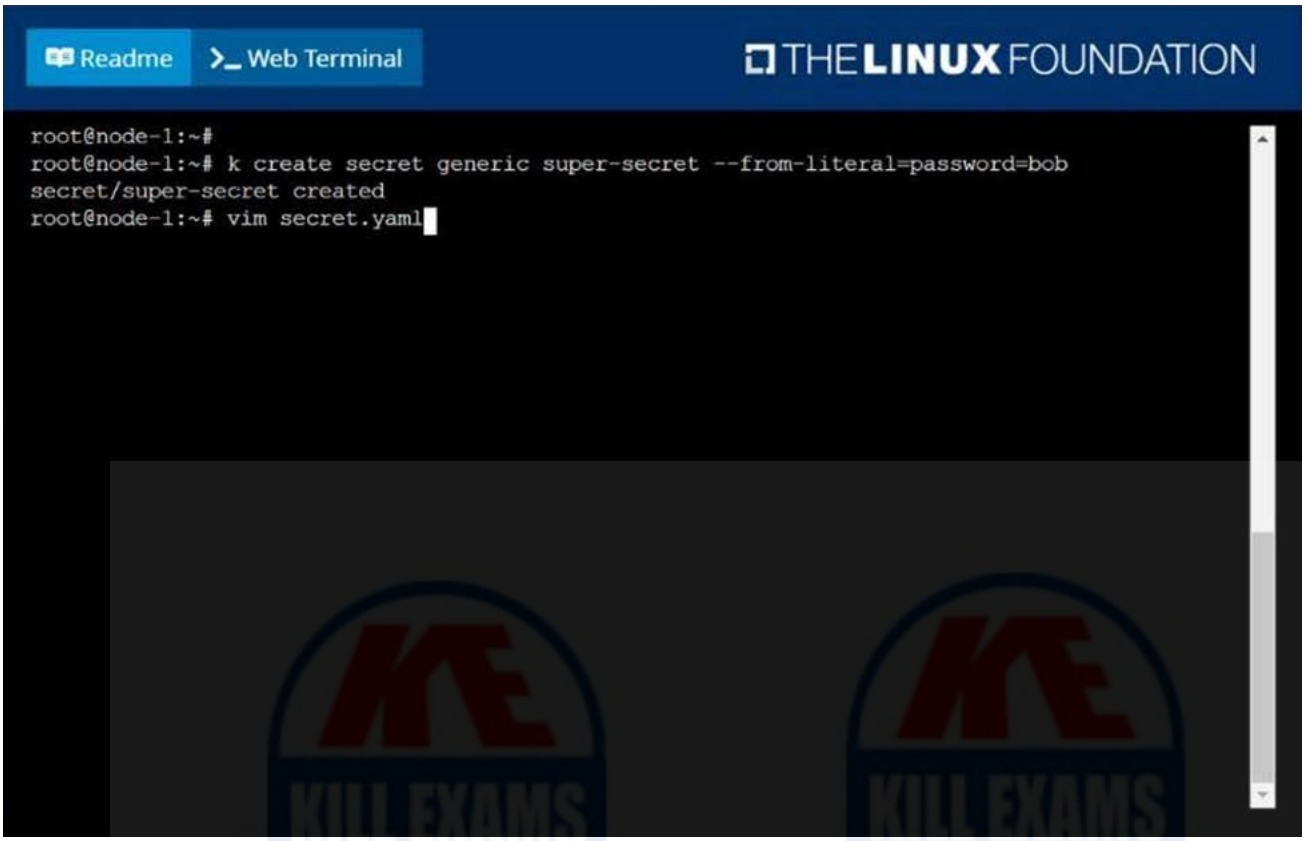
Name: super-secret

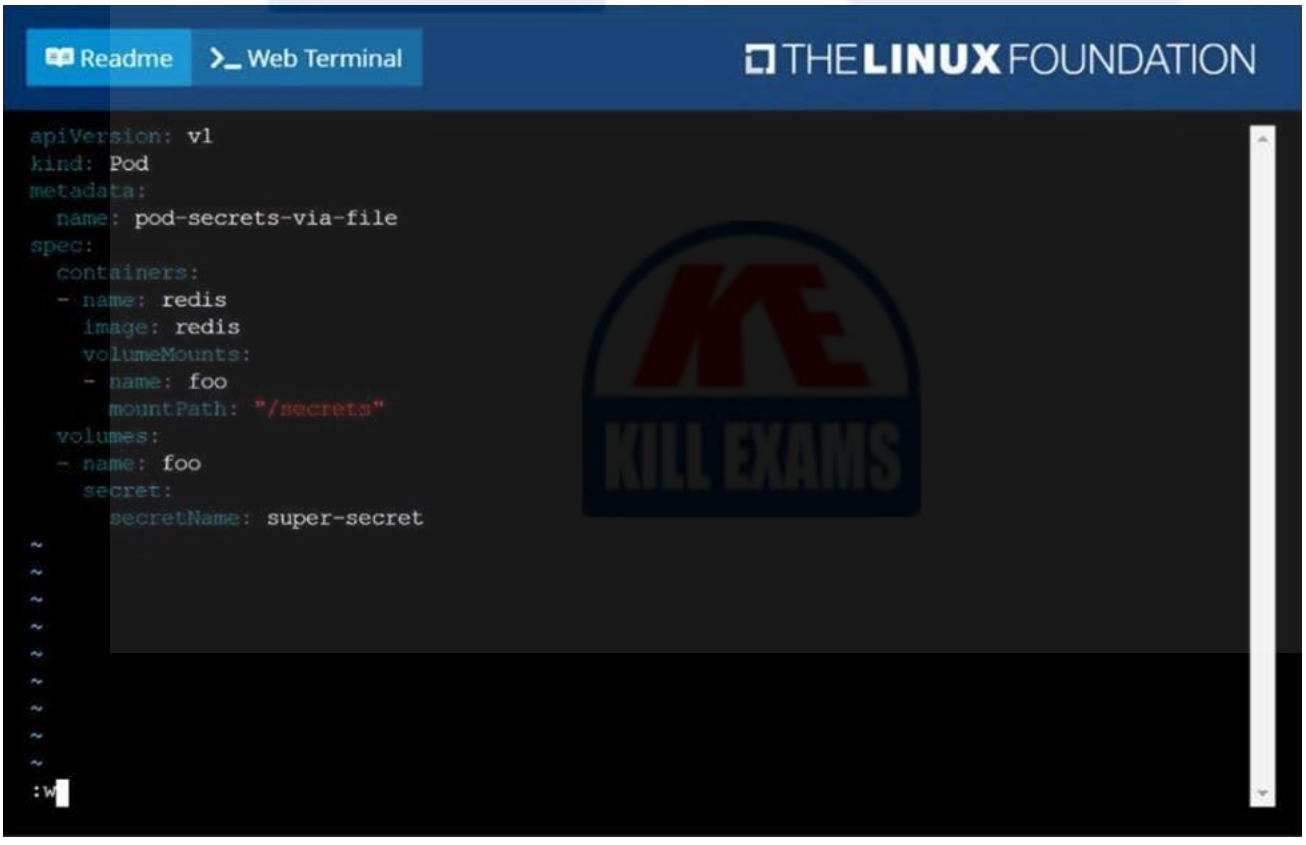
password: bob

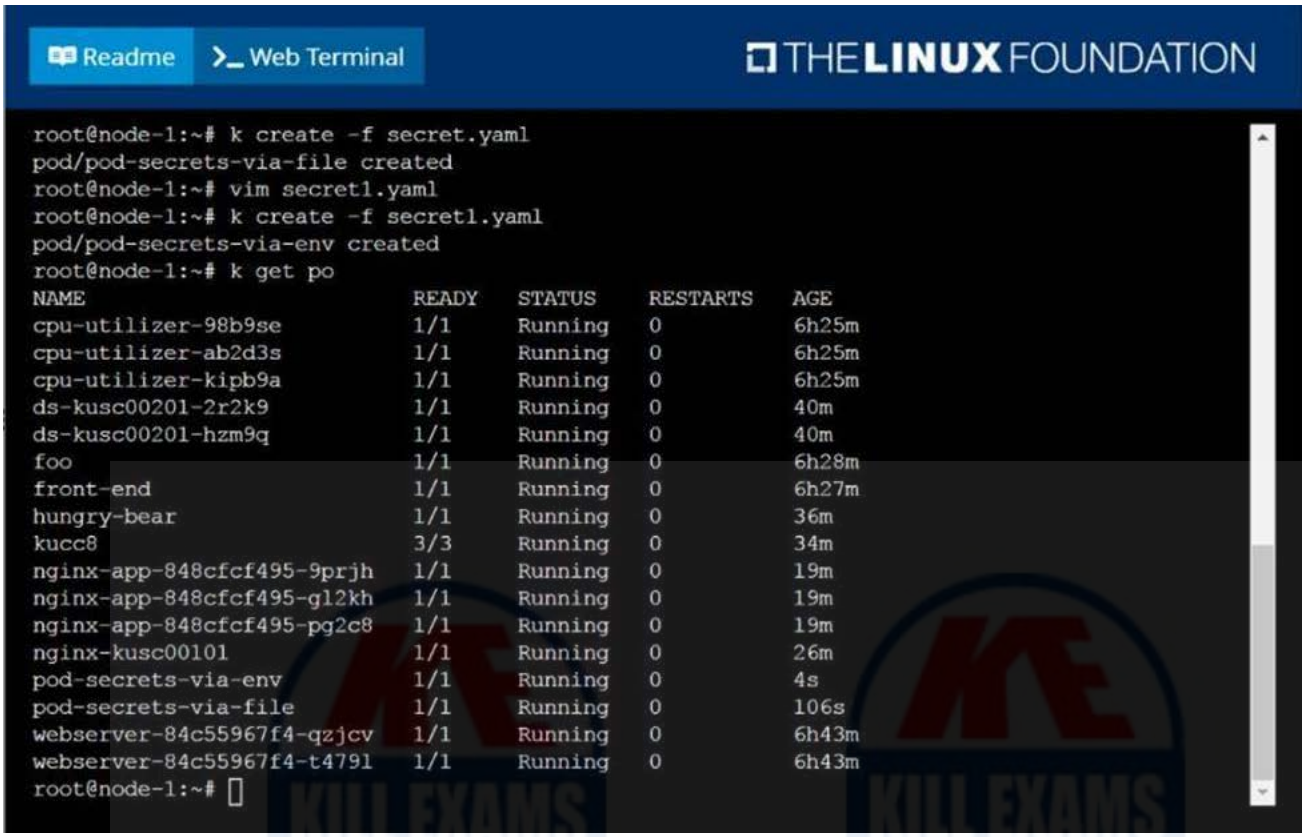
Create a pod named pod-secrets-via-file, using the redis Image, which mounts a secret named super-secret at /secrets.

Create a second pod named pod-secrets-via-env, using the redis Image, which exports password as CONFIDENTIAL

Answer: solution


Readme
Web Terminal
THE LINUX FOUNDATION
root@node-1:~#
root@node-1:~# k create secret generic super-secret --from-literal=password=bob
secret/super-secret created
root@node-1:~# vim secret.yaml


Readme
Web Terminal
THE LINUX FOUNDATION
apiVersion: v1
kind: Pod
metadata:
name: pod-secrets-via-file
spec:
containers:
- name: redis
image: redis
volumeMounts:
- name: foo
mountPath: "/secrets"
volumes:
- name: foo
secret:
secretName: super-secret
:w



Question: 18

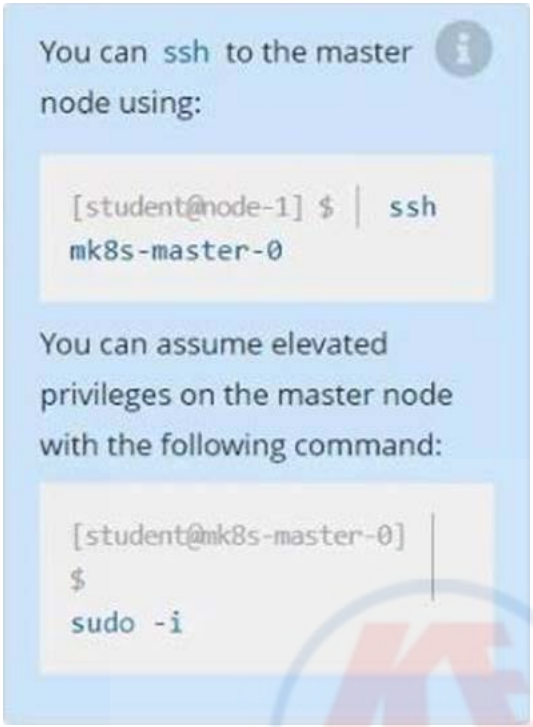
CORRECT TEXT

Score: 7%

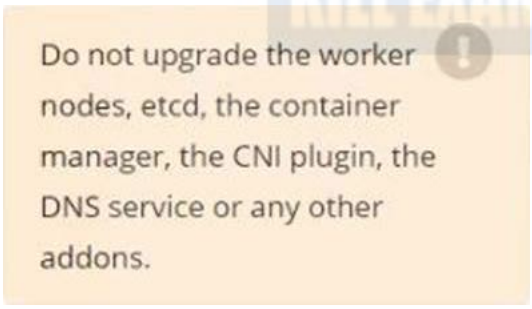
Task

Given an existing Kubernetes cluster running version 1.20.0, upgrade all of the Kubernetes control plane and node components on the master node only to version 1.20.1.

Be sure to drain the master node before upgrading it and uncordon it after the upgrade.



You are also expected to upgrade kubelet and kubectl on the master node.



Answer: SOLUTION:

[] > ssh ek8s

kubectl cordon k8s-master

kubectl drain k8s-master –delete-local-data –ignore-daemonsets –force

apt-get install kubeadm=1.20.1-00 kubelet=1.20.1-00 kubectl=1.20.1-00 — disableexcludes=kubernetes

kubeadm upgrade apply 1.20.1 –etcd-upgrade=false

systemctl daemon-reload

systemctl restart kubelet

kubectl uncordon k8s-master

Question: 19

CORRECT TEXT

A Kubernetes worker node, named wk8s-node-0 is in state NotReady. Investigate why this is the case, and perform any appropriate steps to bring the node to a Ready state, ensuring that any changes are made permanent.

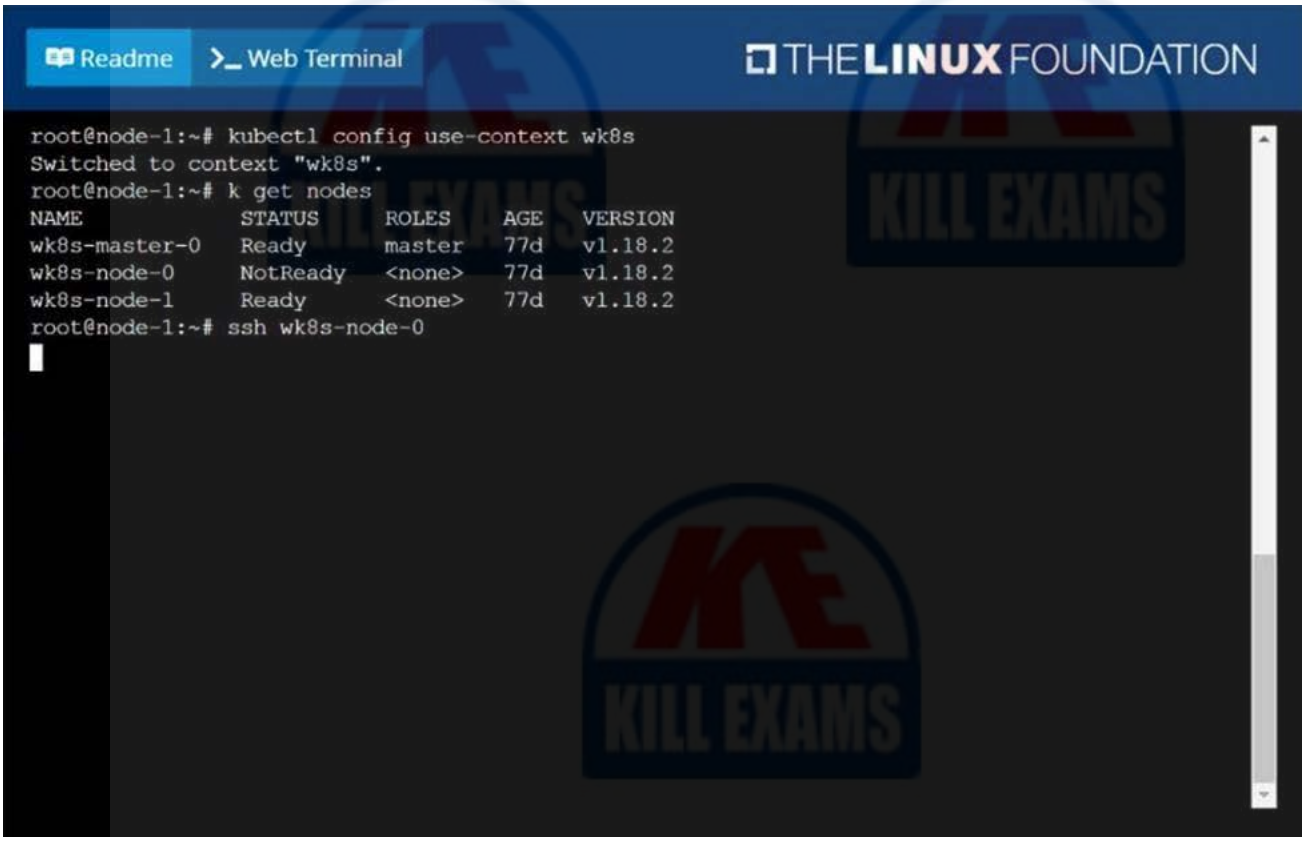
You can ssh to the failed node using:

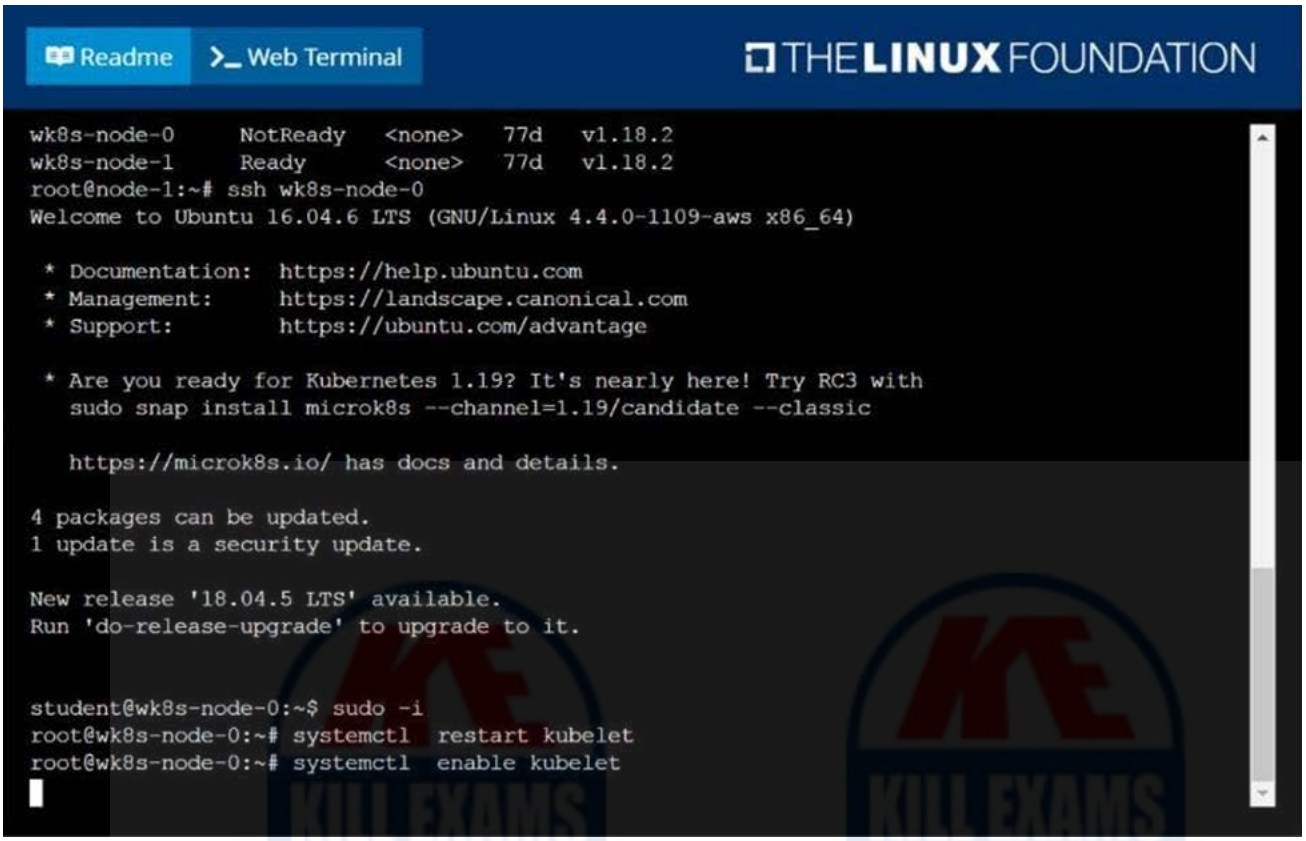
[] $ | ssh Wk8s-node-0

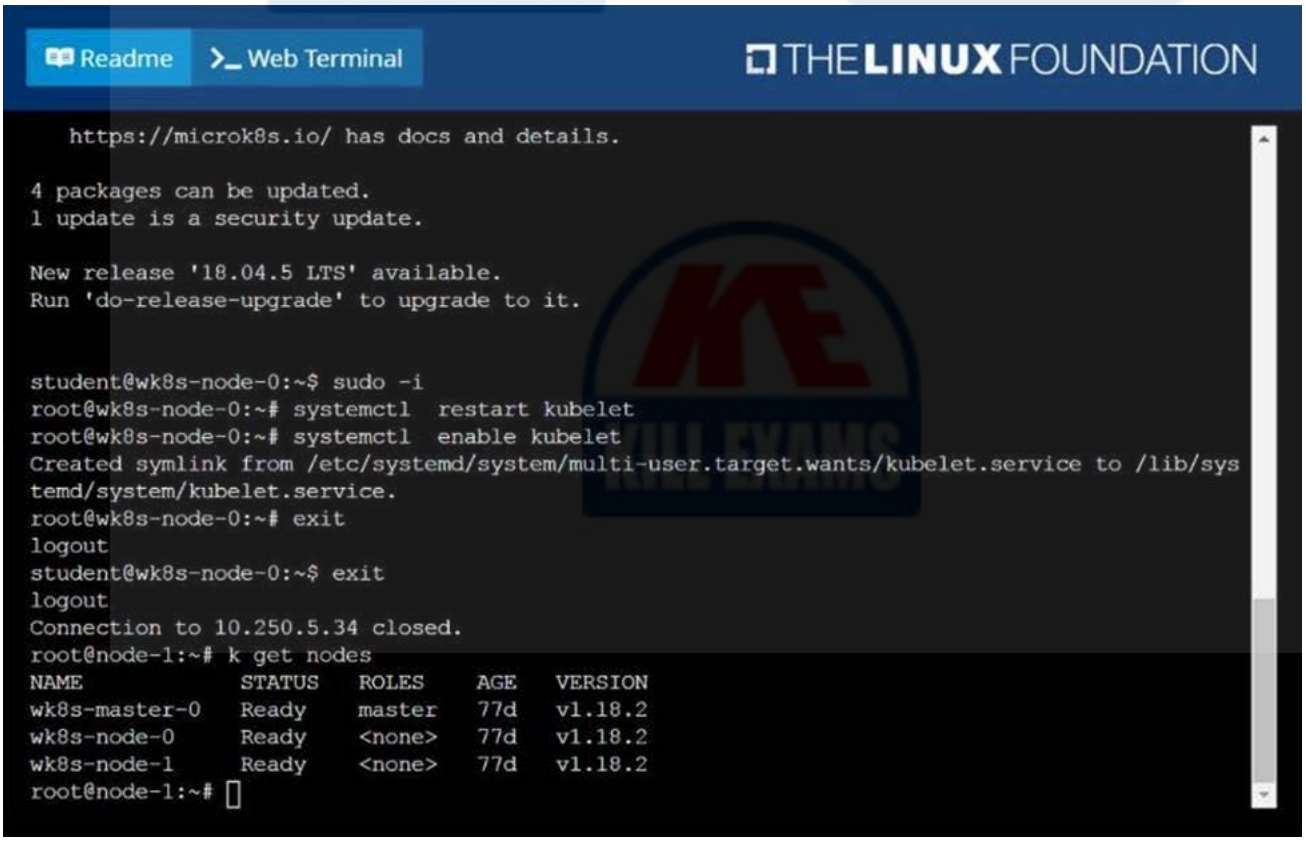
You can assume elevated privileges on the node with the following command:

[] $ | sudo Ci

Answer: solution







Question: 20

CORRECT TEXT

Create a pod as follows:

Name: non-persistent-redis

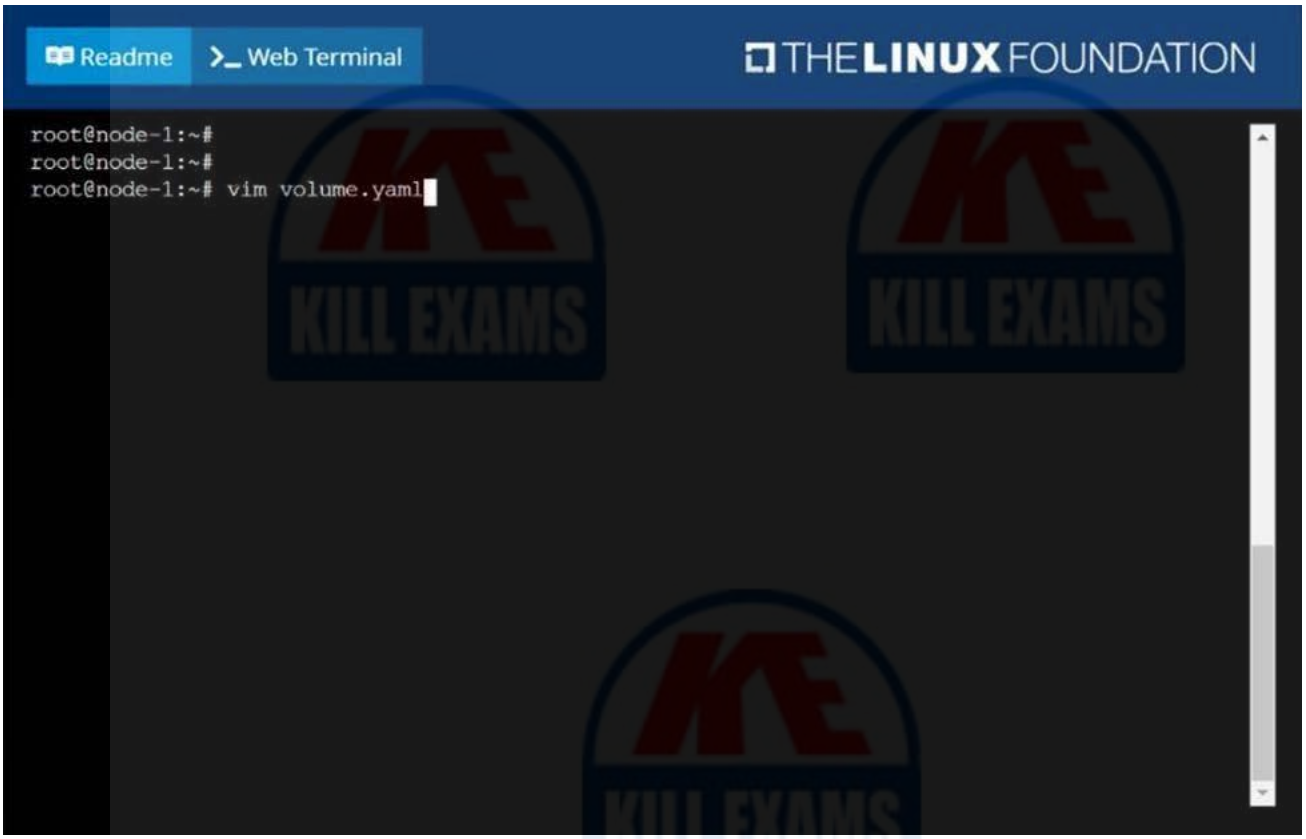
container Image: redis

Volume with name: cache-control

Mount path: /data/redis

The pod should launch in the staging namespace and the volume must not be persistent.

Answer: solution



Readme | Web Terminal

THE LINUX FOUNDATION

```
apiVersion: v1
kind: Pod
metadata:
  name: non-persistent-redis
  namespace: staging
spec:
  containers:
  - name: redis
    image: redis
    volumeMounts:
    - name: cache-control
      mountPath: /data/redis
  volumes:
  - name: cache-control
    emptyDir: {}
~
~
~
~
~
~
~
~
~
:w
```


Readme | Web Terminal

THE LINUX FOUNDATION

```
root@node-1:~#
root@node-1:~#
root@node-1:~# vim volume.yaml
root@node-1:~# k create -f volume.yaml
pod/non-persistent-redis created
root@node-1:~# k get po -n staging
NAME                  READY   STATUS    RESTARTS   AGE
non-persistent-redis  1/1     Running   0          6s
root@node-1:~#
```