

Linux-Foundation

Exam Questions CKA

Certified Kubernetes Administrator (CKA) Program



NEW QUESTION 1

CORRECT TEXT

Create a pod with image nginx called nginx and allow traffic on port 80

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

kubectrl run nginx --image=nginx --restart=Never --port=80

NEW QUESTION 2

CORRECT TEXT

Create a deployment as follows:

? Name: nginx-random

? Exposed via a service nginx-random

? Ensure that the service & pod are accessible via their respective DNS records

? The container(s) within any pod(s) running as a part of this deployment should use the nginx Image

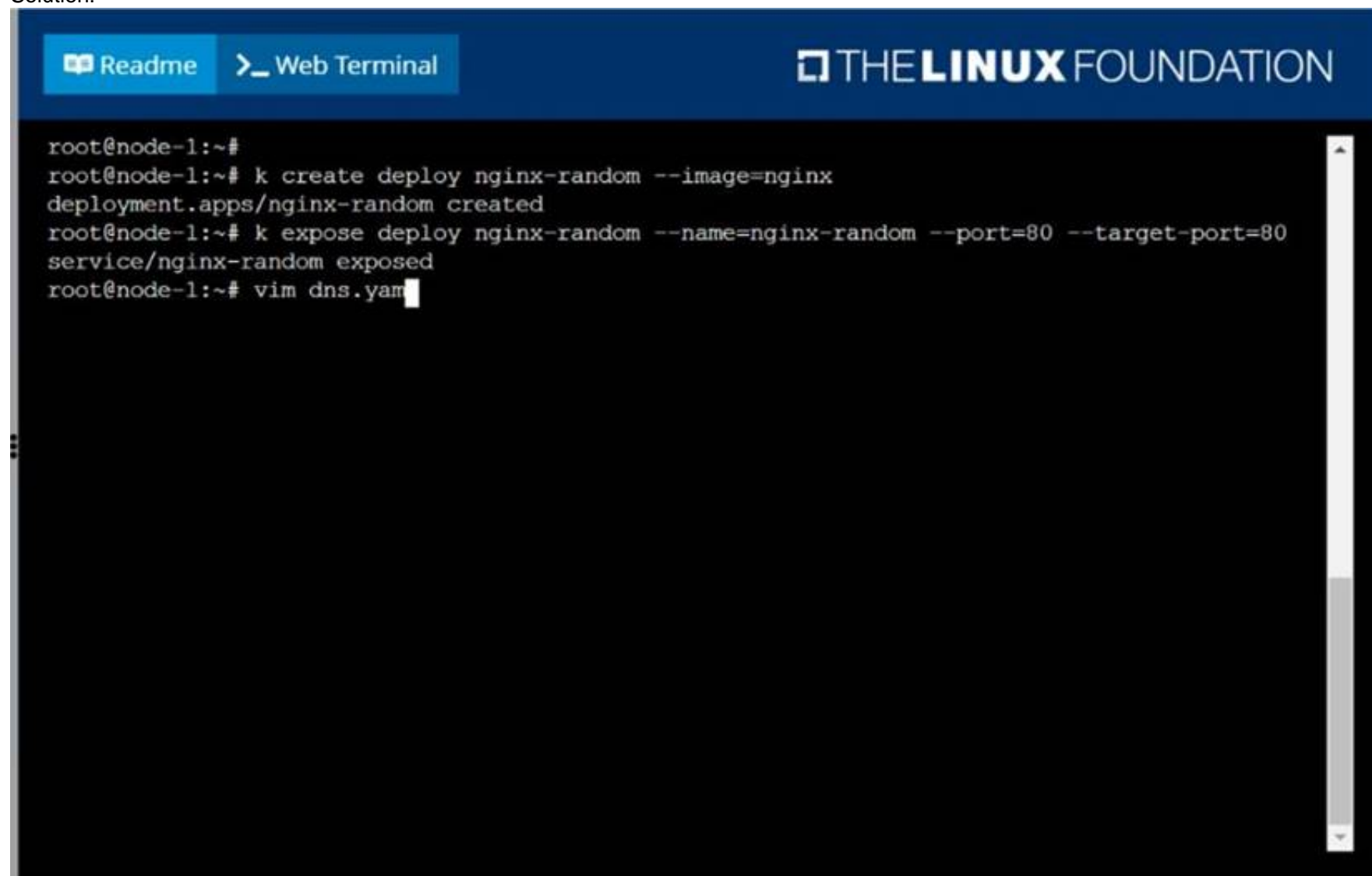
Next, use the utility nslookup to look up the DNS records of the service & pod and write the output to /opt/KUNW00601/service.dns and /opt/KUNW00601/pod.dns respectively.

- A. Mastered
- B. Not Mastered

Answer: A

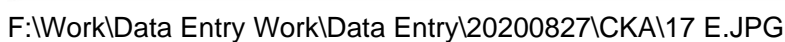
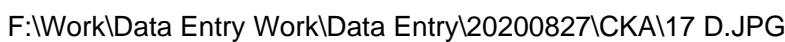
Explanation:

Solution:



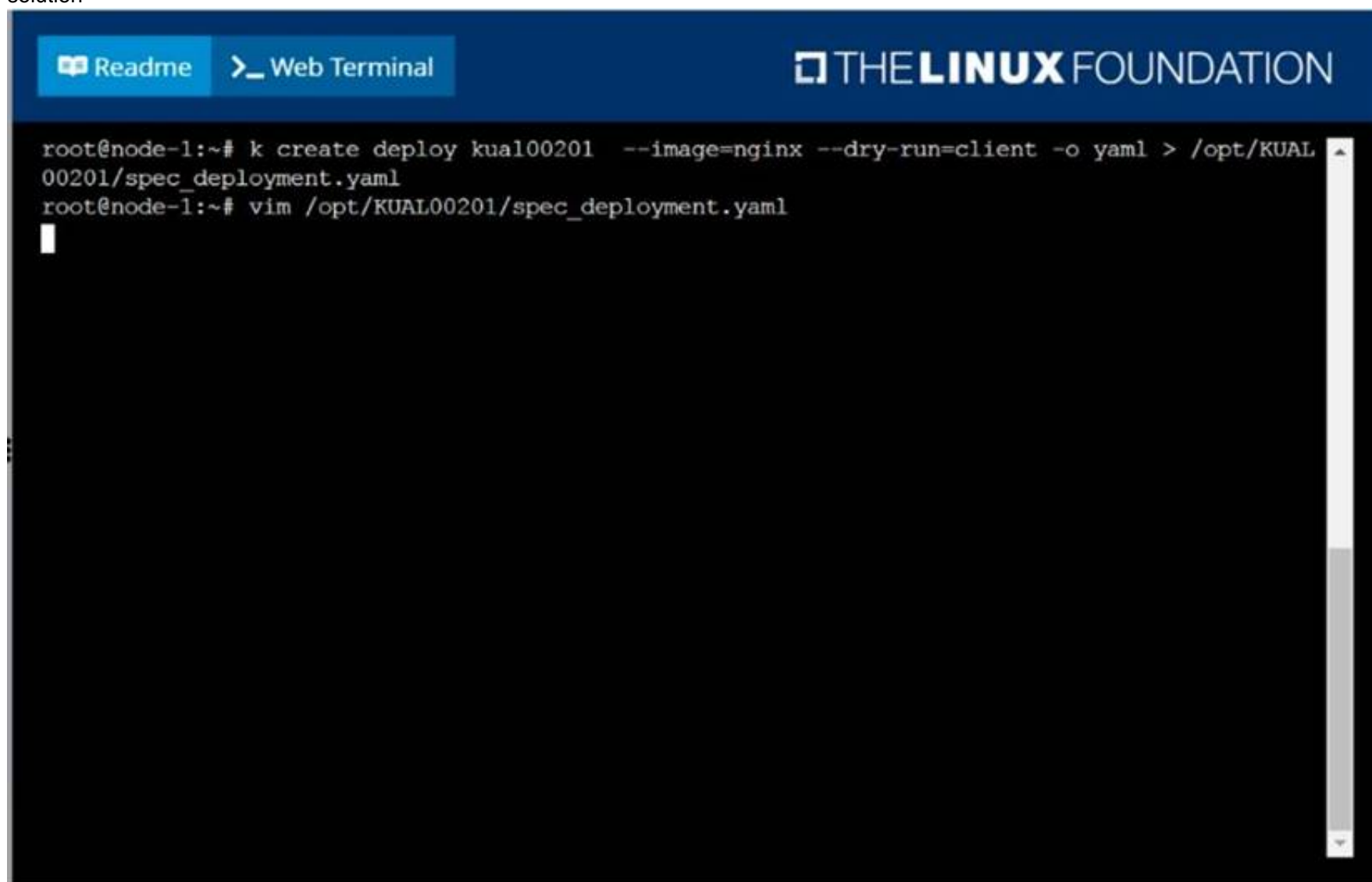
```
root@node-1:~#
root@node-1:~# k create deploy nginx-random --image=nginx
deployment.apps/nginx-random created
root@node-1:~# k expose deploy nginx-random --name=nginx-random --port=80 --target-port=80
service/nginx-random exposed
root@node-1:~# vim dns.yaml
```

F:\Work\Data Entry Work\Data Entry\20200827\CKA\17 C.JPG

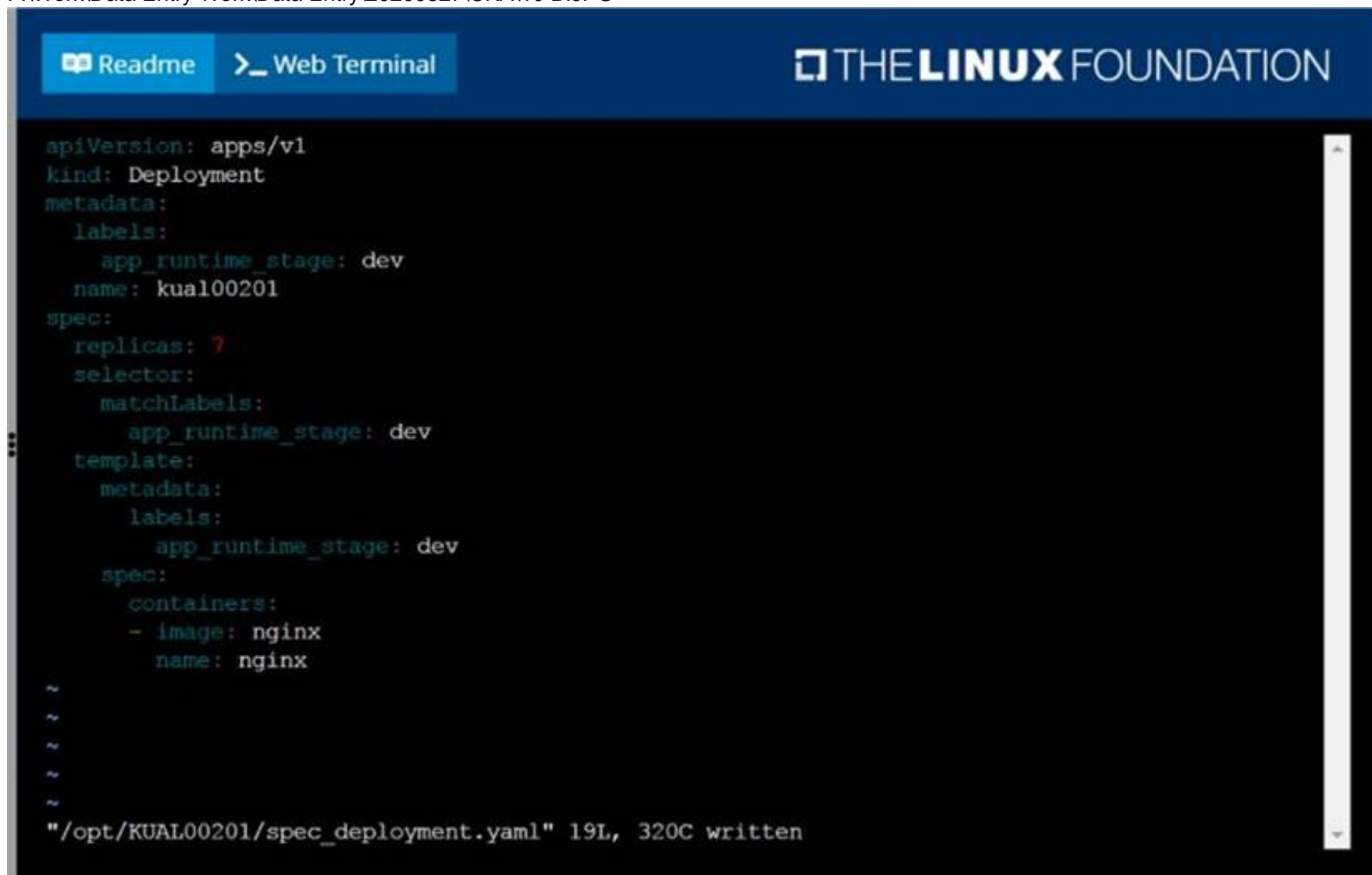


visit - <https://www.surepassexam.com>

Explanation:
solution



F:\Work\Data Entry Work\Data Entry\20200827\CKA\10 B.JPG



F:\Work\Data Entry Work\Data Entry\20200827\CKA\10 C.JPG

NEW QUESTION 4

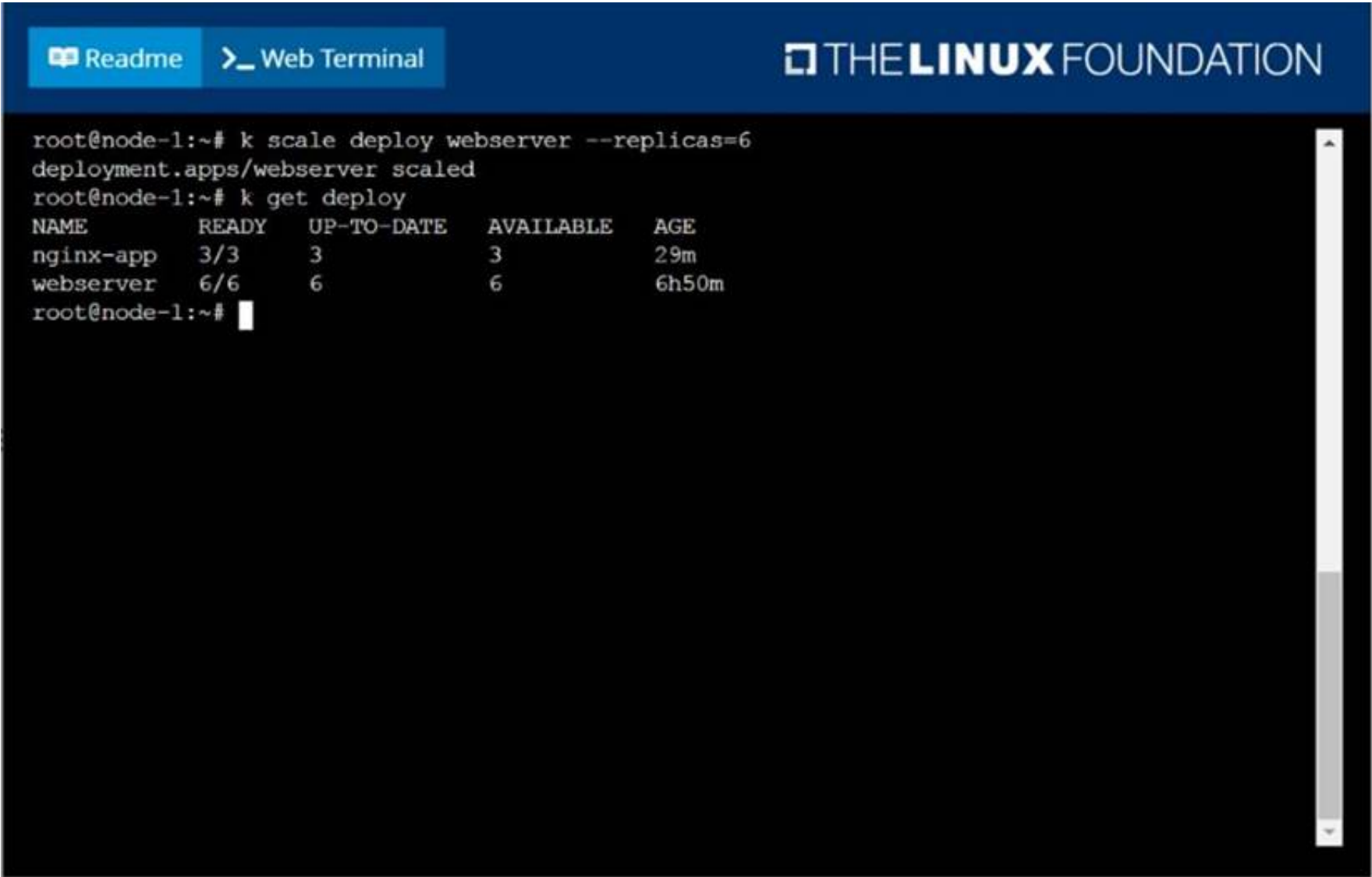
CORRECT TEXT

Scale the deployment webserver to 6 pods.

- A. Mastered
- B. Not Mastered

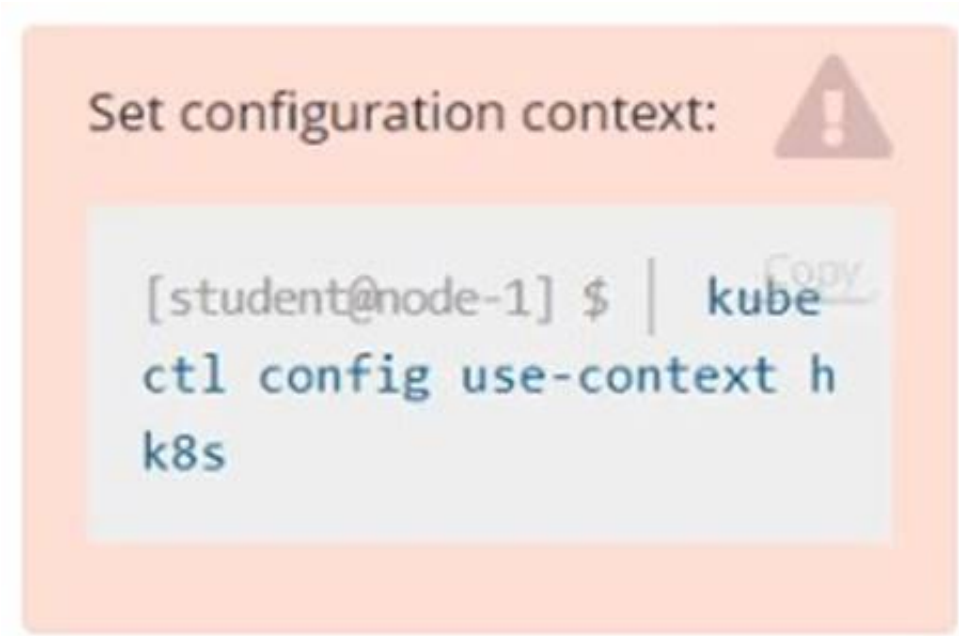
Answer: A

Explanation:
solution



F:\Work\Data Entry Work\Data Entry\20200827\CKA\14 B.JPG

NEW QUESTION 5
CORRECT TEXT
Score: 7%



Task
Create a new NetworkPolicy named allow-port-from-namespace in the existing namespace echo. Ensure that the new NetworkPolicy allows Pods in namespace my-app to connect to port 9000 of Pods in namespace echo.
Further ensure that the new NetworkPolicy:

- does not allow access to Pods, which don't listen on port 9000
- does not allow access from Pods, which are not in namespace my-app

- A. Mastered
B. Not Mastered

Answer: A

Explanation:

Solution:
#network.yaml
apiVersion: networking.k8s.io/v1
kind: NetworkPolicy
metadata:
 name: allow-port-from-namespace
 namespace: internal
spec:
 podSelector:
 matchLabels: {
 }
 policyTypes:


```
- Ingress
ingress:
- from:
- podSelector: {
}
ports:
- protocol: TCP
port: 8080
#spec.podSelector namespace pod
kubectl create -f network.yaml
```

NEW QUESTION 6

CORRECT TEXT

Score: 7%



Task
Reconfigure the existing deployment front-end and add a port specification named http exposing port 80/tcp of the existing container nginx.
Create a new service named front-end-svc exposing the container port http.
Configure the new service to also expose the individual Pods via a NodePort on the nodes on which they are scheduled.

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Solution:
kubectl get deploy front-end
kubectl edit deploy front-end -o yaml
#port specification named http
#service.yaml
apiVersion: v1
kind: Service
metadata:
name: front-end-svc
labels:
app: nginx
spec:
ports:
- port: 80
protocol: tcp
name: http
selector:
app: nginx
type: NodePort
kubectl create -f service.yaml
kubectl get svc
port specification named http
kubectl expose deployment front-end --name=front-end-svc --port=80 --target-port=80 -- type=NodePort

NEW QUESTION 7

CORRECT TEXT

Create an nginx pod and list the pod with different levels of verbosity

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

// create a pod
kubectl run nginx --image=nginx --restart=Never --port=80
// List the pod with different verbosity

```
kubectl get po nginx --v=7
kubectl get po nginx --v=8
kubectl get po nginx --v=9
```

NEW QUESTION 8

CORRECT TEXT

Create a file:

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

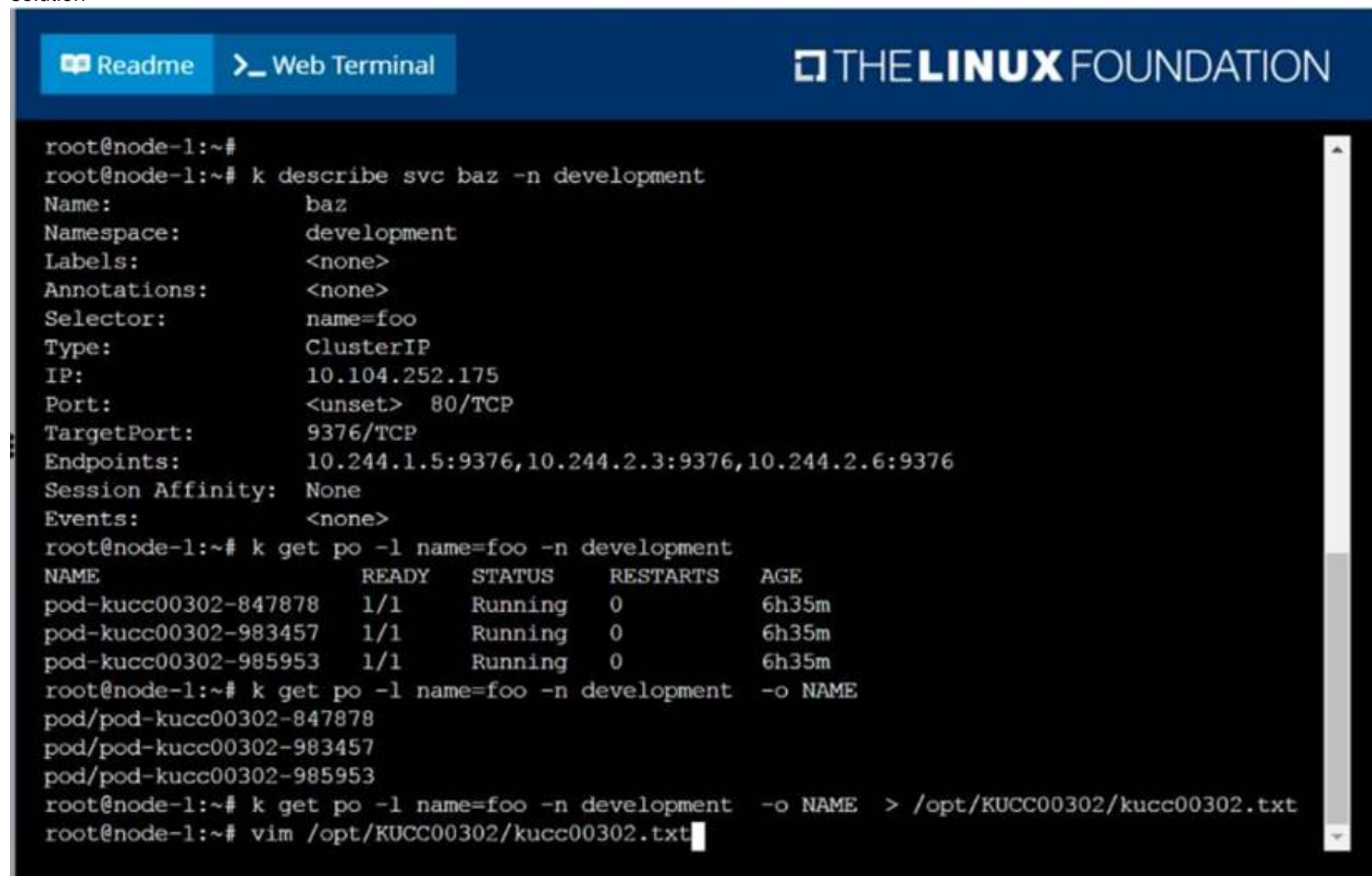
The format of the file should be one pod name per line.

- A. Mastered
- B. Not Mastered

Answer: A

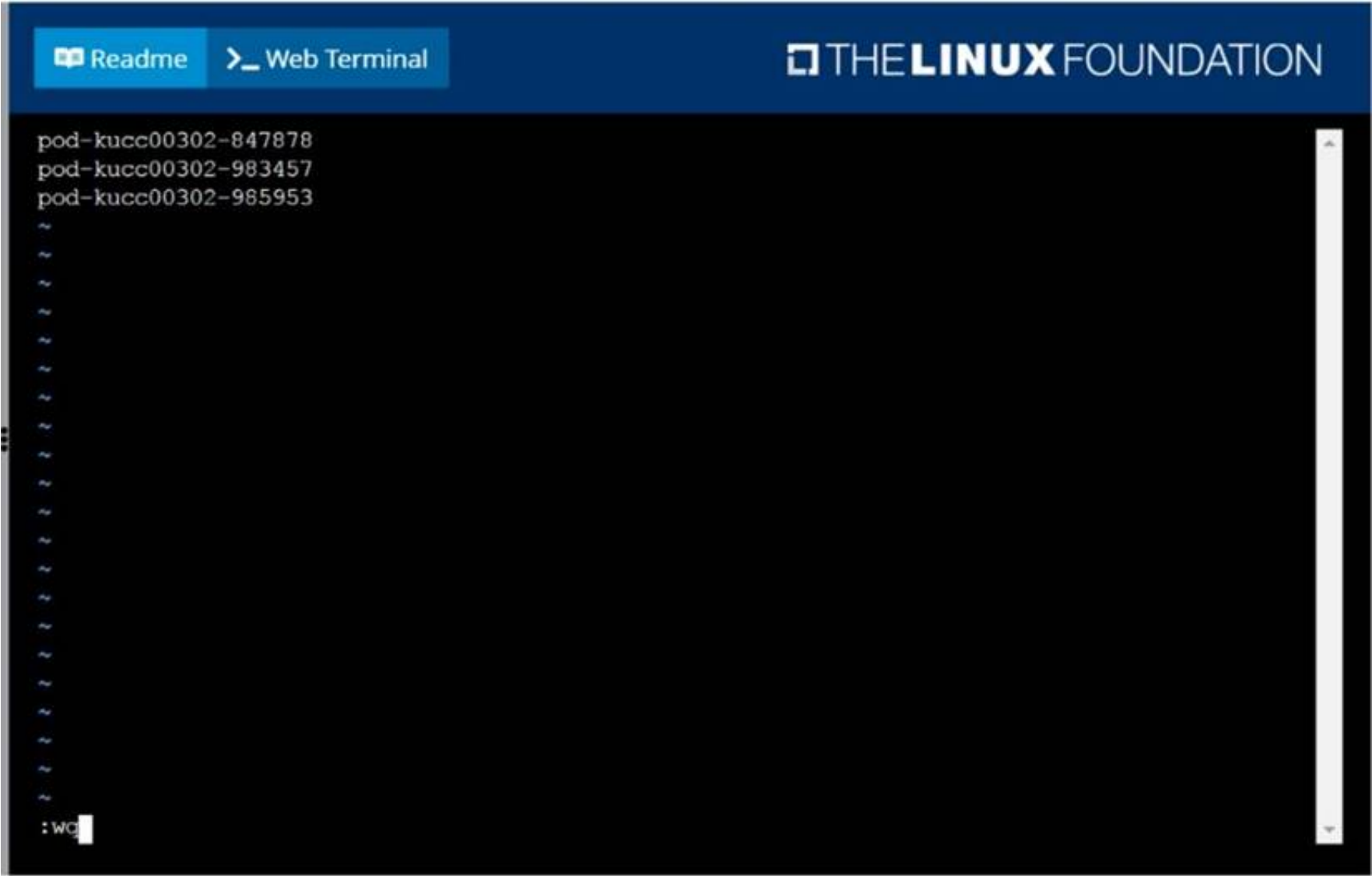
Explanation:

solution

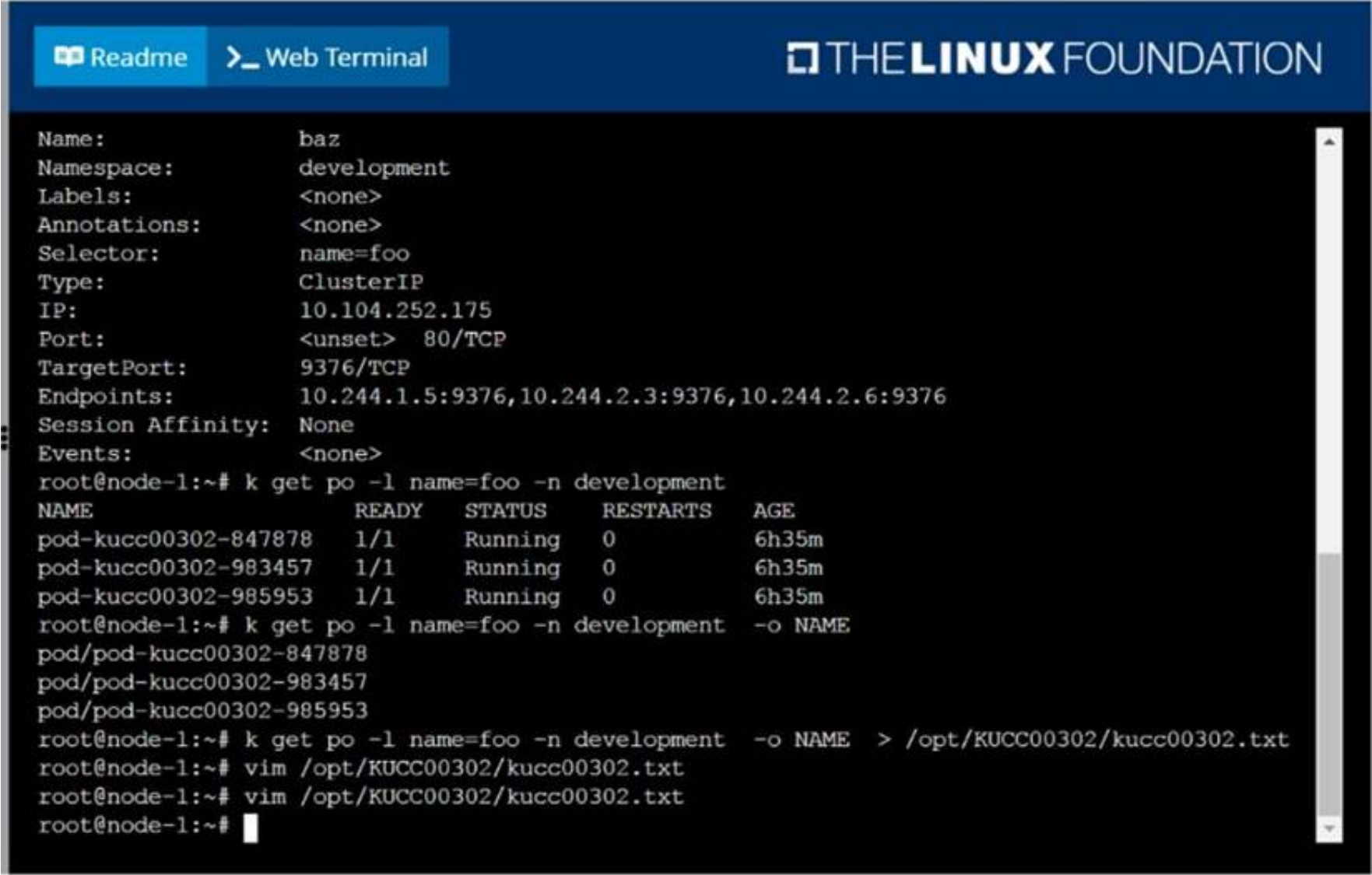


```
root@node-1:~#
root@node-1:~# k describe svc baz -n development
Name:          baz
Namespace:     development
Labels:        <none>
Annotations:   <none>
Selector:      name=foo
Type:          ClusterIP
IP:            10.104.252.175
Port:          <unset> 80/TCP
TargetPort:    9376/TCP
Endpoints:     10.244.1.5:9376,10.244.2.3:9376,10.244.2.6:9376
Session Affinity: None
Events:        <none>
root@node-1:~# k get po -l name=foo -n development
NAME                                READY   STATUS    RESTARTS   AGE
pod-kucc00302-847878                1/1     Running   0           6h35m
pod-kucc00302-983457                1/1     Running   0           6h35m
pod-kucc00302-985953                1/1     Running   0           6h35m
root@node-1:~# k get po -l name=foo -n development -o NAME
pod/pod-kucc00302-847878
pod/pod-kucc00302-983457
pod/pod-kucc00302-985953
root@node-1:~# k get po -l name=foo -n development -o NAME > /opt/KUCC00302/kucc00302.txt
root@node-1:~# vim /opt/KUCC00302/kucc00302.txt
```

F:\Work\Data Entry Work\Data Entry\20200827\CKA\11 B.JPG



F:\Work\Data Entry Work\Data Entry\20200827\CKA\11 C.JPG



F:\Work\Data Entry Work\Data Entry\20200827\CKA\11 D.JPG

NEW QUESTION 9

CORRECT TEXT

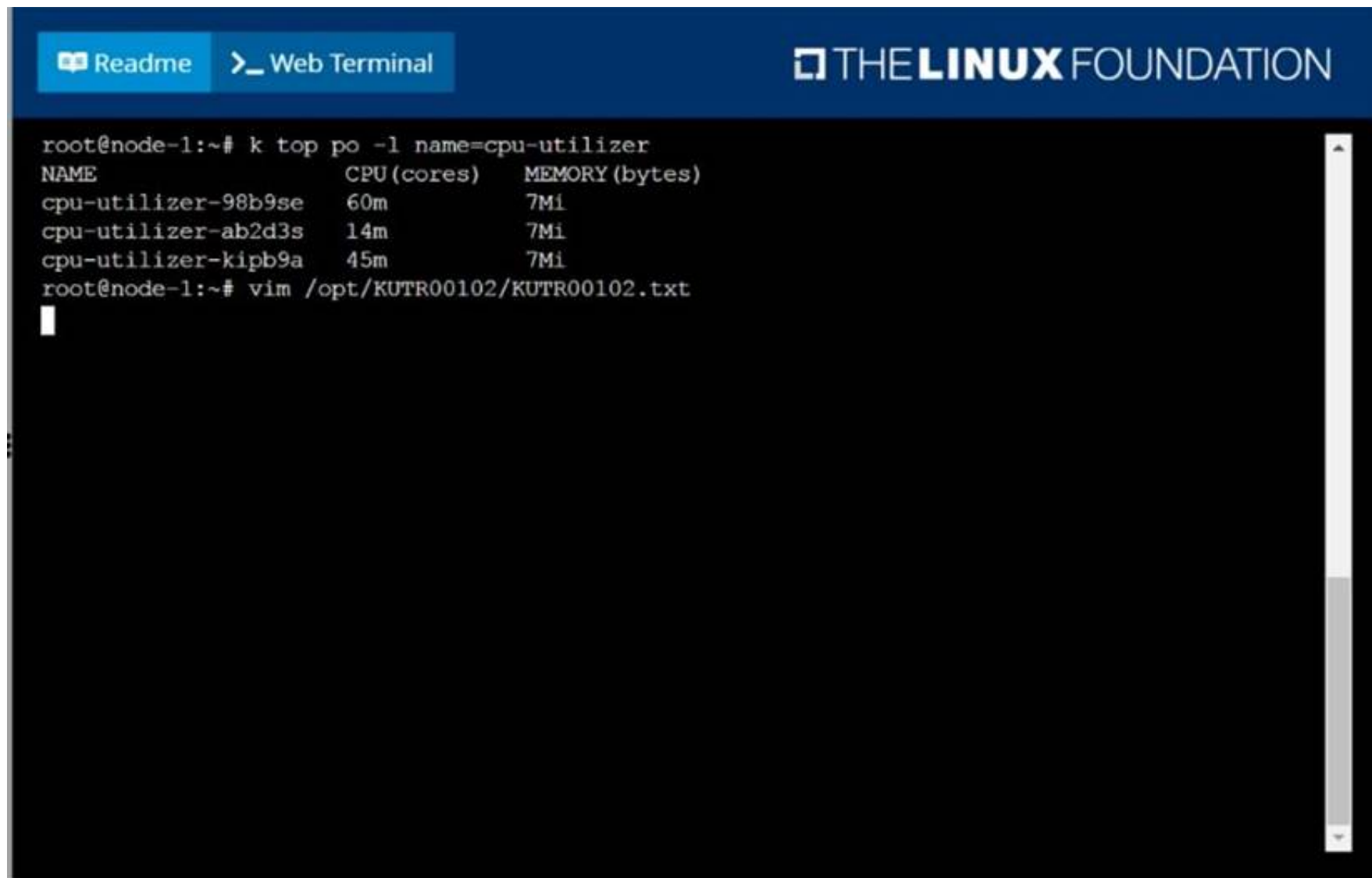
From the pod label name=cpu-utilizer, find pods running high CPU workloads and write the name of the pod consuming most CPU to the file /opt/KUTR00102/KUTR00102.txt (which already exists).

A.

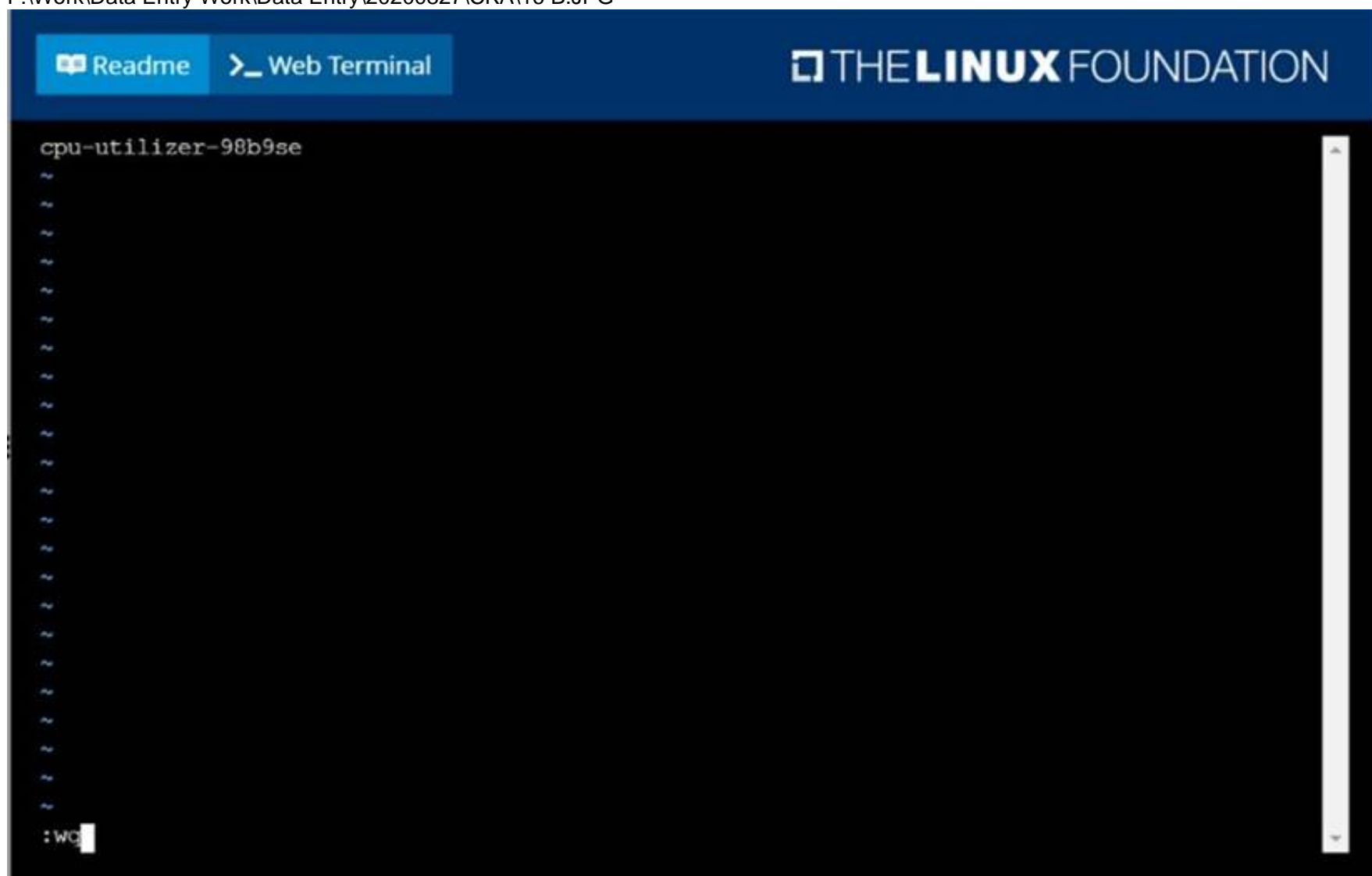
Answer: Seethesolutionbelow.

Explanation:

solution



F:\Work\Data Entry Work\Data Entry\20200827\CKA\16 B.JPG



F:\Work\Data Entry Work\Data Entry\20200827\CKA\16 C.JPG

NEW QUESTION 10

CORRECT TEXT

CORRECT TEXT
Given a partially-functioning Kubernetes cluster, identify symptoms of failure on the cluster.

Determine the node, the failing service, and take actions to bring up the failed service and restore the health of the cluster. Ensure that any changes are made permanently.

You can ssh to the relevant I nodes (bk8s-master-0 or bk8s-node-0) using:

```
[student@node-1] $ ssh <nodename>
```

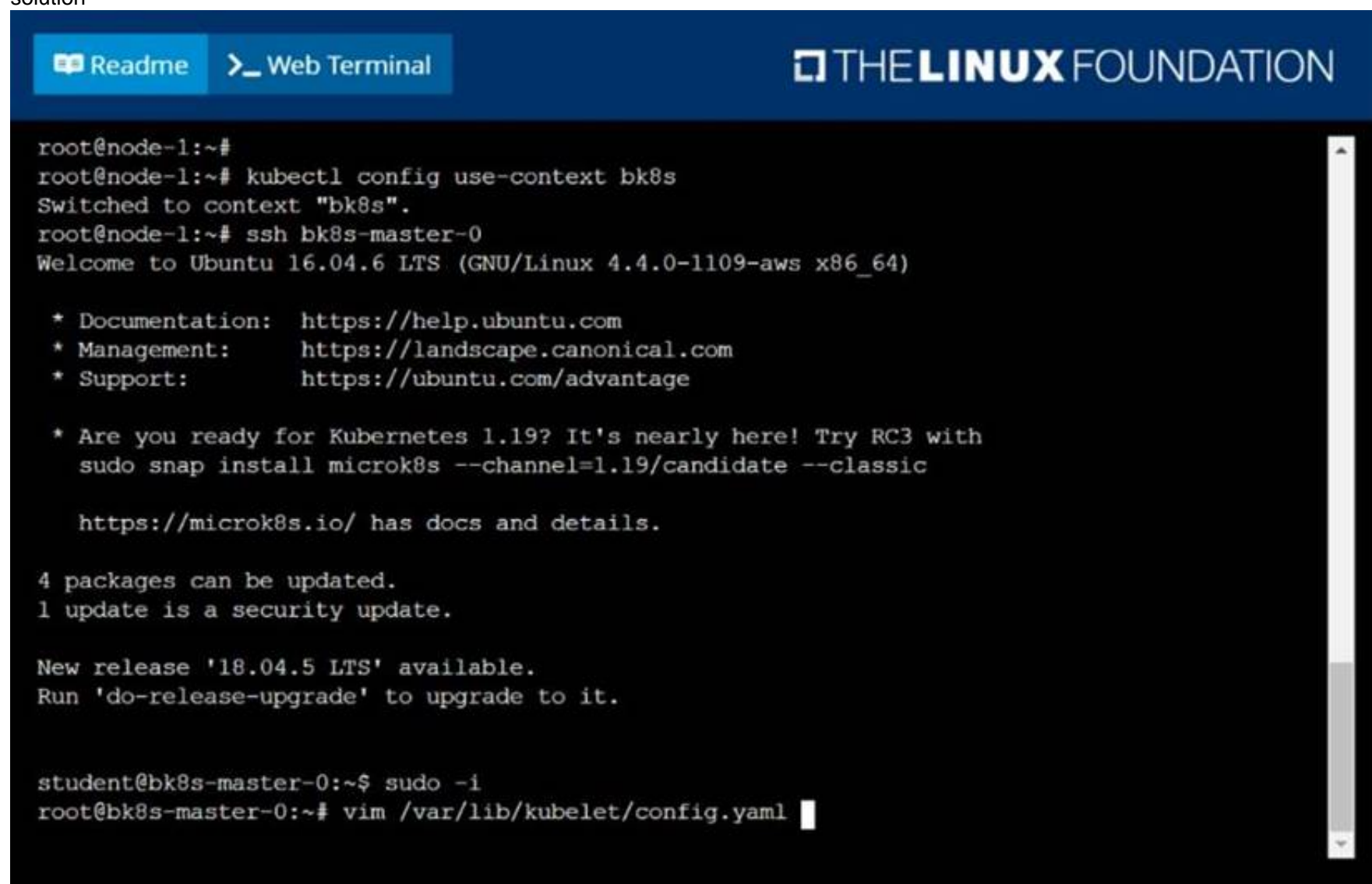
You can assume elevated privileges on any node in the cluster with the following command:

```
[student@nodename] $ | sudo -i
```

- A. Mastered
B. Not Mastered

Answer: A

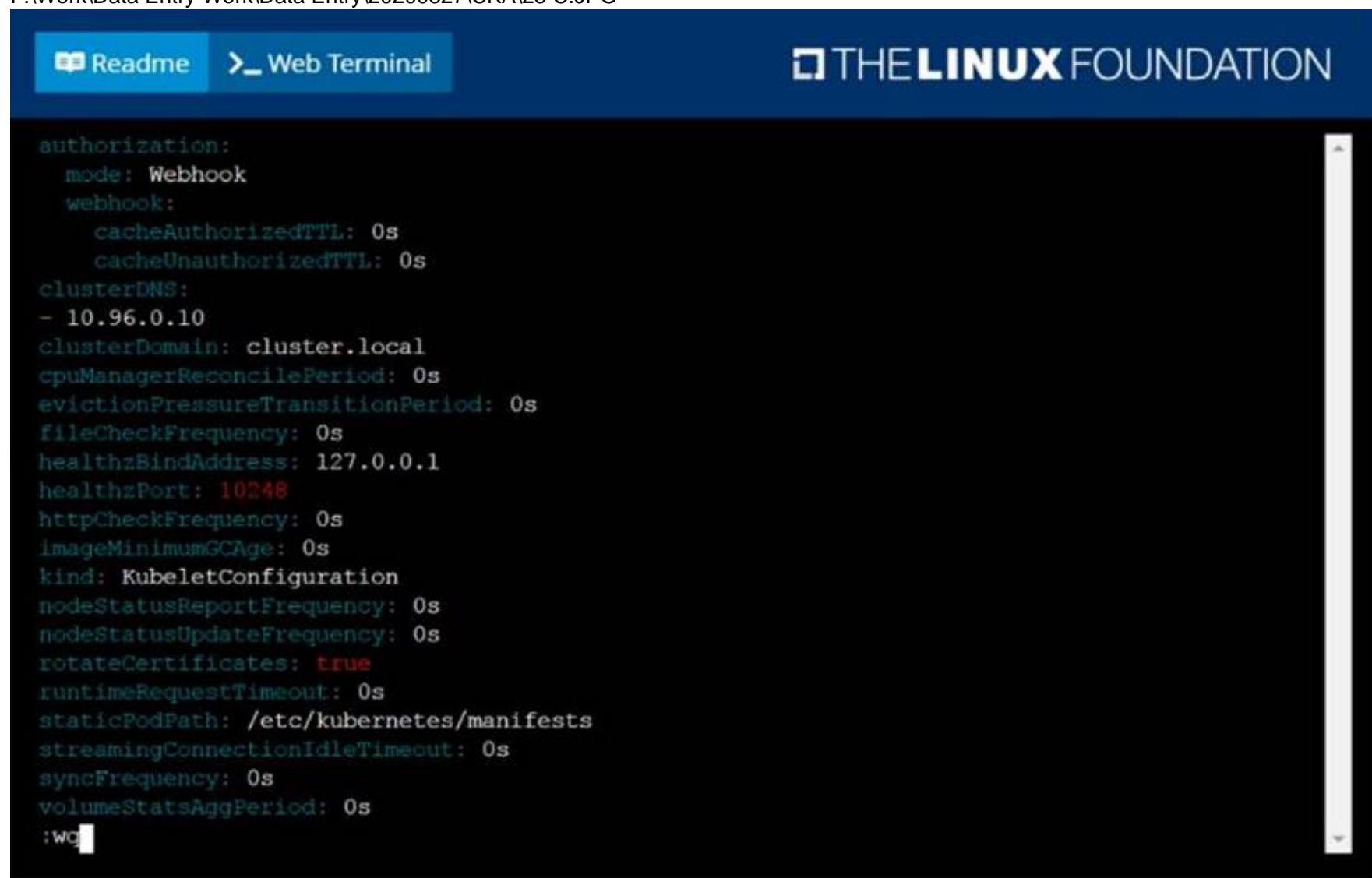
Explanation:
solution



The screenshot shows a web terminal interface with a dark blue header. On the left, there are two buttons: 'Readme' and 'Web Terminal'. On the right, the 'THE LINUX FOUNDATION' logo is displayed. The terminal window shows a series of commands and their outputs. The user is initially at a root prompt on a node-1 machine. They run 'kubectl config use-context bk8s', which switches the context to 'bk8s'. Then, they run 'ssh bk8s-master-0', which connects them to a master node. The master node is running Ubuntu 16.04.6 LTS. The terminal output includes system messages about updates and a new release. Finally, the user runs 'sudo -i' to become root, and then 'vim /var/lib/kubelet/config.yaml' to edit the kubelet configuration file.

```
root@node-1:~#  
root@node-1:~# kubectl config use-context bk8s  
Switched to context "bk8s".  
root@node-1:~# ssh bk8s-master-0  
Welcome to Ubuntu 16.04.6 LTS (GNU/Linux 4.4.0-1109-aws x86_64)  
  
* Documentation:  https://help.ubuntu.com  
* Management:    https://landscape.canonical.com  
* Support:       https://ubuntu.com/advantage  
  
* Are you ready for Kubernetes 1.19? It's nearly here! Try RC3 with  
  sudo snap install microk8s --channel=1.19/candidate --classic  
  
  https://microk8s.io/ has docs and details.  
  
4 packages can be updated.  
1 update is a security update.  
  
New release '18.04.5 LTS' available.  
Run 'do-release-upgrade' to upgrade to it.  
  
student@bk8s-master-0:~$ sudo -i  
root@bk8s-master-0:~# vim /var/lib/kubelet/config.yaml
```

F:\Work\Data Entry Work\Data Entry\20200827\CKA\23 C.JPG



The screenshot shows a web terminal interface with a dark blue header. On the left, there are two buttons: 'Readme' and 'Web Terminal'. On the right, the 'THE LINUX FOUNDATION' logo is displayed. The terminal window shows the contents of the kubelet configuration file, which is a YAML document. The configuration includes settings for authorization (Webhook), clusterDNS, clusterDomain, cpuManagerReconcilePeriod, evictionPressureTransitionPeriod, fileCheckFrequency, healthzBindAddress, healthzPort, httpCheckFrequency, imageMinimumGCAge, kind (KubeletConfiguration), nodeStatusReportFrequency, nodeStatusUpdateFrequency, rotateCertificates, runtimeRequestTimeout, staticPodPath, streamingConnectionIdleTimeout, syncFrequency, and volumeStatsAggPeriod. The user is currently editing the file in vim, and the cursor is at the end of the 'volumeStatsAggPeriod' line.

```
authorization:  
  mode: Webhook  
  webhook:  
    cacheAuthorizedTTL: 0s  
    cacheUnauthorizedTTL: 0s  
clusterDNS:  
- 10.96.0.10  
clusterDomain: cluster.local  
cpuManagerReconcilePeriod: 0s  
evictionPressureTransitionPeriod: 0s  
fileCheckFrequency: 0s  
healthzBindAddress: 127.0.0.1  
healthzPort: 10248  
httpCheckFrequency: 0s  
imageMinimumGCAge: 0s  
kind: KubeletConfiguration  
nodeStatusReportFrequency: 0s  
nodeStatusUpdateFrequency: 0s  
rotateCertificates: true  
runtimeRequestTimeout: 0s  
staticPodPath: /etc/kubernetes/manifests  
streamingConnectionIdleTimeout: 0s  
syncFrequency: 0s  
volumeStatsAggPeriod: 0s  
:wq
```

F:\Work\Data Entry Work\Data Entry\20200827\CKA\23 D.JPG

ReadmeWeb Terminal

THE **LINUX** FOUNDATION

```
https://microk8s.io/ has docs and details.

4 packages can be updated.
1 update is a security update.

New release '18.04.5 LTS' available.
Run 'do-release-upgrade' to upgrade to it.

student@bk8s-master-0:~$ sudo -i
root@bk8s-master-0:~# vim /var/lib/kubelet/config.yaml
root@bk8s-master-0:~# systemctl restart kubelet
root@bk8s-master-0:~# systemctl enable kubelet
root@bk8s-master-0:~# kubect1 get nodes

NAME             STATUS    ROLES    AGE   VERSION
bk8s-master-0    Ready    master   77d   v1.18.2
bk8s-node-0      Ready    <none>   77d   v1.18.2
root@bk8s-master-0:~#
root@bk8s-master-0:~# exit
logout
student@bk8s-master-0:~$ exit
logout
Connection to 10.250.4.77 closed.
root@node-1:~#
```

F:\Work\Data Entry Work\Data Entry\20200827\CKA\23 E.JPG

NEW QUESTION 10

CORRECT TEXT

Create a pod as follows:

? Name: mongo

? Using Image: mongo

? In a new Kubernetes namespace named: my-website

A. Mastered

B. Not Mastered

Answer: A

Explanation:

solution

ReadmeWeb Terminal

THE **LINUX** FOUNDATION

```
root@node-1:~#
root@node-1:~#
root@node-1:~# k create ns my-website
namespace/my-website created
root@node-1:~# k run mongo --image=mongo -n my-website
pod/mongo created
root@node-1:~# k get po -n my-website
NAME    READY   STATUS             RESTARTS   AGE
mongo   0/1     ContainerCreating   0           4s
root@node-1:~#
```

F:\Work\Data Entry Work\Data Entry\20200827\CKA\9 B.JPG

NEW QUESTION 13

CORRECT TEXT

Create a deployment as follows:

? Name: nginx-app

? Using container nginx with version 1.11.10-alpine

? The deployment should contain 3 replicas

Next, deploy the application with new version 1.11.13-alpine, by performing a rolling update.

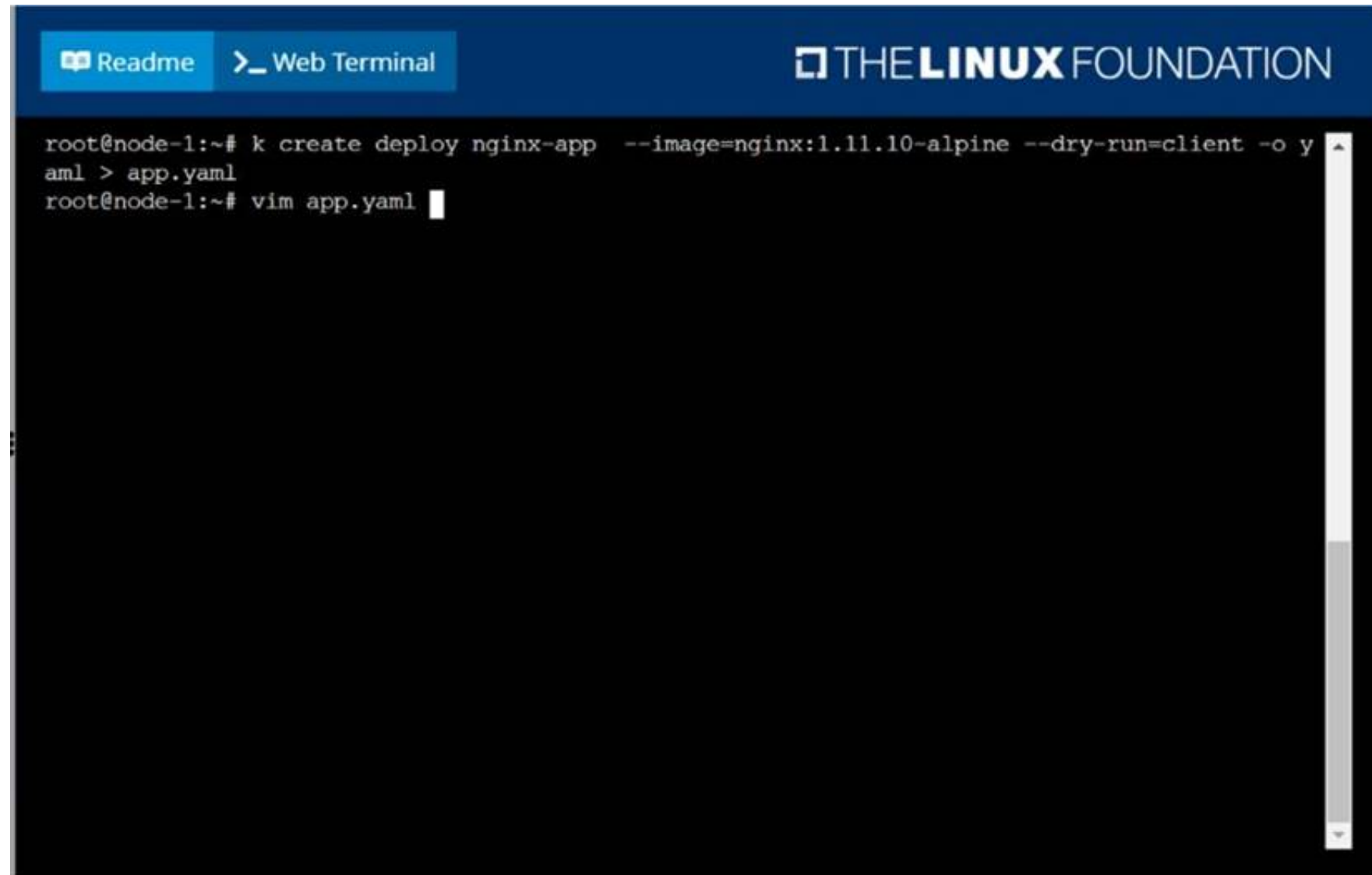
Finally, rollback that update to the previous version 1.11.10-alpine.

- A. Mastered
- B. Not Mastered

Answer: A

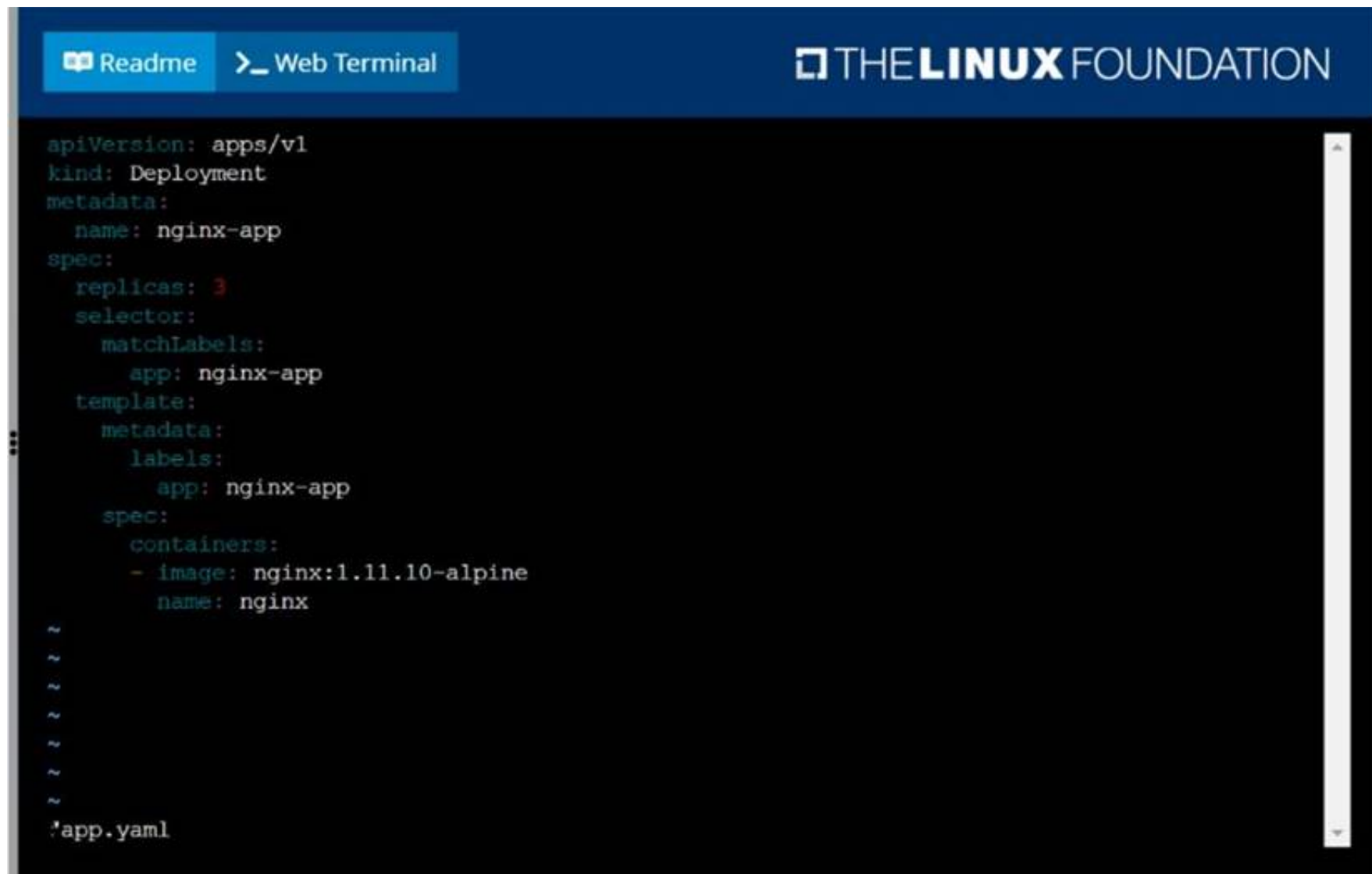
Explanation:

solution



```
root@node-1:~# k create deploy nginx-app --image=nginx:1.11.10-alpine --dry-run=client -o y
aml > app.yaml
root@node-1:~# vim app.yaml
```

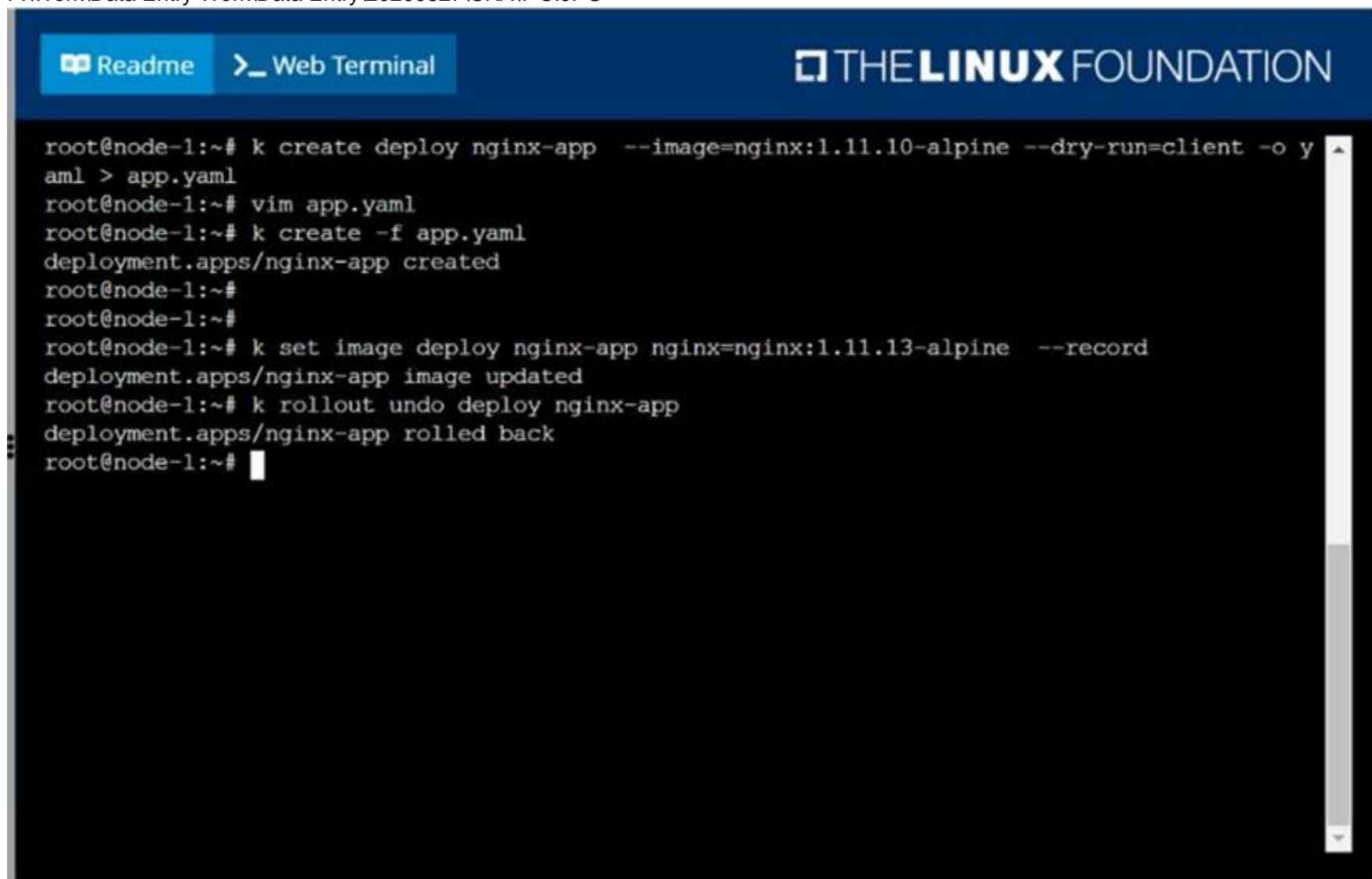
F:\Work\Data Entry Work\Data Entry\20200827\CKA\7 B.JPG



The screenshot shows a web terminal interface with a dark background. At the top, there are two tabs: 'Readme' and 'Web Terminal'. The 'Web Terminal' tab is active, displaying a Kubernetes deployment YAML file named 'app.yaml'. The content of the file is as follows:

```
apiVersion: apps/v1
kind: Deployment
metadata:
  name: nginx-app
spec:
  replicas: 3
  selector:
    matchLabels:
      app: nginx-app
  template:
    metadata:
      labels:
        app: nginx-app
    spec:
      containers:
      - image: nginx:1.11.10-alpine
        name: nginx
```

F:\Work\Data Entry Work\Data Entry\20200827\CKA\7 C.JPG



The screenshot shows a web terminal interface with a dark background. At the top, there are two tabs: 'Readme' and 'Web Terminal'. The 'Web Terminal' tab is active, displaying a series of Kubernetes commands being executed on a node named 'node-1'. The commands and their outputs are as follows:

```
root@node-1:~# k create deploy nginx-app --image=nginx:1.11.10-alpine --dry-run=client -o y
aml > app.yaml
root@node-1:~# vim app.yaml
root@node-1:~# k create -f app.yaml
deployment.apps/nginx-app created
root@node-1:~#
root@node-1:~#
root@node-1:~# k set image deploy nginx-app nginx=nginx:1.11.13-alpine --record
deployment.apps/nginx-app image updated
root@node-1:~# k rollout undo deploy nginx-app
deployment.apps/nginx-app rolled back
root@node-1:~#
```

F:\Work\Data Entry Work\Data Entry\20200827\CKA\7 D.JPG

NEW QUESTION 17

CORRECT TEXT

Get list of all the pods showing name and namespace with a jsonpath expression.

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

kubectl get pods -o=jsonpath="{.items[*]['metadata.name'], 'metadata.namespace']}"

NEW QUESTION 19

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.

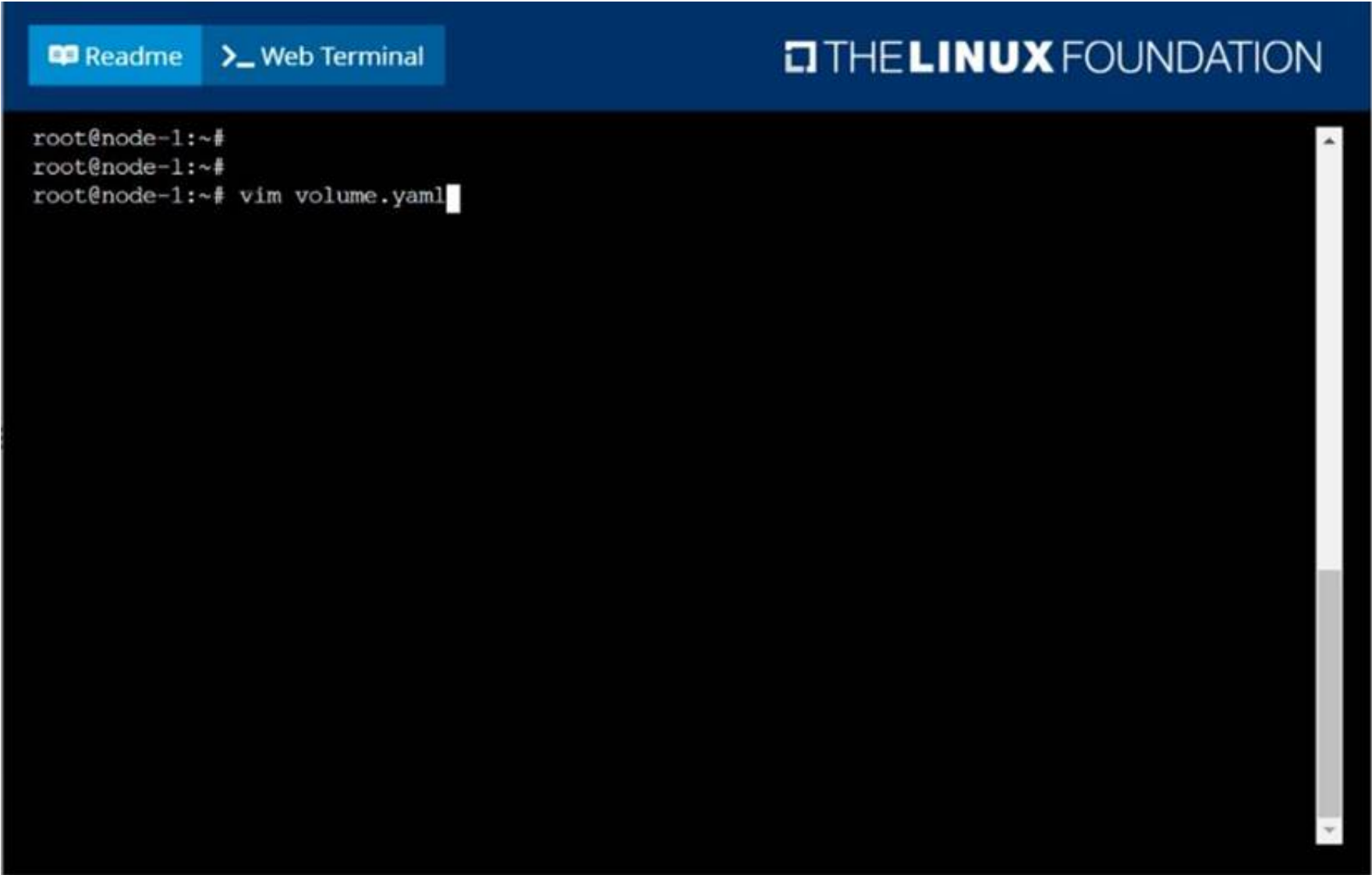
A. Mastered

B. Not Mastered

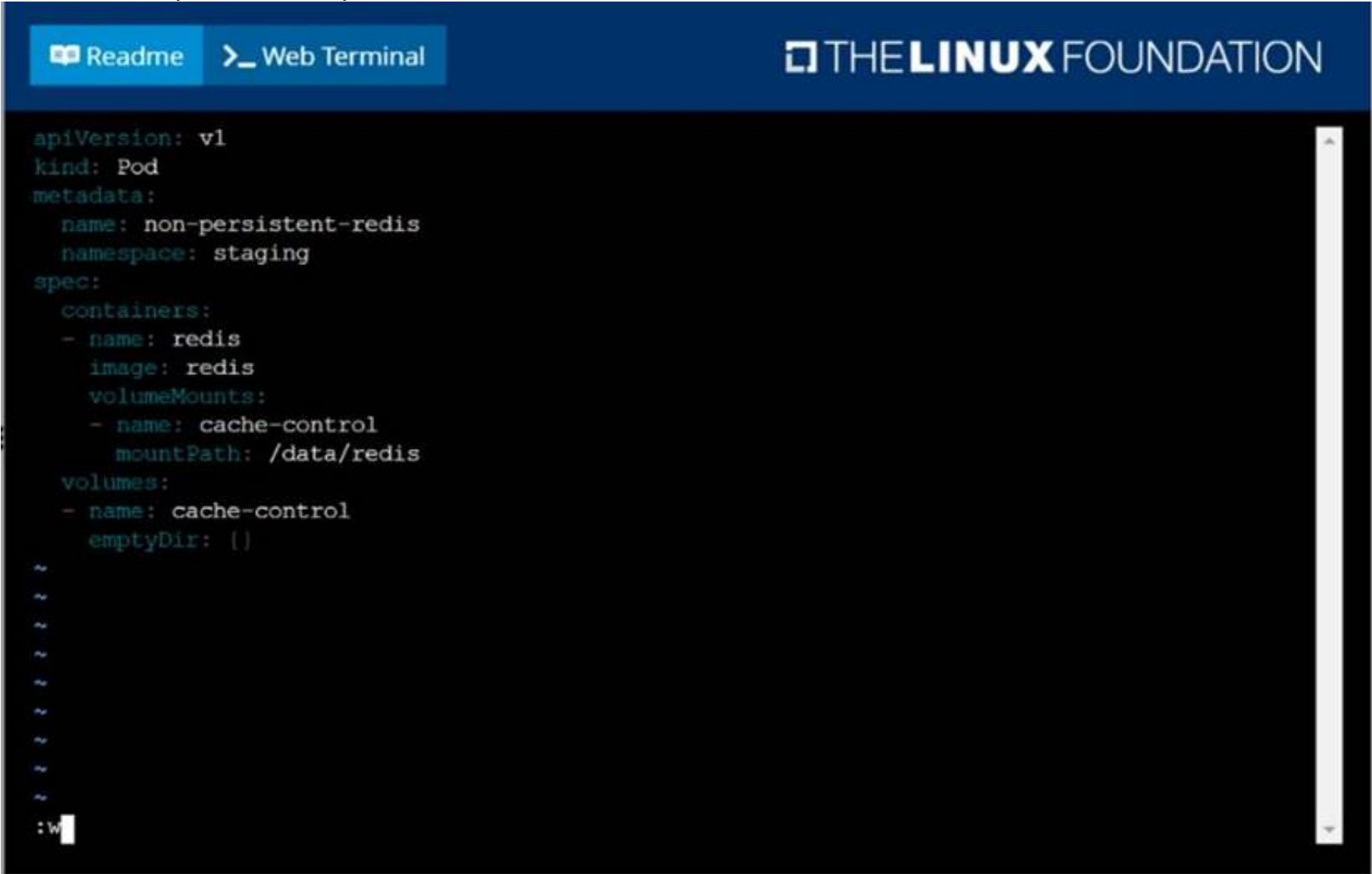
Answer: A

Explanation:

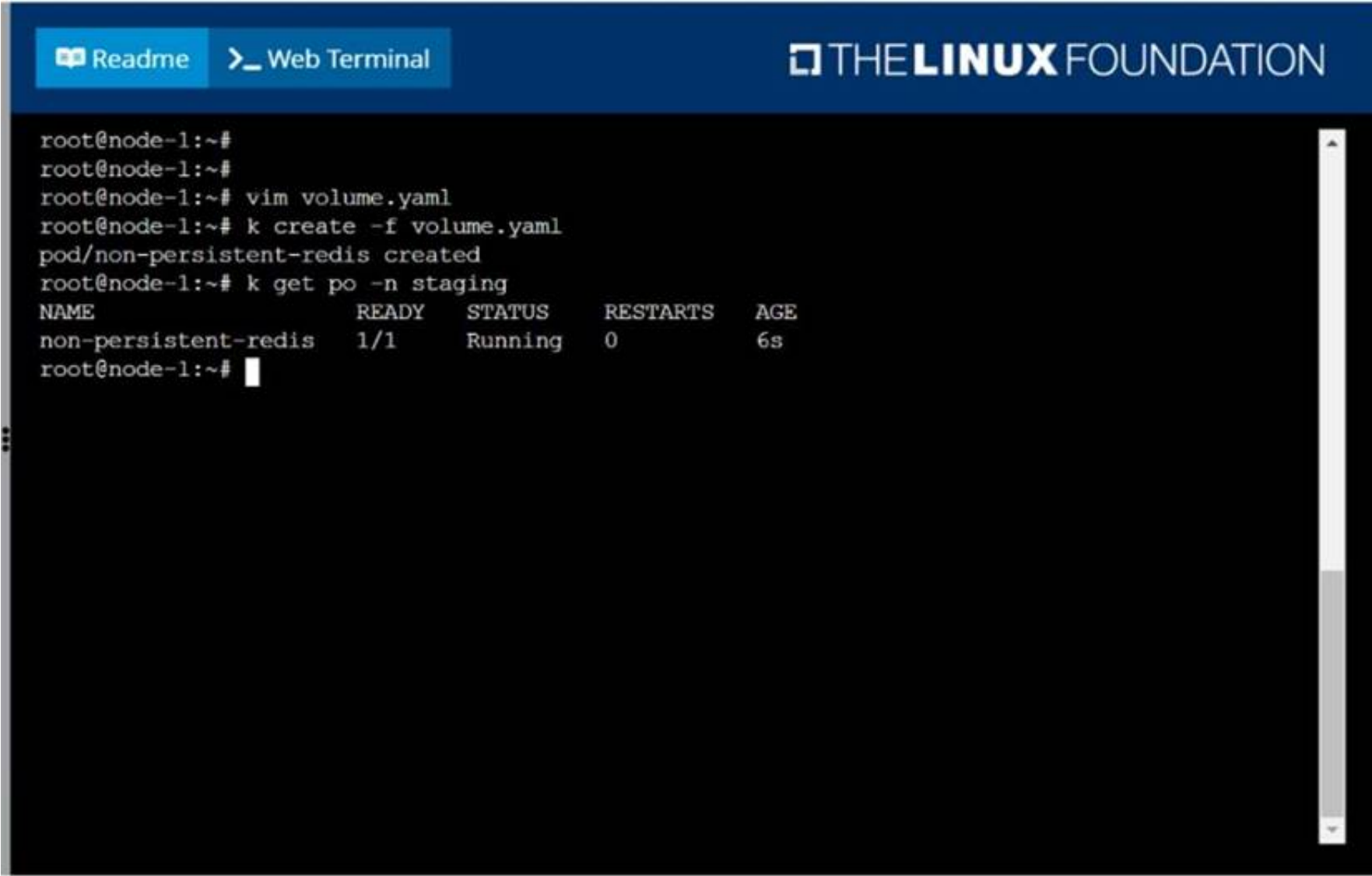
solution



F:\Work\Data Entry Work\Data Entry\20200827\CKA\13 B.JPG

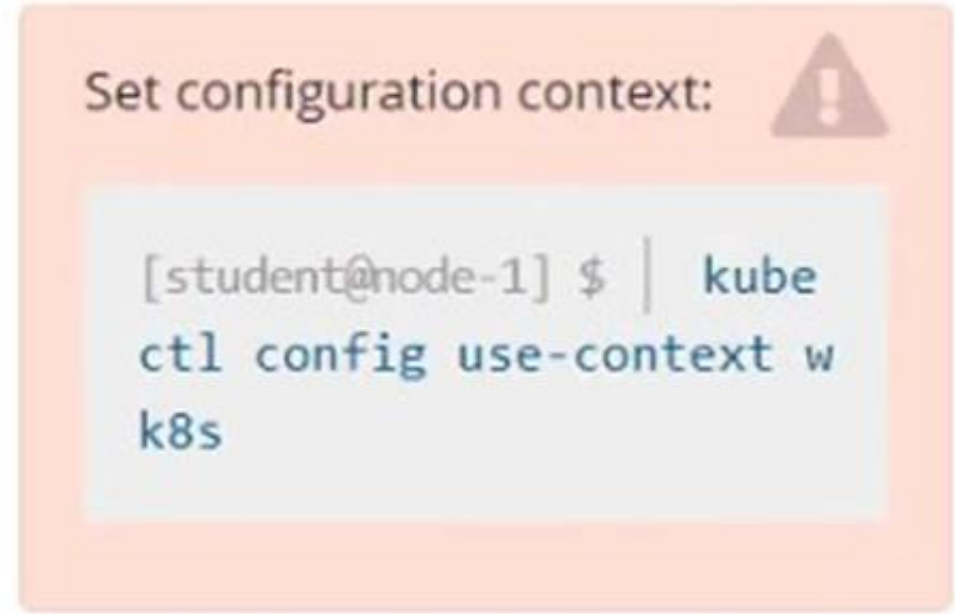


F:\Work\Data Entry Work\Data Entry\20200827\CKA\13 C.JPG

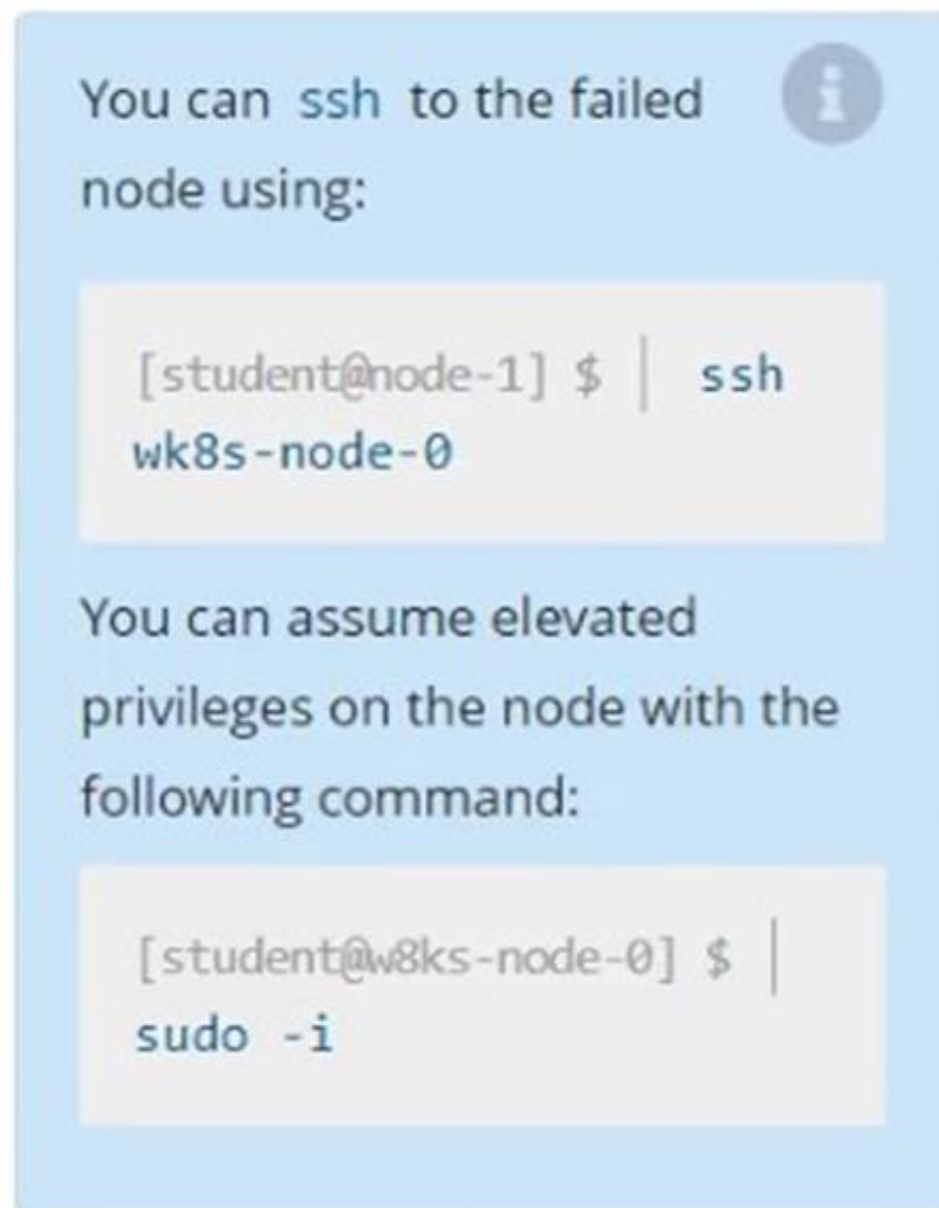


F:\Work\Data Entry Work\Data Entry\20200827\CKA\13 D.JPG

NEW QUESTION 21
 CORRECT TEXT
 Score: 13%



Task
 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.



- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Solution:

```
sudo -i
systemctl status kubelet
systemctl start kubelet
systemctl enable kubelet
```

NEW QUESTION 25

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

A.

Answer: Seethesolutionbelow.

Explanation:

solution

Readme

Web Terminal

THE **LINUX** FOUNDATION

```
root@node-1:~# vim ds.yaml
iroot@node-1:~# k create -f ds.yaml
daemonset.apps/ds-kusc00201 created
root@node-1:~# k get ds
NAME                DESIRED    CURRENT    READY    UP-TO-DATE    AVAILABLE    NODE SELECTOR    AGE
ds-kusc00201         2          2          2        2             2            <none>           4s
root@node-1:~# vim /opt/KUCC00108/pod-spec-KUCC00108.yaml
```

F:\Work\Data Entry Work\Data Entry\20200827\CKA\4 B.JPG

Readme

Web Terminal

THE **LINUX** FOUNDATION

```
apiVersion: v1
kind: Pod
metadata:
  name: hungry-bear
spec:
  volumes:
    - name: workdir
      emptyDir: {}
  containers:
    - name: checker
      image: alpine
      command: ["/bin/sh", "-c", "if [ -f /workdir/calm.txt ];
        then sleep 100000; else exit 1; fi"]
      volumeMounts:
        - name: workdir
          mountPath: /workdir
    initContainers:
      - name: create
        image: alpine
        command: ["/bin/sh", "-c", "touch /workdir/calm.txt"]
        volumeMounts:
          - name: workdir
            mountPath: /workdir
:WQ
```

F:\Work\Data Entry Work\Data Entry\20200827\CKA\4 C.JPG

Readme

Web Terminal

THE LINUX FOUNDATION

```
root@node-1:~# vim ds.yaml
iroot@node-1:~# k create -f ds.yaml
daemonset.apps/ds-kusc00201 created
root@node-1:~# k get ds
NAME          DESIRED   CURRENT   READY   UP-TO-DATE   AVAILABLE   NODE SELECTOR   AGE
ds-kusc00201   2         2         2       2            2           <none>          4s
root@node-1:~# vim /opt/KUCC00108/pod-spec-KUCC00108.yaml
root@node-1:~# k create -f /opt/KUCC00108/pod-spec-KUCC00108.yaml
pod/hungry-bear created
root@node-1:~#
```

F:\Work\Data Entry Work\Data Entry\20200827\CKA\4 D.JPG

NEW QUESTION 26

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:

```
[student@node-1] $ | ssh Wk8s-node-0
```

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

```
[student@w8ks-node-0] $ | sudo -i
```

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

solution

ReadmeWeb Terminal

THE **LINUX** FOUNDATION

```
root@node-1:~# kubectl config use-context wk8s
Switched to context "wk8s".
root@node-1:~# k get nodes
NAME             STATUS    ROLES    AGE   VERSION
wk8s-master-0    Ready     master   77d   v1.18.2
wk8s-node-0      NotReady  <none>    77d   v1.18.2
wk8s-node-1      Ready     <none>    77d   v1.18.2
root@node-1:~# ssh wk8s-node-0
```

F:\Work\Data Entry Work\Data Entry\20200827\CKA\20 C.JPG

ReadmeWeb Terminal

THE **LINUX** FOUNDATION

```
wk8s-node-0    NotReady  <none>    77d   v1.18.2
wk8s-node-1    Ready     <none>    77d   v1.18.2
root@node-1:~# ssh wk8s-node-0
Welcome to Ubuntu 16.04.6 LTS (GNU/Linux 4.4.0-1109-aws x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/advantage

 * Are you ready for Kubernetes 1.19? It's nearly here! Try RC3 with
   sudo snap install microk8s --channel=1.19/candidate --classic
   https://microk8s.io/ has docs and details.

4 packages can be updated.
1 update is a security update.

New release '18.04.5 LTS' available.
Run 'do-release-upgrade' to upgrade to it.

student@wk8s-node-0:~$ sudo -i
root@wk8s-node-0:~# systemctl restart kubelet
root@wk8s-node-0:~# systemctl enable kubelet
```

F:\Work\Data Entry Work\Data Entry\20200827\CKA\20 D.JPG

Readme

Web Terminal

THE **LINUX** FOUNDATION

```
https://microk8s.io/ has docs and details.

4 packages can be updated.
1 update is a security update.

New release '18.04.5 LTS' available.
Run 'do-release-upgrade' to upgrade to it.

student@wk8s-node-0:~$ sudo -i
root@wk8s-node-0:~# systemctl restart kubelet
root@wk8s-node-0:~# systemctl enable kubelet
Created symlink from /etc/systemd/system/multi-user.target.wants/kubelet.service to /lib/sy
temd/system/kubelet.service.
root@wk8s-node-0:~# exit
logout
student@wk8s-node-0:~$ exit
logout
Connection to 10.250.5.34 closed.
root@node-1:~# k get nodes
NAME             STATUS    ROLES    AGE   VERSION
wk8s-master-0    Ready     master   77d   v1.18.2
wk8s-node-0      Ready     <none>   77d   v1.18.2
wk8s-node-1      Ready     <none>   77d   v1.18.2
root@node-1:~#
```

F:\Work\Data Entry Work\Data Entry\20200827\CKA\20 E.JPG

NEW QUESTION 31

CORRECT TEXT

List all the pods sorted by name

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

kubectll get pods --sort-by=.metadata.name

NEW QUESTION 33

CORRECT TEXT

Schedule a pod as follows:

? Name: nginx-kusc00101

? Image: nginx

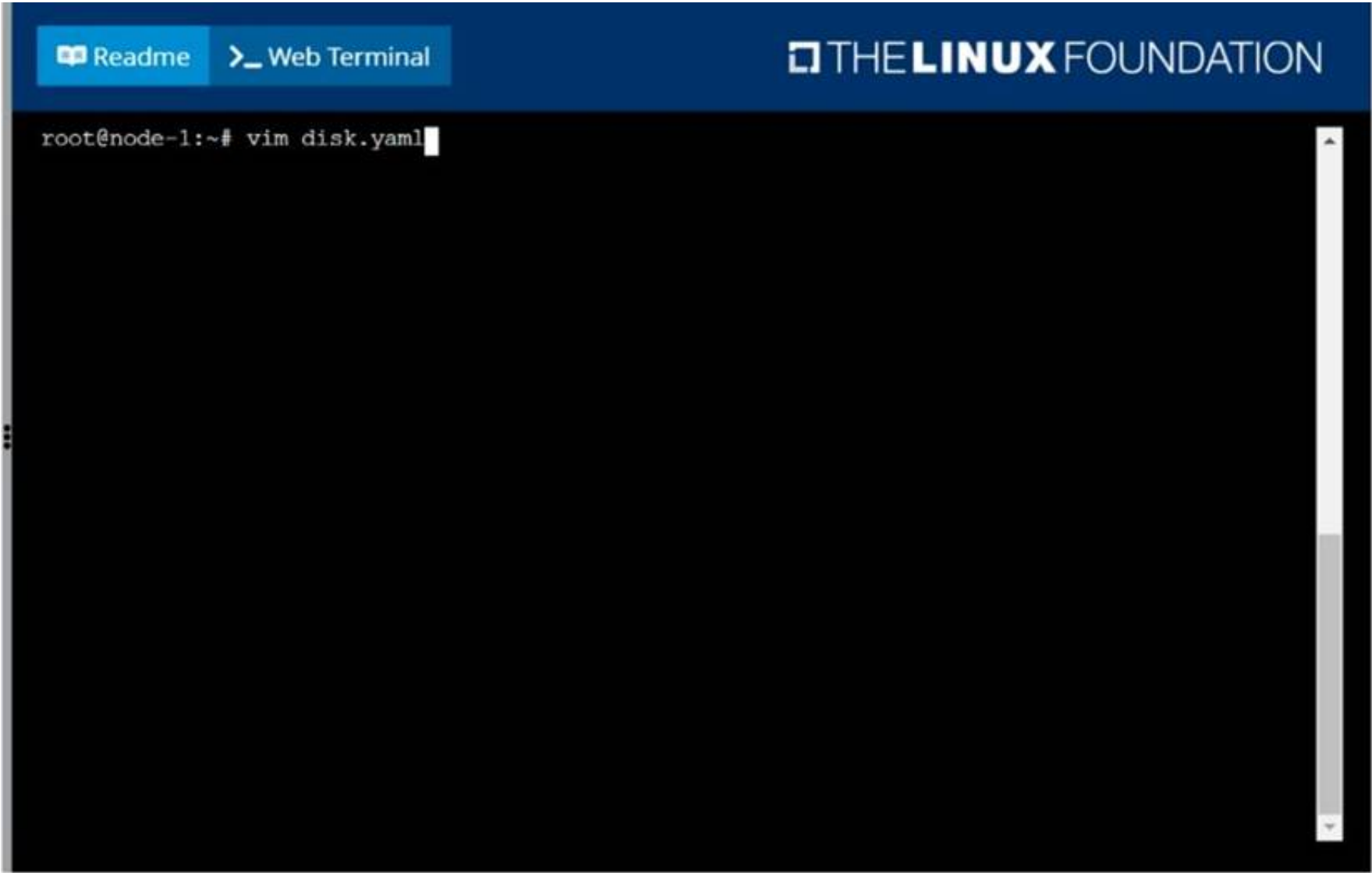
? Node selector: disk=ssd

- A. Mastered
- B. Not Mastered

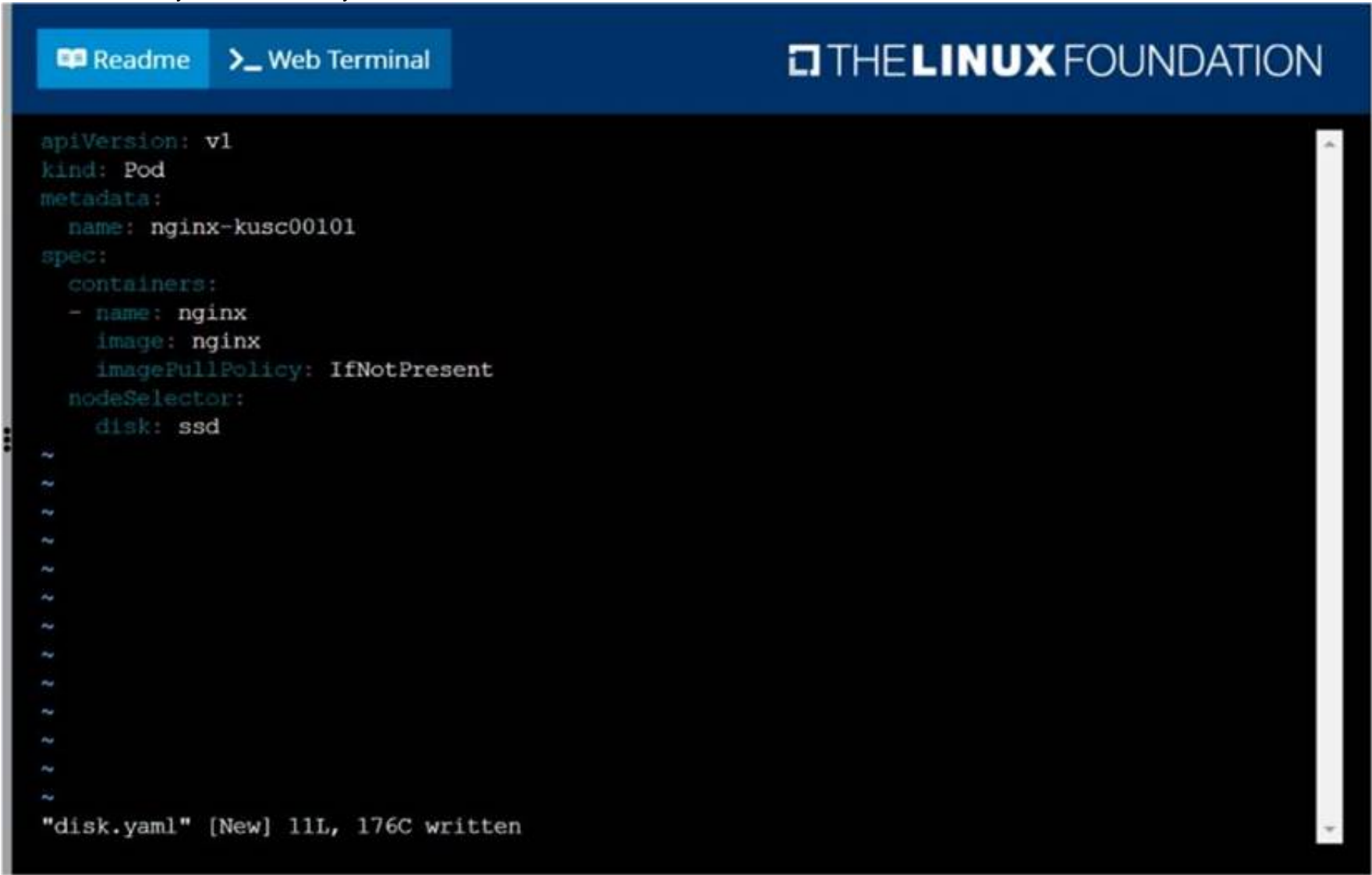
Answer: A

Explanation:

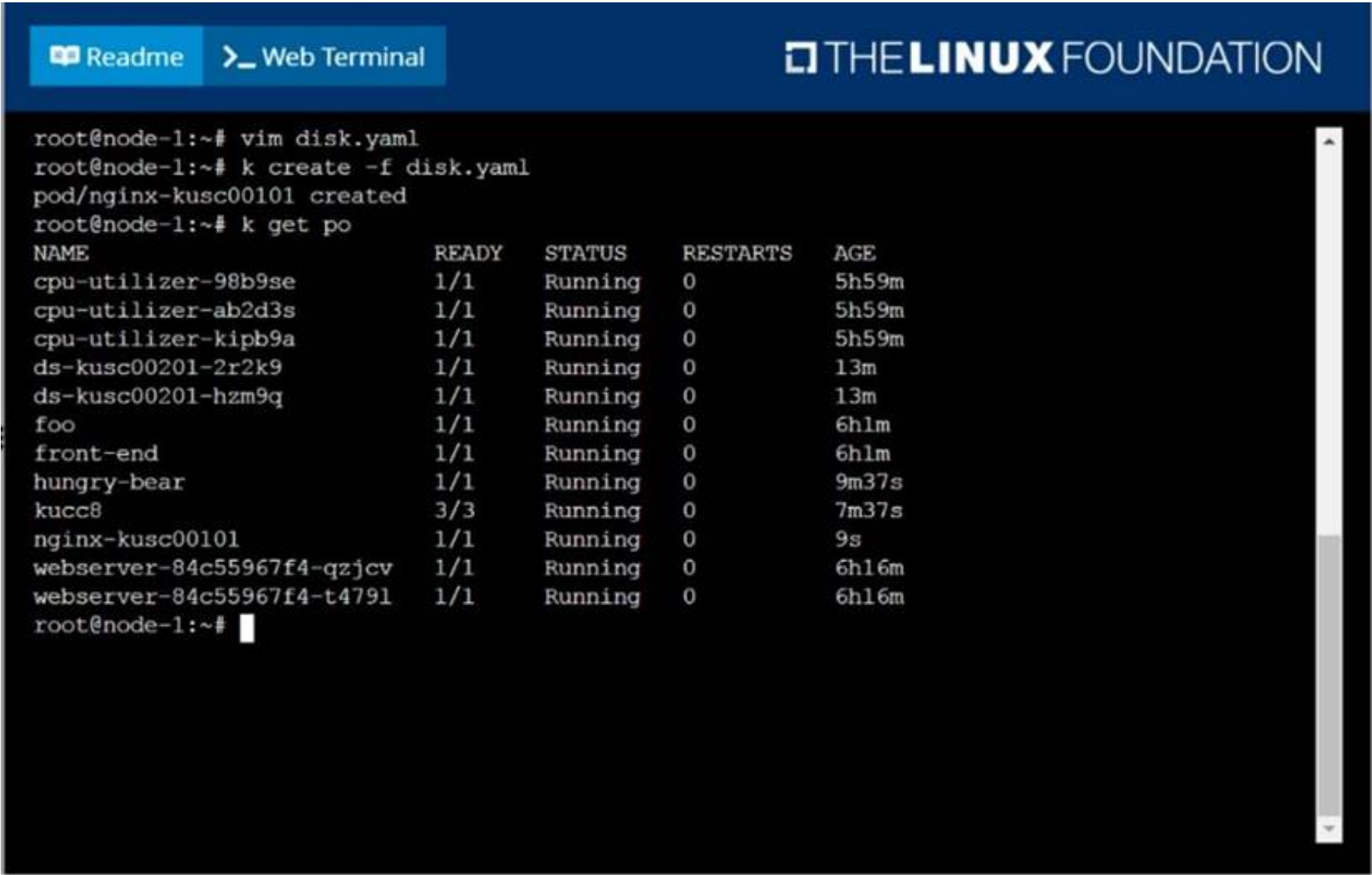
solution



F:\Work\Data Entry Work\Data Entry\20200827\CKA\6 B.JPGF:\Work\Data



F:\Work\Data Entry Work\Data Entry\20200827\CKA\6 C.JPG



F:\Work\Data Entry Work\Data Entry\20200827\CKA\6 D.JPG

NEW QUESTION 35

CORRECT TEXT

List the nginx pod with custom columns POD_NAME and POD_STATUS

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

kubectkl get po -o=custom-columns="POD_NAME:.metadata.name, POD_STATUS:.status.containerStatuses[].state"

NEW QUESTION 36

CORRECT TEXT

Create a nginx pod with label env=test in engineering namespace

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

kubectkl run nginx --image=nginx --restart=Never --labels=env=test
-- namespace=engineering --dry-run -o yaml > nginx-pod.yaml
kubectkl run nginx --image=nginx --restart=Never --labels=env=test --
namespace=engineering --dry-run -o yaml | kubectkl create -n engineering -f –
YAML File:
apiVersion: v1
kind: Pod
metadata:
name: nginx
namespace: engineering
labels:
env: test
spec:
containers:
- name: nginx
image: nginx
imagePullPolicy: IfNotPresent
restartPolicy: Never
kubectkl create -f nginx-pod.yaml

NEW QUESTION 39

.....

Thank You for Trying Our Product

We offer two products:

1st - We have Practice Tests Software with Actual Exam Questions

2nd - Questions and Answers in PDF Format

CKA Practice Exam Features:

- * CKA Questions and Answers Updated Frequently
- * CKA Practice Questions Verified by Expert Senior Certified Staff
- * CKA Most Realistic Questions that Guarantee you a Pass on Your FirstTry
- * CKA Practice Test Questions in Multiple Choice Formats and Updatesfor 1 Year

100% Actual & Verified — Instant Download, Please Click
[Order The CKA Practice Test Here](#)