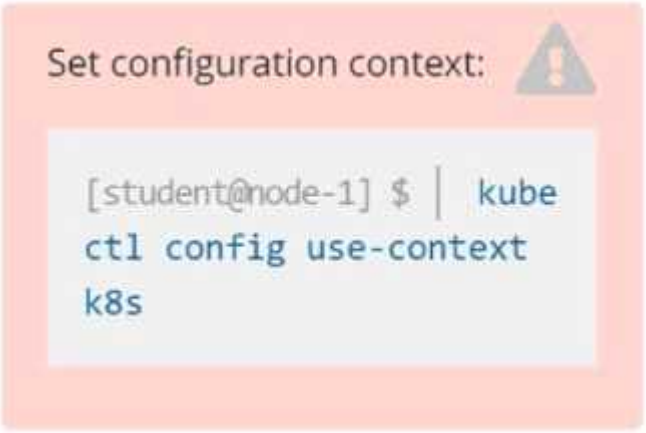
Linux Foundation

CKA Exam

Linux Foundation Certified Kubernetes Administrator Exam

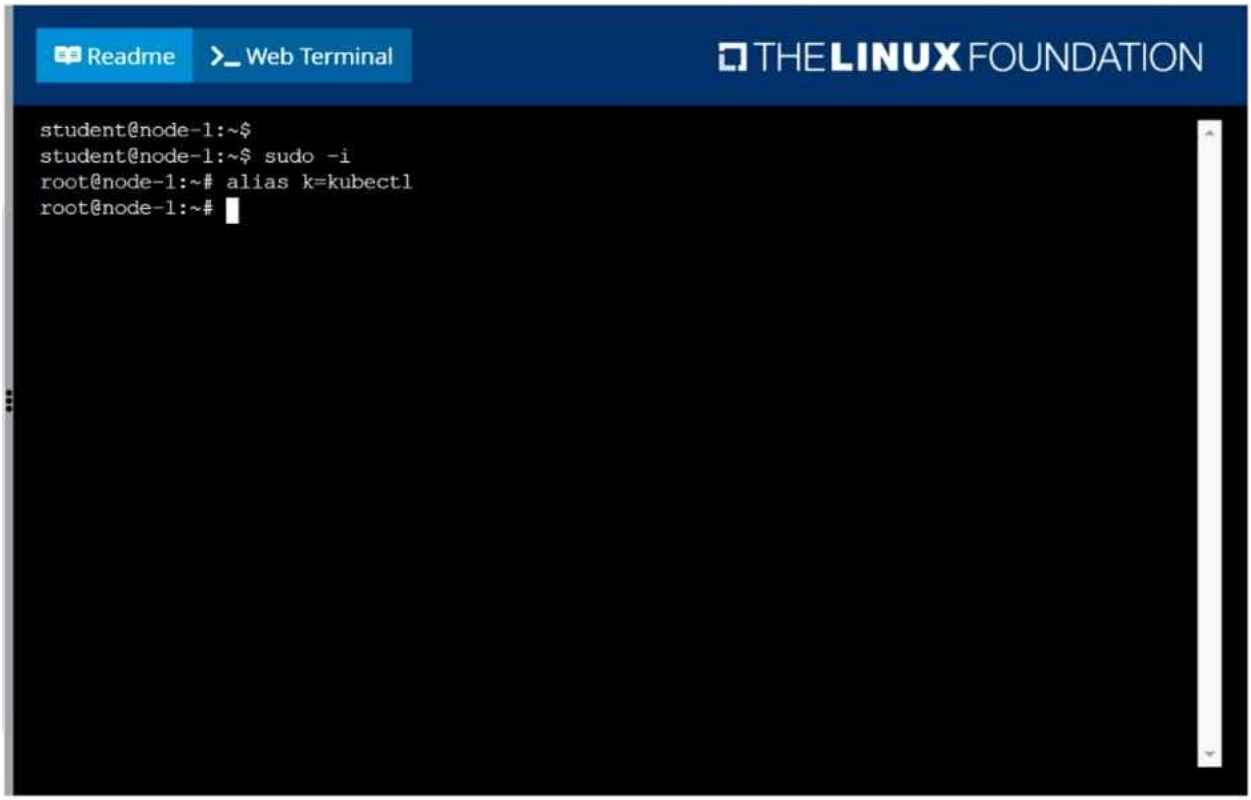
Question: 1

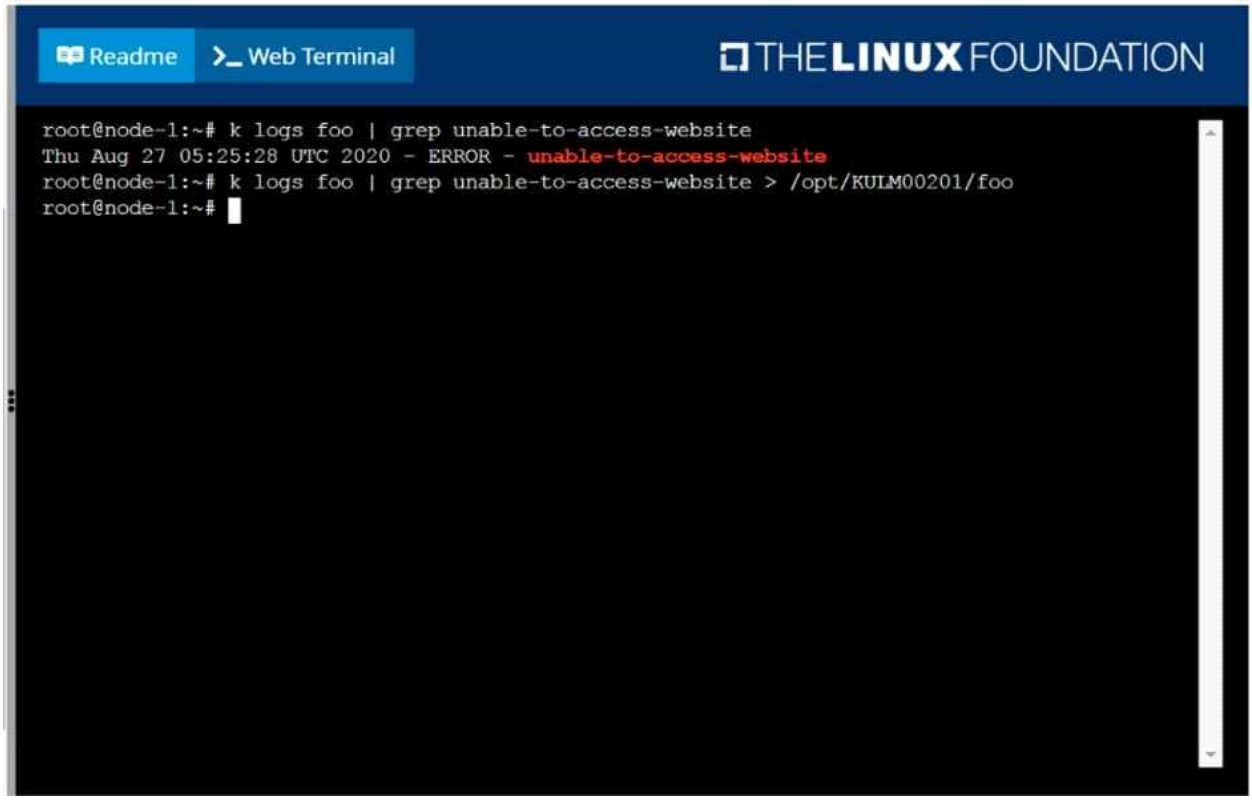
SIMULATION
Monitor the logs of pod foo and:
• Extract log lines corresponding to error unable-to-access-website
• Write them to /opt/KULM00201/foo



Solution

solution


Readme
Web Terminal
THE LINUX FOUNDATION
student@node-1:~$
student@node-1:~$ sudo -i
root@node-1:~# alias k=kubectl
root@node-1:~#

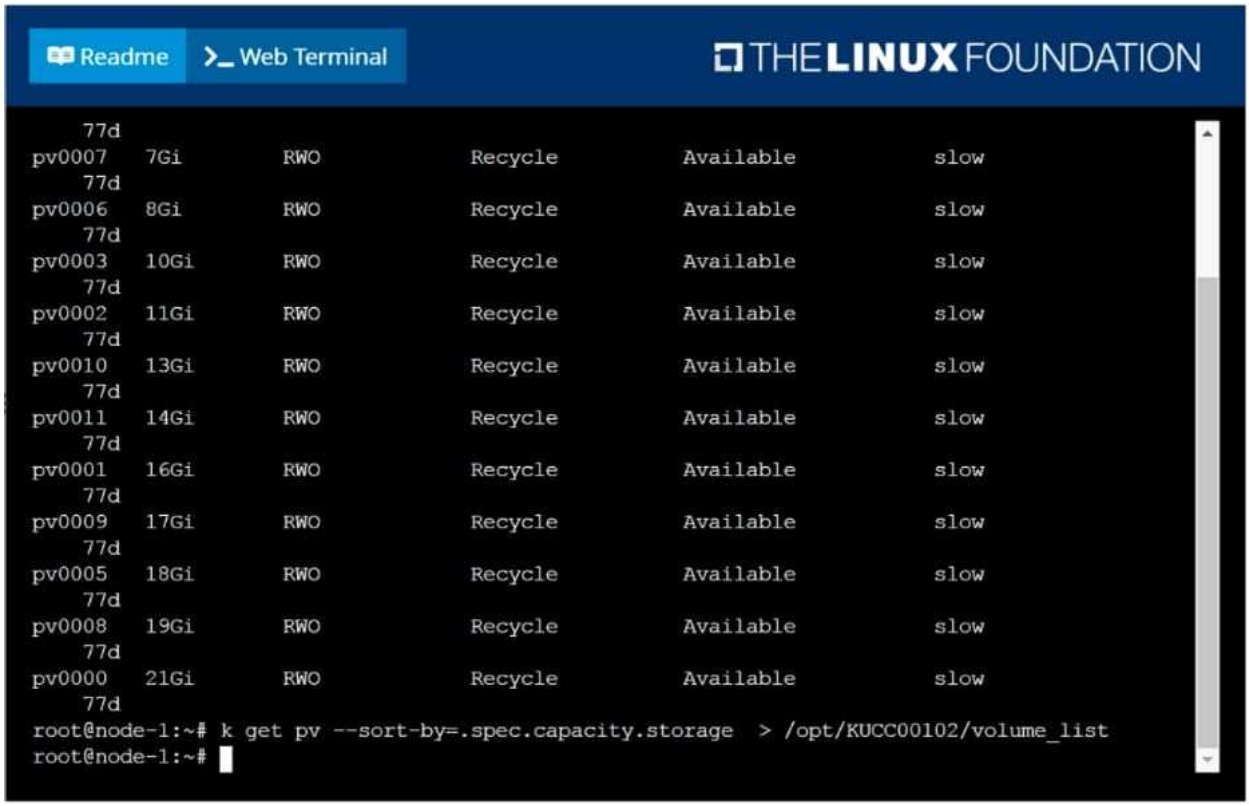

Readme
Web Terminal
THE LINUX FOUNDATION
root@node-1:~# k logs foo | grep unable-to-access-website
Thu Aug 27 05:25:28 UTC 2020 - ERROR - unable-to-access-website
root@node-1:~# k logs foo | grep unable-to-access-website > /opt/KULM00201/foo
root@node-1:~#

Question: 2

SIMULATION
List all persistent volumes sorted by capacity, saving the full kubectl output to /opt/KUCC00102/volume_list. Use kubectl 's own functionality for sorting the output, and do not manipulate it any further.

Solution

solution

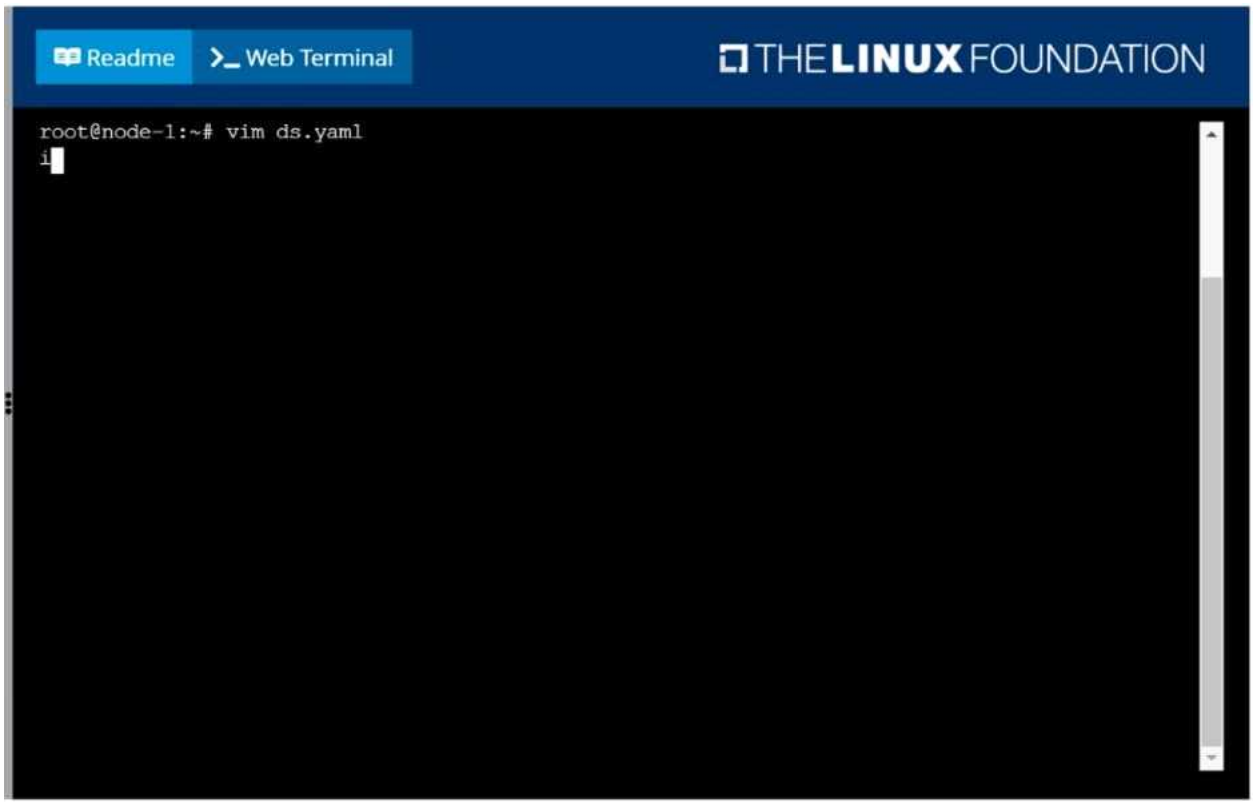


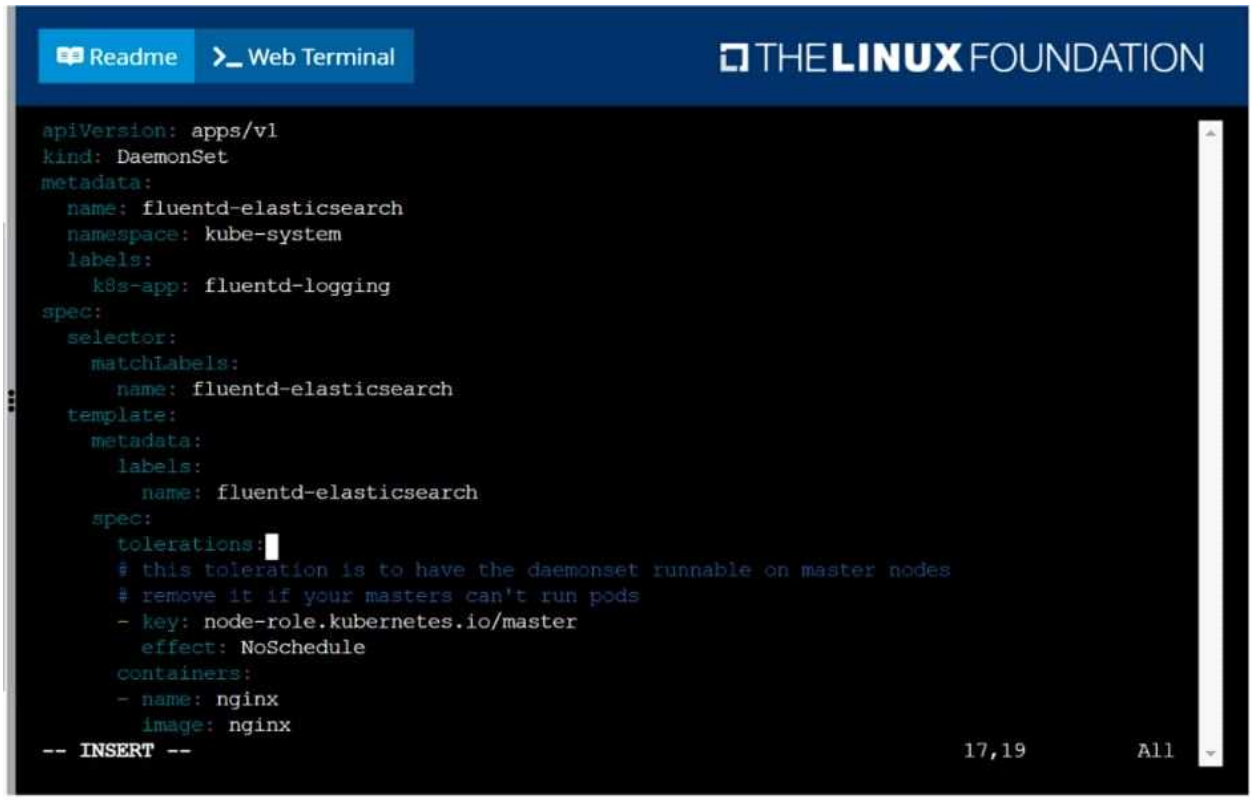
Question: 3

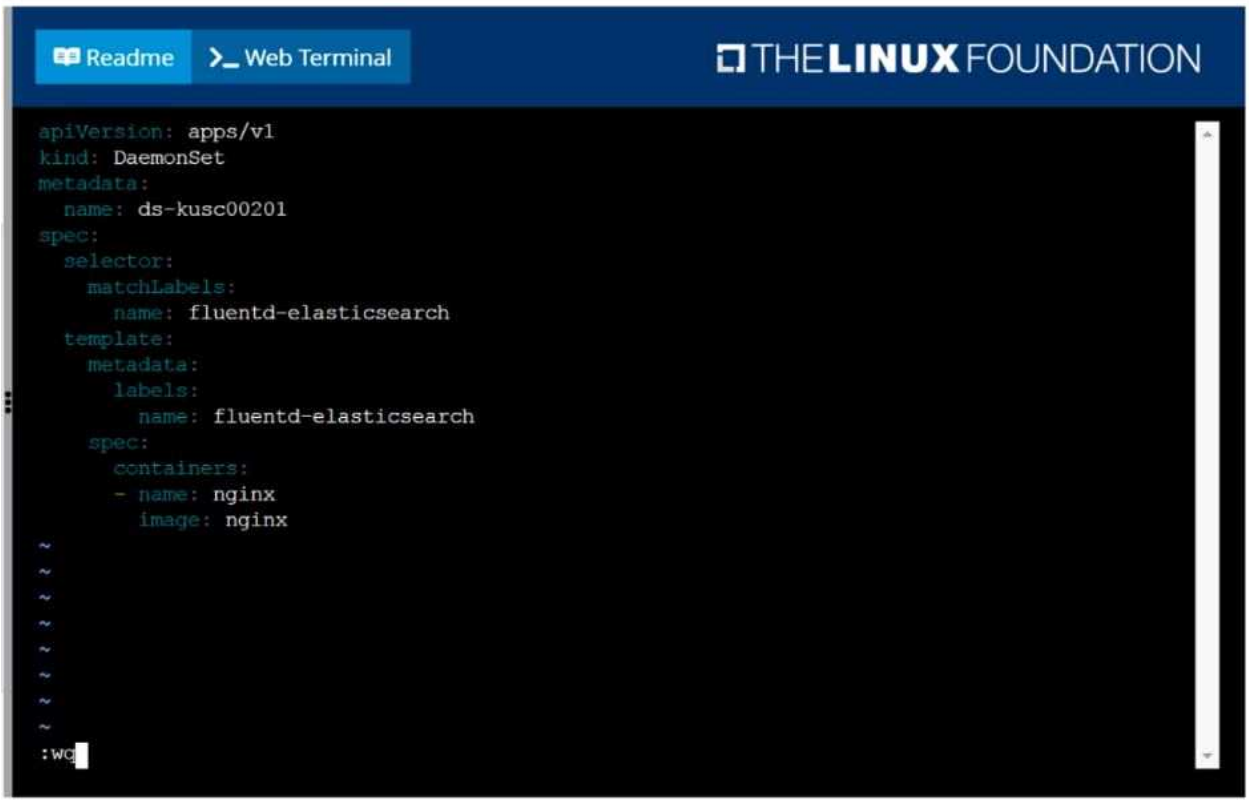
SIMULATION
Ensure a single instance of pod nginx is running on each node of the Kubernetes cluster where nginx also represents the Image name which has to be used. Do not override any taints currently in place.
Use DaemonSet to complete this task and use ds-kusc00201 as DaemonSet name.

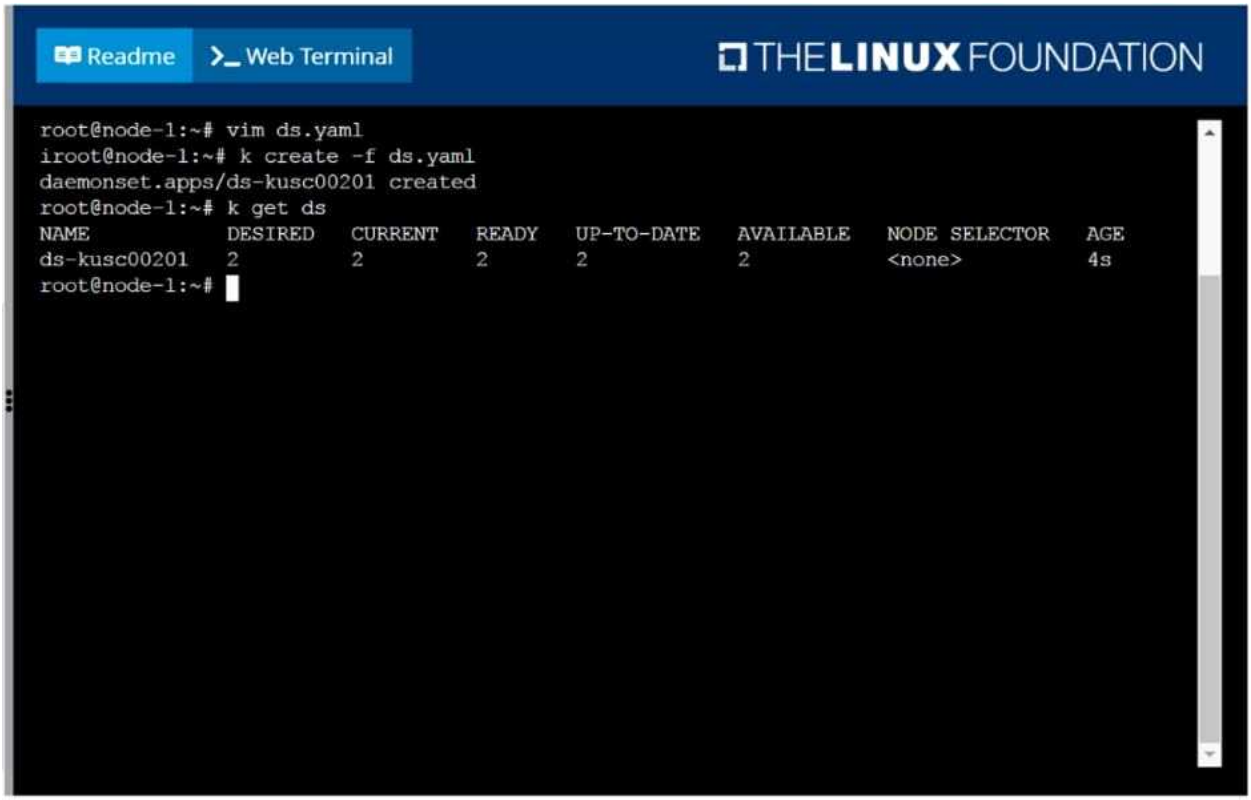
Solution

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
~
~
~
~
~
~
~
~
:wq



Question: 4

List all the pods sorted by created timestamp

Solution

kubect1 get pods--sort-by=.metadata.creationTimestamp

Question: 5

List all the pods showing name and namespace with a json path expression

Solution

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