1- How many pods exist on the system?

**Zero pod**

2- How many Nodes exist on the system?

**Zero Nod**

3- Create a new pod with the nginx image.

Image name: nginx

**[rshdan@192 ~]$ kubectl run nginx --image=nginx**

**pod/nginx created**

4- Which nodes are these pods placed on?

**[rshdan@192 ~]$ kubectl describe pod nginx**

**Name: nginx**

**Namespace: default**

**Priority: 0**

**Service Account: default**

**Node: minikube/192.168.49.2**

5- Create pod from the below yaml using kubectl apply command

apiVersion: v1

kind: Pod

metadata:

name: webapp

namespace: default

spec:

containers:

- image: nginx

imagePullPolicy: Always

name: nginx

- image: agentx

imagePullPolicy: Always

name: agentx

**[rshdan@192 assignment]$ kubectl apply -f nginx-webserver.yml**

**pod/webapp created**

**[rshdan@192 assignment]$**

6- How many containers are part of the pod webapp

**Two containres**

7- What images are used in the new webapp pod?

**nginx**

**agentx**

8- What is the state of the container agentx in the pod webapp

**State: Waiting**

**Reason: ImagePullBackOff**

9- Why do you think the container agentx in pod webapp is in error?

**there’s no container image called agentx in docker hub**

10- Delete the webapp Pod.

[**rshdan@192 assignment]$ kubectl delete pod webapp**

**pod "webapp" deleted**

11- Create a new pod with the name redis and with the image redis123.

* Name: redis
* Image Name: redis123

**[rshdan@192 assignment]$ kubectl get all**

**NAME READY STATUS RESTARTS AGE**

**pod/redis 0/1 ImagePullBackOff 0 2m**

12- Now change the image on this pod to redis.

Once done, the pod should be in a running state.

**[rshdan@192 assignment]$ kubectl set image pod redis redis=redis**

**pod/redis image updated**

**[rshdan@192 assignment]$ kubectl get all**

**NAME READY STATUS RESTARTS AGE**

**pod/redis 1/1 Running 0 6m15s**

**NAME TYPE CLUSTER-IP EXTERNAL-IP PORT(S) AGE**

**service/kubernetes ClusterIP 10.96.0.1 <none> 443/TCP 2d8h**

**[rshdan@192 assignment]$**

13- Create a pod called my-pod of image nginx:alpine

**[rshdan@192 assignment]$ kubectl run my-pod --image=nginx:alpine**

**pod/my-pod created**

**[rshdan@192 assignment]$**

14- Delete the pod called my-pod

**[rshdan@192 assignment]$ kubectl delete pod my-pod**

**pod "my-pod" deleted**

**[rshdan@192 assignment]$**