1. Install k8s cluster (minikube)
2. Create a pod with the name redis and with the image redis.
3. Create a pod with the name nginx and with the image “nginx123” Use a pod-definition YAML file.
4. What is the nginx pod status?

kubectl get pods

NAME READY STATUS RESTARTS AGE

nginx 0/1 ImagePullBackOff 0 8m40s

redias 1/1 Running 0 7m52s

1. Change the nginx pod image to “nginx” check the status again

kubectl get pods

NAME READY STATUS RESTARTS AGE

nginx 1/1 Running 0 11m

redias 1/1 Running 0 10m

6- How many ReplicaSets exist on the system?

Zero

1. Create a ReplicaSet withname= replica-set-1 image= busybox replicas= 3

kubectl get replicaset

NAME DESIRED CURRENT READY AGE

replica-set-1 3 3 3 84s

1. Scale the ReplicaSet replica-set-1 to 5 PODs.
2. How many PODs are READY in the replica-set-1?

Five.

1. Delete any one of the 5 PODs then check How many PODs exist now?

Why are there still 5 PODs, even after you deleted one?

Five because the replicaset type be sure all the time there are 5 still up and runnings

1. How many Deployments and ReplicaSets exist on the system?

Zero deployments and five replicasets.

1. create a Deployment withname= deployment-1 image= busybox replicas= 3
2. How many Deployments and ReplicaSets exist on the system now?

kubectl get deployments

NAME READY UP-TO-DATE AVAILABLE AGE

deployment-1 3/3 3 3 16s

kubectl get replicasets

NAME DESIRED CURRENT READY AGE

deployment-1-75cd85d546 3 3 3 38s

replica-set-1 5 5 5 13m

1. How many pods are ready with the deployment-1?

Three

1. Update deployment-1 image to nginx then check the ready pods again
2. Run kubectl describe deployment deployment-1 and check events What is the deployment strategy used to upgrade the deployment-1?   
    RollingUpdate
3. Rollback the deployment-1What is the used image with the deployment-1?

busybox

1. Create a deployment using nginx image with latest tag only and remember to mention tag i.e nginx:latest and name it as nginx-deployment. App labels should be app: nginx-app and type: front-end. The container should be named as nginx-container; also make sure replica counts are 3.

kubectl get deployments

NAME READY UP-TO-DATE AVAILABLE AGE

deployment-1 3/3 3 3 4h50m

nginx-deployment 3/3 3 3 15s