Exercise - Deploy

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Q1

Create a new deployment called myproject, with image nginx:1.16 and 1 replica.
Next upgrade the deployment to version 1.17 using rolling update
Make sure that the version upgrade is recorded in the resource annotation.

```
controlplane $
controlplane $ k create deployment myproject --image=nginx:1.16 --replicas=1
deployment.apps/myproject created
controlplane $
controlplane $ k get deployments.apps
NAME         READY   UP-TO-DATE   AVAILABLE   AGE
myproject    1/1     1            1           23s
controlplane $
controlplane $ kubectl set image deployment/myproject nginx=nginx:1.17 --record
Flag --record has been deprecated, --record will be removed in the future
deployment.apps/myproject image updated
controlplane $
controlplane $ kubectl rollout history deployment/myproject
deployment.apps/myproject
REVISION  CHANGE-CAUSE
1         <none>
2         kubectl set image deployment/myproject nginx=nginx:1.17 --record=true

controlplane $
```

Q2

Create a deployment of nginx with the image of nginx of version 1.18-alpine. Now upgrade the version to 1.19-alpine and record it. Now roll back the deployment to the previous version.

```
controlplane $
controlplane $ k create deployment deploy-nginx --image=nginx:1.18-alpine
deployment.apps/deploy-nginx created
controlplane $
controlplane $ k get deployments.apps
NAME            READY   UP-TO-DATE   AVAILABLE   AGE
deploy-nginx    1/1     1            1           19s
controlplane $
controlplane $
controlplane $
controlplane $ kubectl set image deployment/deploy-nginx nginx=nginx:1.19-alpine --record
Flag --record has been deprecated, --record will be removed in the future
deployment.apps/deploy-nginx image updated
controlplane $
```

```
controlplane $
controlplane $ kubectl rollout undo deployment/deploy-nginx --record
error: unknown flag: --record
See 'kubectl rollout undo --help' for usage.
controlplane $ kubectl rollout undo deployment/deploy-nginx
deployment.apps/deploy-nginx rolled back
controlplane $
controlplane $ k rollout history deployment/deploy-nginx
deployment.apps/deploy-nginx
REVISION  CHANGE-CAUSE
2         kubectl set image deployment/deploy-nginx nginx=nginx:1.19-alpine --record=true
3         <none>

controlplane $
controlplane $ k describe deployments.apps deploy-nginx
Name:                   deploy-nginx
Namespace:              default
CreationTimestamp:      Sat, 21 Sep 2024 04:03:34 +0000
Labels:                 app=deploy-nginx
Annotations:            deployment.kubernetes.io/revision: 3
Selector:               app=deploy-nginx
Replicas:               1 desired | 1 updated | 1 total | 1 available | 0 unavailable
StrategyType:           RollingUpdate
MinReadySeconds:        0
RollingUpdateStrategy:  25% max unavailable, 25% max surge
Pod Template:
  Labels:  app=deploy-nginx
  Containers:
   nginx:
    Image:          nginx:1.18-alpine
    Port:           <none>
    Host Port:      <none>
```