Name: Shweta Singh
Sap Id: 500098159
RollNo: R2142211484
Branch & Batch: Btech CSE(DevOps) & B4

Lab Exercise 9– Creating Replicaset in Kubernetes

Below is a lab exercise that will help you understand and practice creating a Replicaset in Kubernetes:

Step 1: Create a ReplicaSet Configuration File

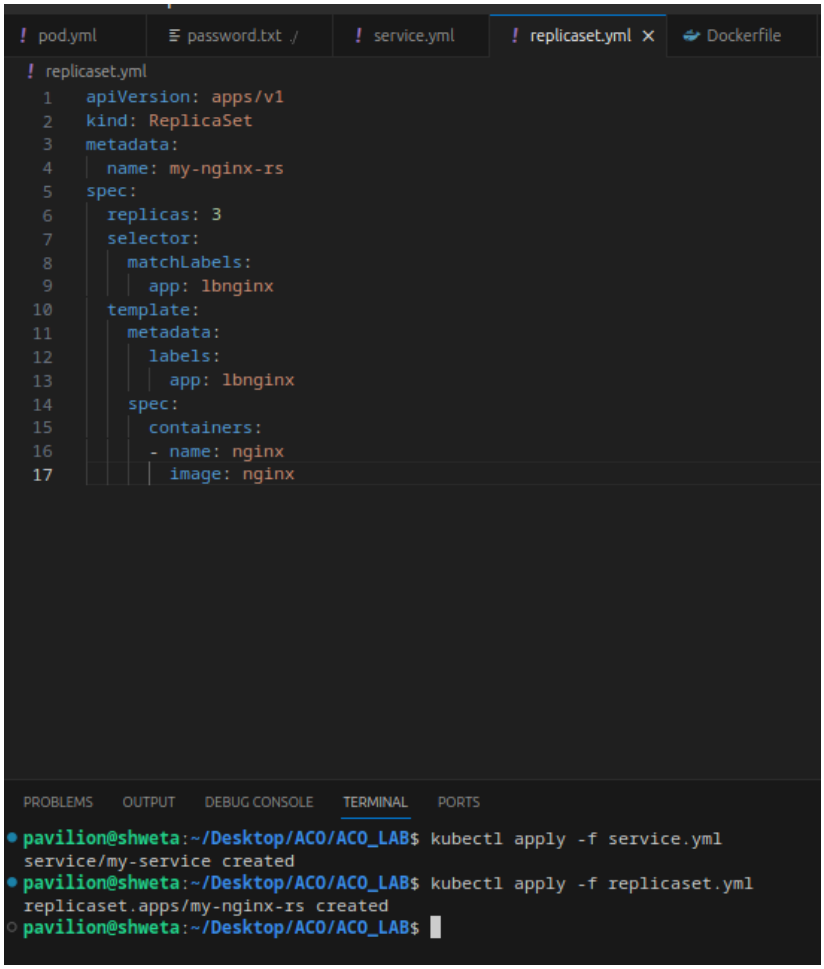
Create a file named replicaset.yaml with the following configuration:

Link of file: (Coly following code from my GitHub repo)

https://github.com/hkshitesh/ACO-LAB-2021-25/blob/main/scripts/replicaset.yaml

```
apiVersion: apps/v1
kind: ReplicaSet
metadata:
  name: my-nginx-rs
spec:
  replicas: 3
  selector:
    matchLabels:
      app: lbnginx
  template:
    metadata:
      labels:
        app: lbnginx
```

```
spec:
  containers:
  - name: nginx
    image: nginx
```



Step 2: Apply the ReplicaSet Configuration

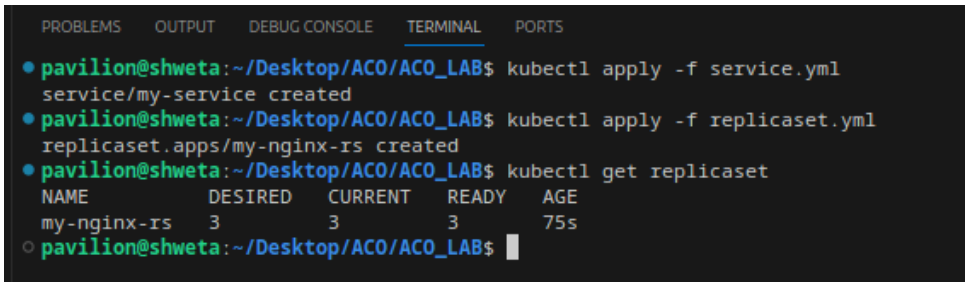
Apply the configuration to create the ReplicaSet:

```
kubectl apply -f replicaset.yaml
```

Step 3: View the ReplicaSet and Pods

View the created ReplicaSet and the associated Pods:

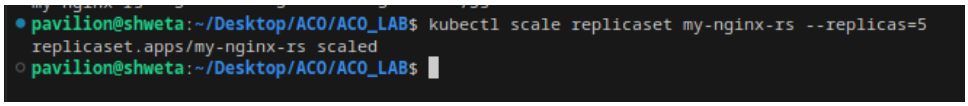
```
kubectl get replicaset

kubectl get pods
```



Step 4: Scale the ReplicaSet

Scale the ReplicaSet to 5 replicas:

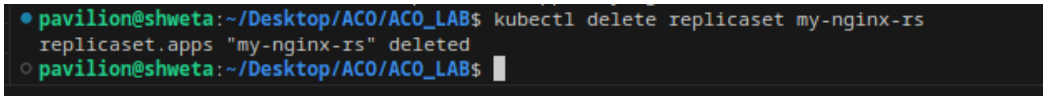
```
kubectl scale replicaset my-nginx-rs --replicas=5
```



Step 5: Delete the ReplicaSet

Delete the ReplicaSet:

```
kubectl delete replicaset my-replicaset
```



Conclusion

This exercise demonstrated how to create, manage, and update a ReplicaSet in Kubernetes. You learned how to scale the ReplicaSet, update the image, and delete the ReplicaSet from the cluster. Experiment further with different configurations and scaling options to deepen your understanding of managing ReplicaSets in Kubernetes.