APPLICATION CONTAINERIZATION AND ORCHESTRATION LAB

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B4

SUBMITTED TO

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Lab Exercise 10– Creating Deployment in Kubernetes

Step 1: Create a Deployment Configuration File

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

```yaml
apiVersion: apps/v1
kind: Deployment
metadata:
  name: apache-deployment
  labels:
    app: web
spec:
  replicas: 10
  selector:
    matchLabels:
      app: web
  template:
    metadata:
      labels:
        app: web
    spec:
      containers:
        - name: httpd
          image: httpd
```

Step 2: Apply the Deployment Configuration

Apply the configuration to create the Deployment:

```
sachinaggarwal@Sachins-MacBook-Air acoexp9 % kubectl apply -f deployment.yaml
deployment.apps/apache-deployment created
```

Step 3: View the Deployment and Pods

View the created Deployment and the associated Pods:

```
● sachinaggarwal@Sachins-MacBook-Air acoexp9 % kubectl get deployments

  NAME                READY   UP-TO-DATE   AVAILABLE   AGE
  apache-deployment   1/10    10           1           18s
```

```
● sachinaggarwal@Sachins-MacBook-Air acoexp9 % kubectl get pods

  NAME                                READY   STATUS             RESTARTS   AGE
  apache-deployment-788fbf66b5-2zzg5  0/1     ContainerCreating  0          24s
  apache-deployment-788fbf66b5-bk5nt  1/1     Running            0          24s
  apache-deployment-788fbf66b5-ftrqw  0/1     ContainerCreating  0          24s
  apache-deployment-788fbf66b5-kbm5t  1/1     Running            0          24s
  apache-deployment-788fbf66b5-l92qs  0/1     ContainerCreating  0          24s
  apache-deployment-788fbf66b5-n9jtv  0/1     ContainerCreating  0          24s
  apache-deployment-788fbf66b5-nnhdf  0/1     ContainerCreating  0          24s
  apache-deployment-788fbf66b5-plsm2  1/1     Running            0          24s
  apache-deployment-788fbf66b5-rbztc  0/1     ContainerCreating  0          24s
  apache-deployment-788fbf66b5-rhkgn  0/1     ContainerCreating  0          24s
```

Step 4: Delete the Deployment

Delete the Deployment:

```
● sachinaggarwal@Sachins-MacBook-Air acoexp9 % kubectl delete deployment apache-deployment

  deployment.apps "apache-deployment" deleted
```