

## KUBERNETES SCLINGI DEPLOYMENT

### DEPLOYMENT.YAML

```
apiVersion: apps/v1
kind: Deployment
metadata:
  name: nginx-deployment1
spec:
  replicas: 2 # Start with 2 replicas
  selector:
    matchLabels:
      app: nginx
  template:
    metadata:
      labels:
        app: nginx
    spec:
      containers:
        - name: nginx
          image: nginx:latest # Public Nginx image
          ports:
            - containerPort: 80
```

### SERVICE.YAML

```
apiVersion: v1
kind: Service
metadata:
  name: nginx-service1
spec:
  selector:
    app: nginx
  ports:
    - protocol: TCP
      port: 80 # Exposing port 80 externally
      targetPort: 80 # Port inside the container
  type: NodePort # Use NodePort for local access
```

DEPLOYMENT 2

```
deployment.apps/nginx-deployment unchanged
PS D:\DEVOPS\kubernetes\publicImage> kubectl apply -f deployment.yaml
deployment.apps/nginx-deployment1 created
PS D:\DEVOPS\kubernetes\publicImage> kubectl apply -f service.yaml
service/nginx-service1 created
PS D:\DEVOPS\kubernetes\publicImage> kubectl get deployments
NAME                                READY    UP-TO-DATE    AVAILABLE    AGE
nginx-deployment                    2/2      2             2            6m52s
nginx-deployment1                   2/2      2             2            6s
spring-boot-deployment1             3/3      3             3            4d10h
webapp-deployment                   0/2      2             0            27h
```

DEPLOYMENT 4

```
PS D:\DEVOPS\kubernetes\publicImage> kubectl scale deployment nginx-deployment --replicas=4
deployment.apps/nginx-deployment scaled
PS D:\DEVOPS\kubernetes\publicImage> kubectl get deployments
NAME                                READY    UP-TO-DATE    AVAILABLE    AGE
nginx-deployment                    2/4      4             2            7m27s
nginx-deployment1                   2/2      2             2            41s
spring-boot-deployment1             3/3      3             3            4d10h
webapp-deployment                   0/2      2             0            27h
```

Nginx-service1 : localhost:31305

```
webapp-deployment                   0/2      2             0            27h
PS D:\DEVOPS\kubernetes\publicImage> kubectl get service
NAME                                TYPE        CLUSTER-IP    EXTERNAL-IP    PORT(S)          AGE
kubernetes                          ClusterIP    10.43.0.1     <none>         443/TCP          45d
nginx-service                       NodePort     10.43.39.124  <none>         80:31134/TCP     7m57s
nginx-service1                      NodePort     10.43.234.80  <none>         80:31305/TCP     74s
spring-boot-service1               LoadBalancer 10.43.31.186  192.168.127.2  8080:31889/TCP   4d10h
webapp-service                     LoadBalancer 10.43.8.123   <pending>      80:31420/TCP     27h
```

