**Lesson 3 Demo 4**

**Deploying Pod and assigning Service to it**

**Objective:** To deploy a Pod and assign Service to it using the label selector

**Tools required:** kubeadm, kubectl, kubelet, and etcd

**Prerequisites:** A Kubernetes cluster must be set up (follow steps of Lesson 2 Demo 1)

Steps to be followed:

1. Creating a Deployment object
2. Creating a Service for Deployment using label selector

**Step 1: Creating a Deployment object**

1. Create a file **mydeployment.yaml**.

**vi mydeployment.yaml**

1. Add the following code to the **mydeployment.yaml** file.

**apiVersion: apps/v1 # for versions before 1.9.0 use apps/v1beta2**

**kind: Deployment**

**metadata:**

**name: nginx-deployment**

**spec:**

**selector:**

**matchLabels:**

**app: httpd**

**replicas: 2 # tells deployment to run 2 pods matching the template**

**template:**

**metadata:**

**labels:**

**app: httpd**

**spec:**

**containers:**

**- name: httpd**

**image: httpd:latest**

**ports:**

**- containerPort: 80**

***Text

Description automatically generated***

1. Run the following command to create the Deployment:

**kubectl create -f mydeployment.yaml**

**Text

Description automatically generated**

1. List the pods available by using the following command:

**kubectl get pods**

**kubectl get deployment**

**Text

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**Step 2: Creating Service for Deployment using label selector**

1. Create a file **myservice.yaml**.

**vi myservice.yaml**

1. Add the following code to the **myservice.yaml** file.

**apiVersion: v1**

**kind: Service**

**metadata:**

**name: myservice**

**spec:**

**selector:**

**app: httpd**

**ports:**

**- protocol: TCP**

**port: 8080**

**targetPort: 80**

**Text

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1. Run the following command to create Service:

**kubectl create -f myservice.yaml**

Text

Description automatically generated

1. Describe the Service by using the following command:

**kubectl describe svc myservice**

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Description automatically generated**

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| Note: This Service will be attached to the Pod created in Step 1. |