Case Study 4

1. Set up kubeconfig -
   mkdir -p $HOME/.kube
   sudo cp -i /etc/kubernetes/admin.conf $HOME/.kube/config
   (Provide root ownership, if not provided)

2. Install a Pod overlay Network -
   kubectl apply -f
   https://raw.githubusercontent.com/coreos/flannel/master/Documentation/kube-flannel.yml

3. Initialize the cluster -
   kubeadm init --pod-network-cidr=<Any-Subnet-Gateway-IP>/16

4. On worker nodes, join them to the cluster using the command provided by **kubeadm init**.

5. Verify kubectl Setup -
   kubectl get nodes

6. Deploy a pod -
   kubectl run my-k8s-app --port=80
   --image=<registry_name>/<application-image>:version

7. Expose only within the cluster -
   kubectl expose pod my-k8s-app --type=ClusterIP --port=80 --target-port=80

8. Verify the created service -
   kubectl get services