

For this assignment you will need to install Minikube (instructions can be found here: <https://k8s-docs.netlify.app/en/docs/tasks/tools/install-minikube/>) or otherwise have a kubernetes cluster you can test with.

Install the [points-devops helm chart](#) with the default values:

```
helm install -g ./points-devops-0.1.0.tgz
```

You should see some notes concerning how to access the deployment:

```
NAME: points-devops-0-1649447510
LAST DEPLOYED: Fri Apr  8 15:51:50 2022
NAMESPACE: default
STATUS: deployed
REVISION: 1
NOTES:
1. Get the application URL by running these commands:
  export NODE_PORT=$(kubectl get --namespace default -o
  jsonpath="{.spec.ports[0].nodePort}" services points-devops-0-1649447510)
  export NODE_IP=$(kubectl get nodes --namespace default -o
  jsonpath="{.items[0].status.addresses[0].address}")
  echo http://$NODE_IP:$NODE_PORT
```

Test it with curl:

```
eric.olsson@pts-eolss06:/tmp$ export NODE_PORT=$(kubectl get --namespace
default -o jsonpath="{.spec.ports[0].nodePort}" services
points-devops-0-1649447510)
eric.olsson@pts-eolss06:/tmp$ export NODE_IP=$(kubectl get nodes
--namespace default -o jsonpath="{.items[0].status.addresses[0].address}")
eric.olsson@pts-eolss06:/tmp$ echo http://$NODE_IP:$NODE_PORT
http://192.168.39.229:30000
eric.olsson@pts-eolss06:/tmp$ curl http://192.168.39.229:30000
This is the blue deployment!
```

The helm chart creates two deployments which are suffixed with “blue” and “green”. Initially the “blue” deployment is active and taking traffic.

Write a script in bash that will use kubectl to connect to the cluster and swap the blue/green service such that:

1. If blue is active, update the service such that traffic goes to the green deployment. Likewise if green is active, send traffic to the blue deployment.
2. Scale the inactive deployment down to zero running pods.
3. The script should be able to be run any number of times and have the deployment still accessible via curl.
4. The script should come with some instructions on how to run it.

This should take not more than an hour to complete. When you are done, please send in your script and instructions.