# Implement-DevOps-in-Google-Cloud-Challenge-Lab

Google cloud ready 2022

First Task -------

gcloud config set compute/zone us-east1-b

git clone https://source.developers.google.com/p/$DEVSHELL\_PROJECT\_ID/r/sample-app

gcloud container clusters get-credentials jenkins-cd

kubectl create clusterrolebinding cluster-admin-binding --clusterrole=cluster-admin --user=$(gcloud config get-value account)

helm repo add stable https://charts.helm.sh/stable

helm repo update

helm install cd stable/jenkins

export POD\_NAME=$(kubectl get pods --namespace default -l "app.kubernetes.io/component=jenkins-master" -l "app.kubernetes.io/instance=cd" -o jsonpath="{.items[0].metadata.name}")

kubectl port-forward $POD\_NAME 8080:8080 >> /dev/null &

printf $(kubectl get secret cd-jenkins -o jsonpath="{.data.jenkins-admin-password}" | base64 --decode);echo

cd sample-app

kubectl create ns production

kubectl apply -f k8s/production -n production

kubectl apply -f k8s/canary -n production

kubectl apply -f k8s/services -n production

kubectl get svc

kubectl get service gceme-frontend -n production

After these commands do the jenkins part then do the rest commands -

git init

git config credential.helper gcloud.sh

git remote add origin https://source.developers.google.com/p/$DEVSHELL\_PROJECT\_ID/r/sample-app

git config --global user.email "<user email>"

git config --global user.name "<user name>"

git add .

git commit -m "initial commit"

git push origin master

2nd Task -----

git checkout -b new-feature

After this command make the required changes!

git add Jenkinsfile html.go main.go

git commit -m "Version 2.0.0"

git push origin new-feature

3rd Task ----------

curl http://localhost:8001/api/v1/namespaces/new-feature/services/gceme-frontend:80/proxy/version

kubectl get service gceme-frontend -n production

git checkout -b canary

git push origin canary

export FRONTEND\_SERVICE\_IP=$(kubectl get -o \

jsonpath="{.status.loadBalancer.ingress[0].ip}" --namespace=production services gceme-frontend)

git checkout master

git push origin master

4rth Task -------

export FRONTEND\_SERVICE\_IP=$(kubectl get -o \

jsonpath="{.status.loadBalancer.ingress[0].ip}" --namespace=production services gceme-frontend)

while true; do curl http://$FRONTEND\_SERVICE\_IP/version; sleep 1; done

kubectl get service gceme-frontend -n production

git merge canary

git push origin master

export FRONTEND\_SERVICE\_IP=$(kubectl get -o \

jsonpath="{.status.loadBalancer.ingress[0].ip}" --namespace=production services gceme-frontend)

DONE --------