**TASK 2:-**

**cd web**

**skaffold build --interactive=false \**

**--default-repo us-east1-docker.pkg.dev/qwiklabs-gcp-02-15226cdf6297/cicd-challenge \**

**--file-output artifacts.json**

**cd ..**

**TASK 3:-**

**gcloud config set deploy/region $REGION**

**cp clouddeploy-config/delivery-pipeline.yaml.template clouddeploy-config/delivery-pipeline.yaml**

**sed -i "s/targetId: staging/targetId: cd-staging/" clouddeploy-config/delivery-pipeline.yaml**

**sed -i "s/targetId: prod/targetId: cd-production/" clouddeploy-config/delivery-pipeline.yaml**

**sed -i "/targetId: test/d" clouddeploy-config/delivery-pipeline.yaml**

**gcloud beta deploy apply --file=clouddeploy-config/delivery-pipeline.yaml**

**gcloud beta deploy delivery-pipelines describe web-app**

**gcloud container clusters list --format="csv(name,status)"**

**CONTEXTS=("cd-staging" "cd-production" )**

**for CONTEXT in ${CONTEXTS[@]}**

**do**

**gcloud container clusters get-credentials ${CONTEXT} --region ${REGION}**

**kubectl config rename-context gke\_${PROJECT\_ID}\_${REGION}\_${CONTEXT} ${CONTEXT}**

**done**

**for CONTEXT in ${CONTEXTS[@]}**

**do**

**kubectl --context ${CONTEXT} apply -f kubernetes-config/web-app-namespace.yaml**

**done**

**envsubst < clouddeploy-config/target-staging.yaml.template > clouddeploy-config/target-cd-staging.yaml**

**envsubst < clouddeploy-config/target-prod.yaml.template > clouddeploy-config/target-cd-production.yaml**

**sed -i "s/staging/cd-staging/" clouddeploy-config/target-cd-staging.yaml**

**sed -i "s/prod/cd-production/" clouddeploy-config/target-cd-production.yaml**

**for CONTEXT in ${CONTEXTS[@]}**

**do**

**envsubst < clouddeploy-config/target-$CONTEXT.yaml.template > clouddeploy-config/target-$CONTEXT.yaml**

**gcloud beta deploy apply --file clouddeploy-config/target-$CONTEXT.yaml**

**done**

**Task 4:-**

**gcloud beta deploy releases create web-app-001 \**

**--delivery-pipeline web-app \**

**--build-artifacts web/artifacts.json \**

**--source web/**

**Task 6:-**

**gcloud services enable cloudbuild.googleapis.com**

**cd ~/**

**git clone https://github.com/GoogleCloudPlatform/cloud-deploy-tutorials.git**

**cd cloud-deploy-tutorials**

**git checkout c3cae80 --quiet**

**cd tutorials/base**

**envsubst < clouddeploy-config/skaffold.yaml.template > web/skaffold.yaml**

**cat web/skaffold.yaml**

**cd web**

**skaffold build --interactive=false \**

**--default-repo us-east1-docker.pkg.dev/qwiklabs-gcp-02-15226cdf6297/cicd-challenge \**

**--file-output artifacts.json**

**cd ..**

**gcloud beta deploy releases create web-app-002 \**

**--delivery-pipeline web-app \**

**--build-artifacts web/artifacts.json \**

**--source web/**