pipeline {

agent any

environment {

REPO\_URL = 'https://github.com/your-username/your-repo.git'

BRANCH = 'main'

SSH\_CREDENTIALS = 'gce-ssh'

REMOTE\_HOST = 'xx.xx.xx.xx' // Replace with GCE external IP

REMOTE\_APP\_DIR = '/home/ubuntu/myapp'

}

stages {

stage('Clone Repository') {

steps {

git branch: "${BRANCH}", url: "${REPO\_URL}"

}

}

stage('Install Dependencies') {

steps {

sh 'npm install' // or pip install -r requirements.txt

}

}

stage('Run Tests') {

steps {

sh 'npm test' // or pytest / mvn test

}

}

stage('Build App') {

steps {

sh 'npm run build' // optional: build assets or transpile code

}

}

stage('Deploy to GCE') {

when {

expression { currentBuild.result == null || currentBuild.result == 'SUCCESS' }

}

steps {

sshagent(credentials: [env.SSH\_CREDENTIALS]) {

sh """

ssh -o StrictHostKeyChecking=no ubuntu@${REMOTE\_HOST} 'mkdir -p ${REMOTE\_APP\_DIR}'

scp -r \* ubuntu@${REMOTE\_HOST}:${REMOTE\_APP\_DIR}

ssh ubuntu@${REMOTE\_HOST} '

cd ${REMOTE\_APP\_DIR} &&

npm install &&

pm2 restart app || pm2 start app.js --name app

'

"""

}

}

}

}

post {

failure {

echo 'Pipeline failed. Notifying team...'

// Add mail or Slack notifier here

}

success {

echo 'Pipeline executed successfully and deployed to GCE!'

}

}

}