Prerequisites

- Docker-pipeline
- Docker

Steps

- Please install Docker and jenkins in ec2 instance
- Run the below code
- Open necessary ports in ec2 instance

```
pipeline {
   agent any
   environment {
      registry = "971627905827.dkr.ecr.us-east-1.amazonaws.com/demo-repo"
   }

   stages {
      stage('Cloning Git') {
         steps {
            checkout([$class: 'GitSCM', branches: [[name: '*/master']],
doGenerateSubmoduleConfigurations: false, extensions: [], submoduleCfg: [],
userRemoteConfigs: [[credentialsId: '', url:
'https://github.com/akannan1087/myPythonDockerRepo']]])
         }
      }

   // Building Docker images
   stage('Building image') {
     steps{
      script {
         sh 'docker build -t demo-repo -f /var/lib/jenkins/workspace/test_ecr_repo/Dockerfile .'
      }
     }
   }

    stage('Tagging image') {
     steps{
      script {
```

```
            sh 'docker tag demo-repo:latest
971627905827.dkr.ecr.us-east-1.amazonaws.com/demo-repo:latest'
        }
      }
    }

    // Uploading Docker images into AWS ECR
    stage('Pushing to ECR') {
     steps{
         script {
                sh 'aws ecr get-login-password --region us-east-1 | docker login --username AWS
--password-stdin 971627905827.dkr.ecr.us-east-1.amazonaws.com'
                sh 'docker push 971627905827.dkr.ecr.us-east-1.amazonaws.com/demo-repo:latest'
        }
       }
     }

         // Stopping Docker containers for cleaner Docker run
     stage('stop previous containers') {
         steps {
            sh 'docker ps -f name=mypythonContainer -q | xargs --no-run-if-empty docker container
stop'
            sh 'docker container ls -a -fname=mypythonContainer -q | xargs -r docker container rm'
         }
       }

    stage('Docker Run') {
     steps{
         script {
                sh 'docker run -d -p 8096:5000 --rm --name mypythonContainer
971627905827.dkr.ecr.us-east-1.amazonaws.com/demo-repo:latest'
            }
     }
    }
    }
}
```