**Source code:**

**1) Docker swarm Application.java :**

**package** com;

**import** java.util.Random;

**import** org.springframework.boot.SpringApplication;

**import** org.springframework.boot.autoconfigure.SpringBootApplication;

**import** org.springframework.stereotype.Controller;

**import** org.springframework.web.bind.annotation.GetMapping;

**import** org.springframework.web.bind.annotation.ResponseBody;

@SpringBootApplication

**Publicclass** DockerSwarmApplication {

**Public static void** main(String[] args) {

SpringApplication.*run*(DockerSwarmApplication.**class**, args);

}

}

@Controller

**Class** Index Controller{

**static** String *randomWebAppID*= **new** String(**new** Random().toString());

@GetMapping("/")

@ResponseBody

**public** String index() {

**return**"[WEBAPPID "+ *randomWebAppID* + "] Hello World from Spring";

}

}

**2)application. Properties :**

server.port=8080

**3)Dockerfie**

FROM eclipse-temurin:17-jdk-alpine

VOLUME /tmp

COPY target/\*.jar app.jar

ENTRYPOINT ["java","-jar","/app.jar"]

**4)pipeline script**

pipeline{

agent any

tools {

//Install the Maven version configured as "M3" and add it to the path.

maven "Maven"

jdk "java1"

}

stages {

stage('Checkout from GitHub') {

steps {

git branch: 'main', url: "https://github.com/awtraining1/sl.git"

}

}

stage('Maven Build') {

steps {

dir('PHASE5/my/spring-bootdemo') {

bat "mvn -Dmaven.test.skip=true clean package"

}

}

}

stage('Docker Image Creation') {

steps {

dir('PHASE5/my/spring-bootdemo') {

bat "docker build -t my-morning-spring-app --output type=docker ."

}

}

}

stage('Push Docker Image') {

steps {

bat "docker tag my-morning-spring-app Kiran/my-morning-spring-app"

bat "docker push Kiran/my-morning-spring-app"

}

}

}

}