

Jenkins Pipeline to Deploy Docker Swarm Code:

Java class:

```
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
public class DockerSwarmApplication {

    public static void main(String[] args) {

        SpringApplication.run(DockerSwarmApplication.class, args);

    }

}

@Controller
class IndexController{

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

    @GetMapping("/")
    @ResponseBody
    public String index() {

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

    }

}
```

Application properties :

localhost:8080

dockerfile :

```
FROM eclipse-temurin:17-jdk-alpine
VOLUME /tmp
```

COPY target/*.jar app.jar

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

Pipelinescript :

```
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 anithaneel/my-  
    morning-spring-app"  
    bat "docker push anithaneel/my-morning-spring-app"  
  }  
}  
}  
}
```