EMP No: 2577108
Name: Pramod

Source Code- Setting Up Jenkins Pipeline to Deploy Docker Swarm

1. DockerswarmApplication.java

```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
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";
}
}
```

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"
```

EMP No: 2577108
Name: Pramod

4. 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/SagarKhuba/Java.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 sagar/my-morning-spring-app"
                bat "docker push sagar/my-morning-spring-app"
            }
        }
    }
}
```