Jenkins Pipeline to Deploy Docker Swarm Alogarithm:

• 1)Start of the Jenkins Pipeline.

• 2)Set up the Jenkins agent to run on any available node.

• 3)Define the tools used in the pipeline:

• Install and configure Maven with the label "M3."

• install and configure Java 1 with the label "java1."

• 4)Define the stages in the pipeline:

• Checkout from GitHub:Use the "git" command to clone the
"awtraining1/sl" repository from the "main" branch.

• Maven Build:Navigate to the "PHASE5/my/spring-bootdemo"
directory.Execute the "mvn clean package" command to build the Spring
Boot application.The -Dmaven.test.skip=true flag skips running tests
during the build.

• Docker Image Creation:Navigate to the "PHASE5/my/spring-bootdemo"
directory.Build the Docker image using the Dockerfile.The Dockerfile uses
an Alpine-based JDK 17 image, copies the packaged JAR file ("app.jar")
into the image, and sets the entry point to run the JAR.

• Push Docker Image:Tag the Docker image with the name "my-morning-
spring-app" using docker tag.Push the tagged Docker image to the
Docker Hub repository "anithaneel/my-morning-spring-app" using
docker push.

• 5)End of the Jenkins Pipeline