

TASK 5

STEP1-CREATE A REPO IN GIT

The screenshot shows a GitHub repository page for 'devops_spring-boot-app'. The repository is public and was forked from 'jayasreeksrj/spring-boot-app'. It has 1 branch and 0 tags. The main branch is up-to-date with 'jayasreeksrj/spring-boot-app/main'. The repository contains several files and folders: '.devcontainer', '.github/workflows', '.mvn(wrapper)', 'src', '.editorconfig', '.gitignore', and 'Jenkinsfile'. There are 719 commits in total, with the most recent being 'Update deployment.yaml' by 'justicesecops-10' 19 hours ago. The 'About' section describes the application as a Spring Framework application based on JSP, Spring MVC, Spring Data JPA, Hibernate and JDBC. It includes links to 'Readme', 'Apache-2.0 license', 'Activity', '0 stars', '0 watching', and '0 forks'. The 'Releases' section indicates 'No releases published' and a link to 'Create a new release'.

STEP2-PIPELINE SCRIPT

```
pipeline {  
    agent any  
  
    environment {  
        DOCKER_IMAGE = "deepika452005/devops_springboot"  
        DOCKER_TAG = "latest"  
        DOCKER_CREDENTIALS_ID = "docker"  
        GITHUB_CREDENTIALS_ID = "github_seccred"  
        KUBECONFIG = "/var/lib/jenkins/.kube/config"  
        MAVEN_HOME = "/mnt/c/Users/Deepika/Downloads/apache-maven-3.9.9-bin/apache-maven-3.9.9" // Updated Maven path  
    }  
  
    stages {  
        stage('Checkout Code') {  
            steps {  
                git credentialsId: GITHUB_CREDENTIALS_ID, url:  
                'https://github.com/DeepikaRajasundar/devops_spring-boot-app.git', branch: 'main'  
            }  
        }  
    }  
}
```

```
        }

    }

stage('Build Application') {
    steps {
        script {
            sh "${MAVEN_HOME}/bin/mvn clean package -DskipTests"
        }
    }
}

stage('Run Maven Tests') {
    steps {
        script {
            catchError(buildResult: 'SUCCESS', stageResult: 'FAILURE') {
                sh "${MAVEN_HOME}/bin/mvn test"
            }
        }
    }
}

stage('Build Docker Image') {
    steps {
        script {
            sh "docker build -t ${DOCKER_IMAGE}:${DOCKER_TAG} ."
        }
    }
}

stage('Push Docker Image') {
    steps {
```

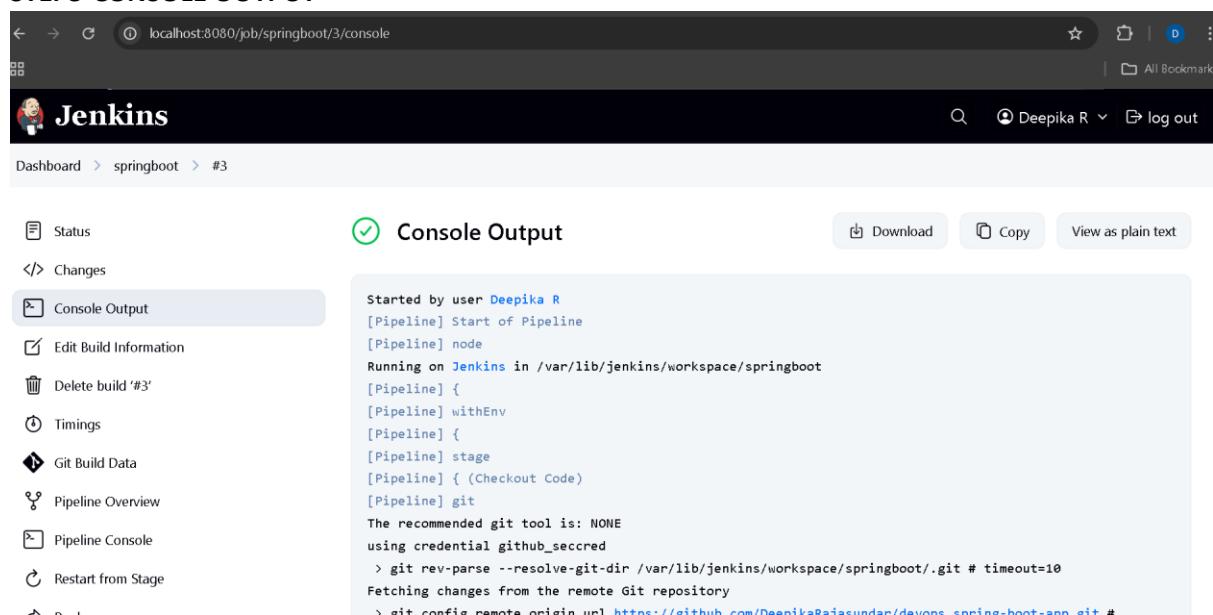
```

        withDockerRegistry([credentialsId: DOCKER_CREDENTIALS_ID, url: "]) {
            sh "docker push ${DOCKER_IMAGE}:${DOCKER_TAG}"
        }
    }
}

post {
    success {
        echo "✅ Deployment Successful!"
    }
    failure {
        echo "❌ Deployment Failed!"
    }
}

```

STEP3-CONSOLE OUTPUT



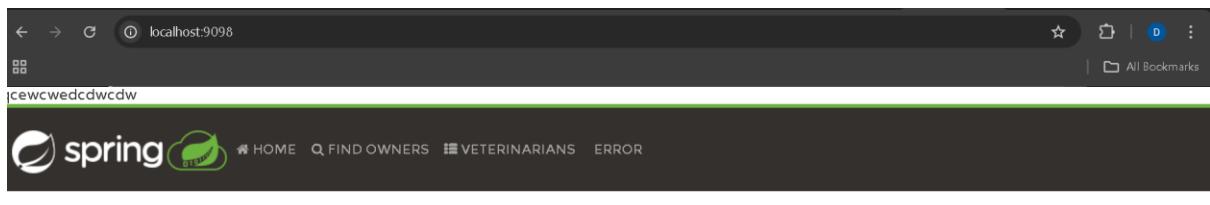
The screenshot shows the Jenkins console output for a build named 'springboot #3'. The left sidebar contains links like Status, Changes, Console Output (which is selected), Edit Build Information, Delete build '#3', Timings, Git Build Data, Pipeline Overview, Pipeline Console, Restart from Stage, and Pending. The main area displays the following log output:

```

Started by user Deepika R
[Pipeline] Start of Pipeline
[Pipeline] node
Running on Jenkins in /var/lib/jenkins/workspace/springboot
[Pipeline] {
[Pipeline] withEnv
[Pipeline] {
[Pipeline] stage
[Pipeline] { (Checkout Code)
[Pipeline] git
The recommended git tool is: NONE
using credential github_seccred
> git rev-parse --resolve-git-dir /var/lib/jenkins/workspace/springboot/.git # timeout=10
Fetching changes from the remote Git repository
> git config remote.origin.url https://github.com/DeepikaRaiasundar/devops_spring-boot-app.git #

```

STEP4-OUTPUT IN LOCALHOST



???welcome Aranganathan 79998wdd???



STEP5- BUILD SUCCESSFUL

A screenshot of a web browser window showing the Jenkins Stage View for a pipeline named 'springboot'. The left sidebar has options like Build Now, Configure, Delete Pipeline, Full Stage View, Stages, Rename, and Pipeline Syntax. The main area is titled 'Stage View' and shows a table of build times for different stages: Checkout Code (1s), Build Application (30s), Run Maven Tests (1min 15s), Build Docker Image (5s), Push Docker Image (39s), and Declarative Post Actions (274ms). Below the table, it says 'Average stage times: (full run time: ~2min 34s)'. At the bottom, there's a 'Permalinks' section with a table showing the last build information: #3, 10:12 AM, No Changes.