Write up:

1. Software Used in this project are
2. Eclipse STS
3. GitHub
4. Jenkins
5. Docker Hub
6. AWS EC2 Cloud

**Project Summary**

1. First of all I have created the spring boot project in the Eclipse STS
2. Then I have given the connection to the database Mysql in the Application.properties
3. In the application.properties I have given the docker mysql credentials
4. Then I have clean the project by right click the project and run as 🡺 Maven clean
5. Then I have uploaded the project to the github by using git commands
6. First open the file location then right click on the directory and then open with Git bash
7. Then enter the commands
8. git init
9. git remote add origin “url”
10. git add . 🡺 To stagged the files
11. git status 🡺 To see the files it should be in green color
12. git commit -m “first commit” 🡺To commit the files
13. git push origin master 🡺 Push the files to the GitHub
14. Hence the GitHub portion is completed

**Jenkins**

1. Then open the Jenkins in the browser and the Create the new item
2. Then create one Free style project with the name demodataspring
3. Then select the proper configuration
4. First of all set the Global tool configuration

* Give the Jdk installation credentials
* Give the GitHub credentials
* Give the Maven credentials

1. Then go to the manage plugin and then install the docker plugins
2. Then go to configure and the give the Repository URL and Then give the .git extension URL in source code management
3. Then give poll SCM 🡺 5 stars i.e \* \* \* \* \*
4. Then in the build steps
5. select the Invoke top-level maven targets 🡺Maven credentials
6. select the Docker build and publish 🡺 docker credentials
7. Then build the project then the complete automation are done
8. Source code are pushed on the Jenkins workspace
9. Then convert the project to the image
10. Then finally pushed the image to the docker hub

**AWS EC2**

1. First of all I have created one instance then connect the instance with Linux cmd
2. Then by the command sudo -i we taken to the root i.e user to admin
3. Then install the docker by using the command called 🡺 yum install docker
4. Then activate the daemon by giving the command called🡺service docker start
5. Then check the images are present or not by the command called 🡺docker images
6. Then login by giving the docker hub credentials by command called 🡺docker login
7. Then pull the created images from the docker hub by command called🡺 docker pull praveenece2704/demodataspring
8. Then created the mysql image by the command called 🡺 docker run --name docker-mysql -e MYSQL\_ROOT\_PASSWORD = password -e MYSQL\_DATABASE=db1 -e MYSQL\_USER =user -e MYSQL\_PASSWORD =password id mysql:5 --default-authentication-plugin=mysql\_native\_password
9. Then run the image by the command called 🡺 docker run -p 8088:8088 --name final-app --link docker-mysql:mysql praveenece2704/demodataspring
10. Finally copy the public IPv4 DNS url form the EC2 instance and finally verified the result