Steps to install Jenkins:

1. Create an ec2 instance (Amazon Linux) containing the security groups with the inbound rules ports 80, 8080, 22.
2. SSH to the instance using putty.
3. Install Jenkins in the ec2 instance.
4. Update the java version in the ec2 instance.
5. Try to start the Jenkins service.
6. Open a browser window and request http://<public-ip-of -instance>:8080
7. Get the initial admin password from the instance using these commands.

cd /var/lib/Jenkins/secrets/

cat initialAdminPassword

1. Create a user in the Jenkins window.
2. Install the suggested plugins.
3. Create your first job in the Jenkins dashboard
4. Go to configure 🡪Source Code Management 🡪Add your git repository URL then apply and save.
5. Go to Manage Jenkins 🡪Global tool configuration 🡪 Add Ant installation
6. Go to your job 🡪 configure 🡪 Build 🡪Invoke Ant and select the version you created.
7. Go to the project dashboard and click on Build now. If it turns to a blue bubble the build process is successful and jar file should be created corresponding to the folder written in build.xml.

Setting the post build Configuration:

1. Go to Manage Jenkins 🡪 configure 🡪 search for the amazon s3 options and provide the access keys to prove that you are an authorized user.
2. Then Manage Jenkins 🡪 Manage Plugins 🡪 search and download ‘publish over SSH’ plugin.
3. Go to Mange Jenkins 🡪configure 🡪 search for SSH options and create a profile for the host you are deploying your jar file.
4. Then go to your job and configure the post build settings with the profiles created in the previous steps.

Automating the build process when the developer committing the code from git hub:

1. Go to your project and enable the build trigger by checking the option ‘GitHub hook trigger for GITScm polling’ then apply and save.
2. Then login to your github repository and go to your repo 🡪settings 🡪 add service🡪 give the public ip where Jenkins service is hosted with the port 8080.
3. Click on test service button to check the build process is automated or not.
4. So, if any changes made in the github repo, then the build process is automated once the developer commits the code.