CI-CD ASSIGNMENT 2

ARNAV RANJAN, 500067731, R171218029
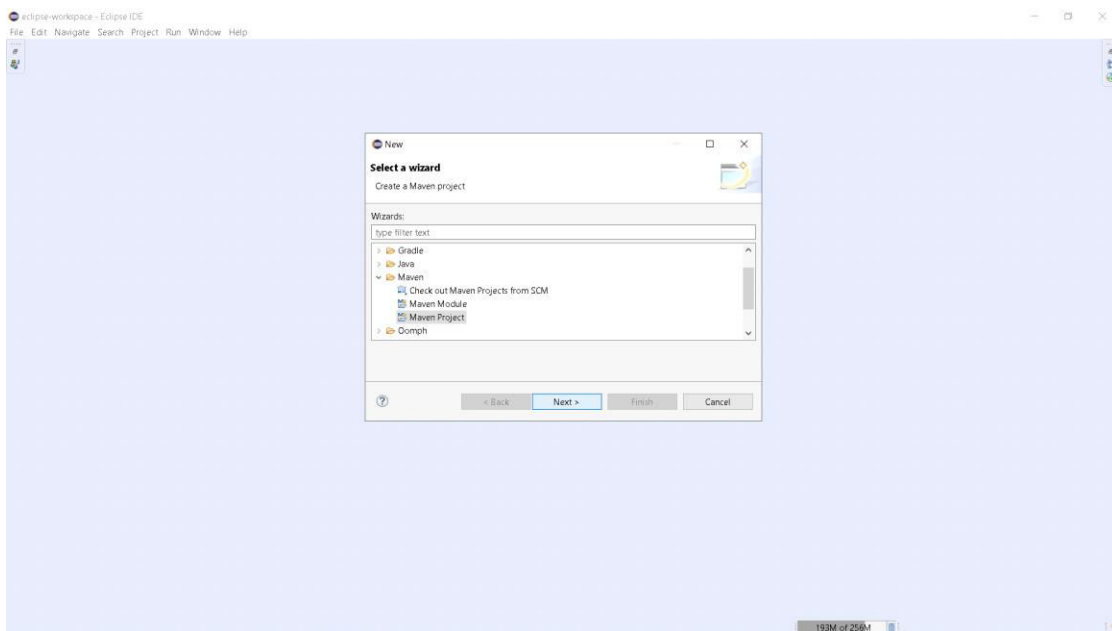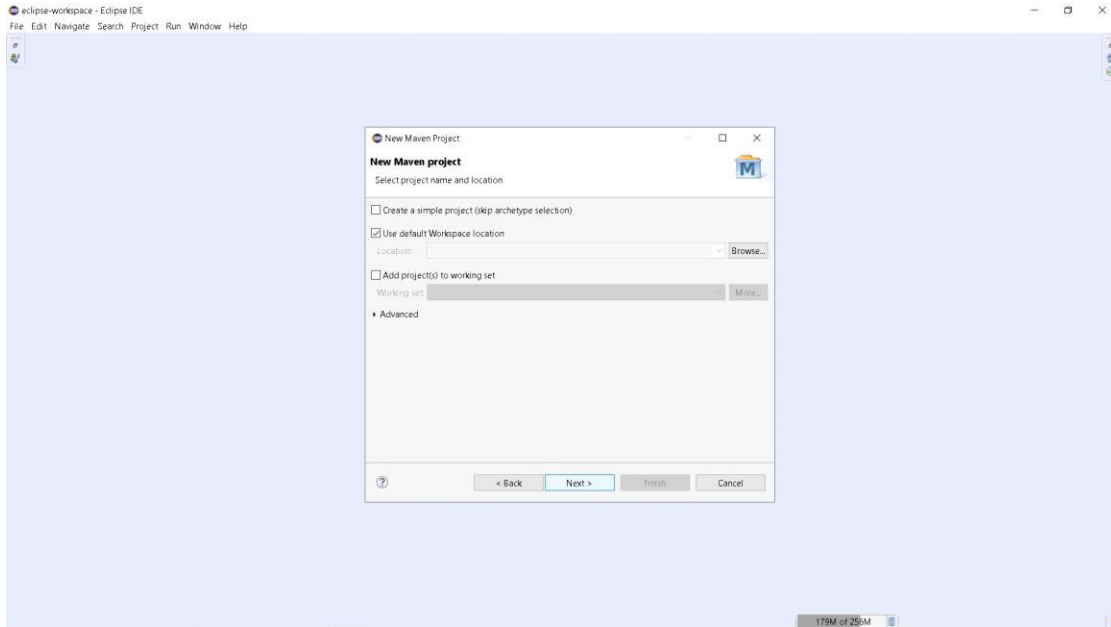
Aim-

Step 1: Create a Maven project using Eclipse.

Step2: Push the same running project on GitHub using Eclipse or IDE.

Step 3: Create a Jenkins Pipeline to generate build and push the generated build on Nexus Server using Jenkinsfile in GitHub.
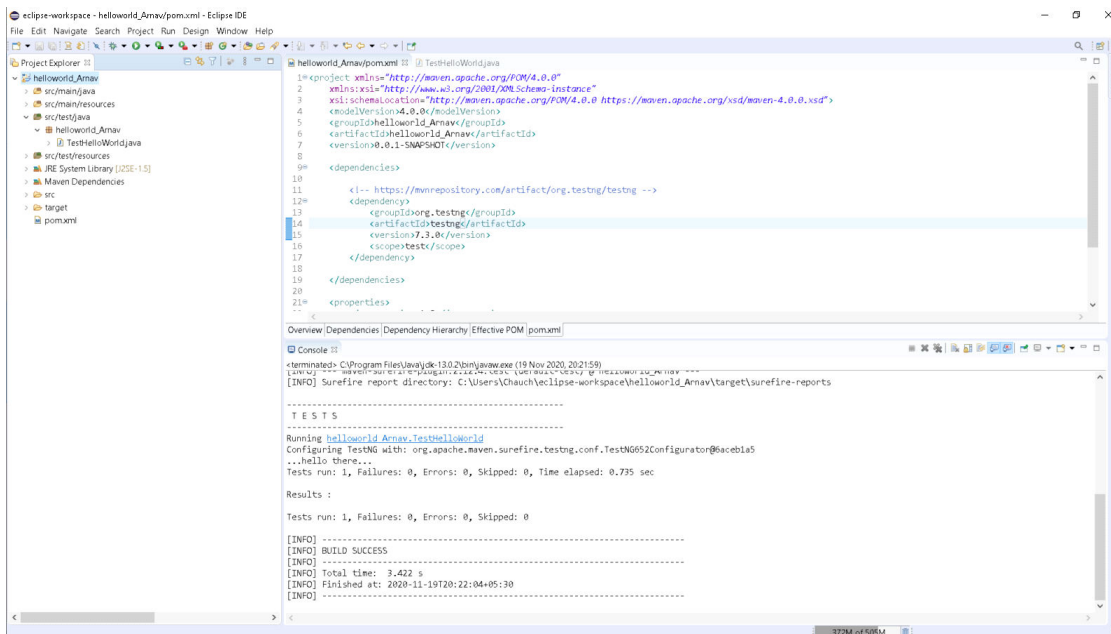
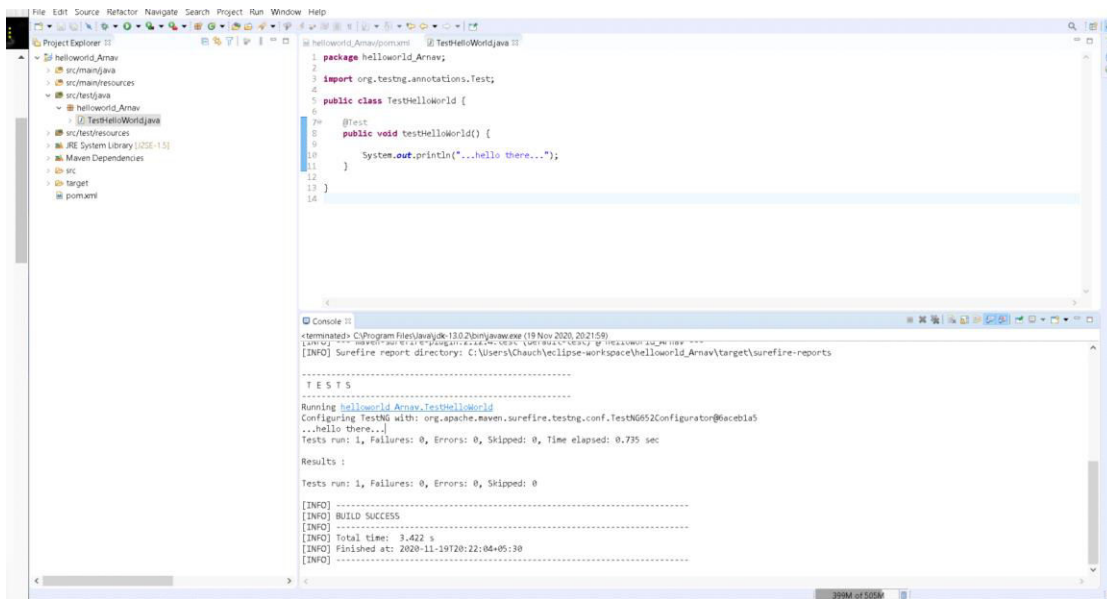Step 1 - Create Maven project using Eclipse

starting   a project
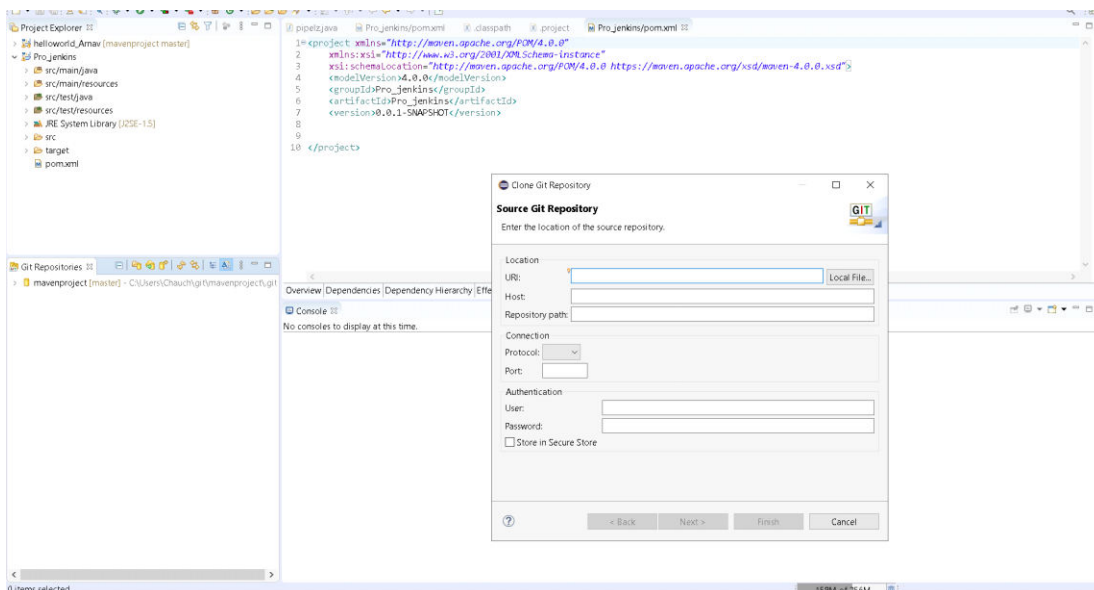
making changes in the Pom file
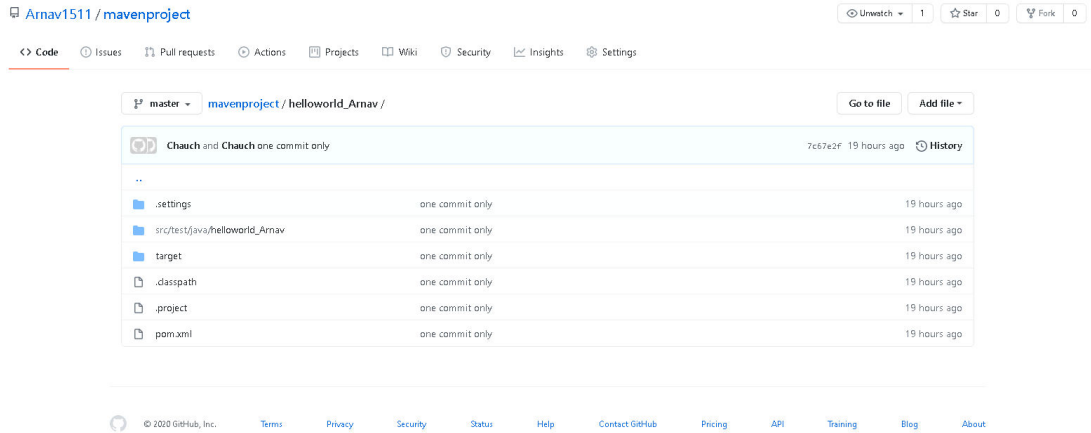

writing the code and testing it

Step2: Push the same running project on GitHub using Eclipse or IDE.

Cloning to the git hub repo

final outcome

Step 3: Create a Jenkins Pipeline to generate build and push the generated build on Nexus Server using Jenkinsfile in GitHub.

Using the command java-jar jenkins.war --httpPort=8383

running nexus


```
Administrator: Command Prompt - nexus.exe /run                                    —    □    ×
Microsoft Windows [Version 10.0.18363.1198]
(c) 2019 Microsoft Corporation. All rights reserved.

C:\WINDOWS\system32>cd C:\Program Files\nexus-3.28.1-01\bin

C:\Program Files\nexus-3.28.1-01\bin>nexus.exe/run
2020-11-20 14:18:17,117+0530 INFO  [FelixStartLevel] *SYSTEM org.sonatype.nexus.pax.logging.NexusLogActivator - start
2020-11-20 14:18:18,895+0530 INFO  [FelixStartLevel] *SYSTEM org.sonatype.nexus.features.internal.FeaturesWrapper - Fast
 FeaturesService starting
2020-11-20 14:18:21,625+0530 WARN  [FelixStartLevel] *SYSTEM uk.org.lidalia.sysoutslf4j.context.SysOutOverSLF4JInitialis
er - Your logging framework class org.ops4j.pax.logging.slf4j.Slf4jLogger is not known - if it needs access to the stand
ard println methods on the console you will need to register it by calling registerLoggingSystemPackage
2020-11-20 14:18:21,627+0530 INFO  [FelixStartLevel] *SYSTEM uk.org.lidalia.sysoutslf4j.context.SysOutOverSLF4J - Packag
e org.ops4j.pax.logging.slf4j registered; all classes within it or subpackages of it will be allowed to print to System.
out and System.err
2020-11-20 14:18:21,630+0530 INFO  [FelixStartLevel] *SYSTEM uk.org.lidalia.sysoutslf4j.context.SysOutOverSLF4J - Replac
ed standard System.out and System.err PrintStreams with SLF4JPrintStreams
2020-11-20 14:18:21,631+0530 INFO  [FelixStartLevel] *SYSTEM uk.org.lidalia.sysoutslf4j.context.SysOutOverSLF4J - Redire
cted System.out and System.err to SLF4J for this context
2020-11-20 14:18:21,638+0530 INFO  [FelixStartLevel] *SYSTEM org.sonatype.nexus.bootstrap.ConfigurationBuilder - Propert
ies:
2020-11-20 14:18:21,639+0530 INFO  [FelixStartLevel] *SYSTEM org.sonatype.nexus.bootstrap.ConfigurationBuilder -   appli
cation-host='0.0.0.0'
2020-11-20 14:18:21,639+0530 INFO  [FelixStartLevel] *SYSTEM org.sonatype.nexus.bootstrap.ConfigurationBuilder -   appli
cation-port='8081'
2020-11-20 14:18:21,639+0530 INFO  [FelixStartLevel] *SYSTEM org.sonatype.nexus.bootstrap.ConfigurationBuilder -   fabri
c.etc='C:\Program Files\nexus-3.28.1-01/etc/fabric'
2020-11-20 14:18:21,640+0530 INFO  [FelixStartLevel] *SYSTEM org.sonatype.nexus.bootstrap.ConfigurationBuilder -   jetty
.etc='C:\Program Files\nexus-3.28.1-01/etc/jetty'
2020-11-20 14:18:21,640+0530 INFO  [FelixStartLevel] *SYSTEM org.sonatype.nexus.bootstrap.ConfigurationBuilder -   karaf
```

successful


```
Administrator: Command Prompt - nexus.exe /run                                    —    □    ×
2020-11-20 14:19:15,597+0530 INFO  [jetty-main-1] *SYSTEM org.sonatype.nexus.siesta.SiestaServlet - JAX-RS RuntimeDelega
te: org.sonatype.nexus.siesta.internal.resteasy.SisuResteasyProviderFactory@16970c76
2020-11-20 14:19:16,799+0530 INFO  [jetty-main-1] *SYSTEM org.jboss.resteasy.plugins.validation.i18n - RESTEASY008550: U
nable to find CDI supporting ValidatorFactory. Using default ValidatorFactory
2020-11-20 14:19:18,027+0530 INFO  [jetty-main-1] *SYSTEM org.sonatype.nexus.siesta.SiestaServlet - Initialized
2020-11-20 14:19:18,031+0530 INFO  [jetty-main-1] *SYSTEM org.sonatype.nexus.repository.httpbridge.internal.ViewServlet
- Initialized
2020-11-20 14:19:18,132+0530 INFO  [jetty-main-1] *SYSTEM org.eclipse.jetty.server.handler.ContextHandler - Started o.e.
j.w.WebAppContext@677881f{Sonatype Nexus,/,file:///C:/Program%20Files/nexus-3.28.1-01/public/,AVAILABLE}
2020-11-20 14:19:19,031+0530 INFO  [jetty-main-1] *SYSTEM org.eclipse.jetty.server.AbstractConnector - Started ServerCon
nector@77868ff7{HTTP/1.1, (http/1.1)}{0.0.0.0:8081}
2020-11-20 14:19:19,031+0530 INFO  [jetty-main-1] *SYSTEM org.eclipse.jetty.server.Server - Started @67256ms
2020-11-20 14:19:19,032+0530 INFO  [jetty-main-1] *SYSTEM org.sonatype.nexus.bootstrap.jetty.JettyServer -
-------------------------------------------------

Started Sonatype Nexus OSS 3.28.1-01

-------------------------------------------------
```

making a pipeline project
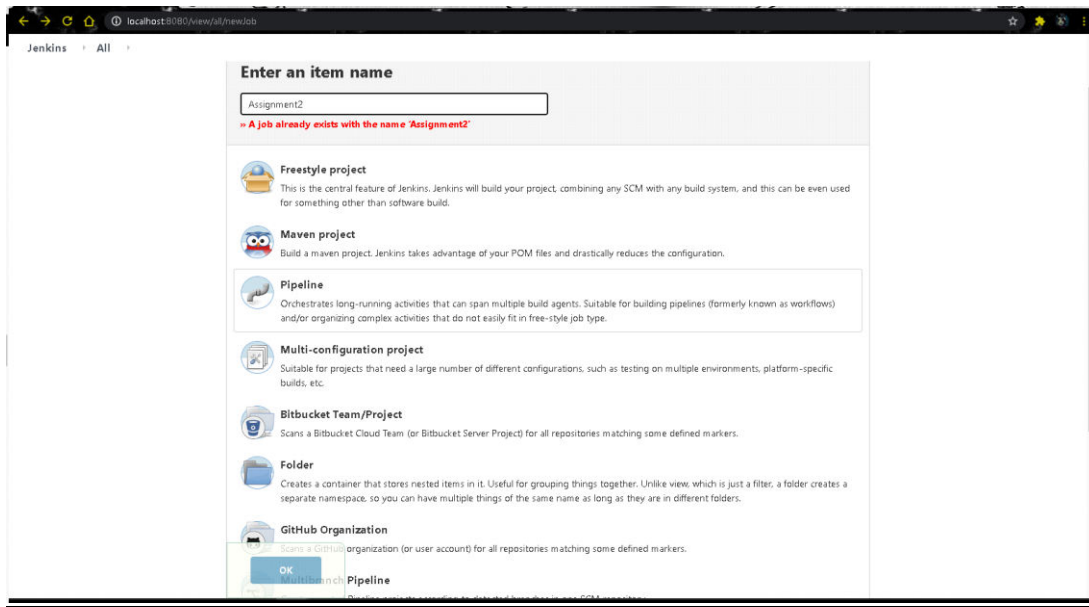
writing a jenkins pipeline script to do all the given task and save it is Jenkinsfile
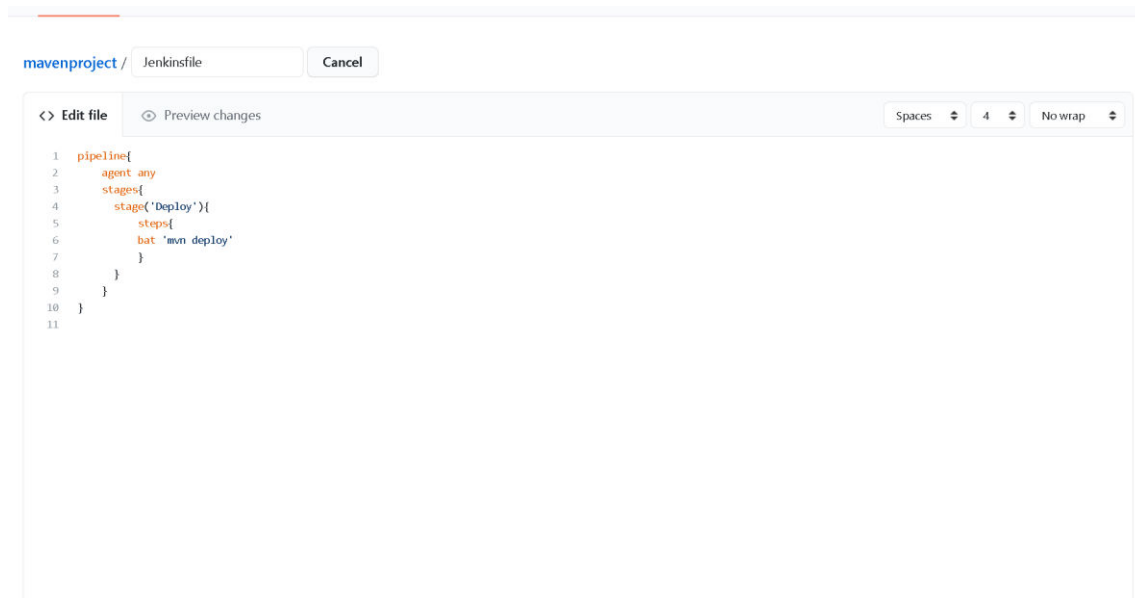
giving the github repository URL and selecting the Jenkinsfile

			Pipeline
General	Build Triggers	Advanced Project Options	

SCM | Git

Repositories

Repository URL   Arnav1511/mavenproject.git

Credentials   - none -

Add ▾

Advanced…

Add Repository

Branches to build

Branch Specifier (blank for 'any')   */master

Add Branch

Repository browser   (Auto)

Additional Behaviours   Add ▾

Script Path   Jenkinsfile

Save   Apply   checkout ☑

Building the pipeline

```
Started by user Arnav Ranjan
Obtained Jenkinsfile from git https://github.com/Arnav1511/mavenproject.git
Running in Durability level: MAX_SURVIVABILITY
[Pipeline] Start of Pipeline
[Pipeline] node
Running on Jenkins in C:\WINDOWS\system32\config\systemprofile\AppData\Local\Jenkins\.jenkins\workspace\Assignment2
[Pipeline] {
[Pipeline] stage
[Pipeline] { (Declarative: Checkout SCM)
[Pipeline] checkout
Selected Git installation does not exist. Using Default
The recommended git tool is: NONE
No credentials specified
 > C:\Program Files\Git\bin\git.exe rev-parse --is-inside-work-tree # timeout=10
Fetching changes from the remote Git repository
 > C:\Program Files\Git\bin\git.exe config remote.origin.url https://github.com/Arnav1511/mavenproject.git # timeout=10
Fetching upstream changes from https://github.com/Arnav1511/mavenproject.git
 > C:\Program Files\Git\bin\git.exe --version # timeout=10
 > git --version # 'git version 2.29.2.windows.2'
 > C:\Program Files\Git\bin\git.exe fetch --tags --force --progress -- https://github.com/Arnav1511/mavenproject.git +refs/heads/*:refs/remotes/origin/* # timeout=10
 > C:\Program Files\Git\bin\git.exe rev-parse "refs/remotes/origin/master^{commit}" # timeout=10
Checking out Revision 76be561e03f47bcb76cf80588287e1054ff687fa (refs/remotes/origin/master)
 > C:\Program Files\Git\bin\git.exe config core.sparsecheckout # timeout=10
 > C:\Program Files\Git\bin\git.exe checkout -f 76be561e03f47bcb76cf80588287e1054ff687fa # timeout=10
Commit message: "Update Jenkinsfile"
First time build. Skipping changelog.
[Pipeline] }
[Pipeline] // stage
[Pipeline] withEnv
[Pipeline] {
[Pipeline] stage
[Pipeline] { (Deploy)
```

```
[Pipeline] }
[Pipeline] // node
[Pipeline] End of Pipeline
Finished: SUCCESS
```

The pipeline will look like so-

Start   Deploy   End

The Nexus server artifact

Sonatype Nexus Repository Manager
OSS 3.28.0-01

Q Search components

Browse

O Welcome

Q Search

Browse

Upload

Browse / jenkins

HTML View

org
  example
    Assignment2
      1.0-SNAPSHOT
      maven-metadata.xml
      maven-metadata.xml.md5
      maven-metadata.xml.sha1