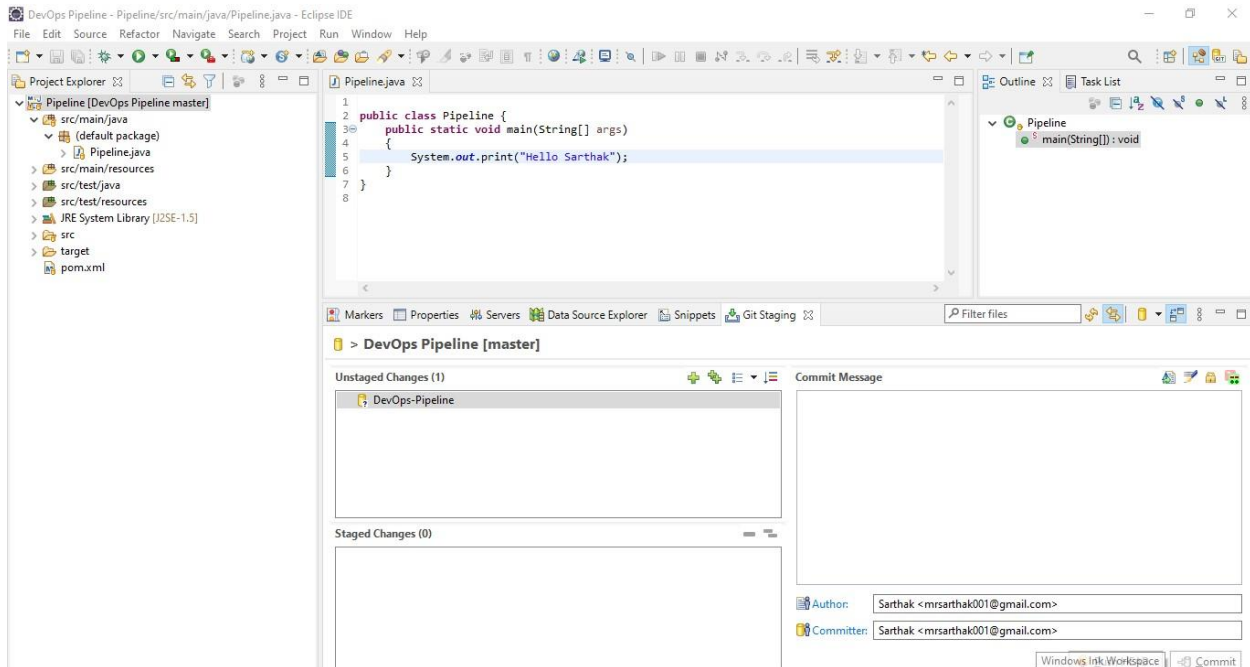
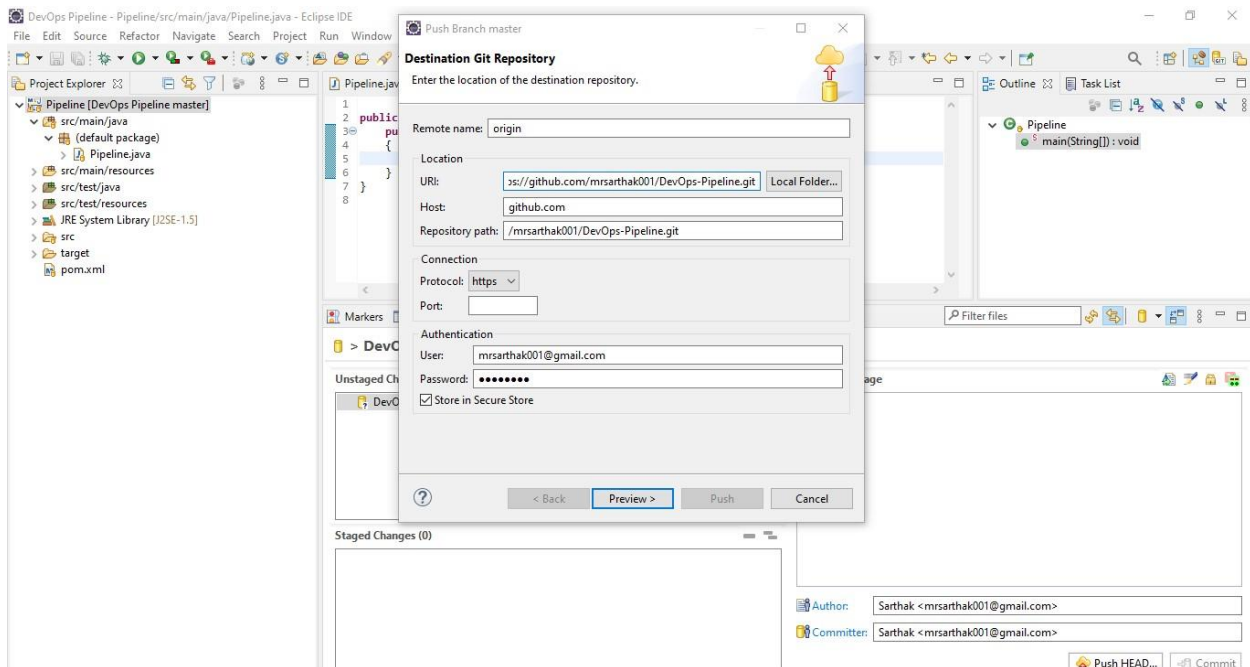


## ASSIGNMENT 2:- Creating a DevOps Pipeline

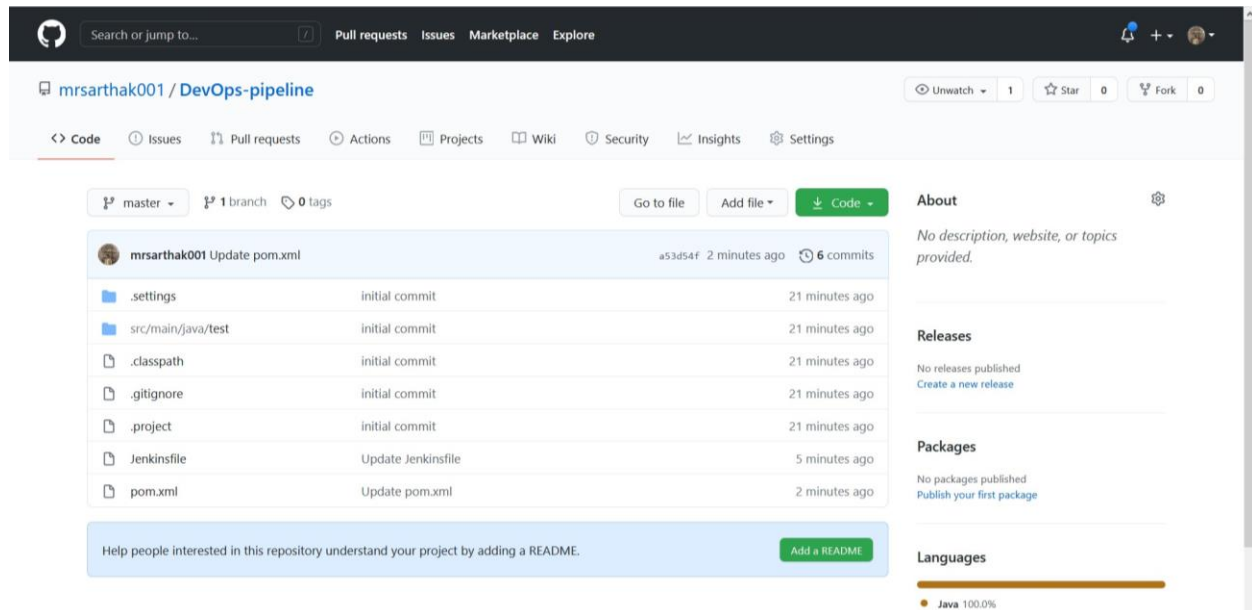
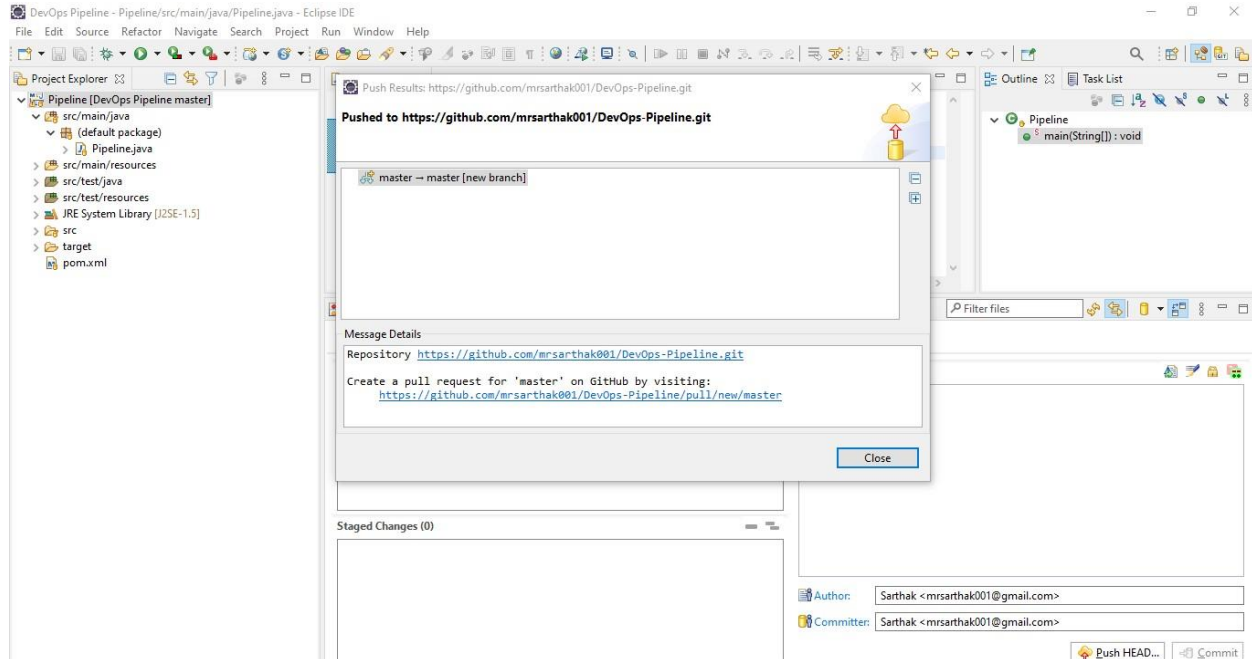
1) First of all we need to create an Eclipse project.



2) Use the Eclipse feature to commit the changes.



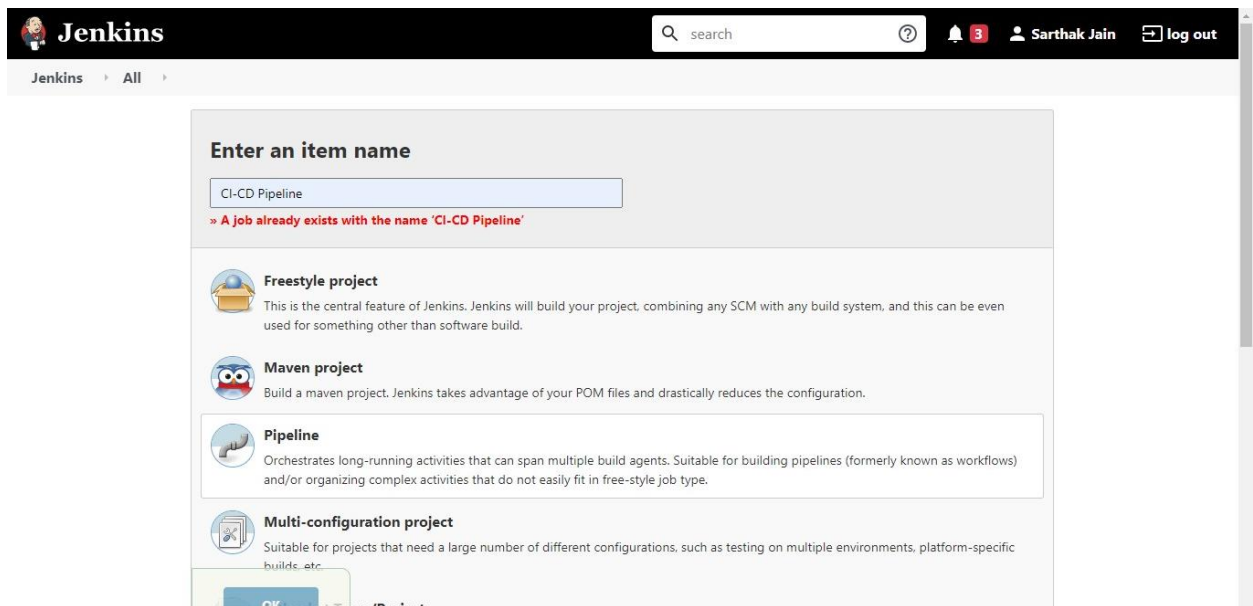
3) Further, we push the project to GitHub using the Eclipse IDE feature.



#### 4) Add a JenkinsFile to create a Jenkins pipeline.

```
1 pipeline{
2   agent any
3   stages{
4     stage('Clean'){
5       steps{
6         echo "Clean Stage"
7         bat "mvn clean"
8       }
9     }
10    stage('Test'){
11      steps{
12        echo "Test Stage"
13        bat "mvn test"
14      }
15    }
16    stage('Package'){
17      steps{
18        echo "Package Stage"
19        bat "mvn package"
20      }
21    }
22    stage('Deploy'){
23      steps{
24        echo "Deploy Stage"
25        bat "mvn deploy"
26      }
27    }
28  }
29 }
```

#### 5) Create a Jenkins pipeline using the Jenkins WebUI.



6) Specify the GitHub repository in the pipeline and specify the path for JenkinsFile.

Jenkins > CI-CD Pipeline > Pipeline

General Build Triggers Advanced Project Options Pipeline

Pipeline

Definition Pipeline script from SCM

SCM Git

Repositories

Repository URL https://github.com/mrsarthak001/DevC

Credentials - none - Add

Advanced... Add Repository

Branches to build

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

Add Branch

Repository browser

7) Specify the Nexus repository in the pom.xml of the project.

8) Use the Poll SCM feature of Jenkins to automate the build

The screenshot shows the Jenkins web interface for a pipeline named "Pipeline CI-CD Pipeline". The left sidebar contains navigation links: Back to Dashboard, Status, Changes, Build Now, Configure, Delete Pipeline, Full Stage View, Open Blue Ocean, Rename, Pipeline Syntax, and Git Polling Log. The main content area displays the pipeline's build history and stage view. The build history shows a single build (#1) from Nov 19, 2020, 11:00 PM, with a status of "Success". The stage view shows a table of stages and their durations.

Stage	Declarative: Checkout SCM	Clean	Test	Package	Deploy
Average stage times: (Average full run time: ~20s)	2s	2s	3s	3s	4s
Build #1	2s	2s	3s	3s	4s

Permalinks:

- Last build (#1), 27 sec ago
- Last stable build (#1), 27 sec ago
- Last successful build (#1), 27 sec ago
- Last completed build (#1), 27 sec ago

REST API Jenkins 2.249.3

9) The pipeline will be built successfully.

This screenshot is identical to the one above, showing the Jenkins Pipeline CI-CD Pipeline page. It displays the build history with a single successful build (#1) and a table of stage durations. The interface includes navigation links on the left and permalinks for the build history.

Stage	Declarative: Checkout SCM	Clean	Test	Package	Deploy
Average stage times: (Average full run time: ~20s)	2s	2s	3s	3s	4s
Build #1	2s	2s	3s	3s	4s

Permalinks:

- Last build (#1), 27 sec ago
- Last stable build (#1), 27 sec ago
- Last successful build (#1), 27 sec ago
- Last completed build (#1), 27 sec ago

REST API Jenkins 2.249.3

10) The built project will be visible in Nexus repository.

