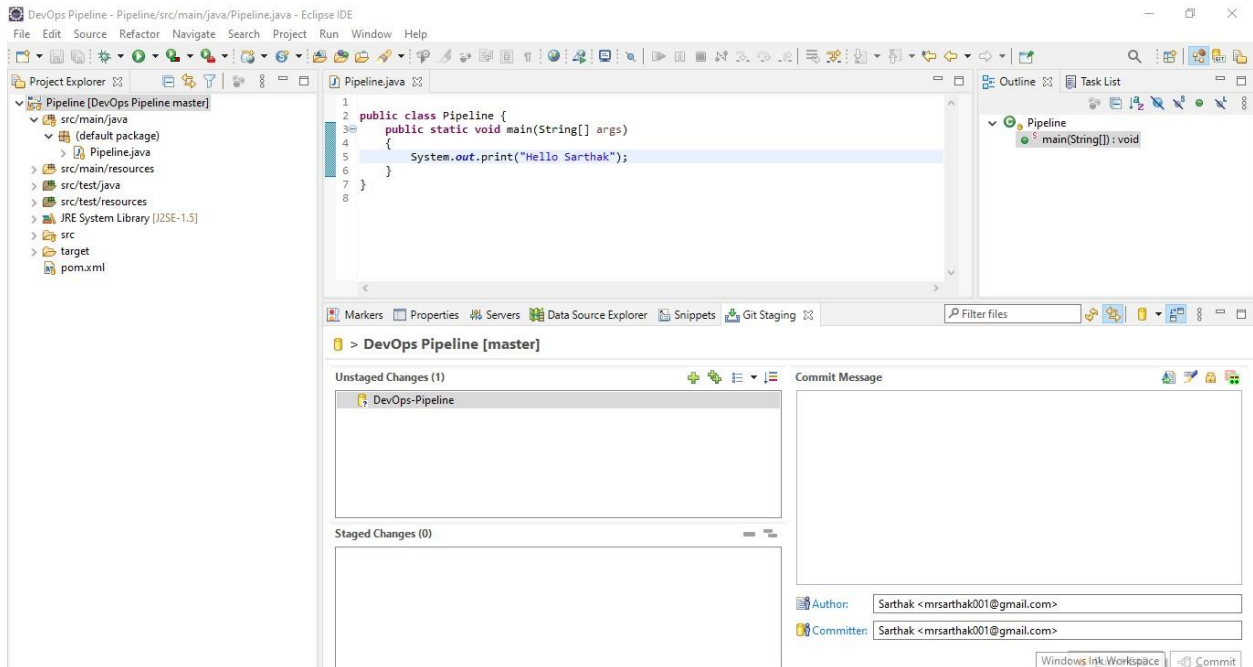
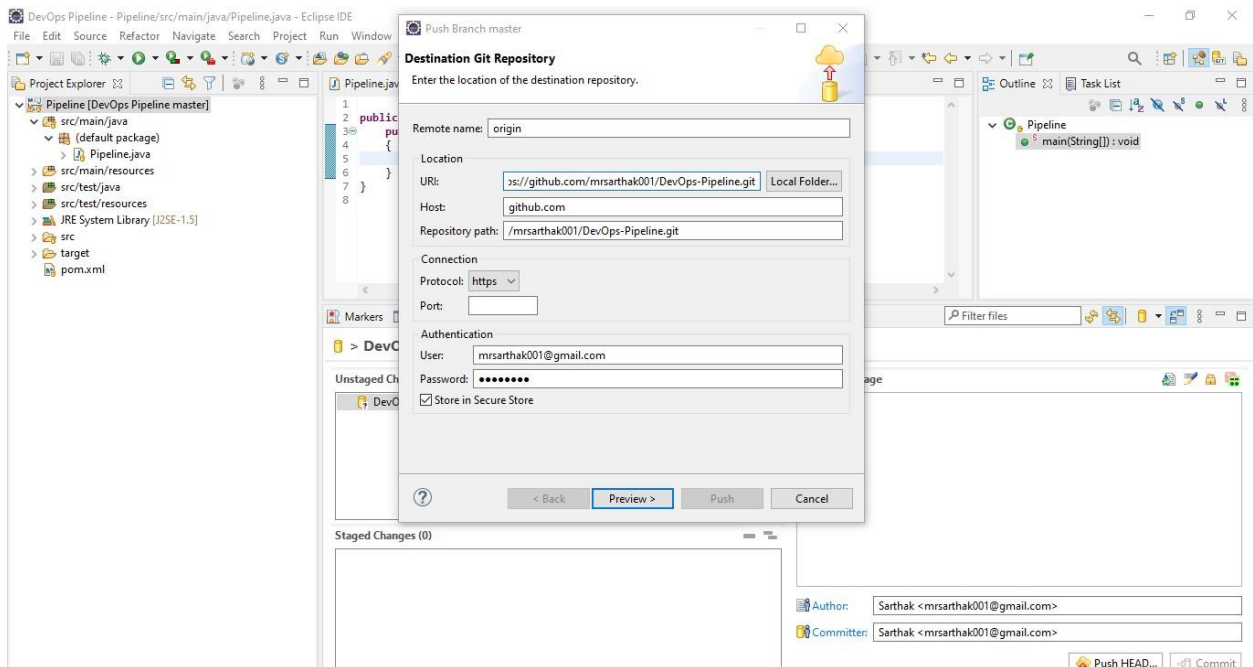


ASSIGNMENT 2:- Creating a DevOps Pipeline

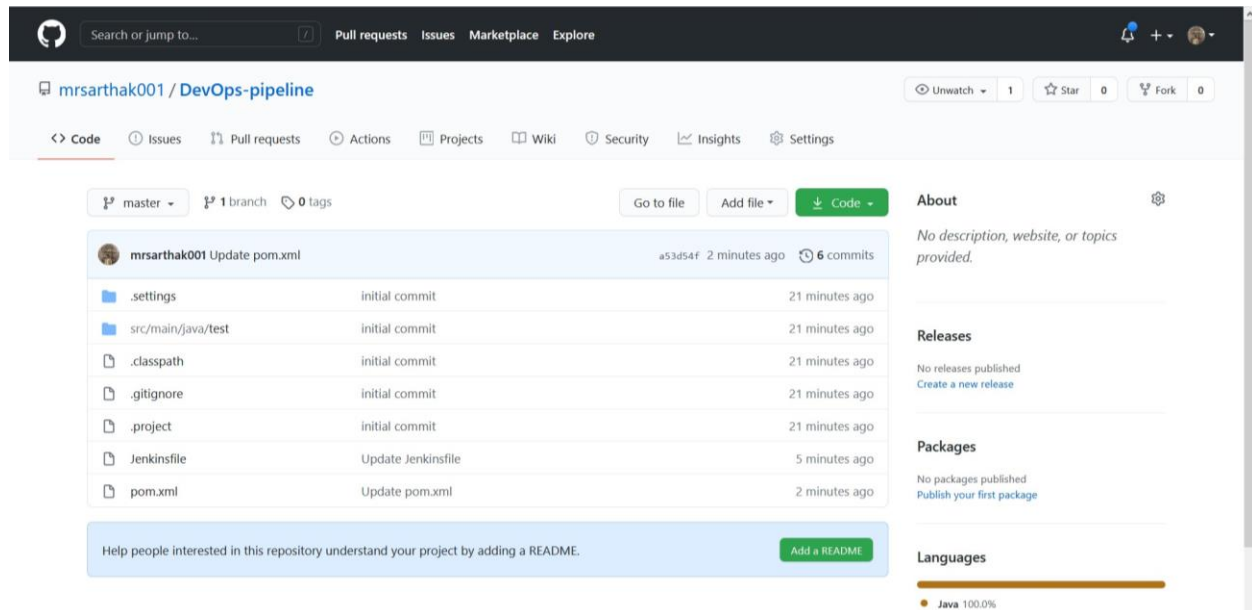
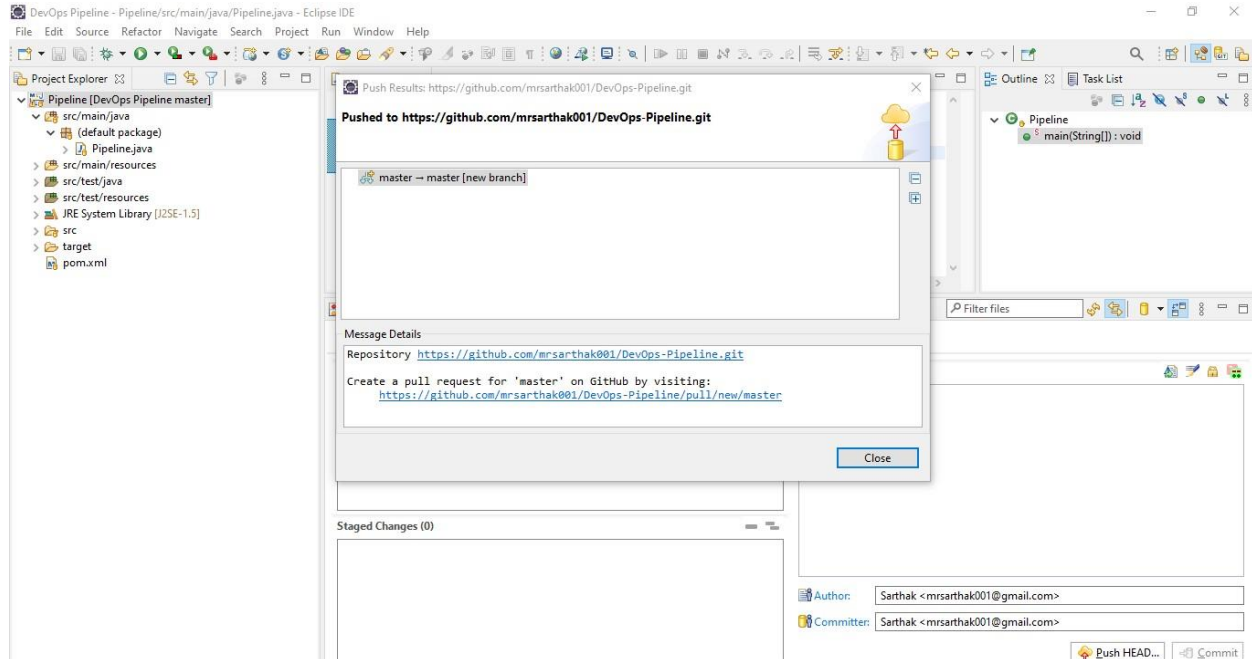
1) First of all we need to create an Eclipse project.



2) Use the Eclipse feature to commit the changes.



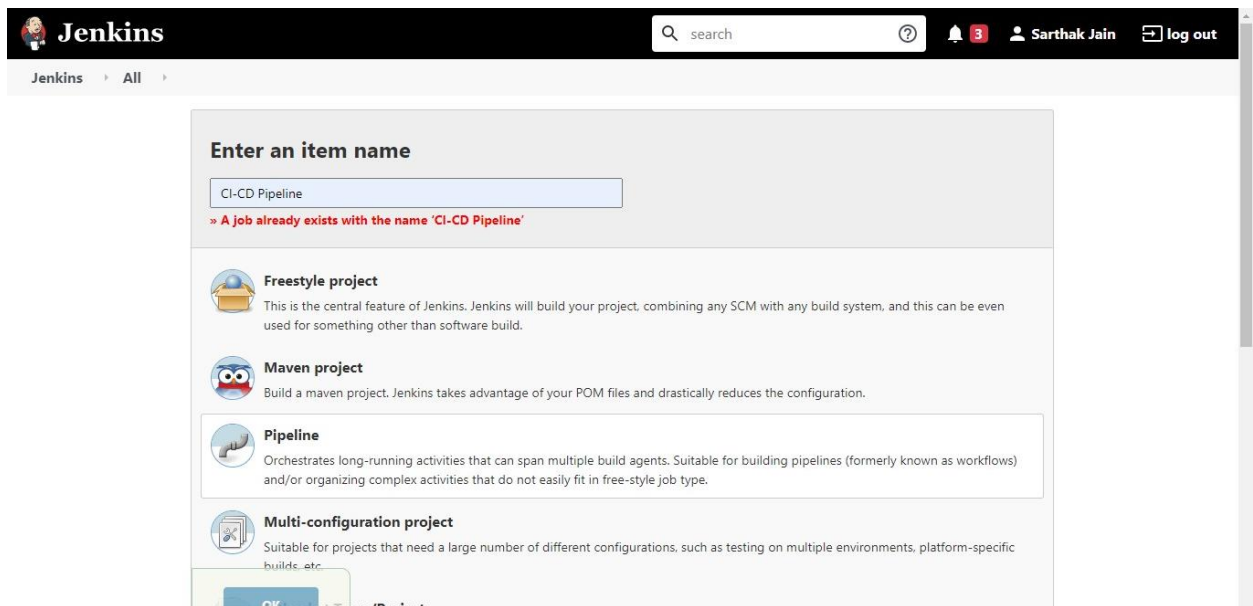
3) Further, we push the project to GitHub using the Eclipse IDE feature.



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 >

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 Pipeline CI-CD Pipeline page. 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 CI-CD Pipeline details, including a description, a Recent Changes section, and a Stage View table. The Stage View table shows the average stage times for the pipeline stages: Declarative: Checkout SCM (2s), Clean (2s), Test (3s), Package (3s), and Deploy (4s). The Permalinks section lists the last build, last stable build, last successful build, and last completed build, all of which are 27 seconds ago.

Stage	Average stage times
Declarative: Checkout SCM	2s
Clean	2s
Test	3s
Package	3s
Deploy	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

9) The pipeline will be built successfully.

The screenshot shows the Jenkins Pipeline CI-CD Pipeline page, identical to the one above. 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 CI-CD Pipeline details, including a description, a Recent Changes section, and a Stage View table. The Stage View table shows the average stage times for the pipeline stages: Declarative: Checkout SCM (2s), Clean (2s), Test (3s), Package (3s), and Deploy (4s). The Permalinks section lists the last build, last stable build, last successful build, and last completed build, all of which are 27 seconds ago.

Stage	Average stage times
Declarative: Checkout SCM	2s
Clean	2s
Test	3s
Package	3s
Deploy	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

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

