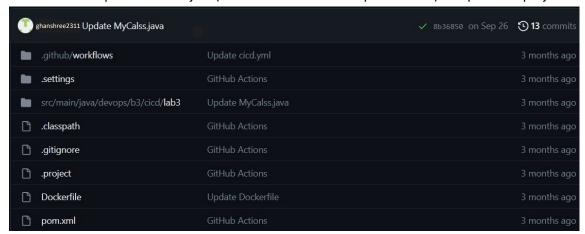
## **Experiment -2**

## (Creating a Jenkins Pipeline with a Jenkins File)

<u>**Objective**</u>: Create a Jenkins pipeline using a Jenkins file that builds a simple project, runs tests, and deploys the project to a designed environment.

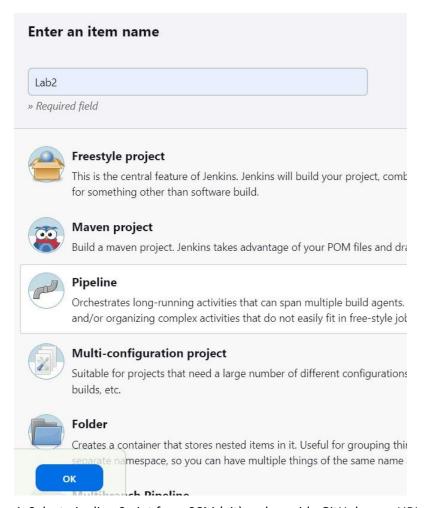
1. Create a simple maven Project (the same one used in Experiment -1) and push the project to GitHub.



2. Create a Jenkins file and push it to GitHub repo (in the root dir) Note: the following Jenkins file includes stages associated with maven project

```
pipeline {
 agent any
tools {
maven 'MAVEN_HOME'
 stages {
        stage('Stage1: Hello Clean Stage 1') {
                 steps {
                         bat 'mvn clean'
        stage ('Stage 2: Test Stage') {
                 steps {
                         bat 'mvn test'
         stage ('Stage 3: My Package'){
                 steps {
                         bat 'mvn package'
         stage ('Stage 4: My Final Build Stage'){
                 steps {
                         bat 'mvn install'
         stage ('Stage Final: Build Success'){
                 steps {
                         echo 'Build Success!'
```

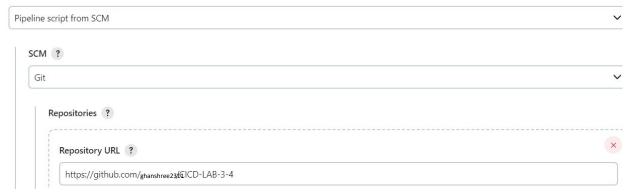
## 3. Create a Jenkins Pipeline CONFIGURATION:



4. Select pipeline Script from SCM (git) and provide GitHub repo URL.

## Pipeline

Definition



5. Provide the Jenkins file path (path in the repo) in the Script Path.

Script Path ?
Jenkinsfile
Lightweight checkout ?
Pipeline Syntax

6. Now if we make any changes to the GitHub repo and push it, it will trigger a new pipeline build.

Declarative: Checkout SCM	Declarative: Tool Install	Stage 1 : Clean Stage	Stage 2 : test Stage	Stage 3 : Install stage	Stage Final : Build Sucess
25	172ms	45	45	45	255ms
25	172ms	45	45	45	255ms