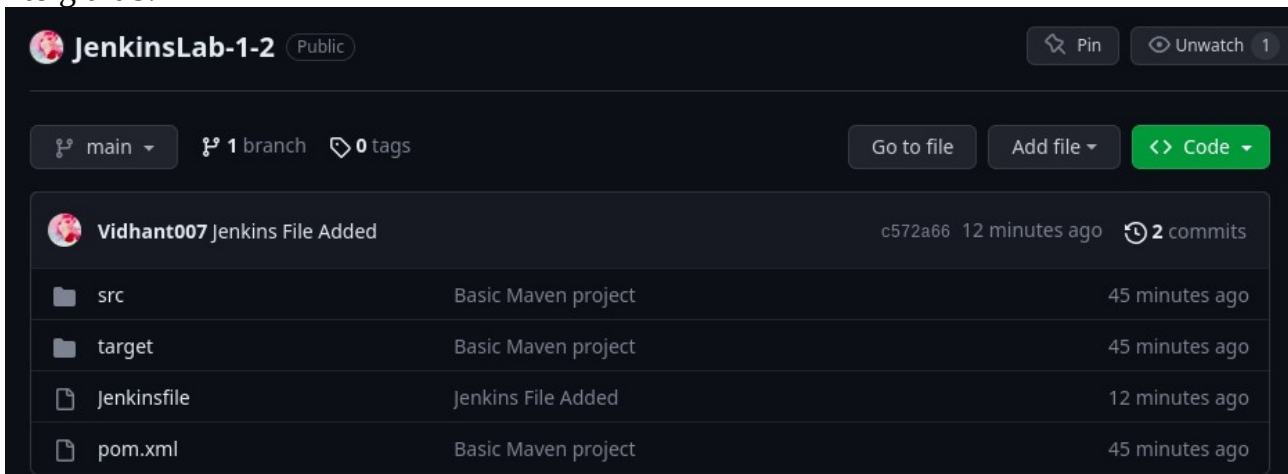# Experiment -2 (Creating a Jenkins Pipeline with a Jenkins File)

**Objective:** Create a Jenkins pipeline using a jenkinsfile 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('Stage 1 : Clean Stage'){
                steps{
                    sh 'mvn clean'
                }
            }
            stage('Stage 2 : test Stage'){
                steps{
                    sh 'mvn test'
                }
            }
            stage('Stage 3 : Install stage'){
                steps{
                    sh 'mvn install'
                }
            }
            stage('Stage Final : Build Sucess'){
                steps{
                    echo 'Build Sucessfull'
                }
            }
    }
}
```

## 3. Create a Jenkins Pipeline

**Enter an item name**

CICD-lab2

» *Required field*

**Freestyle project**
This is the central feature of Jenkins. Jenkins will build your project, combining any SCM used for something other than software build.

**Maven project**
Build a maven project. Jenkins takes advantage of your POM files and drastically reduce

**Pipeline**
Orchestrates long-running activities that can span multiple build agents. Suitable for b workflows) and/or organizing complex activities that do not easily fit in free-style job ty

CONFIGURATION :

## 4. Select the Github CheckBox and provide the github repo Link

✓ **GitHub project**
**Project url** ?

https://github.com/Vidhant007/JenkinsLab-1-2/

Advanced ∨

## 5. Select build Trigger

✓ **Poll SCM** ?
**Schedule** ?

* * * * *

## 6. Select pipeline Script from SCM (git) and provide Github repo url.

**Definition**

Pipeline script from SCM

**SCM** ?

Git

**Repositories** ?

**Repository URL** ?

https://github.com/Vidhant007/JenkinsLab-1-2

7.  Provide the Jenkinsfile path ( path in the repo) in the Script Path.



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