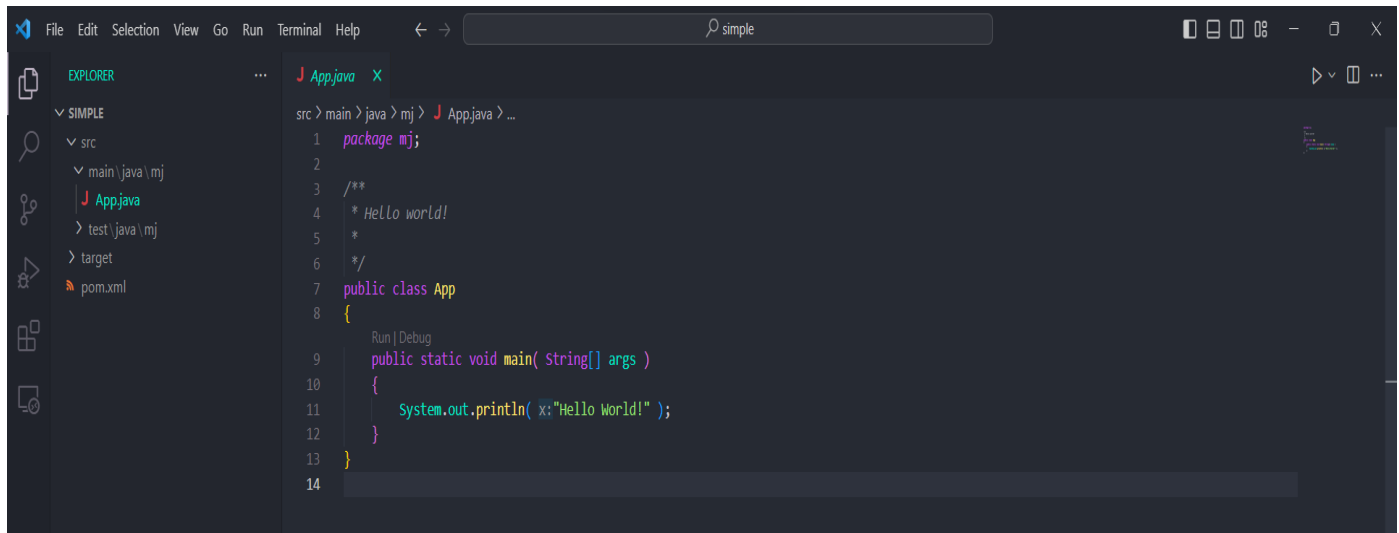


Experiment -1 (Setting Up a Jenkins Job for Maven Build)

Objective: Create a Jenkins Job that builds a maven project using Jenkins and triggers build on changes in the version control repository.

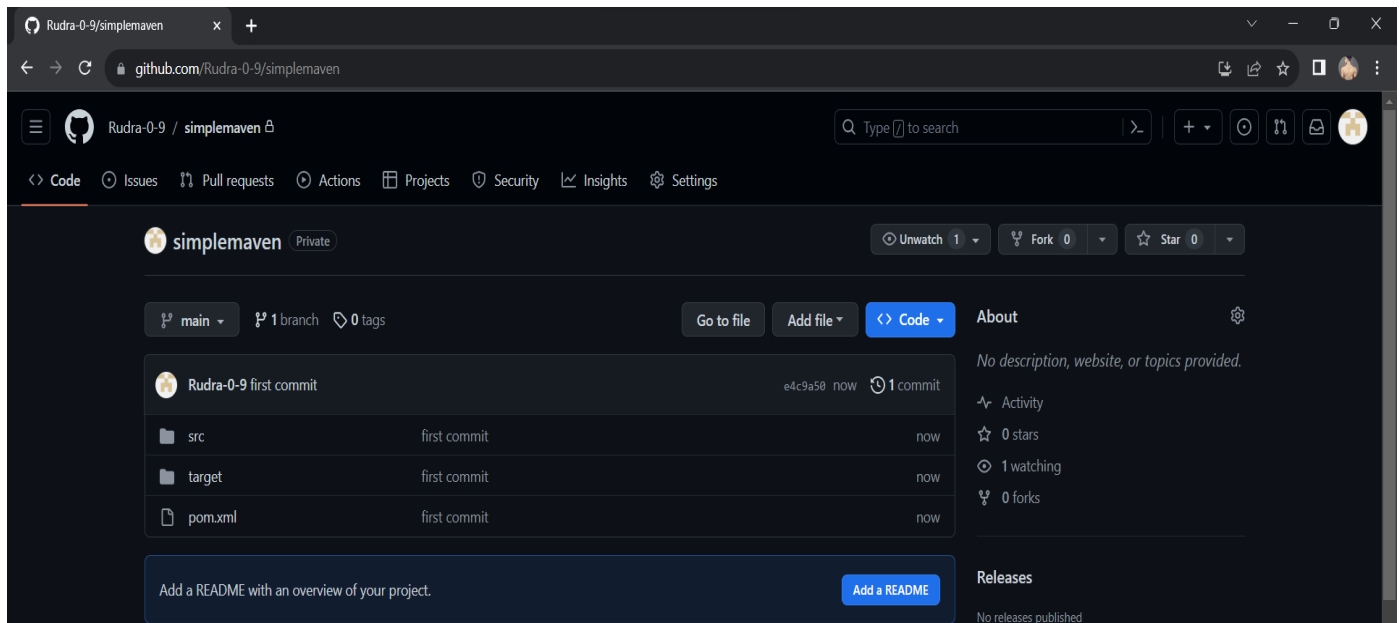
1. Create a basic maven Project.



The screenshot shows an IDE with a project named 'SIMPLE'. The file explorer on the left shows the project structure: 'src' (containing 'main' and 'test' subdirectories, each with a 'java' subdirectory), 'target', and 'pom.xml'. The main editor displays the 'App.java' file with the following code:

```
src > main > java > mj > J App.java > ...
1 package mj;
2
3 /**
4  * Hello world!
5  *
6  */
7 public class App
8 {
9     Run | Debug
10    public static void main( String[] args )
11    {
12        System.out.println( x:"Hello World!" );
13    }
14 }
```

2. Push the Maven project to GitHub repository.



3. Create a Jenkins Pipeline

→ make sure that Maven Integration Plugin is installed in Jenkins

S	W	Name ↓	Last Success	Last Failure	Last Duration	
...	☀	Lab1	N/A	N/A	N/A	▶

Large

4. Check the GitHub project Checkbox and add GitHub Repo link.

☒ GitHub project ?

Project url ?

Advanced ▾

5. Check Git in the SCM checkbox list.

☒ Git ?

Repositories ?

Repository URL ?

Credentials ?

6. Ensure the Build trigger are setup

☒ Poll SCM ?

Schedule ?

7. Add a pom file's path and maven command in the Build section.

Build

Root POM ?

Goals and options ?

Advanced ▾

8. Click on Build Now from the Pipeline Dashboard



Console Output

```
Started by user Rudra
Running as SYSTEM
Building in workspace C:\ProgramData\Jenkins\.jenkins\workspace\Lab1
Selected Git installation does not exist. Using Default
The recommended git tool is: NONE
No credentials specified
> git rev-parse --resolve-git-dir C:\ProgramData\Jenkins\.jenkins\workspace\Lab1\.git # timeout=10
Fetching changes from the remote Git repository
> git config remote.origin.url https://github.com/Rudra-0-9/simplemaven # timeout=10
Fetching upstream changes from https://github.com/Rudra-0-9/simplemaven
> git --version # timeout=10
> git --version # 'git version 2.42.0.windows.2'
> git fetch --tags --force --progress -- https://github.com/Rudra-0-9/simplemaven +refs/heads/*:refs/remotes/origin/* # timeout=10
> git rev-parse "refs/remotes/origin/main^{commit}" # timeout=10
Checking out Revision 5be83b8e0ea0df3a8c799f78c65ae933f47e195c (refs/remotes/origin/main)
> git config core.sparsecheckout # timeout=10
> git checkout -f 5be83b8e0ea0df3a8c799f78c65ae933f47e195c # timeout=10
Commit message: "Update maven.yml"
First time build. Skipping changelog.
Parsing POMs
Discovered a new module mj:simple simple
Modules changed, recalculating dependency graph
Established TCP socket on 50352
[Lab1] $ java -cp C:\ProgramData\Jenkins\.jenkins\plugins\maven-plugin\WEB-INF\lib\maven35-agent-
1.14.jar;C:\ProgramData\Jenkins\.jenkins\tools\udson.tasks.Maven_MavenInstallation\Maven\boot\plexus-classworlds-
2.7.0.jar;C:\ProgramData\Jenkins\.jenkins\tools\udson.tasks.Maven_MavenInstallation\Maven\conf\logging_jenkins.maven3.agent.Maven35Main
```