

Maven Project

First check the maven is configure with environment variables and open command prompt check “mvn --version”

Build a Maven project in local using Maven in 5 minutes and edit the Dartifactid = kavi-app

```
Microsoft Windows [Version 10.0.19045.5131]
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C:\Users\DELL>java --version
java 17.0.11 2024-04-16 LTS
Java(TM) SE Runtime Environment (build 17.0.11+7-LTS-207)
Java HotSpot(TM) 64-Bit Server VM (build 17.0.11+7-LTS-207, mixed mode, sharing)

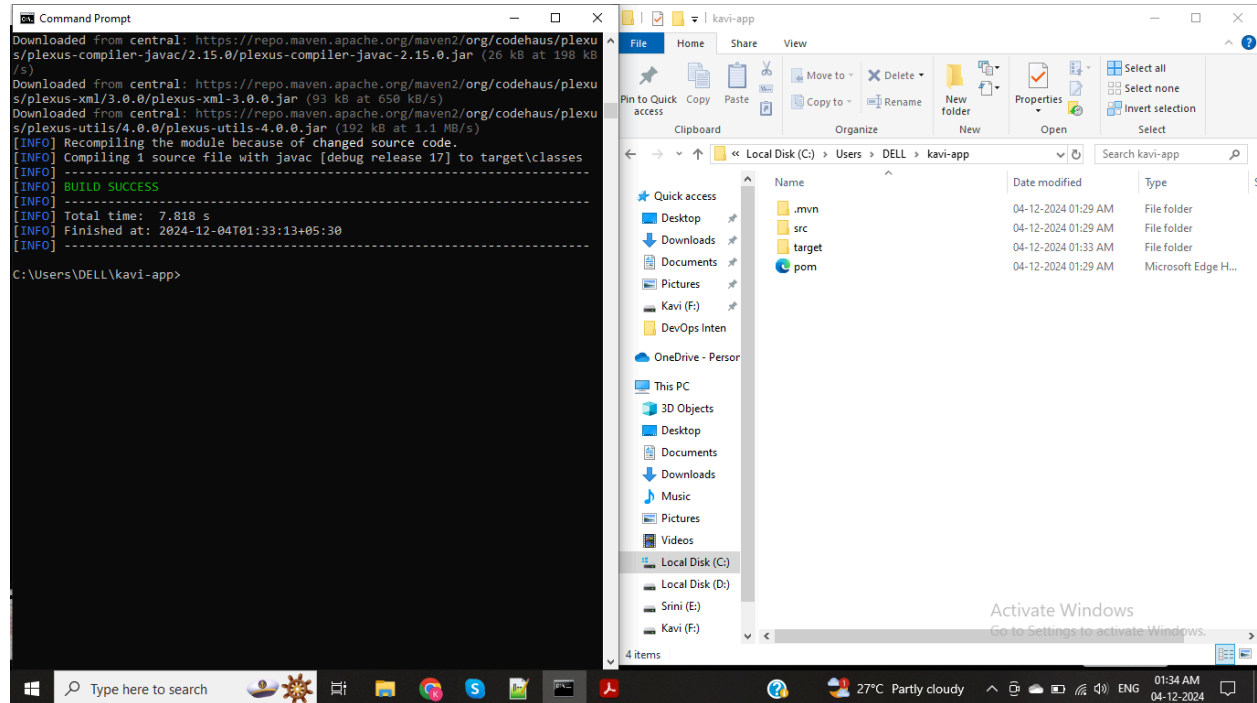
C:\Users\DELL>mvn --version
Apache Maven 3.9.9 (8e8579a9e76f7d01ee5ec7bfcd97d260186937)
Maven home: C:\Program Files\apache-maven-3.9.9
Java version: 17.0.11, vendor: Oracle Corporation, runtime: C:\Program Files\Java\jdk-17
Default locale: en_IN, platform encoding: Cp1252
OS name: "windows 10", version: "10.0", arch: "amd64", family: "windows"

C:\Users\DELL>mvn archetype:generate -DgroupId=com.mycompany.app -DartifactId=kavi-app -DarchetypeArtifactId=maven-archetype-quickstart -DarchetypeVersion=1.5 -DinteractiveMode=false
[INFO] Scanning for projects...
Downloading from central: https://repo.maven.apache.org/maven2/org/codehaus/mojo/maven-metadata.xml
Downloading from central: https://repo.maven.apache.org/maven2/org/apache/maven/plugins/maven-metadata.xml
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/plugins/maven-metadata.xml (14 kB at 19 kB/s)
Downloading from central: https://repo.maven.apache.org/maven2/org/codehaus/mojo/maven-metadata.xml (21 kB at 27 kB/s)
Downloading from central: https://repo.maven.apache.org/maven2/org/apache/maven/plugins/maven-archetype-plugin/maven-metadata.xml
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/plugins/maven-archetype-plugin/maven-metadata.xml (1.0 kB at 24 kB/s)
Downloading from central: https://repo.maven.apache.org/maven2/org/apache/maven/plugins/maven-archetype-plugin/3.3.1/maven-archetype-plugin-3.3.1.pom
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/plugins/maven-archetype-plugin/3.3.1/maven-archetype-plugin-3.3.1.pom (10 kB at 166 kB/s)
Downloading from central: https://repo.maven.apache.org/maven2/org/apache/maven/archetype/maven-archetype/3.3.1/maven-archetype-3.3.1.pom
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/archetype/maven-archetype/3.3.1/maven-archetype-3.3.1.pom (10 kB at 175 kB/s)
Downloading from central: https://repo.maven.apache.org/maven2/org/apache/maven/maven-parent/43/maven-parent-43.pom
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/maven-parent/43/maven-parent-43.pom (50 kB at 188 kB/s)
Downloading from central: https://repo.maven.apache.org/maven2/org/apache/apache/33/apache-33.pom
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/apache/33/apache-33.pom (24 kB at 31 kB/s)
Downloading from central: https://repo.maven.apache.org/maven2/org/apache/groovy/groovy-bom/4.0.23/groovy-bom-4.0.23.pom
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/groovy/groovy-bom/4.0.23/groovy-bom-4.0.23.pom (27 kB at 278 kB/s)
Downloading from central: https://repo.maven.apache.org/maven2/org/junit/junit-bom/5.10.3/junit-bom-5.10.3.pom
Downloaded from central: https://repo.maven.apache.org/maven2/org/junit/junit-bom/5.10.3/junit-bom-5.10.3.pom (5.6 kB at 36 kB/s)
Downloading from central: https://repo.maven.apache.org/maven2/org/apache/maven/plugins/maven-archetype-plugin/3.3.1/maven-archetype-plugin-3.3.1.jar
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/plugins/maven-archetype-plugin/3.3.1/maven-archetype-plugin-3.3.1.jar (99 kB at 131 kB/s)
[INFO]
[INFO] -----< org.apache.maven:standalone-pom >-----
[INFO] Building Maven Stub Project (No POM) 1
[INFO] -----[ pom ]-----
[INFO]
[INFO] >>> archetype:3.3.1:generate (default-cli) > generate-sources @ standalone-pom >>>
[INFO]
```

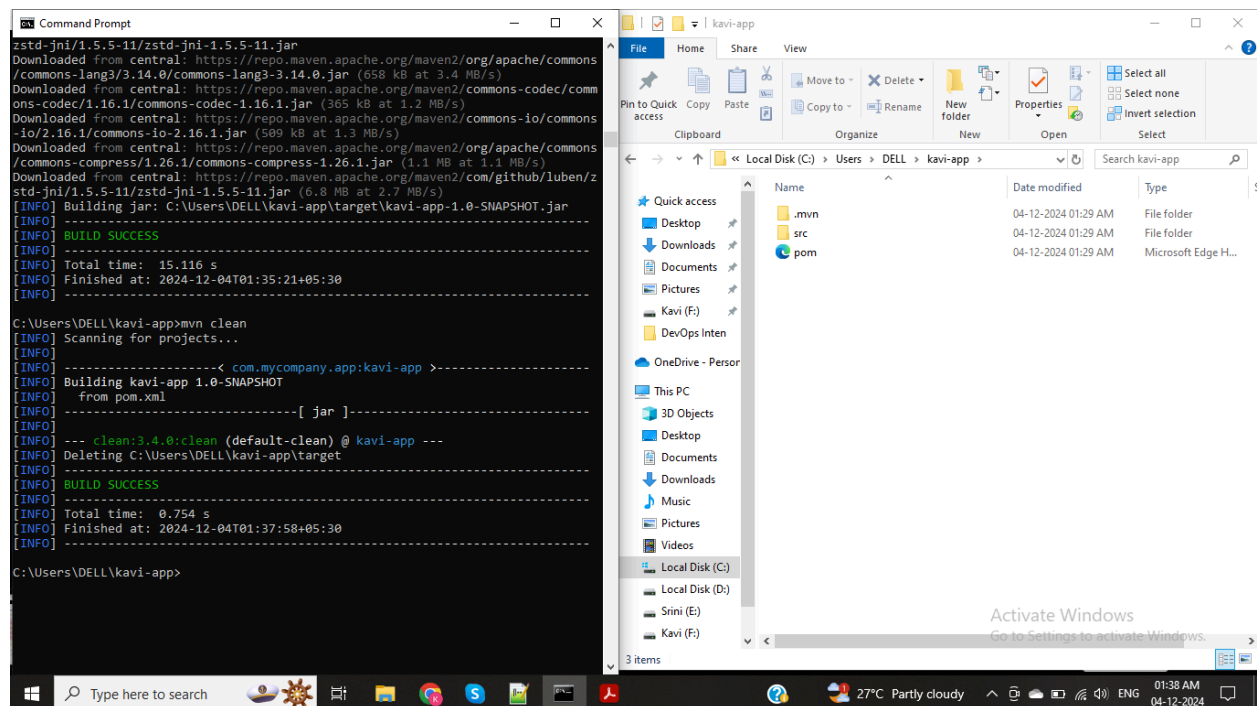
Project is successfully build and its generated

```
Downloaded from central: https://repo.maven.apache.org/maven2/com/github/luben/zstd-jni/1.5.6-3/zstd-jni-1.5.6-3.jar (6.7 MB at 1.8 MB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/com/ibm/icu/icu4j/75.1/icu4j-75.1.jar (14 MB at 3.6 MB/s)
[INFO] Generating project in Batch mode
Downloading from central: https://repo.maven.apache.org/maven2/archetype-catalog.xml
Downloaded from central: https://repo.maven.apache.org/maven2/archetype-catalog.xml (16 MB at 7.9 MB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/archetypes/maven-archetype-quickstart/1.5/maven-archetype-quickstart-1.5.jar
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/archetypes/maven-archetype-quickstart/1.5/maven-archetype-quickstart-1.5.jar (11 kB at 18
1 kB/s)
[INFO] -----
[INFO] Using following parameters for creating project from Archetype: maven-archetype-quickstart:1.5
[INFO] -----
[INFO] Parameter: groupId, Value: com.mycompany.app
[INFO] Parameter: artifactId, Value: kavi-app
[INFO] Parameter: version, Value: 1.0-SNAPSHOT
[INFO] Parameter: package, Value: com.mycompany.app
[INFO] Parameter: packageInPathFormat, Value: com/mycompany/app
[INFO] Parameter: junitVersion, Value: 5.11.0
[INFO] Parameter: package, Value: com.mycompany.app
[INFO] Parameter: groupId, Value: com.mycompany.app
[INFO] Parameter: artifactId, Value: kavi-app
[INFO] Parameter: javaCompilerVersion, Value: 17
[INFO] Parameter: version, Value: 1.0-SNAPSHOT
[WARNING] Don't override file C:\Users\DELL\kavi-app\src\main\java\com\mycompany\app
[WARNING] Don't override file C:\Users\DELL\kavi-app\src\test\java\com\mycompany\app
[WARNING] CP Don't override file C:\Users\DELL\kavi-app\mvn
[INFO] Project created from Archetype in dir: C:\Users\DELL\kavi-app
[INFO]
[INFO] BUILD SUCCESS
[INFO] -----
[INFO] Total time: 19.944 s
[INFO] Finished at: 2024-12-04T01:29:59+05:30
[INFO] -----
C:\Users\DELL>
```

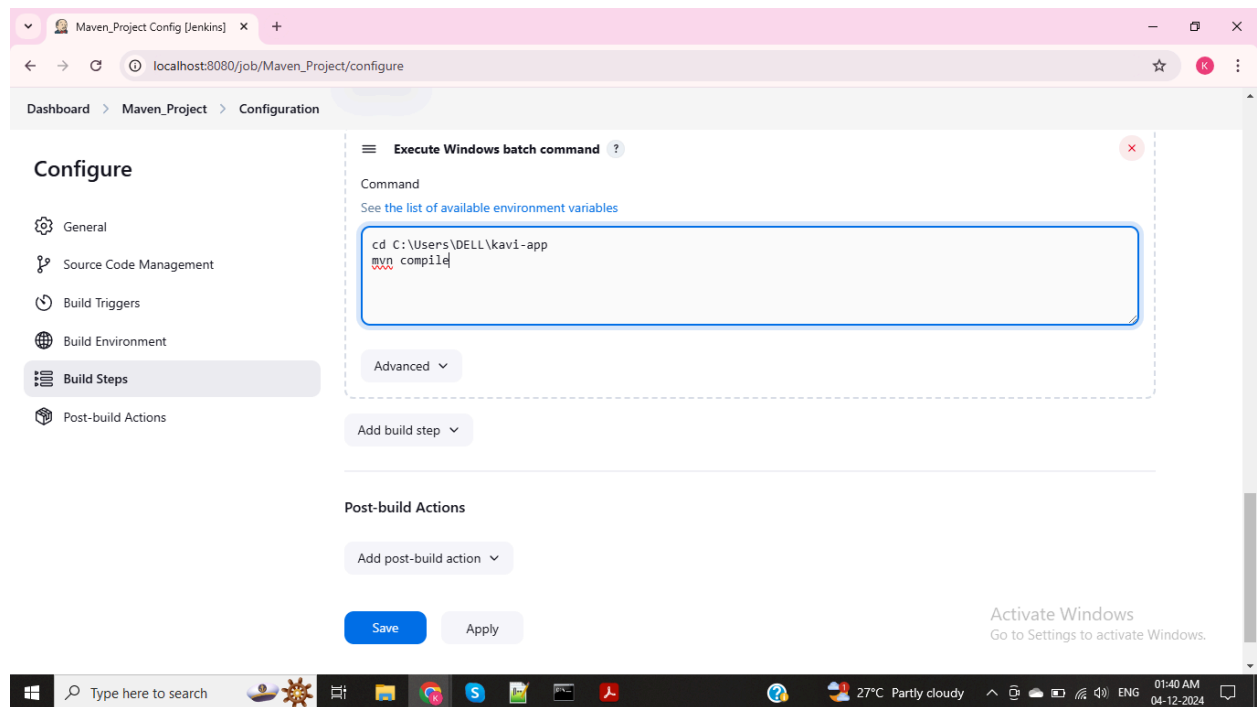
Go to the exact path where source code and pom.xml is located and give “mvn compile” to build a code and it shows output as target file.



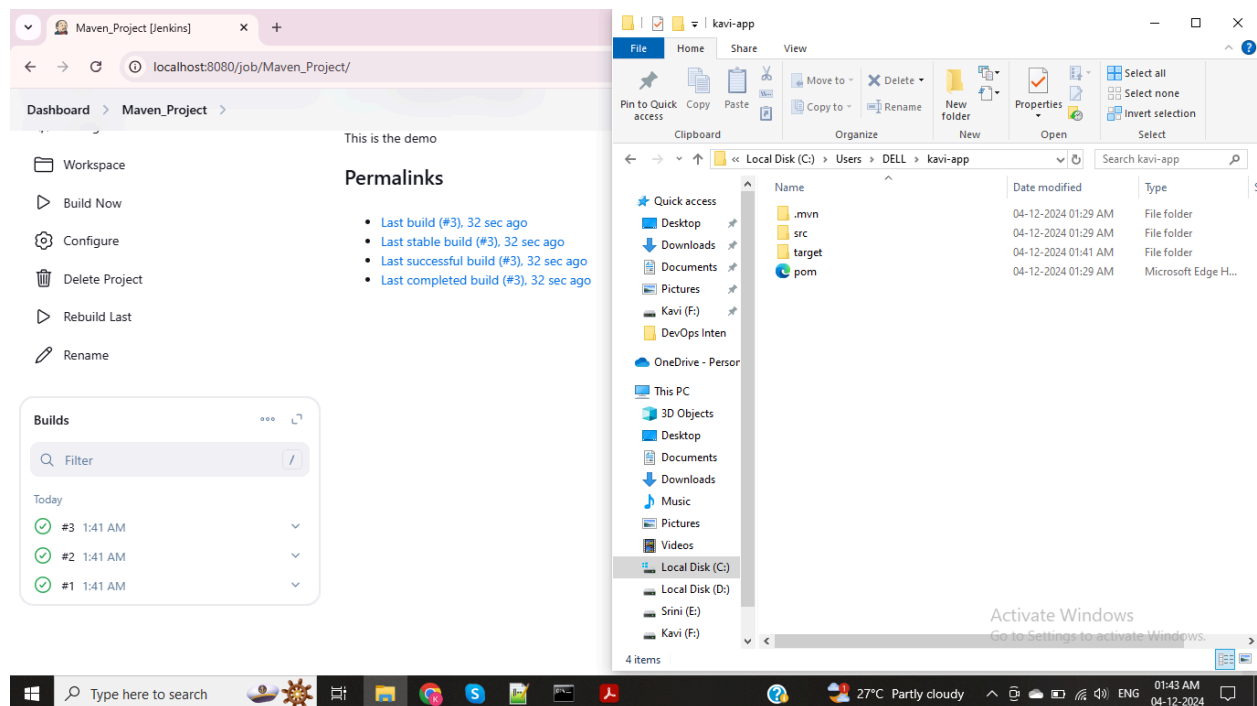
If we want to remove the target file in local use “mvn clean” command



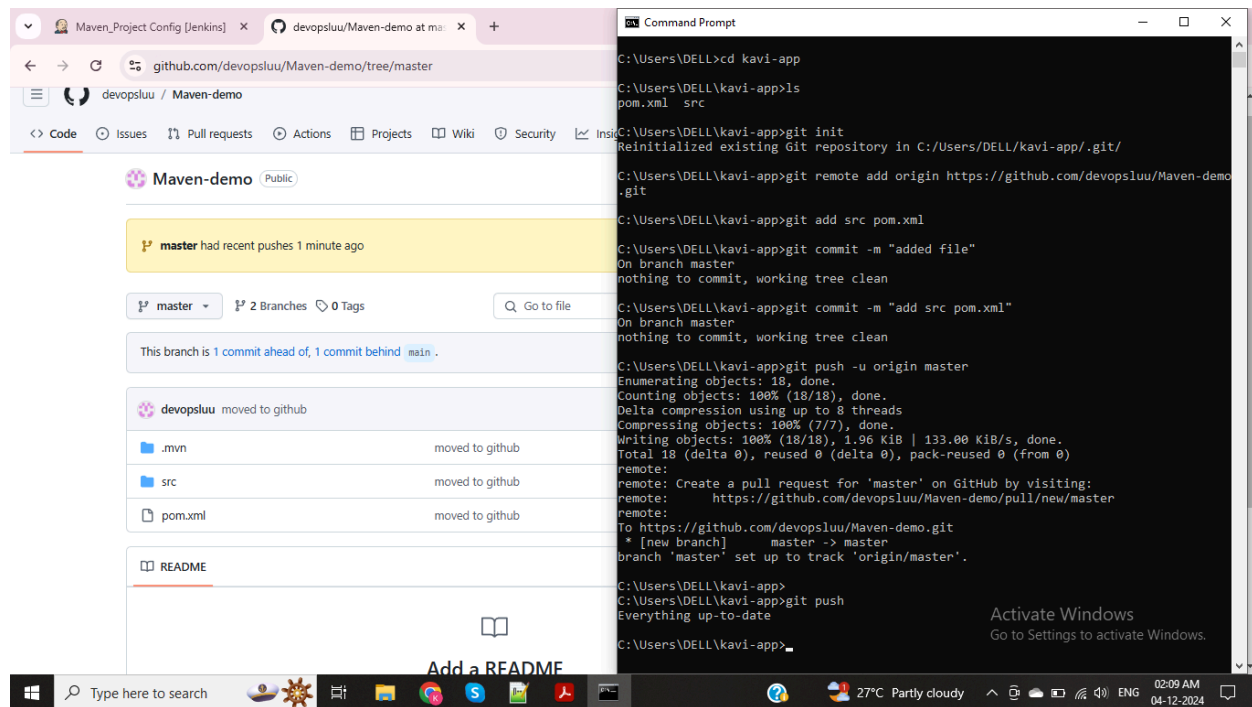
Access with Jenkins --Login to Jenkins and create Freestyle project --go to configure --check “mvn --version” then give cd (locate the path to build project) --**mvn compile** in Build steps.



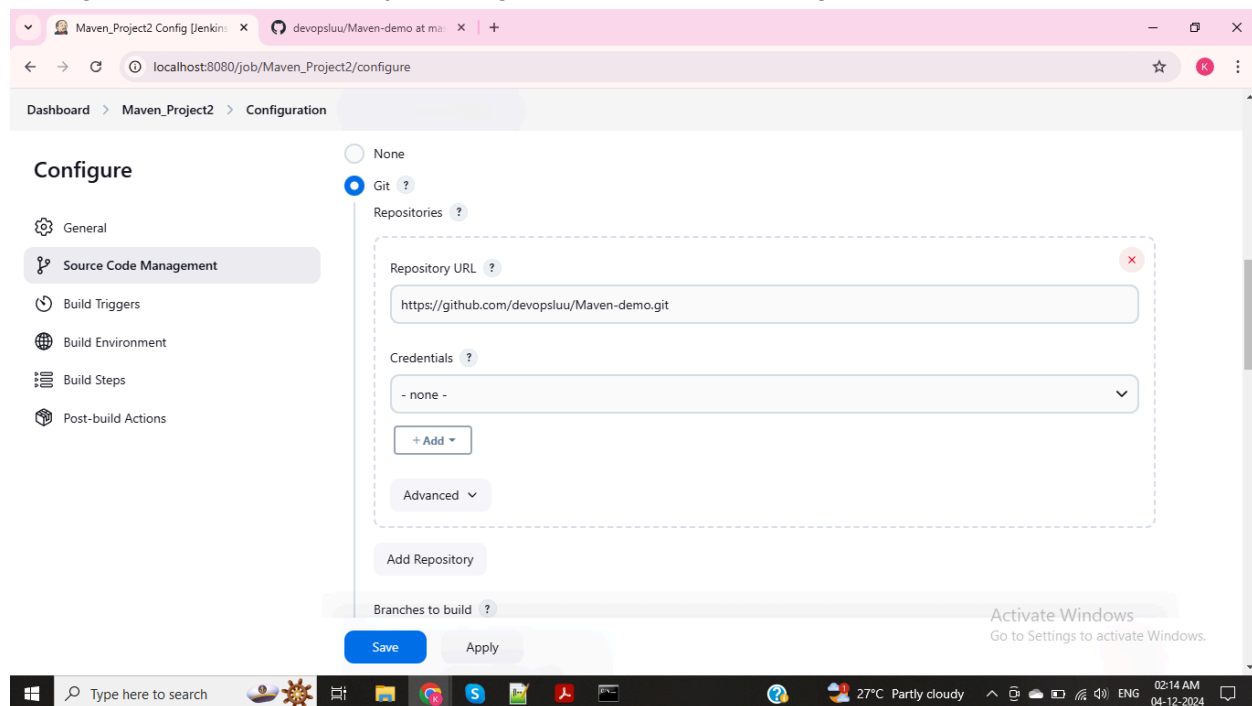
In that same location project is build and it shows output as target file.



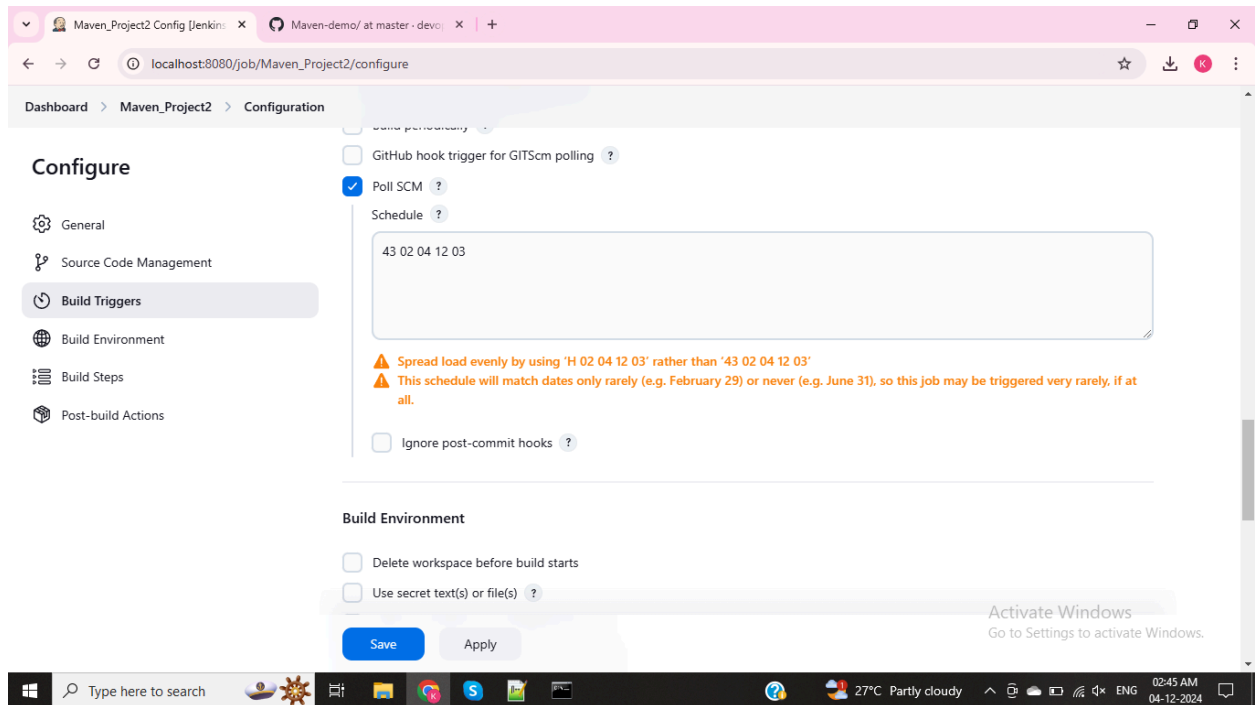
Login to Github --Create a new repository and src code and pom.xml files are moved from local to central.



Create another Freestyle project, go to configure --give git repo code url in source code management then build a project using “mvn compile or package” command



Setting Cron job using Poll SCM



The screenshot shows the Jenkins Configuration page for 'Maven_Project2'. The 'Build Triggers' section is active, and the 'Poll SCM' checkbox is checked. The 'Schedule' field contains the cron expression '43 02 04 12 03'. Below this, a warning message states: 'Spread load evenly by using 'H 02 04 12 03' rather than '43 02 04 12 03'. This schedule will match dates only rarely (e.g. February 29) or never (e.g. June 31), so this job may be triggered very rarely, if at all.' The 'Build Environment' section is also visible, with options to 'Delete workspace before build starts' and 'Use secret text(s) or file(s)'. The 'Save' button is highlighted.

Dashboard > Maven_Project2 > Configuration

Configure

- General
- Source Code Management
- Build Triggers**
- Build Environment
- Build Steps
- Post-build Actions

☐ GitHub hook trigger for GITScm polling ?

☒ Poll SCM ?

Schedule ?

43 02 04 12 03

⚠ Spread load evenly by using 'H 02 04 12 03' rather than '43 02 04 12 03'
⚠ This schedule will match dates only rarely (e.g. February 29) or never (e.g. June 31), so this job may be triggered very rarely, if at all.

☐ Ignore post-commit hooks ?

Build Environment

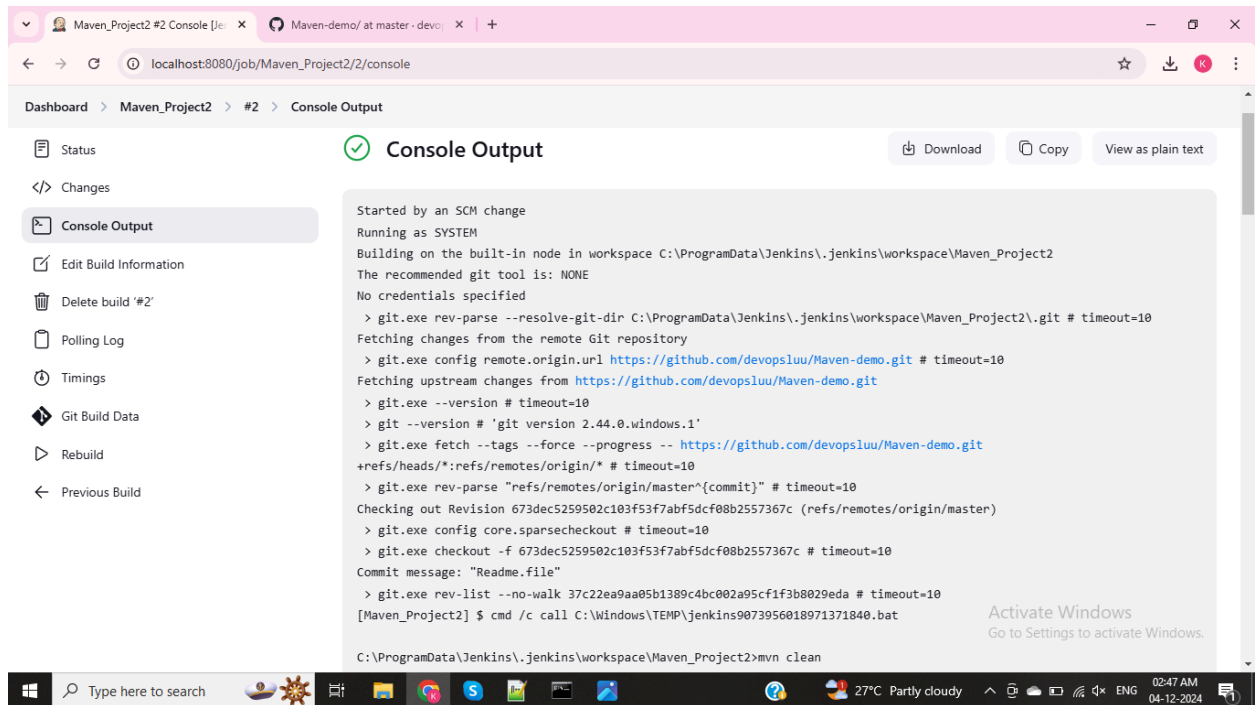
☐ Delete workspace before build starts

☐ Use secret text(s) or file(s) ?

Save Apply

Activate Windows
Go to Settings to activate Windows.

Poll SCM output



The screenshot shows the Jenkins Console Output for 'Maven_Project2 #2'. The output displays the execution of various git commands, including fetching changes from the remote repository, checking out a revision, and running a build command. The output is as follows:

```
Started by an SCM change
Running as SYSTEM
Building on the built-in node in workspace C:\ProgramData\Jenkins\jenkins\workspace\Maven_Project2
The recommended git tool is: NONE
No credentials specified
> git.exe rev-parse --resolve-git-dir C:\ProgramData\Jenkins\jenkins\workspace\Maven_Project2\.git # timeout=10
Fetching changes from the remote Git repository
> git.exe config remote.origin.url https://github.com/devopsluu/Maven-demo.git # timeout=10
Fetching upstream changes from https://github.com/devopsluu/Maven-demo.git
> git.exe --version # timeout=10
> git --version # 'git version 2.44.0.windows.1'
> git.exe fetch --tags --force --progress -- https://github.com/devopsluu/Maven-demo.git +refs/heads/*:refs/remotes/origin/* # timeout=10
> git.exe rev-parse "refs/remotes/origin/master^{commit}" # timeout=10
Checking out Revision 673dec5259502c103f53f7abf5dcf08b2557367c (refs/remotes/origin/master)
> git.exe config core.sparsecheckout # timeout=10
> git.exe checkout -f 673dec5259502c103f53f7abf5dcf08b2557367c # timeout=10
Commit message: "Readme.file"
> git.exe rev-list --no-walk 37c22ea9aa05b1389c4bc002a95cf1f3b8029eda # timeout=10
[Maven_Project2] $ cmd /c call C:\Windows\TEMP\jenkins9073956018971371840.bat
C:\ProgramData\Jenkins\jenkins\workspace\Maven_Project2>mvn clean
```

Dashboard > Maven_Project2 > #2 > Console Output

Console Output

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Activate Windows
Go to Settings to activate Windows.