

**Brian E Shilo**

**21MIC0131**

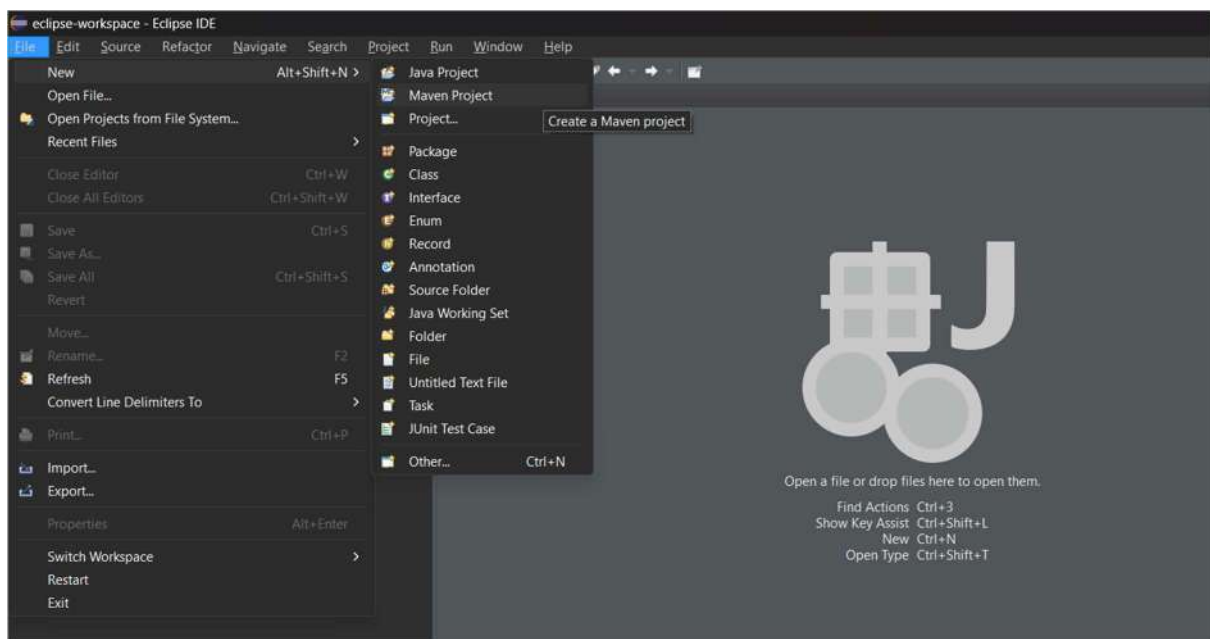
**CSI3025 - Application Development and Deployment Architecture - L23+L24**

**SAHAAYA ARUL MARY S A**

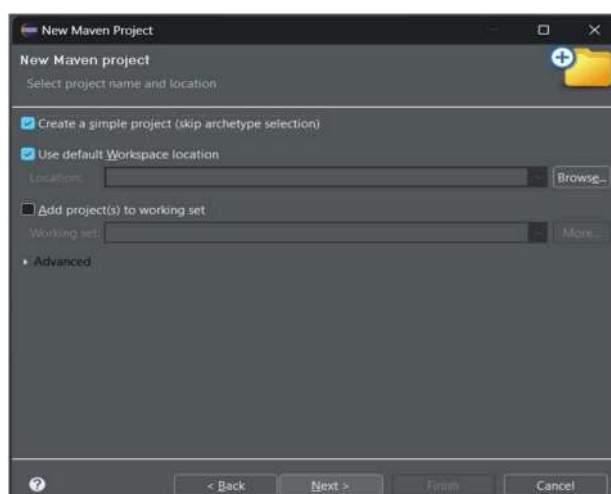
**Digital Assignment – 2**

**PART 1 - Create a Simple Maven Project in Eclipse :**

**Step-1** - Open Eclipse->Click on File -> New -> Maven Project

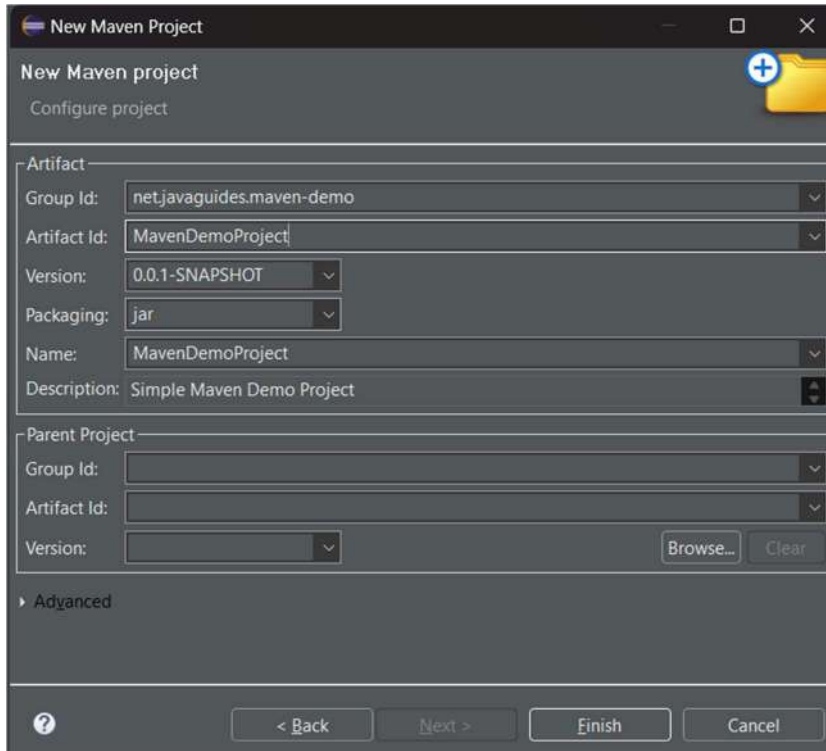


**Step -2** : Tick both boxes and proceed as shown-



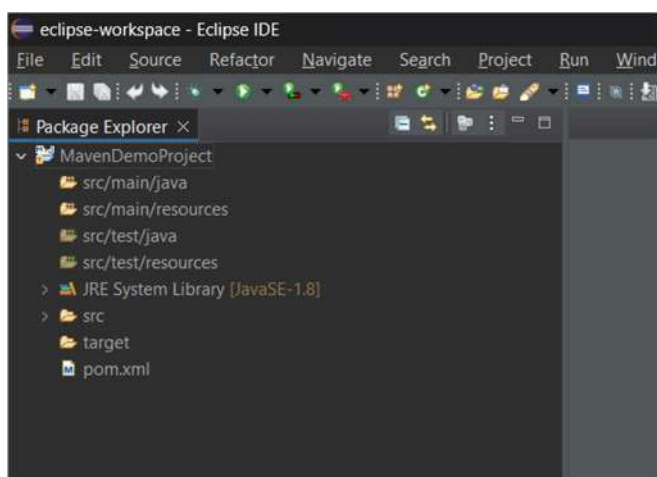
**Step-3** Provide GroupId and ArtifactId in next screen.

- GroupId: net.javaguides.maven-demo
- Artifact Id: MavenDemoProject
- Name: MavenDemoProject
- Description: Simple Maven Demo Project

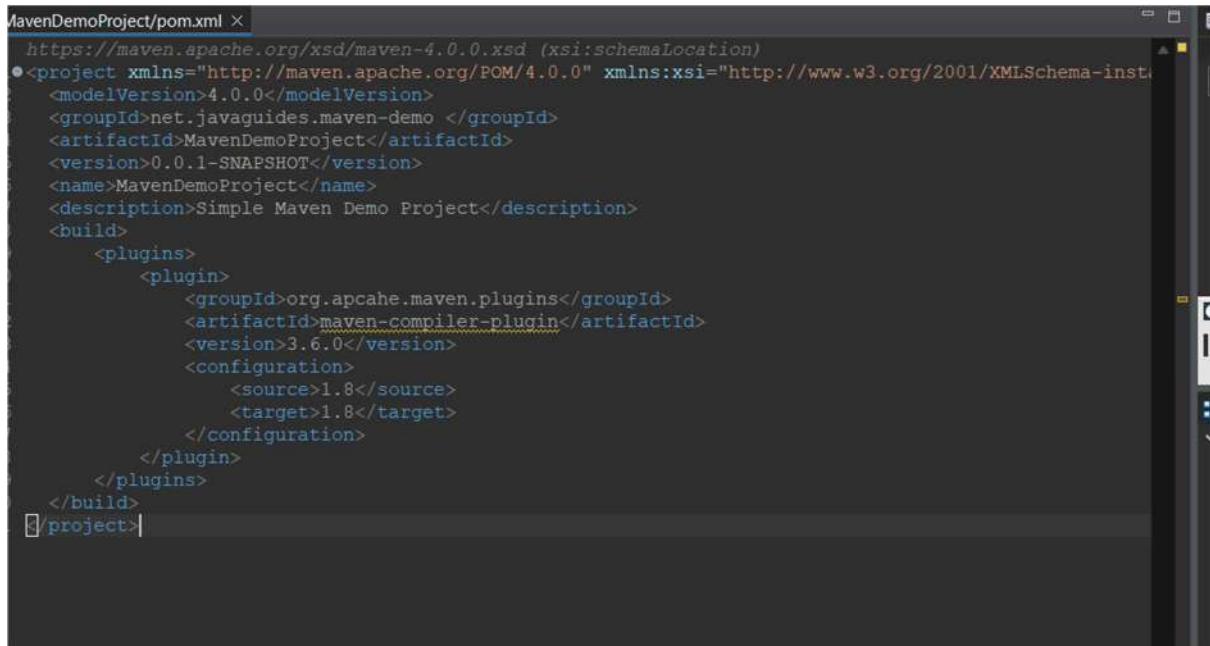
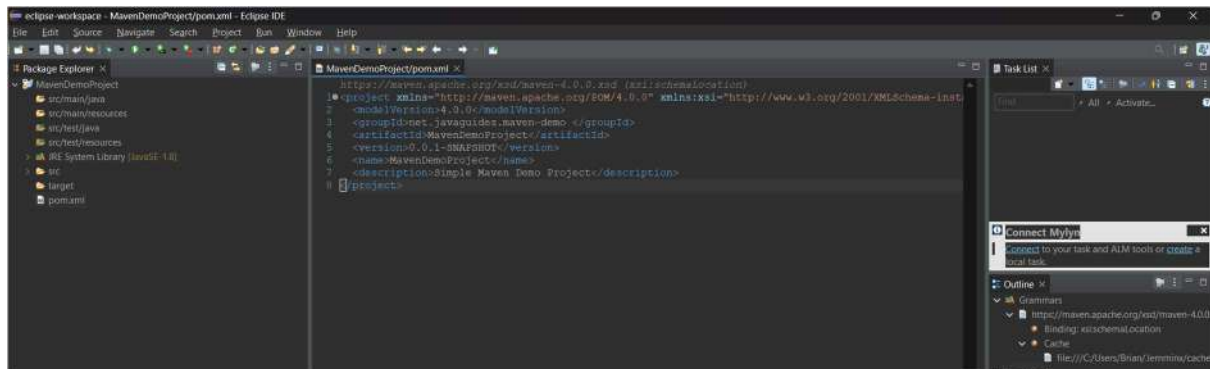


The screenshot shows the 'New Maven Project' dialog box. The 'Artifact' section is expanded, showing the following fields: Group Id (net.javaguides.maven-demo), Artifact Id (MavenDemoProject), Version (0.0.1-SNAPSHOT), Packaging (jar), Name (MavenDemoProject), and Description (Simple Maven Demo Project). The 'Parent Project' section is also expanded, showing Group Id, Artifact Id, and Version fields, along with 'Browse...' and 'Clear' buttons. The 'Advanced' section is collapsed. At the bottom, there are buttons for '< Back', 'Next >', 'Finish', and 'Cancel'.

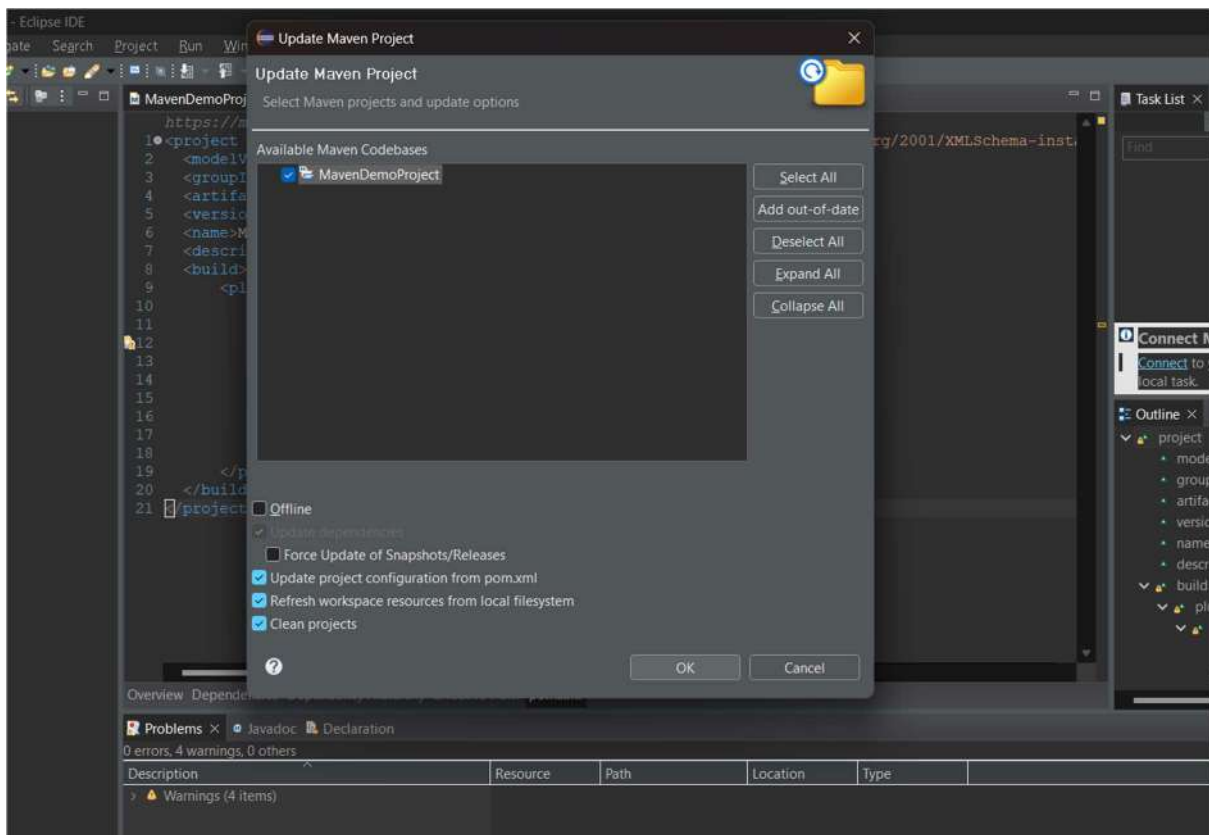
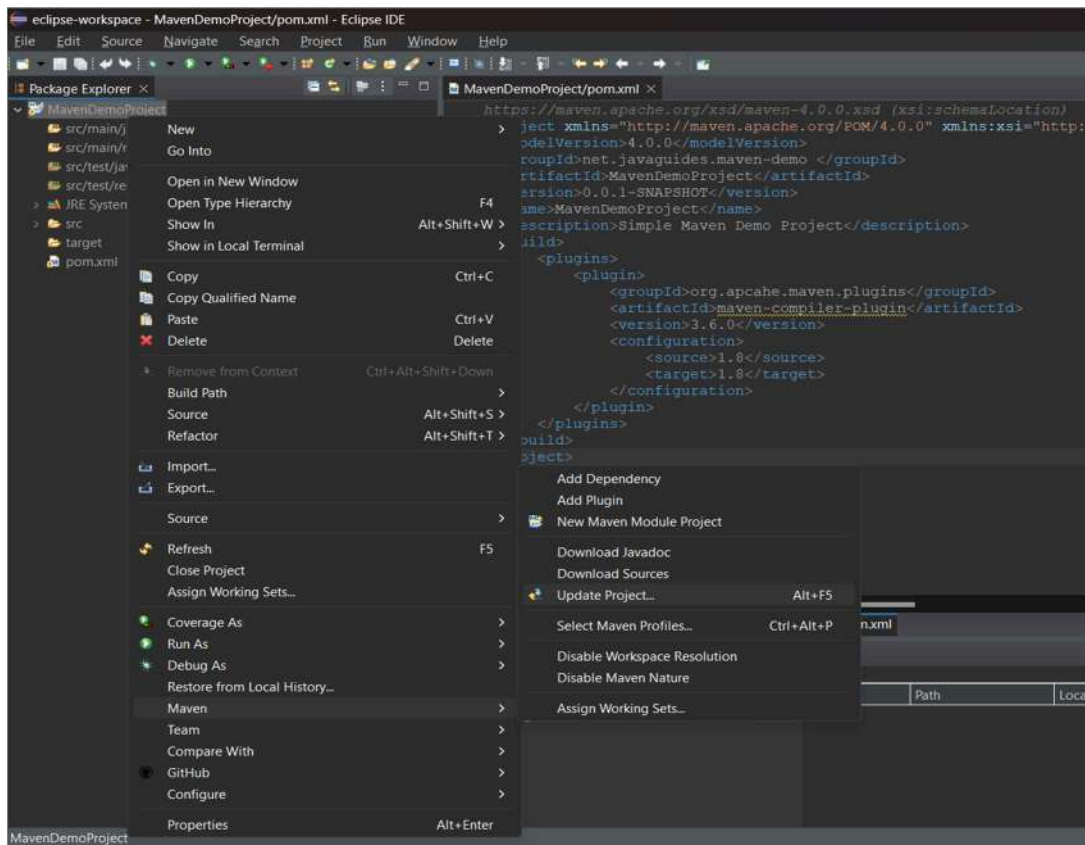
**Step-4** And you are all set. You should see a new Project in Eclipse with below structure.



**Step-5** As you can see in the maven project structure, the default java compiler version ( i.e. source and target setting ) is 1.5. To change the default settings, add the following snippet to pom.xml.

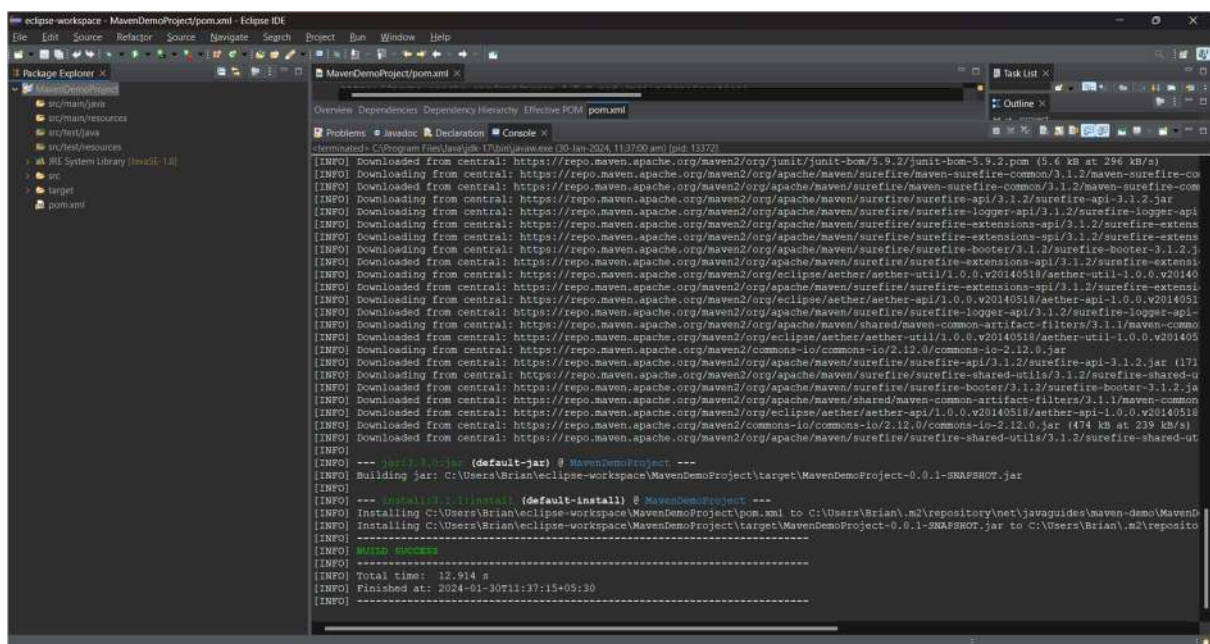
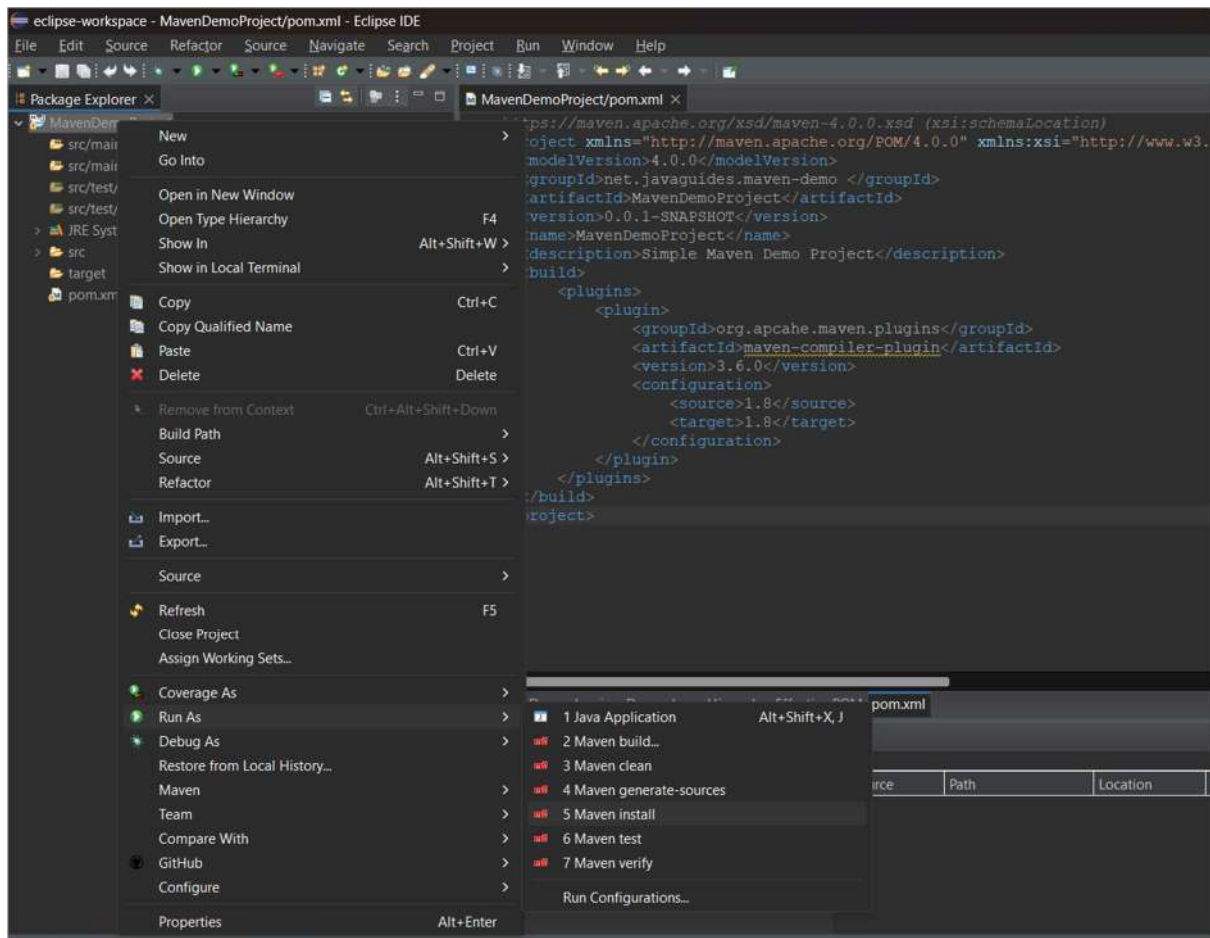


## Step 6 -Update Maven as shown



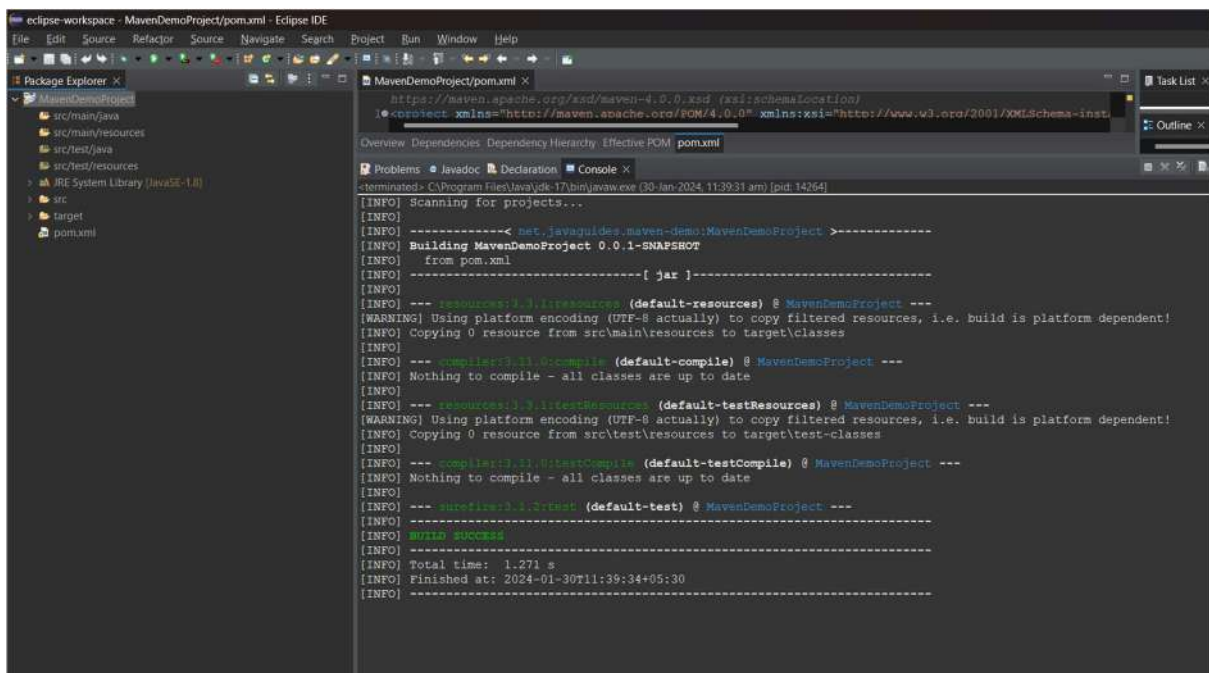
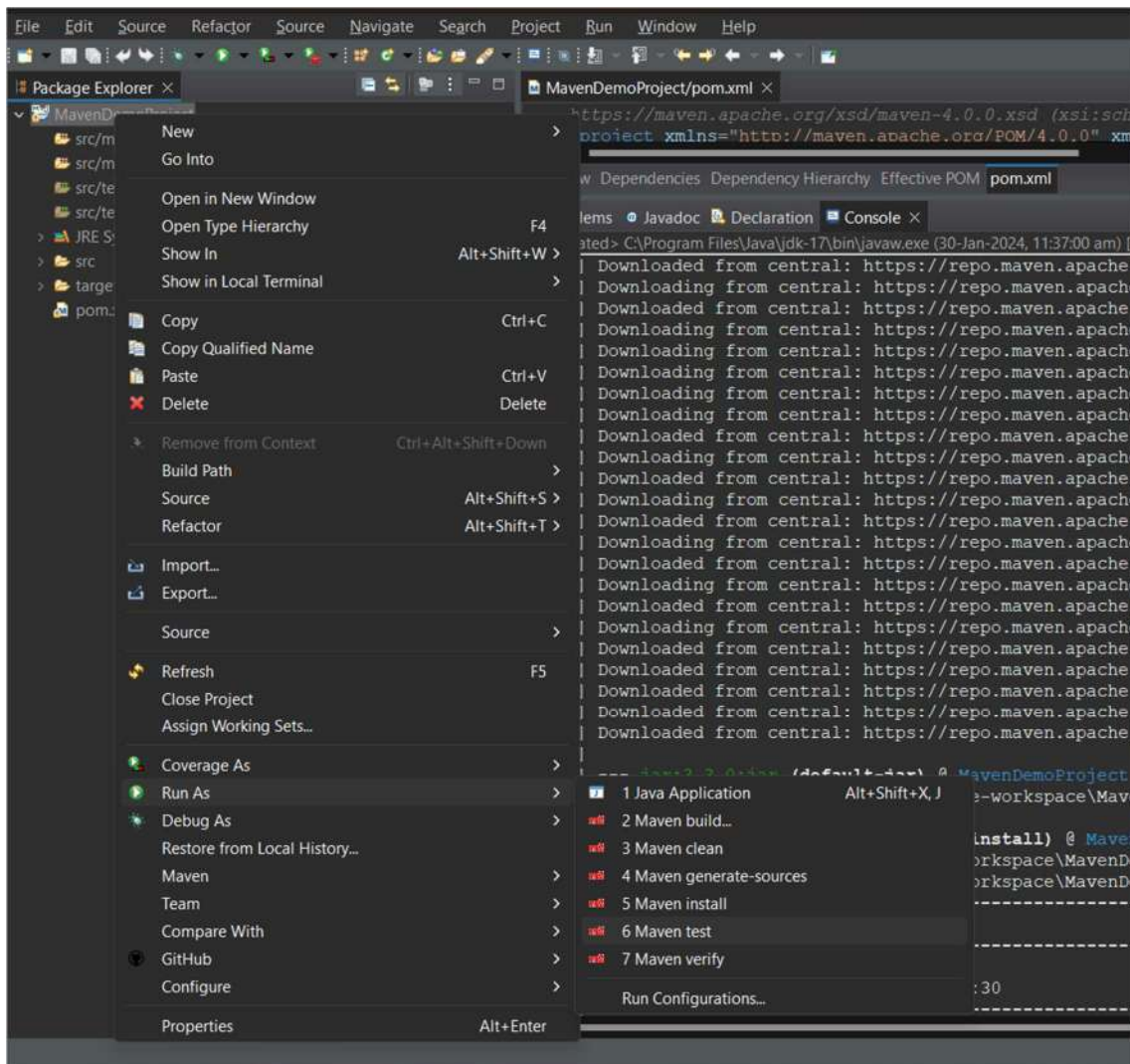
## Step 7 - Maven – Install, Test, Clean

### Maven Install





## Maven Test



The screenshot displays the Eclipse IDE interface with the Maven project structure on the left and the Maven command-line output on the right.

**Left Panel (Package Explorer):**

- Project: MavenDemoProject/pom.xml
- src/main
  - src/main/java
  - src/main/resources
- src/test
  - src/test/java
  - src/test/resources
- target
- pom.xml

**Right Panel (Maven Command-Line Output):**

```

-----< net.javaguides.maven-demo:MavenDemoProject >
Building MavenDemoProject 0.0.1-SNAPSHOT
from pom.xml
-----[ jar ]-----

--- resources:3.3.1:resources (default-resources) @ MavenDemoProject
[NG] Using platform encoding (UTF-8 actually) to copy filtered resources
Copying 0 resource from src/main/resources to target/classes

--- compiler:3.11.0:compile (default-compile) @ MavenDemoProject
Nothing to compile - all classes are up to date

--- resources:3.3.1:testResources (default-testResources) @ MavenDemoProject
[NG] Using platform encoding (UTF-8 actually) to copy filtered resources
Copying 0 resource from src/test/resources to target/test-classes

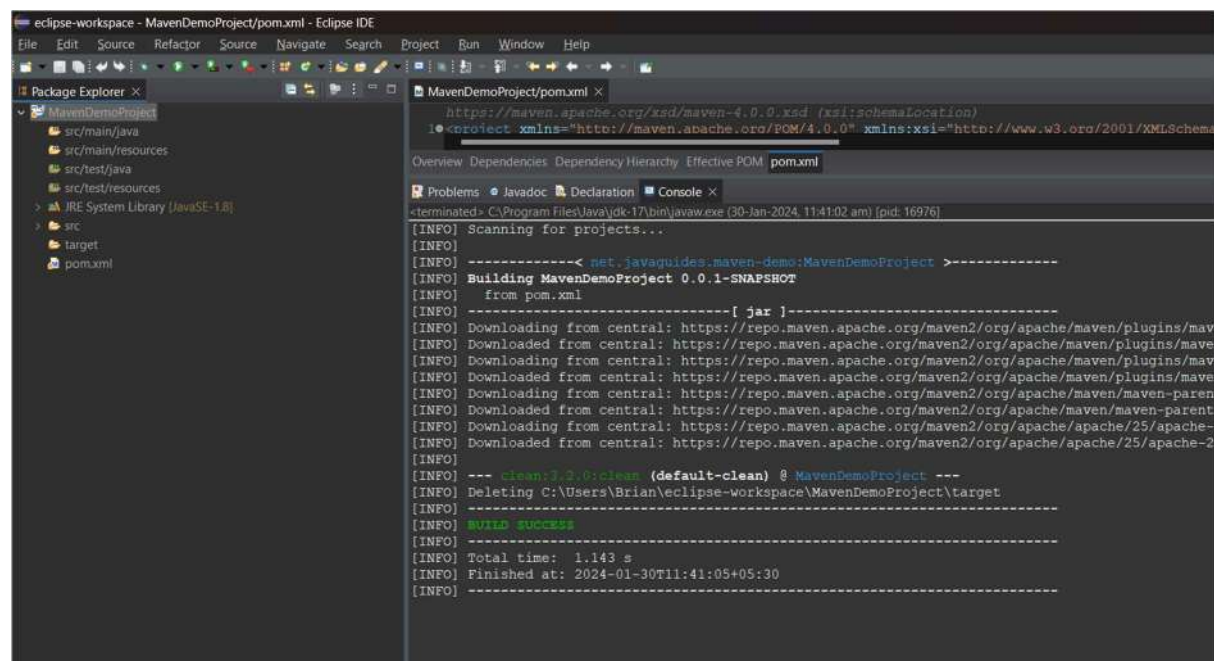
--- compiler:3.11.0:testCompile (default-testCompile) @ MavenDemoProject
Nothing to compile - all classes are up to date

--- surefire:3.1.2:test (default-test) @ MavenDemoProject
BUILD SUCCESS
  
```

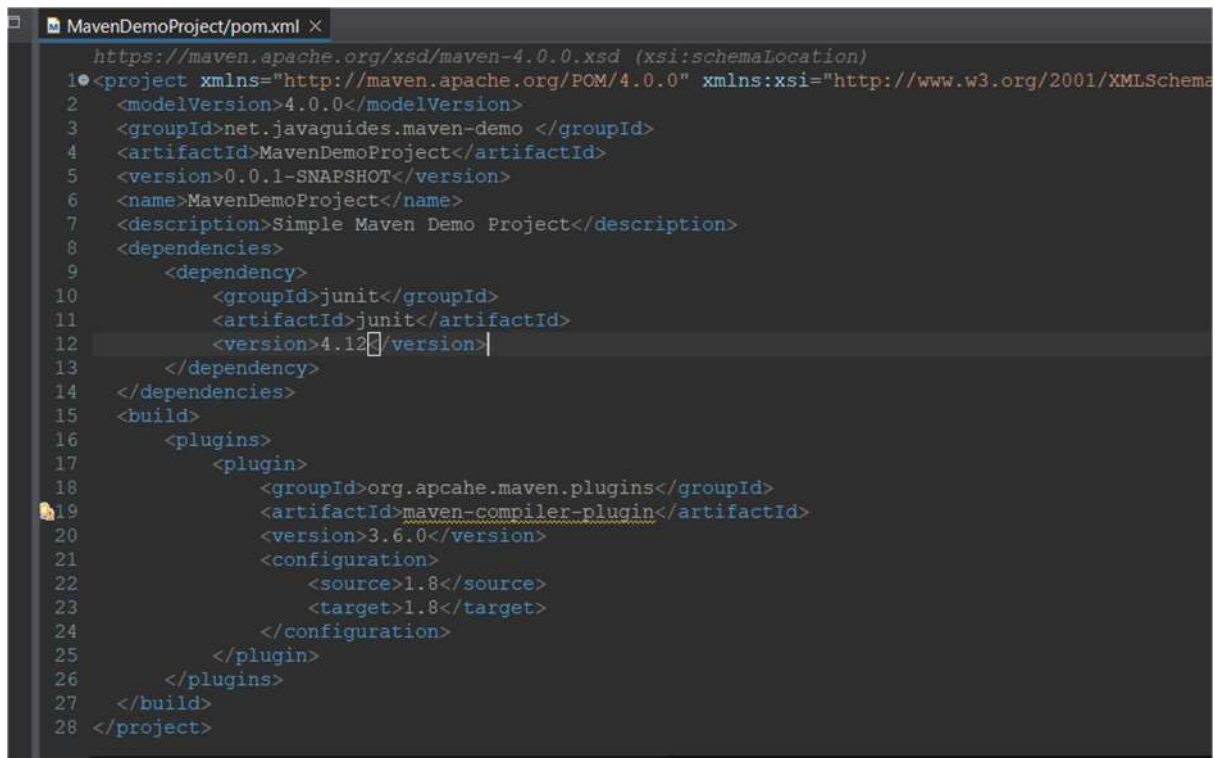
**Bottom Panel (Run Configurations):**

- 1 Java Application
- 2 Maven build...
- 3 Maven clean
- 4 Maven generate-sources
- 5 Maven install
- 6 Maven test
- 7 Maven verify

The Run Configurations dialog is open, showing a list of configurations. The "Maven build..." configuration is selected, and the "Run" button is visible.



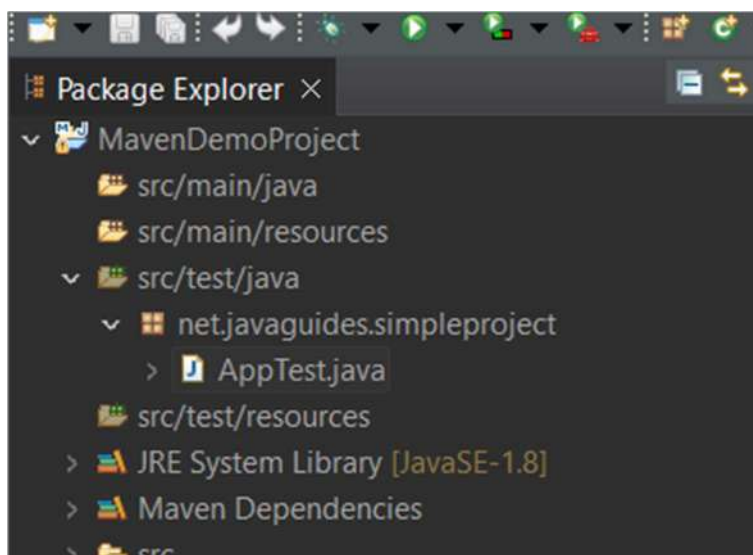
**Step 8-** Add some dependencies to pom.xml file. Here we are adding junit dependency to pom.xml.



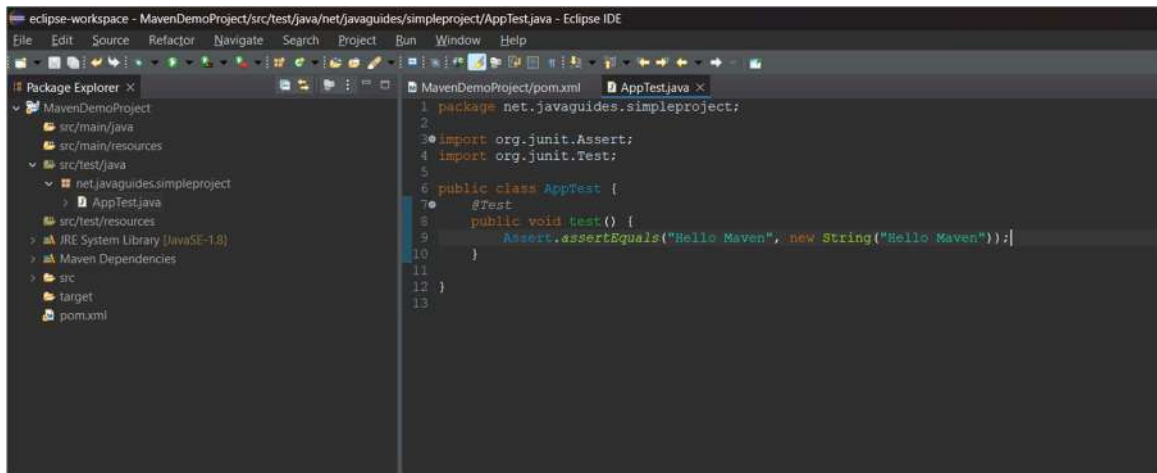
```
https://maven.apache.org/xsd/maven-4.0.0.xsd (xsi:schemaLocation)
10 <project xmlns="http://maven.apache.org/POM/4.0.0" xmlns:xsi="http://www.w3.org/2001/XMLSchema
2   <modelVersion>4.0.0</modelVersion>
3   <groupId>net.javaguides.maven-demo</groupId>
4   <artifactId>MavenDemoProject</artifactId>
5   <version>0.0.1-SNAPSHOT</version>
6   <name>MavenDemoProject</name>
7   <description>Simple Maven Demo Project</description>
8   <dependencies>
9     <dependency>
10      <groupId>junit</groupId>
11      <artifactId>junit</artifactId>
12      <version>4.12</version>
13    </dependency>
14  </dependencies>
15  <build>
16    <plugins>
17      <plugin>
18        <groupId>org.apache.maven.plugins</groupId>
19        <artifactId>maven-compiler-plugin</artifactId>
20        <version>3.6.0</version>
21        <configuration>
22          <source>1.8</source>
23          <target>1.8</target>
24        </configuration>
25      </plugin>
26    </plugins>
27  </build>
28 </project>
```

**Step-9-**

Create a package, named as net.javaguides.simpleproject, under src/test/java folder. Next create a class AppTest.java under src/test/java package and write the following code in it.

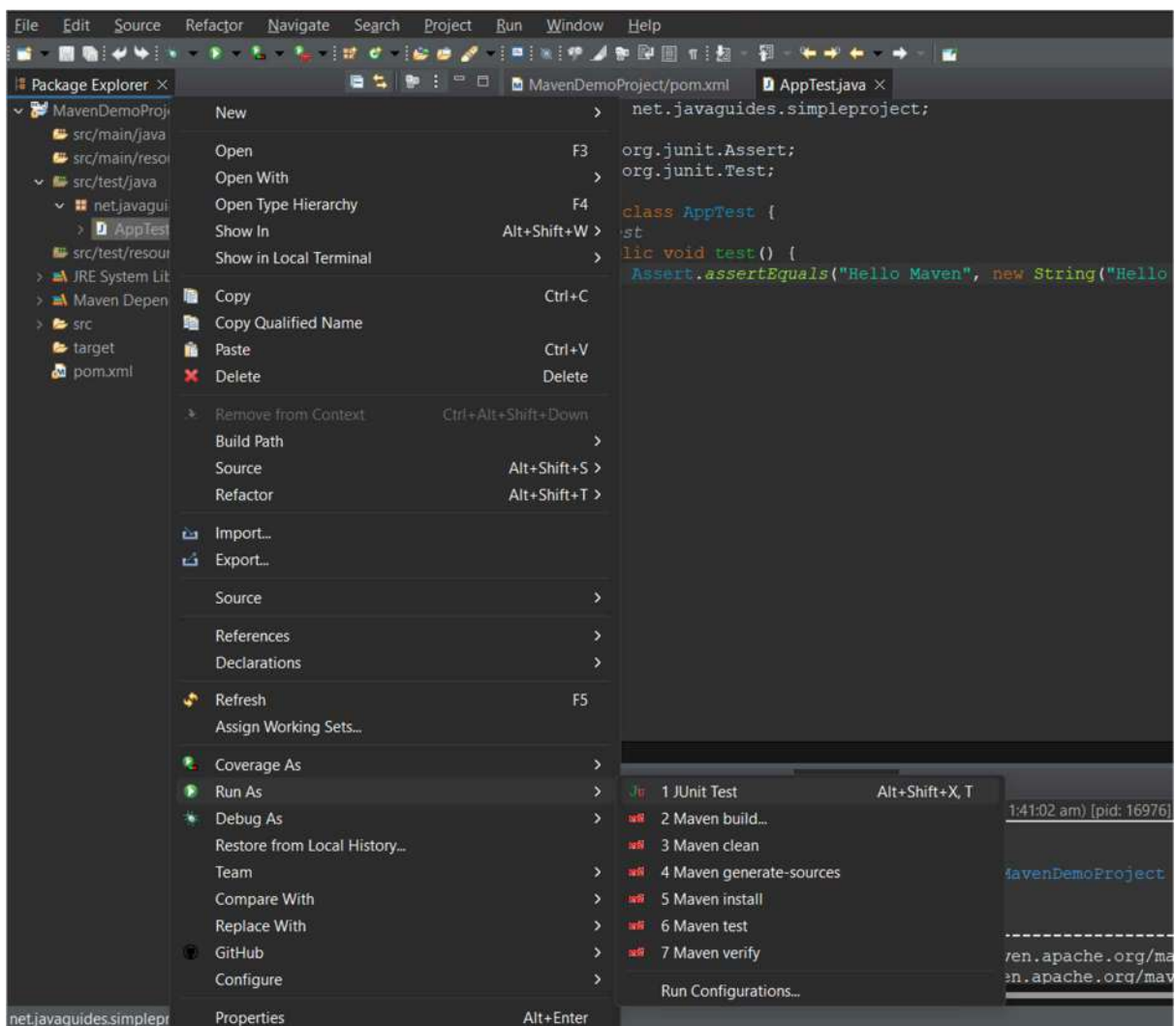


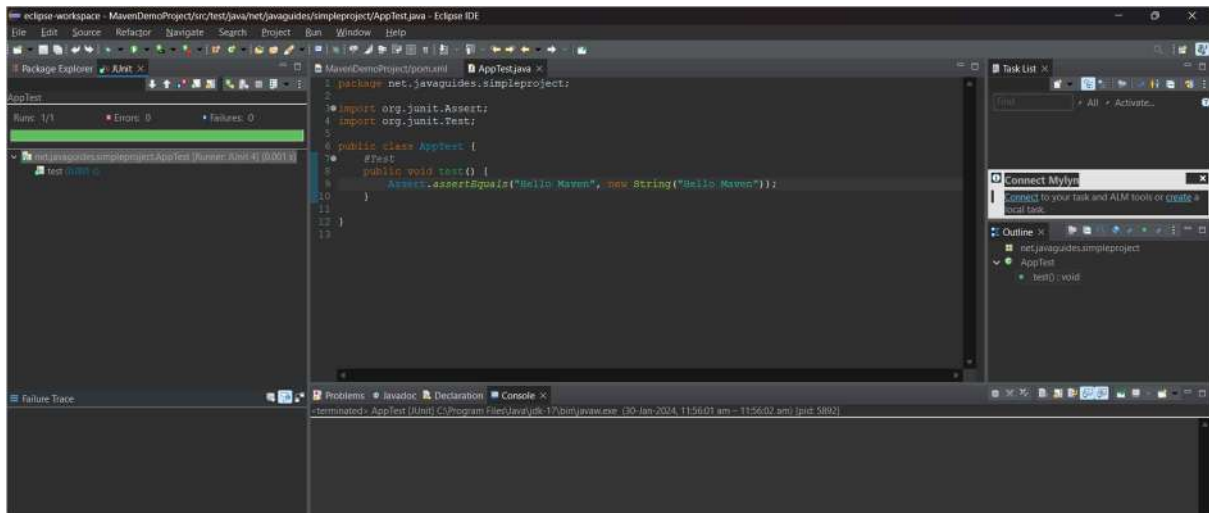




## Step10-

Run your first maven project. Right click on AppTest.java → Run as → JUnit Test.



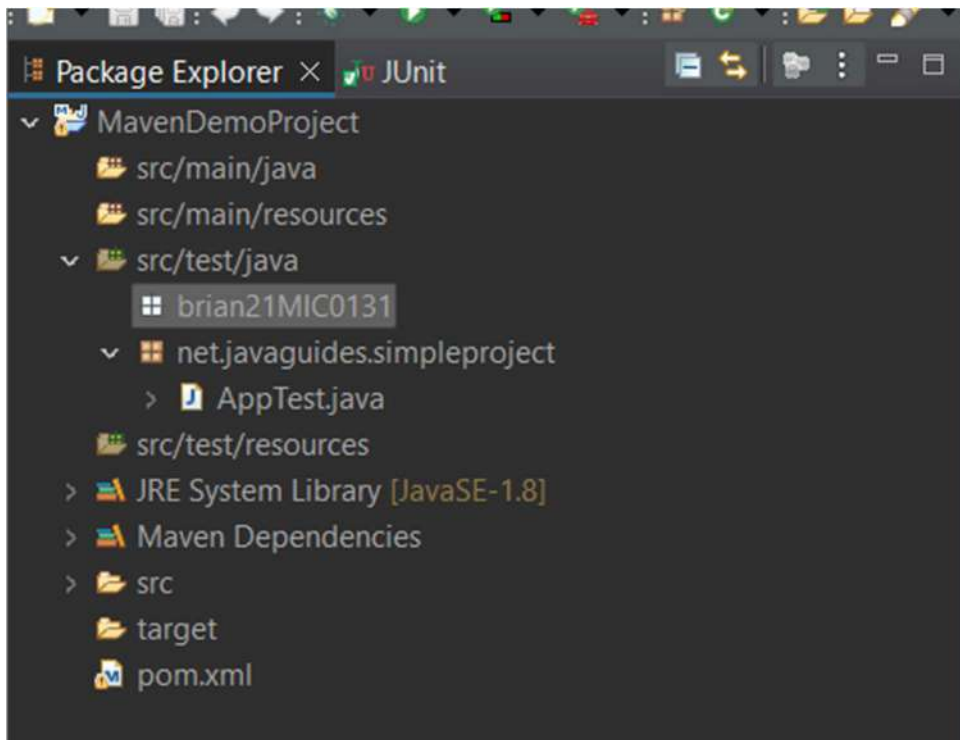


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**PART 2 - Create Maven Project for Application using Java :**

**Step-1 to Step-4** same as above.

**Step 5:** Create a new package under src/test/java



### Step 6 –

Create a class – PrimeChecker

**New Java Class**

Java Class  
Create a new Java class.

Source folder: MavenDemoProject/src/test/java Browse...

Package: brian21MIC0131 Browse...

☐ Enclosing type: Browse...

Name: PrimeChecker

Modifiers: ☒ public ☐ package ☐ private ☐ protected  
☐ abstract ☐ final ☐ static

Superclass: java.lang.Object Browse...

Interfaces: Add...  
Remove

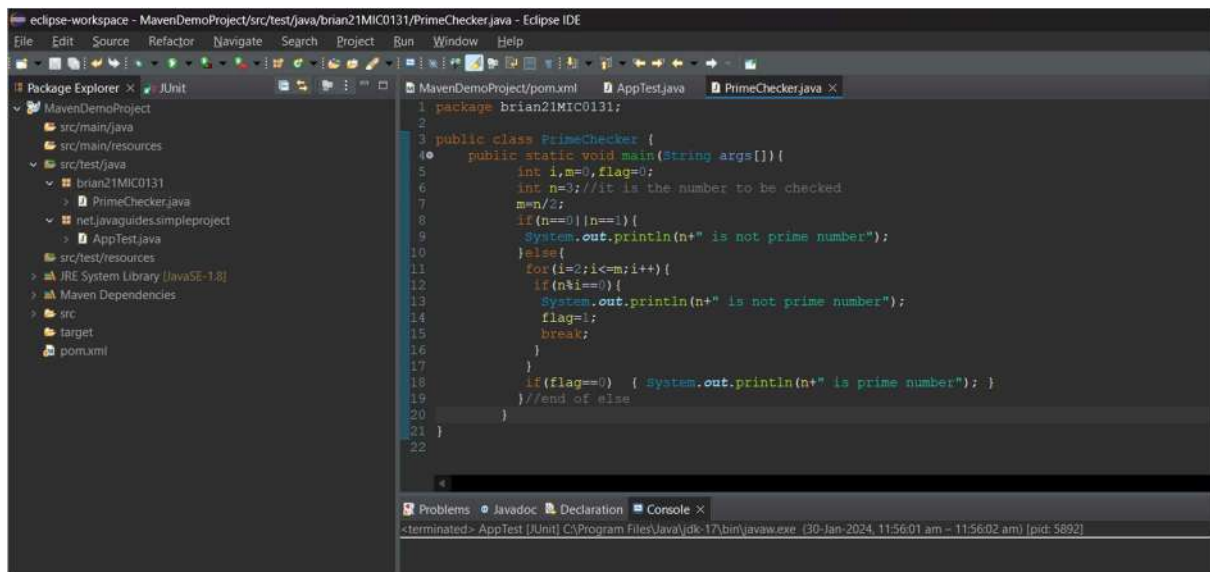
Which method stubs would you like to create?

☐ public static void main(String[] args)  
☐ Constructors from superclass  
☒ Inherited abstract methods

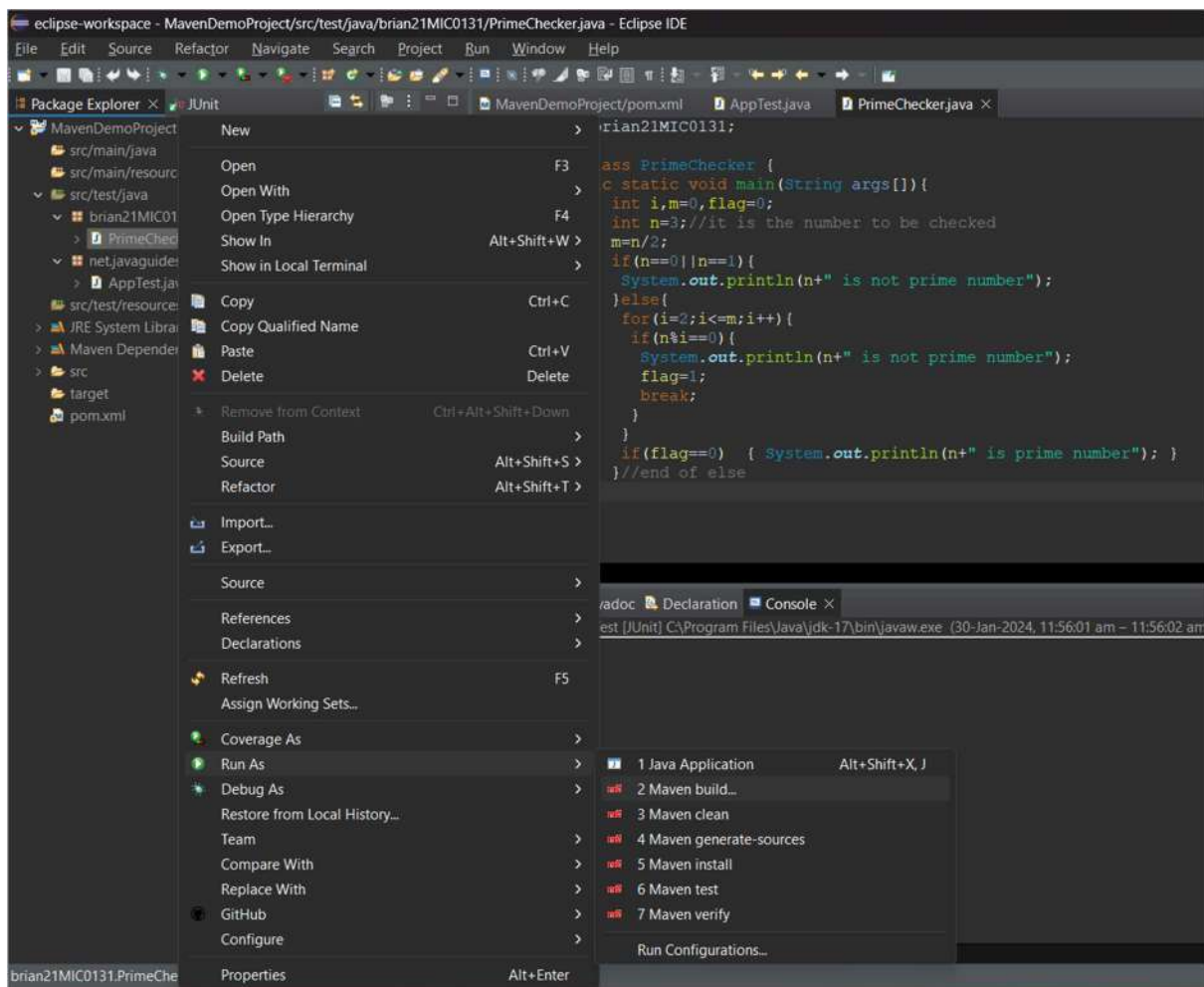
Do you want to add comments? (Configure templates and default value [here](#))  
☐ Generate comments

? Finish Cancel

PrimeChecker.java file-

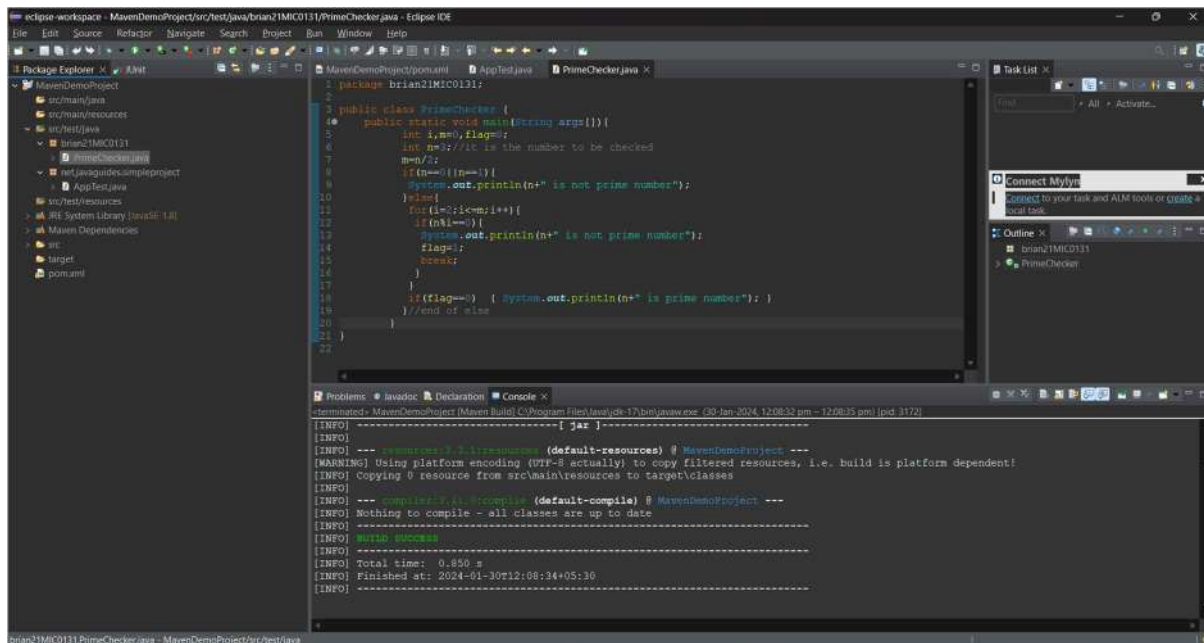
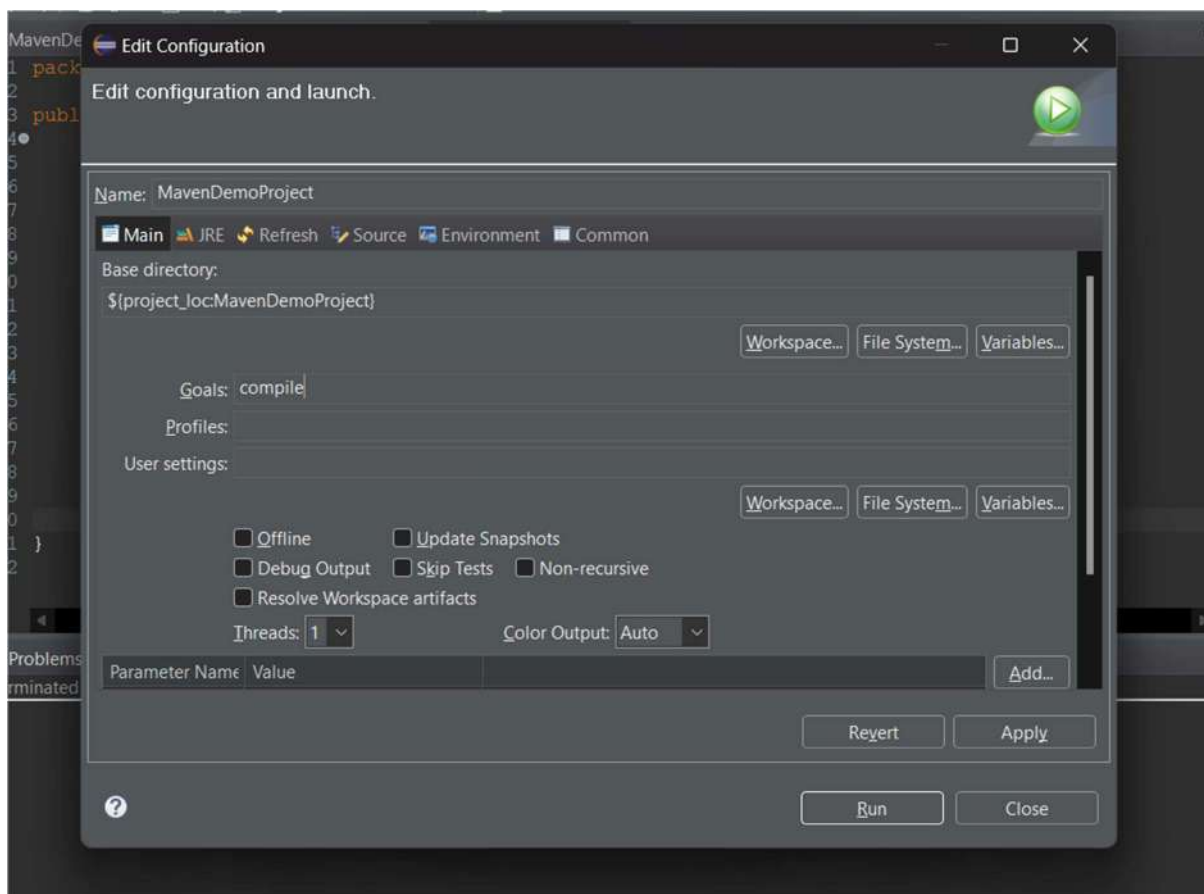


Run as maven build –

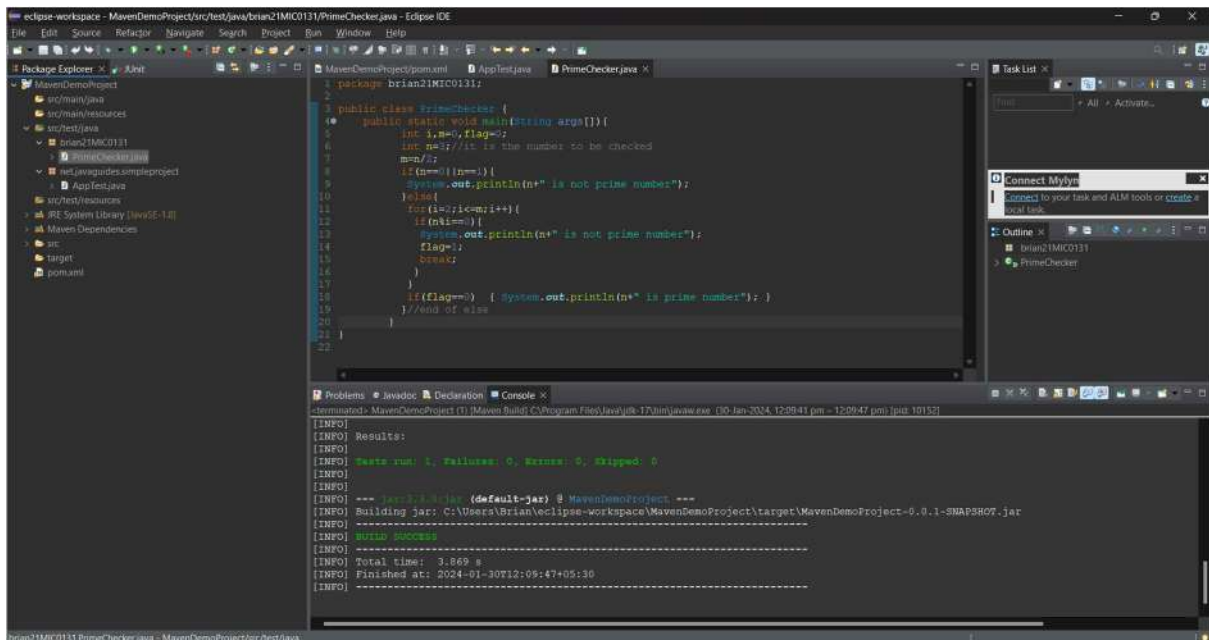
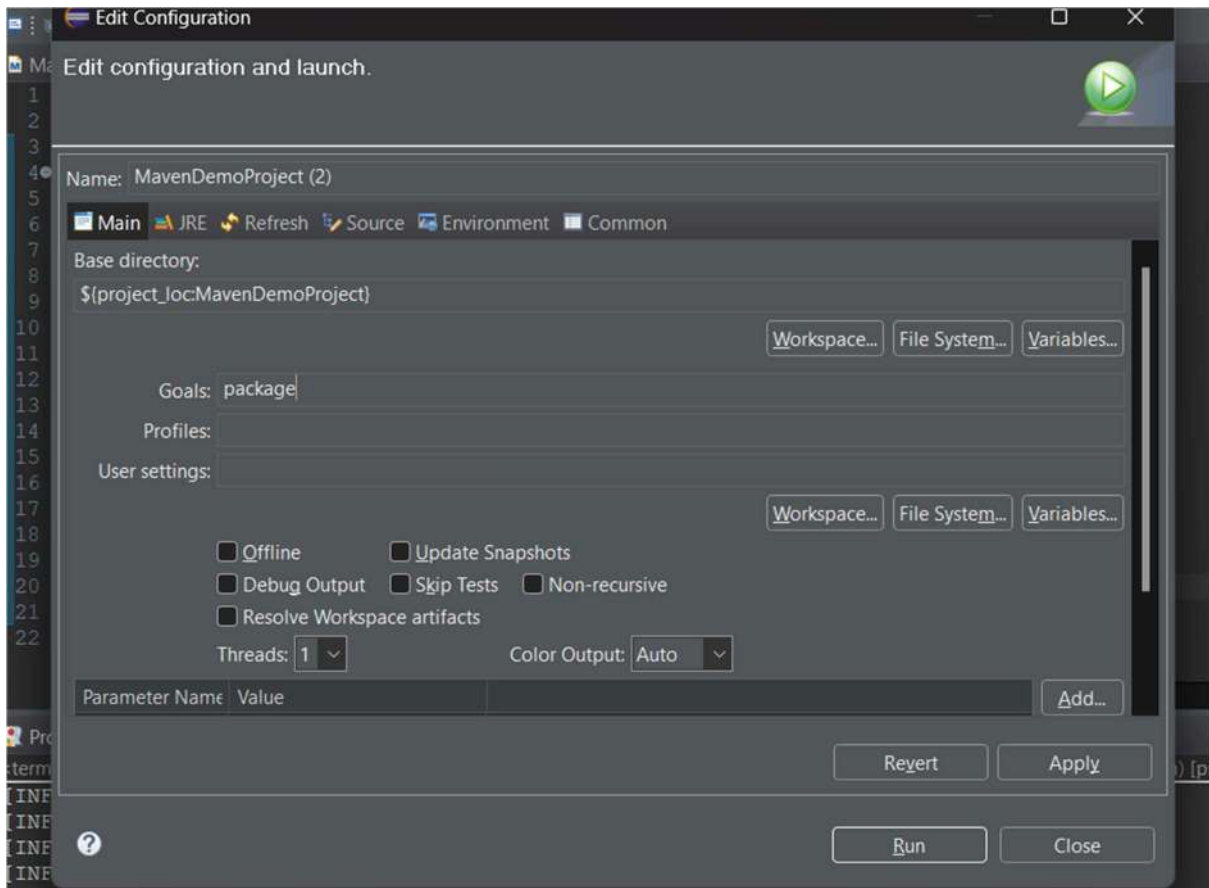




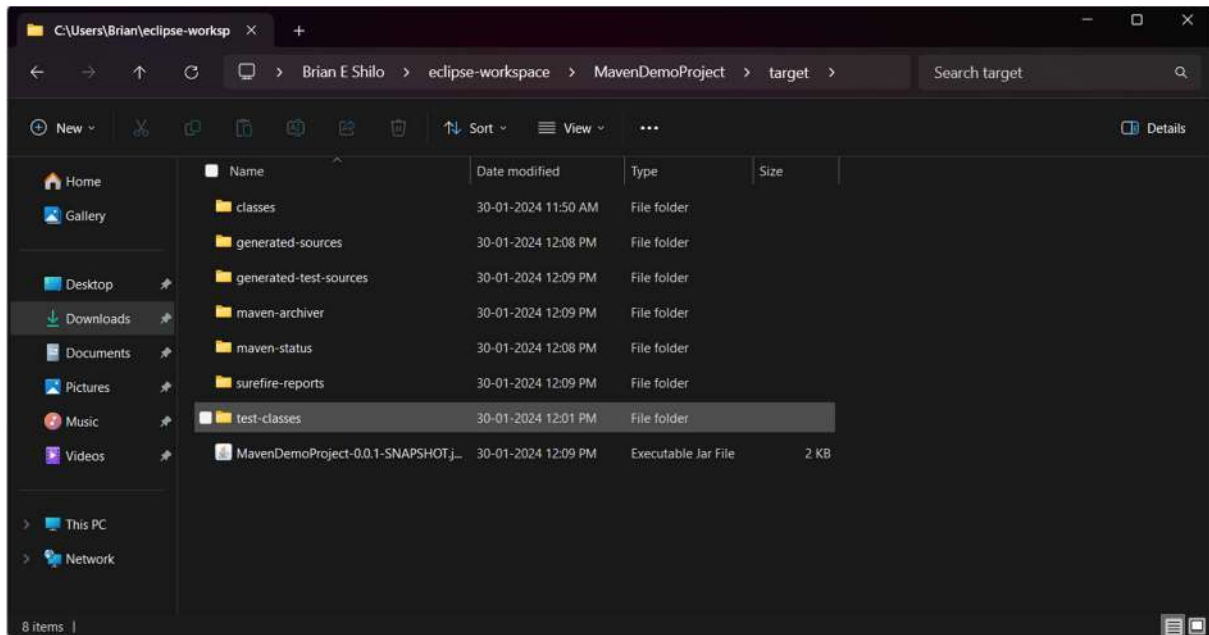
## Run as Maven build – goals - compile



Run as Maven build – goals – package



We get path directory : C:\Users\Brian\eclipse-workspace\MavenDemoProject\target\



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