Module 2 Exercise Guide

Lab 1: Build a Maven Project

Advanced Java Programming

Prerequisites / Getting Started

To perform the following exercises, you must have the prerequisites listed below:
- You should have completed all the Lesson Items that come before the lab exercise, following the sequence.

You will use the following tools in these lab exercises:
- Java 8
- Eclipse IDE
- Maven
- Postman
- IntelliJ

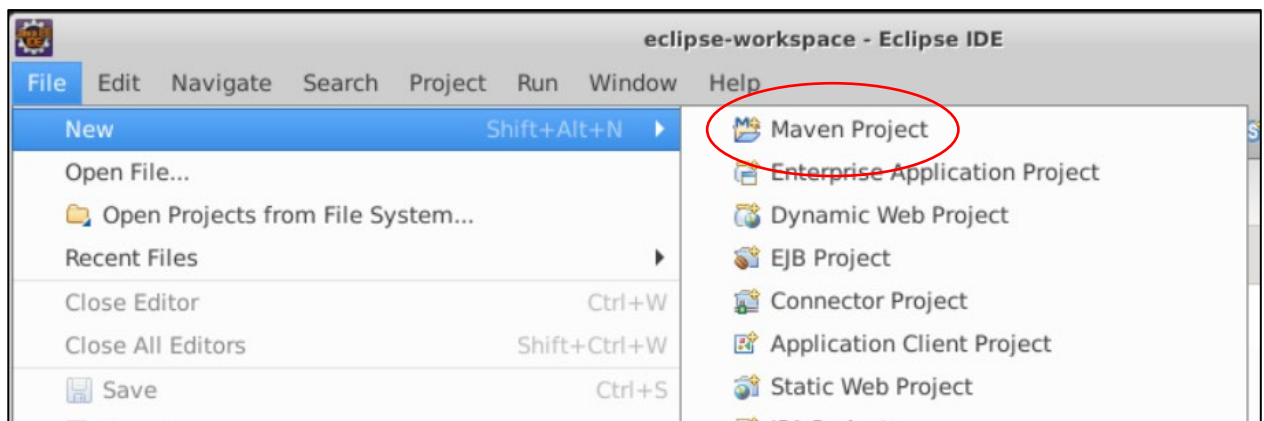# Exercise 1: Build a Maven Project

In this exercise, you will create a Maven application named "MyFirstMavenApp" and experiment with the following Maven commands:
- Execute the "compile" command.
- Run the "test" command.
- Utilize the "package" command.
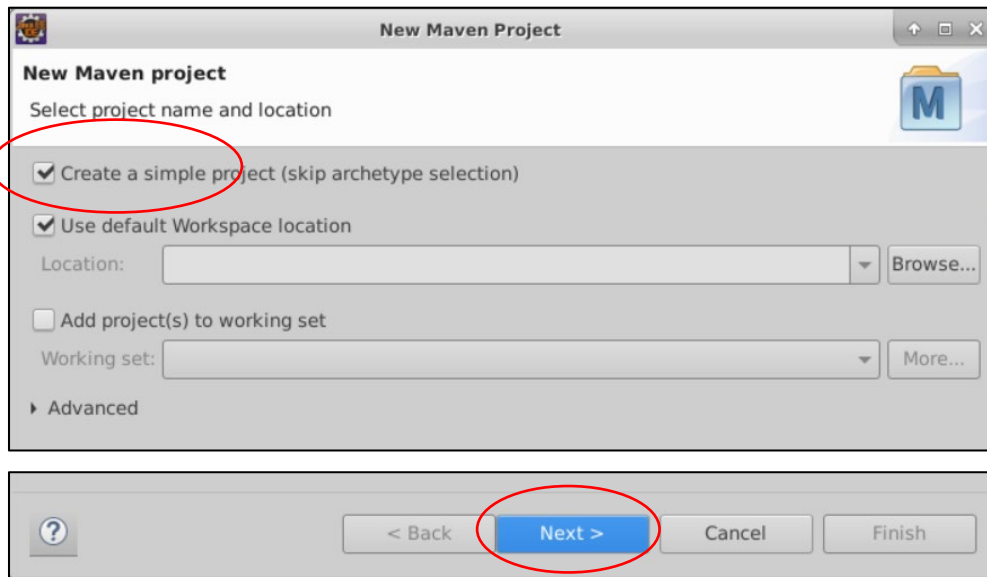- Use the "clean" command.

1. Open your lab.

2. On the desktop, double-click **Eclipse** to open it.

3. Click **Launch** to select the default workspace.

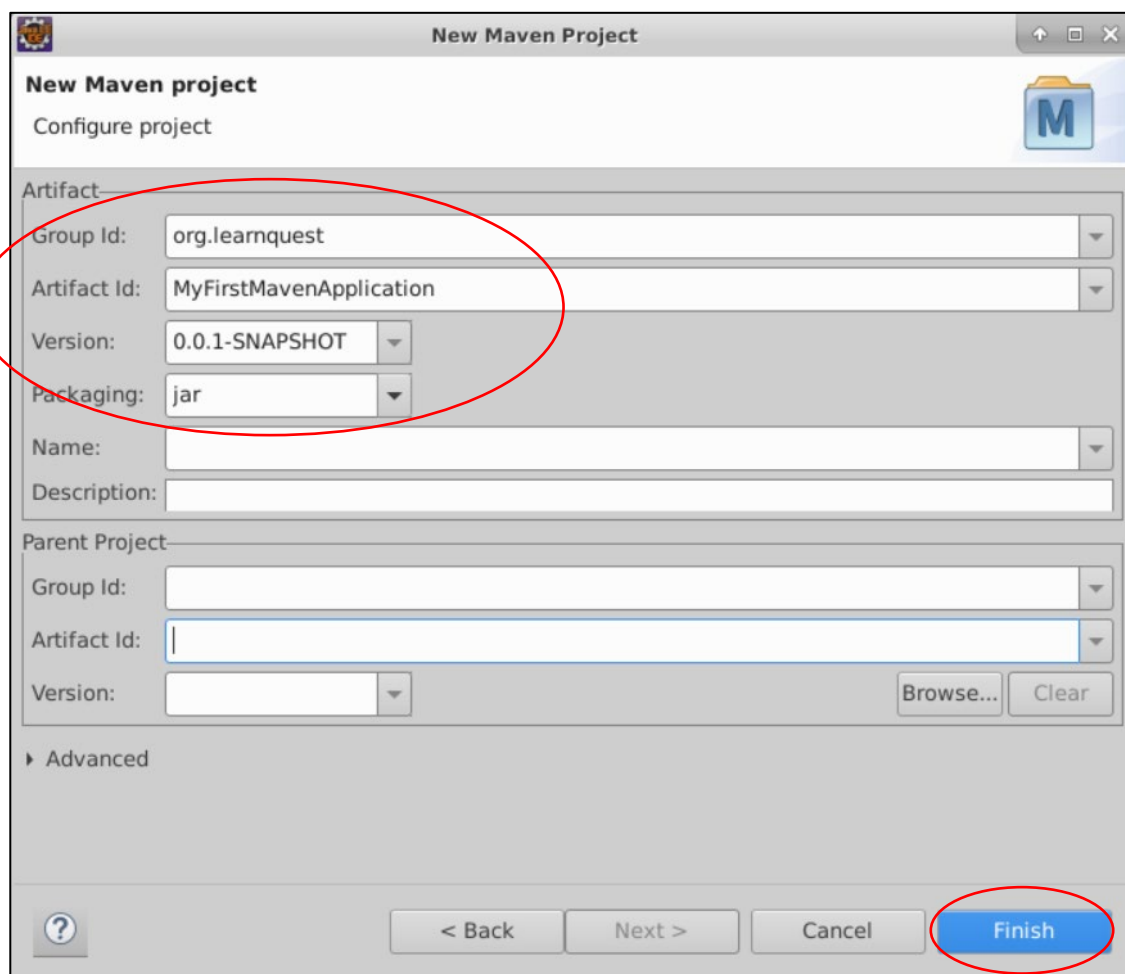4. Select **File > New > Maven Project**.

5. In the New Maven Project Window, select the box for "Create a simple project (skip archetype selection)". Click **Next**.
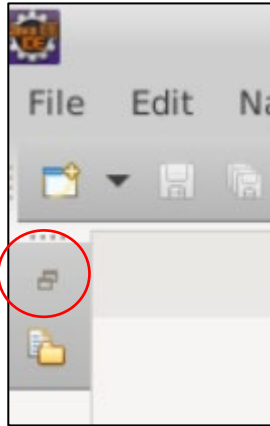

6. Fill in the **Group Id** information, **Artifact Id** information, **Version** and **Packing** as shown in the image below, then click **Finish**.
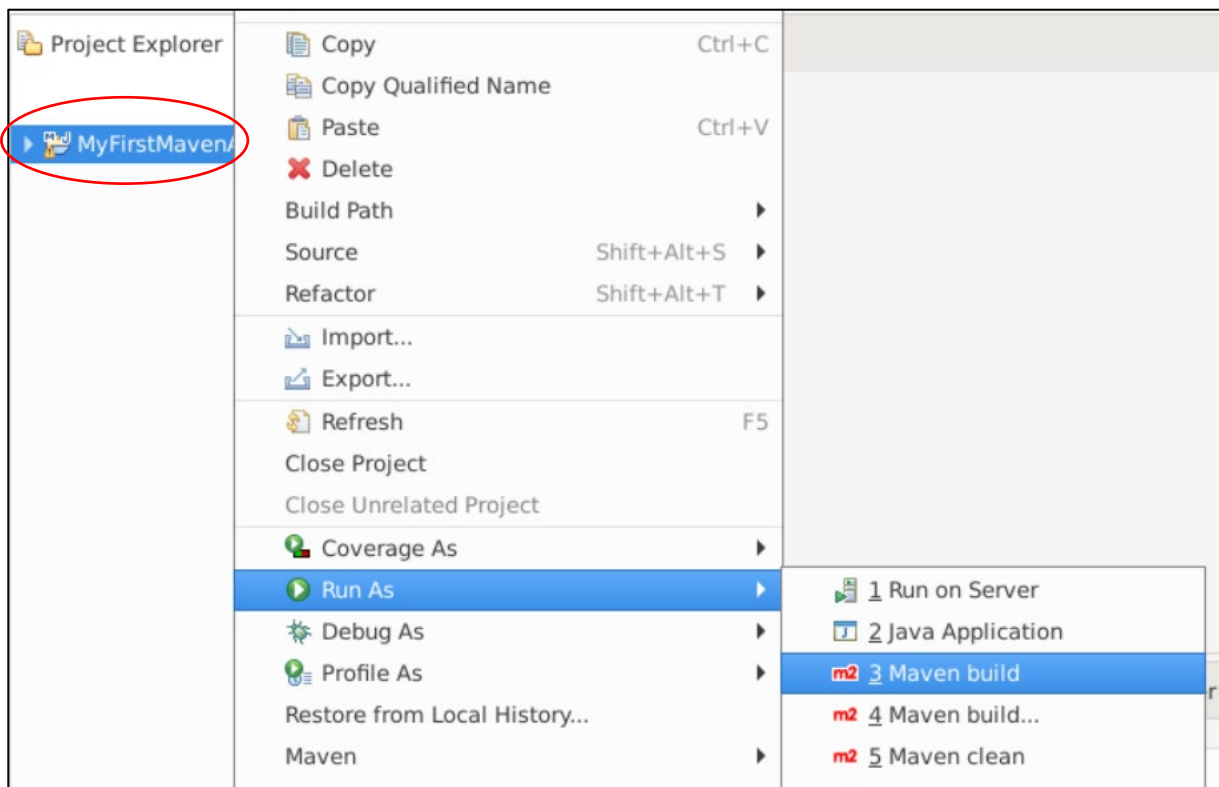
7. At the left of your screen, click the **restore** icon to open the Project Explorer pane.
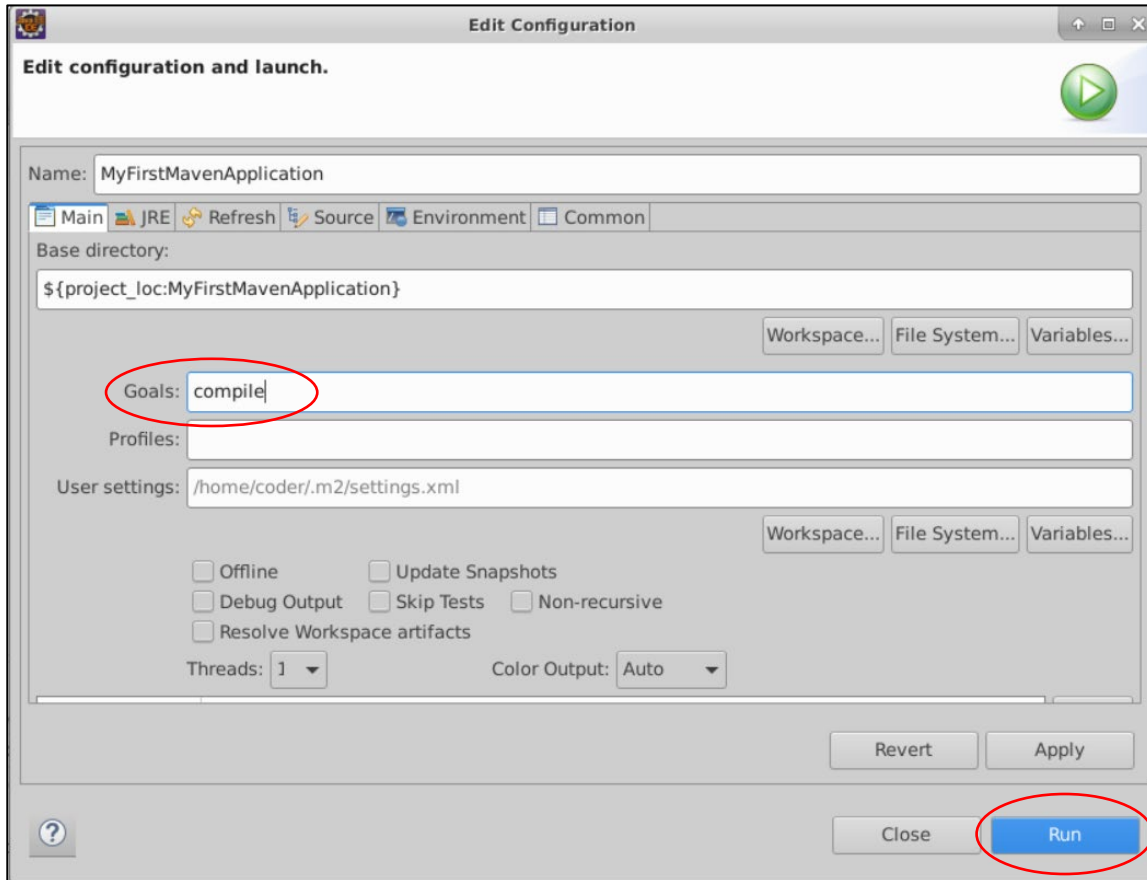

8. Right-click on the project and select **Run as > Maven Build**.
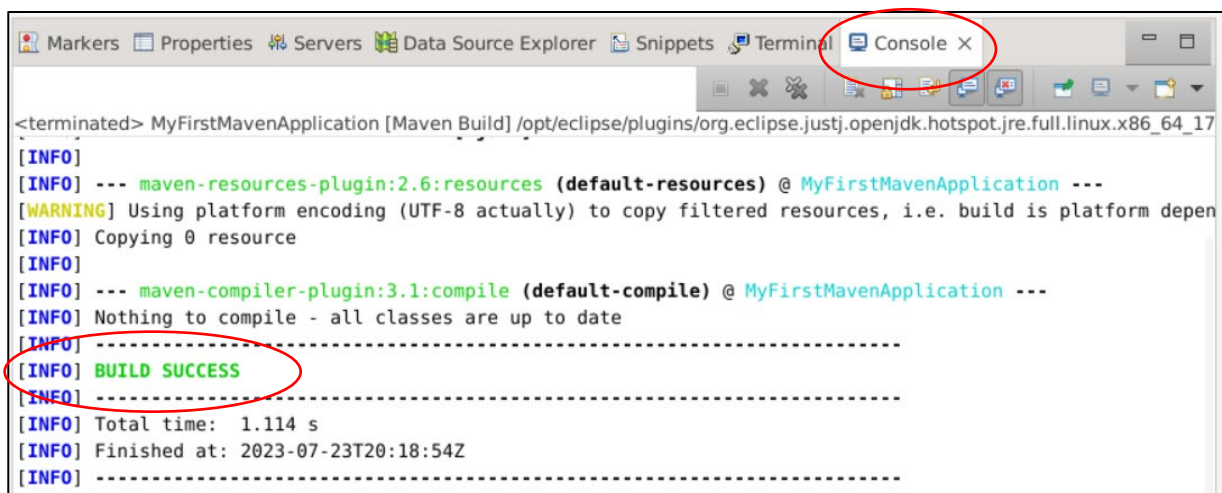

9. This opens the **Edit Configuration and Launch** window.
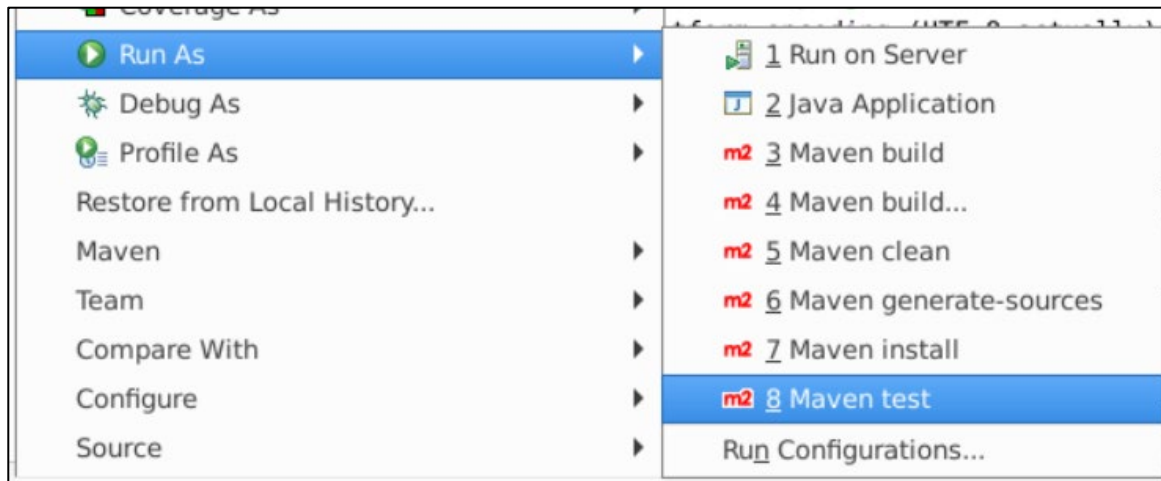
10. In the **Goals** text box, type **"Compile"** and select **Run** to compile the project.
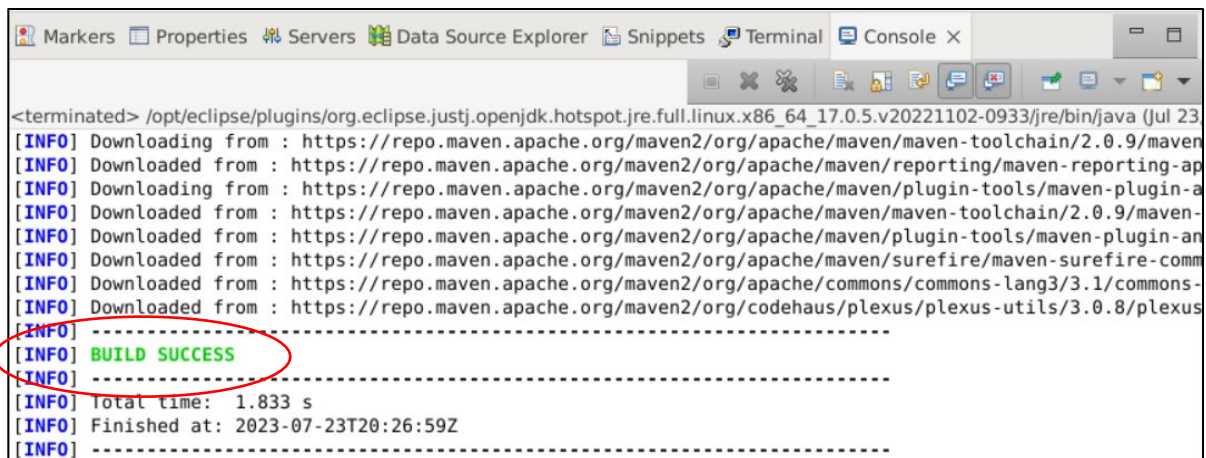

11. At the bottom of the center pane, ensure the **Console** tab is selected. Scroll down in the run info and ensure your build was a success.
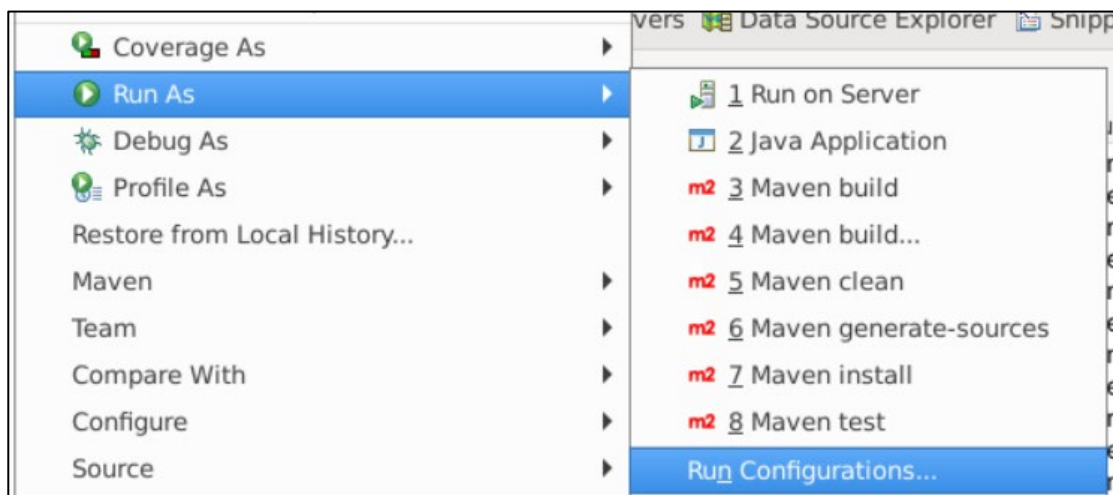
12. Now let's test the project. In the left side Project Explorer, right-click your project, select **Run As > Maven test**.
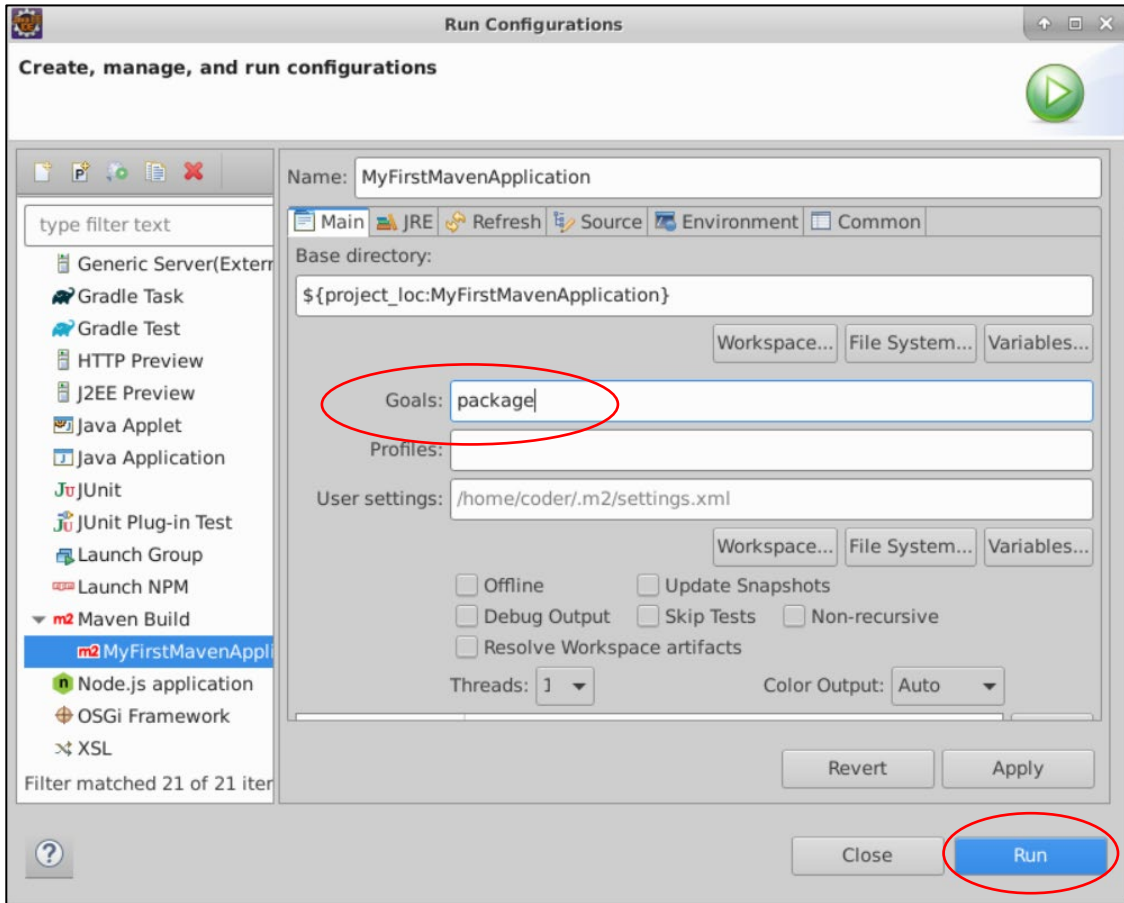

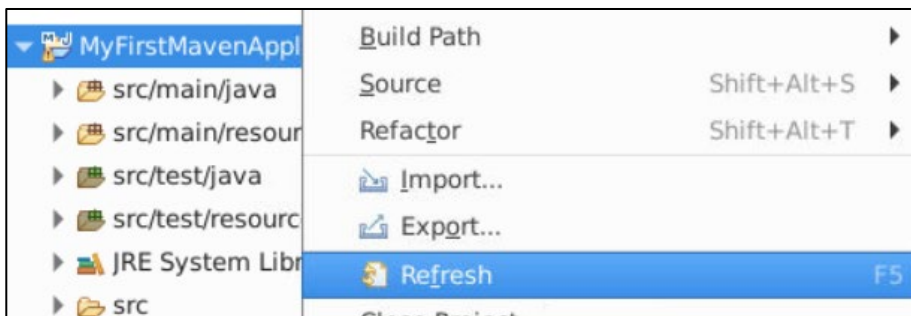13. In the Console tab at the bottom of the page, ensure the test was successful.

14. Next, create the package. Right-click on your project in the left Project Explorer pane, and select **Run As > Run Configurations**.

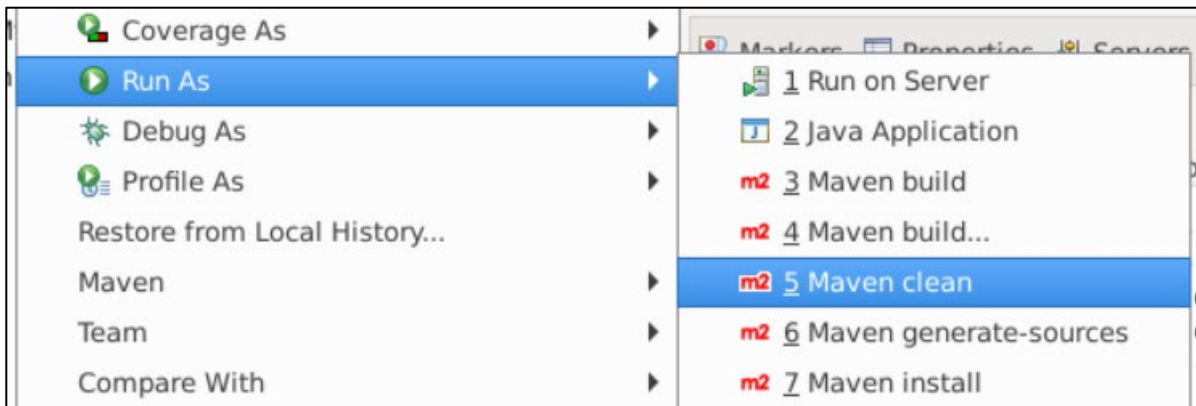15. In the **Goals** text box, type "**package**" and click **Run**.

16. Once it is successful, right-click your project in the Project Explorer pane at the left, and click **Refresh**.
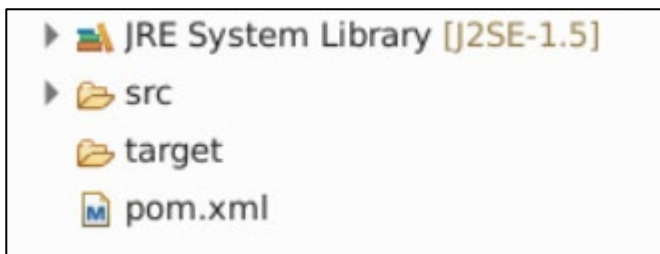

17. Expand your project, and expand the **target** folder to see the JAR file created from the package command.
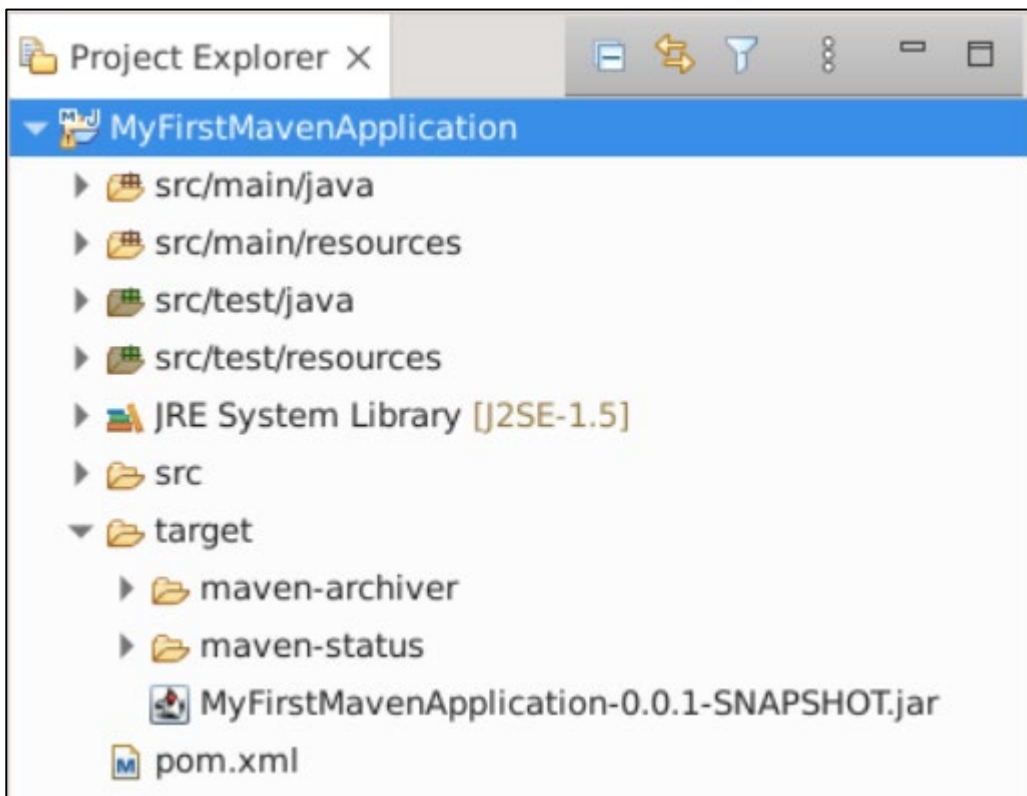
18. Now we will run the clean command. Right-click on your project in the left Project Explorer pane, and select **Run As > Maven clean**.

19. After it's successful, right-click your project, and **Refresh** it. Expand the **target** folder. You will see that the folders and JAR file created during the package command have been removed.

20. Repeat steps 14 through 17 above to recreate the package.

End of exercise