Build and Release Management
LAB
File

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LAB-1

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LAB 1:

Aim: Basics maven project, goals like: clean, build, and install. Using a jar file in another java project with making reference with that jar package.

Cmd line command:

mvn archetype:generate -D groupId=com.skaas.sample -D artifactId=my-app -D archetypeArtifactId=maven-archetype-quickstart -D interactiveMode=false

Procedure:

1. Create a basic maven project and added a class to it
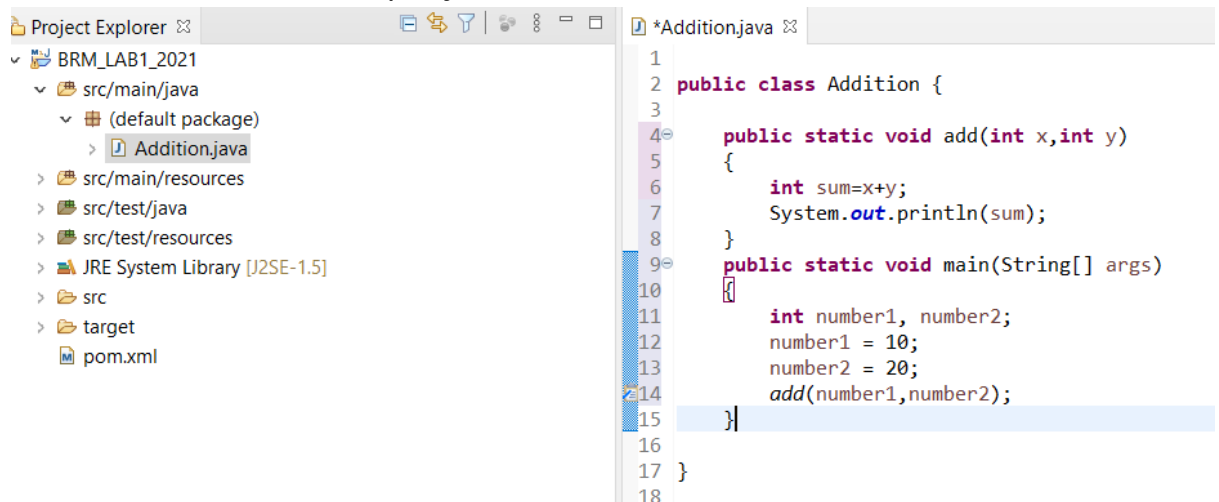
2. Now ran a maven goal: clean

```java
1
2  public class Addition {
3
4      public static void add(int x,int y)
5      {
6          int sum=x+y;
7          System.out.println(sum);
8      }
9      public static void main(String[] args)
10     {
11         int number1, number2;
12         number1 = 10;
13         number2 = 20;
14         add(number1,number2);
15     }
16 }
```

Markers Properties Servers Data Source Explorer Snippets Console ⌧

<terminated> BRM_LAB1_2021 (1) [Maven Build] C:\Program Files\Java\jdk-11.0.9\bin\javaw.exe (21-Jan-2021, 10:00:55 AM – 10:00:59

```
SLF4J: Actual binding is of type [org.slf4j.impl.SimpleLoggerFactory]
SLF4J: Class path contains multiple SLF4J bindings.
SLF4J: Found binding in [jar:file:/C:/Users/Soma%20Sekhar/.p2/pool/plugins/org.eclipse.m2e.maven.ru
SLF4J: Found binding in [file:/D:/ecllipse/eclipse/configuration/org.eclipse.osgi/5/0/.cp/org/slf4j
SLF4J: See http://www.slf4j.org/codes.html#multiple_bindings for an explanation.
SLF4J: Actual binding is of type [org.slf4j.impl.SimpleLoggerFactory]
[INFO] Scanning for projects...
[INFO]
[INFO] -------------------< com.upes.dp.brm:BRM_LAB1_2021 >--------------------
[INFO] Building Lab_1 0.0.1-SNAPSHOT
[INFO] -------------------------------[ jar ]----------------------------------
[INFO] Downloading from : https://repo.maven.apache.org/maven2/org/apache/maven/plugins/maven-clean
[INFO] Downloaded from : https://repo.maven.apache.org/maven2/org/apache/maven/plugins/maven-clean-
[INFO]
[INFO] --- maven-clean-plugin:2.5:clean (default-clean) @ BRM_LAB1_2021 ---
[INFO] Deleting D:\ecllipse\eclipse_workspace\BRM_LAB1_2021\target
[INFO] ------------------------------------------------------------------------
[INFO] BUILD SUCCESS
[INFO] ------------------------------------------------------------------------
[INFO] Total time:  2.094 s
[INFO] Finished at: 2021-01-21T10:00:59+05:30
[INFO] ------------------------------------------------------------------------
```

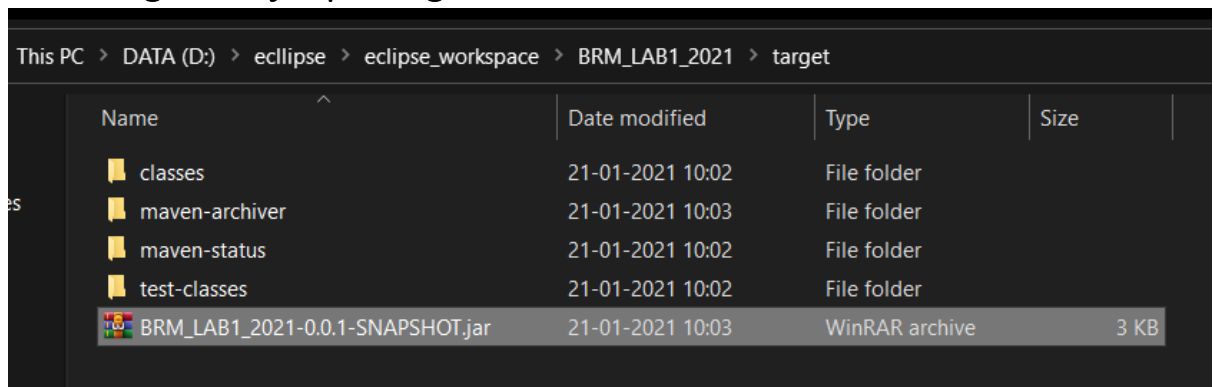## 3. Now to generate the jar package, run the maven goal: install

Markers Properties Servers Data Source Explorer Snippets Console ⌧

<terminated> BRM_LAB1_2021 (3) [Maven Build] C:\Program Files\Java\jdk-11.0.9\bin\javaw.exe (21-Jan-2021, 10:03:01 AM – 10:03:19 AM)

```
[INFO] Downloading from : https://repo.maven.apache.org/maven2/org/codehaus/plexus/plexus/3.1/plexus-3.1.pom
[INFO] Downloaded from : https://repo.maven.apache.org/maven2/org/codehaus/plexus/plexus/3.1/plexus-3.1.pom (19 kB at 52 kB/s)
[INFO] Downloading from : https://repo.maven.apache.org/maven2/org/codehaus/plexus/plexus-digest/1.0/plexus-digest-1.0.pom
[INFO] Downloaded from : https://repo.maven.apache.org/maven2/org/codehaus/plexus/plexus-digest/1.0/plexus-digest-1.0.pom (1.1 kB at 3
[INFO] Downloading from : https://repo.maven.apache.org/maven2/org/codehaus/plexus/plexus-components/1.1.7/plexus-components-1.1.7.pom
[INFO] Downloaded from : https://repo.maven.apache.org/maven2/org/codehaus/plexus/plexus-components/1.1.7/plexus-components-1.1.7.pom
[INFO] Downloading from : https://repo.maven.apache.org/maven2/org/codehaus/plexus/plexus/1.0.8/plexus-1.0.8.pom
[INFO] Downloaded from : https://repo.maven.apache.org/maven2/org/codehaus/plexus/plexus/1.0.8/plexus-1.0.8.pom (7.2 kB at 23 kB/s)
[INFO] Downloading from : https://repo.maven.apache.org/maven2/org/codehaus/plexus/plexus-container-default/1.0-alpha-8/plexus-contain
[INFO] Downloaded from : https://repo.maven.apache.org/maven2/org/codehaus/plexus/plexus-container-default/1.0-alpha-8/plexus-container
[INFO] Downloading from : https://repo.maven.apache.org/maven2/org/codehaus/plexus/plexus-utils/3.0.5/plexus-utils-3.0.5.jar
[INFO] Downloading from : https://repo.maven.apache.org/maven2/org/codehaus/plexus/plexus-digest/1.0/plexus-digest-1.0.jar
[INFO] Downloaded from : https://repo.maven.apache.org/maven2/org/codehaus/plexus/plexus-digest/1.0/plexus-digest-1.0.jar (12 kB at 20
[INFO] Downloaded from : https://repo.maven.apache.org/maven2/org/codehaus/plexus/plexus-utils/3.0.5/plexus-utils-3.0.5.jar (230 kB at
[INFO] Installing D:\ecllipse\eclipse_workspace\BRM_LAB1_2021\target\BRM_LAB1_2021-0.0.1-SNAPSHOT.jar to C:\Users\Soma Sekhar\.m2\repo
[INFO] Installing D:\ecllipse\eclipse_workspace\BRM_LAB1_2021\pom.xml to C:\Users\Soma Sekhar\.m2\repository\com\upes\dp\brm\BRM_LAB1_
[INFO] ------------------------------------------------------------------------
[INFO] BUILD SUCCESS
[INFO] ------------------------------------------------------------------------
[INFO] Total time:  15.495 s
[INFO] Finished at: 2021-01-21T10:03:19+05:30
[INFO] ------------------------------------------------------------------------
```

4. Checking if the jar package has been built or not.

5. Referencing the jar package path to another java project to use the components of this project.
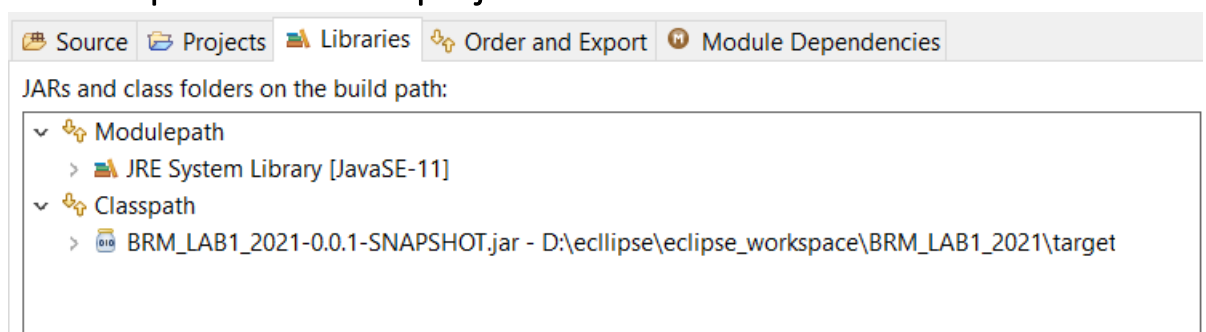
6. Now after giving the path to the jar package, we can use the classes defined in it, in any project.
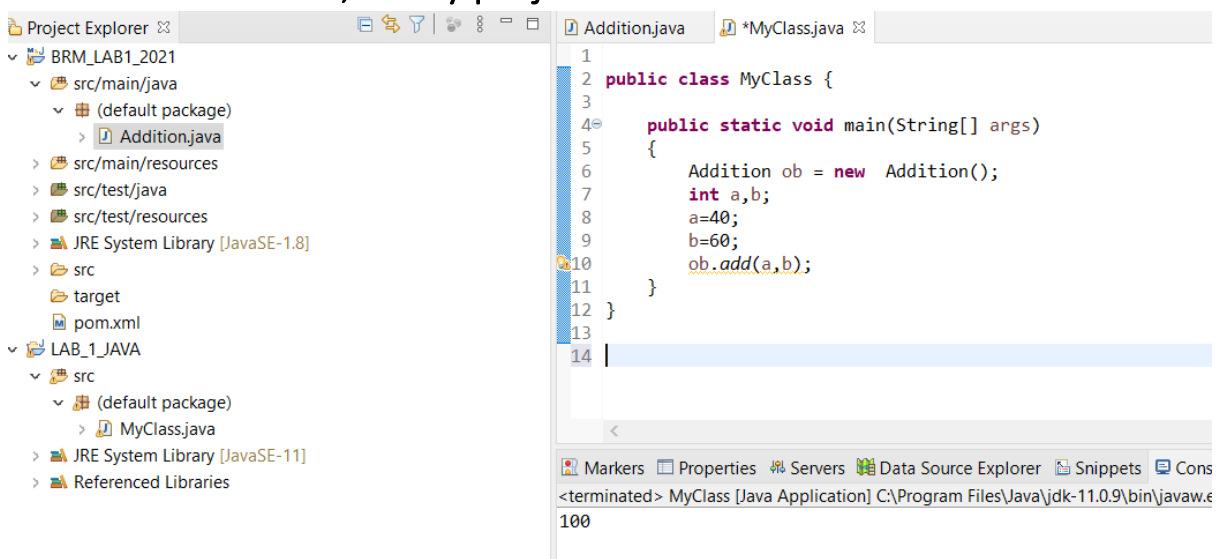
RESULT:

Thus, successfully, built a jar package with maven using the goal maven install and referenced that jar in other project to access its components.