Exercise 4: Creating and Configuring a Maven Project

Scenario:

You need to set up a new Maven project for the library management application and add Spring dependencies.

Steps:

1. **Create a New Maven Project:**

   o Create a new Maven project named **LibraryManagement**.

2. **Add Spring Dependencies in pom.xml:**

   o Include dependencies for Spring Context, Spring AOP, and Spring WebMVC.

3. **Configure Maven Plugins:**

   o Configure the Maven Compiler Plugin for Java version 1.8 in the pom.xml file.

pom.xml:

```xml
<project xmlns="http://maven.apache.org/POM/4.0.0"

    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"

    xsi:schemaLocation="http://maven.apache.org/POM/4.0.0

              http://maven.apache.org/xsd/maven-4.0.0.xsd">

  <modelVersion>4.0.0</modelVersion>


  <groupId>com.library</groupId>

  <artifactId>LibraryManagement</artifactId>

  <version>0.0.1-SNAPSHOT</version>


  <dependencies>

    <dependency>

      <groupId>org.springframework</groupId>

      <artifactId>spring-context</artifactId>

      <version>5.3.34</version>

    </dependency>

    <dependency>

      <groupId>org.springframework</groupId>
```

```xml
                    <artifactId>spring-aop</artifactId>
                    <version>5.3.34</version>
                </dependency>
                <dependency>
                    <groupId>org.springframework</groupId>
                    <artifactId>spring-webmvc</artifactId>
                    <version>5.3.34</version>
                </dependency>
                <dependency>
                    <groupId>jakarta.servlet</groupId>
                    <artifactId>jakarta.servlet-api</artifactId>
                    <version>5.0.0</version>
                    <scope>provided</scope>
                </dependency>
            </dependencies>

            <build>
                <plugins>
                    <plugin>
                        <groupId>org.apache.maven.plugins</groupId>
                        <artifactId>maven-compiler-plugin</artifactId>
                        <version>3.11.0</version>
                        <configuration>
                            <source>1.8</source>
                            <target>1.8</target>
                        </configuration>
                    </plugin>
                </plugins>
            </build>
        </project>
```

OUTPUT:

```
[INFO] --- jar:3.4.1:jar (default-jar) @ LibraryManagement ---
[INFO] Building jar: C:\Users\swethaganesh\eclipse-workspace\LibraryManagement\target\LibraryManagement-0.0.1-SNAPSHOT.jar
[INFO]
[INFO] --- install:3.1.1:install (default-install) @ LibraryManagement ---
[INFO] Installing C:\Users\swethaganesh\eclipse-workspace\LibraryManagement\pom.xml to C:\Users\swethaganesh\.m2\repository\com\library\LibraryManagement\0.0
[INFO] Installing C:\Users\swethaganesh\eclipse-workspace\LibraryManagement\target\LibraryManagement-0.0.1-SNAPSHOT.jar to C:\Users\swethaganesh\.m2\reposito
[INFO] ------------------------------------------------------------------------
[INFO] BUILD SUCCESS
[INFO] ------------------------------------------------------------------------
[INFO] Total time:  13.215 s
[INFO] Finished at: 2025-07-05T15:03:03+05:30
[INFO] ------------------------------------------------------------------------
```