# Spring Data JPA - Quick Example

1. Software Installation (Ensure the following are installed)

- **MySQL Server 8.0**
- **MySQL Workbench 8**
- **Eclipse IDE for Enterprise Java Developers 2019-03 R**
- **Maven 3.6.2**

2. Project Creation Using Spring Initializr

1. Go to: https://start.spring.io
2. Fill details:
   - Group: com.cognizant
   - Artifact: orm-learn
   - Description: Demo project for Spring Data JPA and Hibernate
3. Select dependencies:
   - **Spring Boot DevTools**
   - **Spring Data JPA**
   - **MySQL Driver**
4. Click **Generate** and download the ZIP.
5. Extract the ZIP to your Eclipse Workspace.

6.
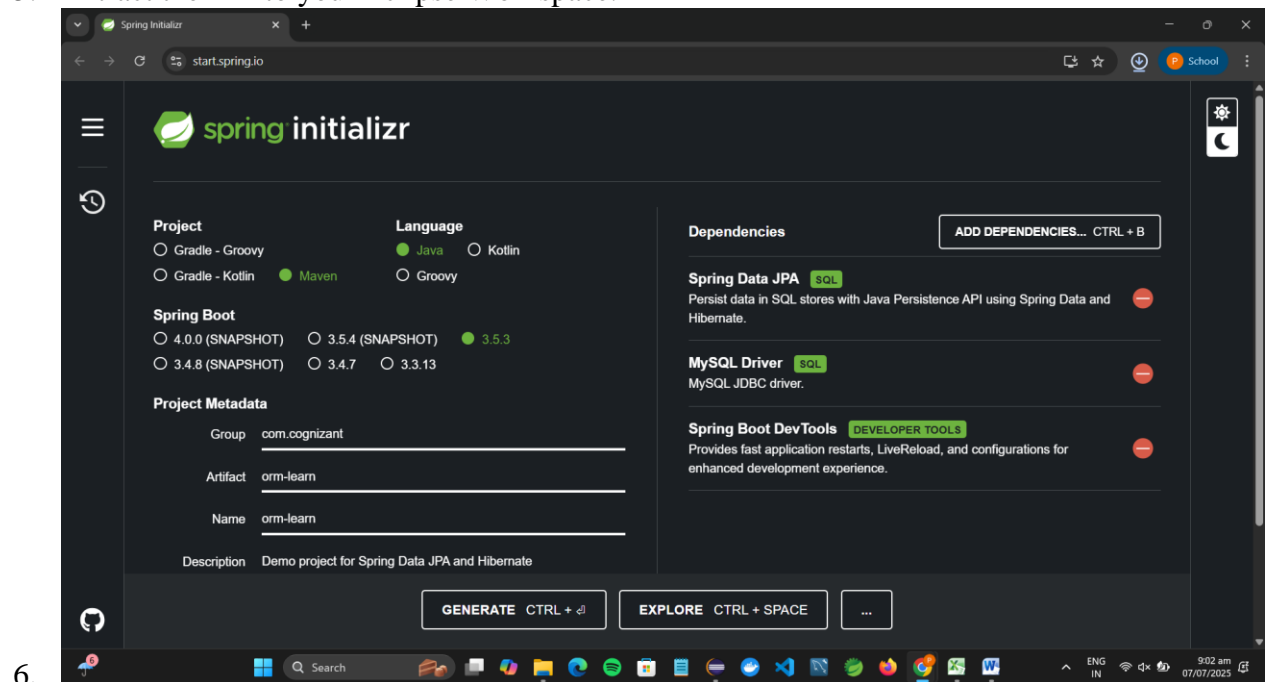
3. Import Project into Eclipse

1. Open Eclipse → File > Import > Maven > Existing Maven Projects.
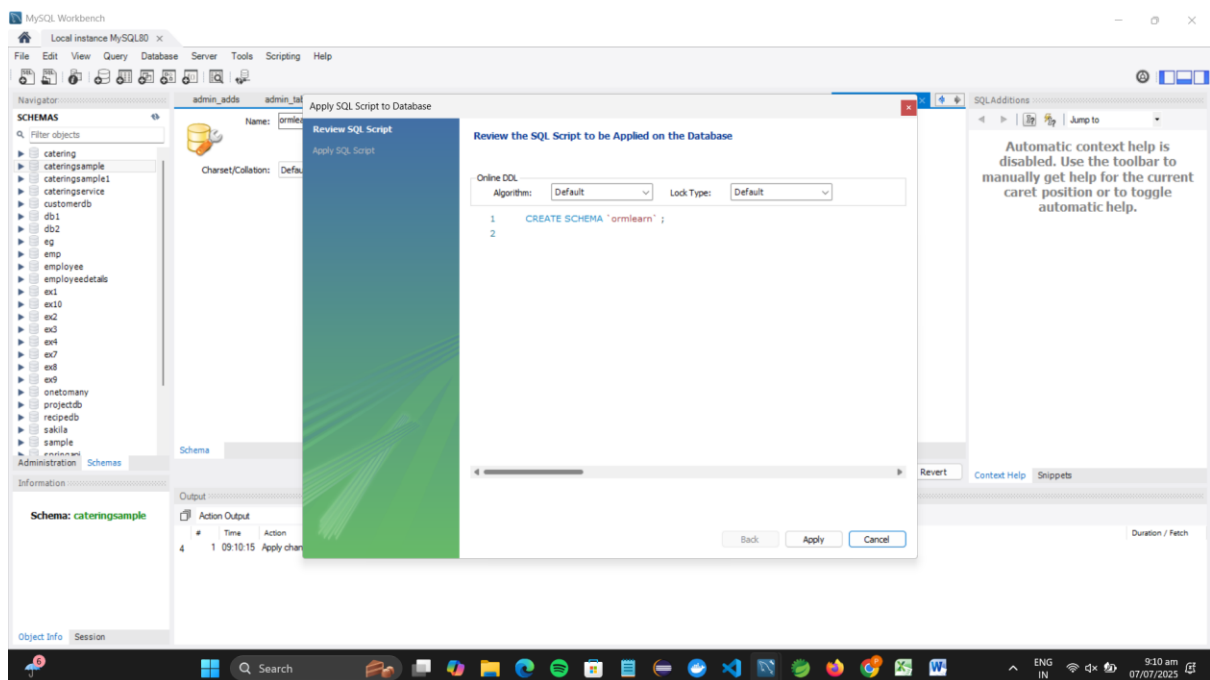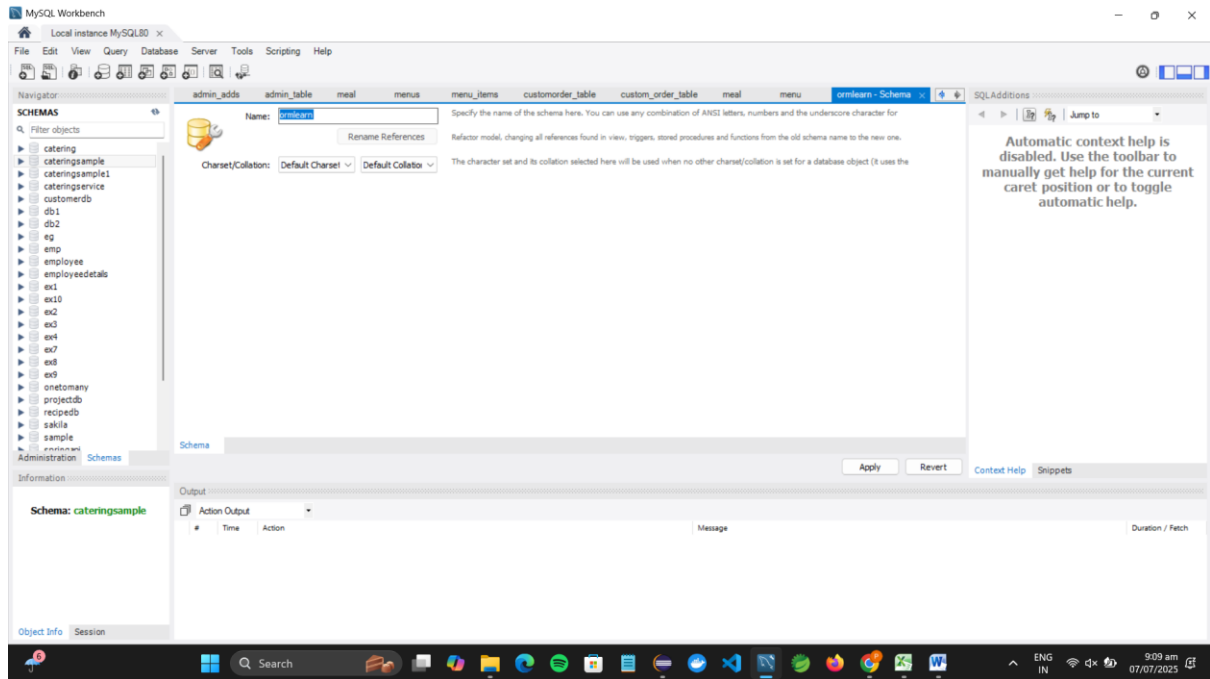2. Browse and select extracted folder.
3. Click **Finish**.
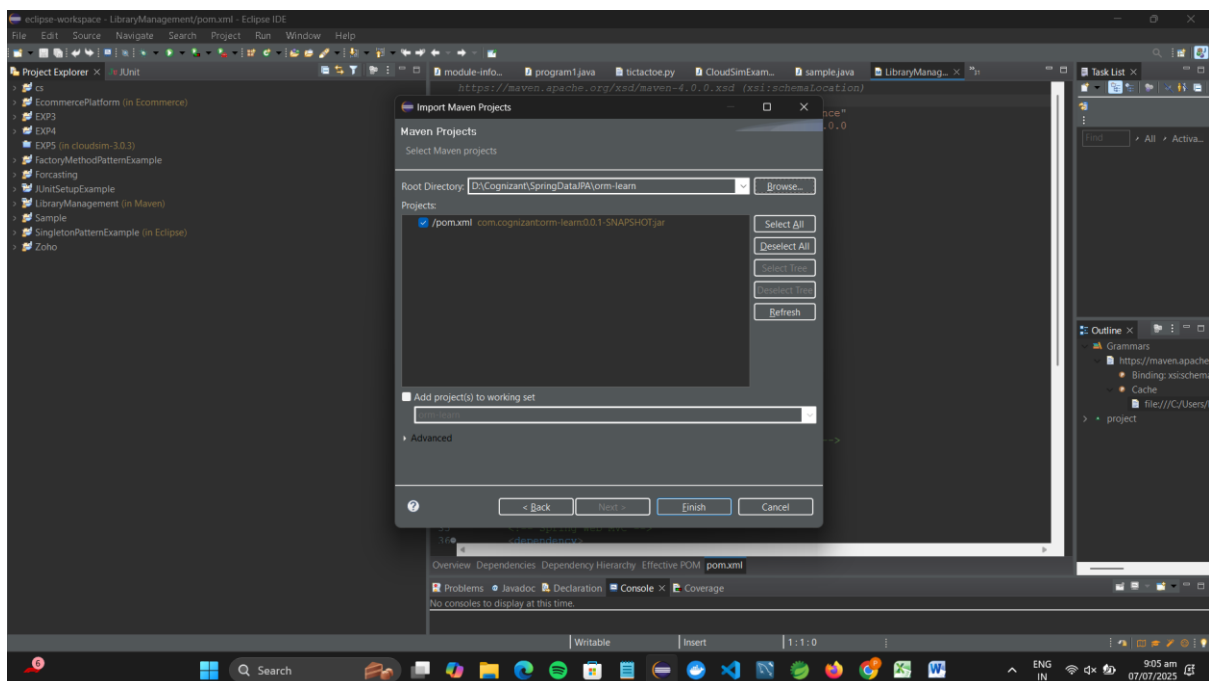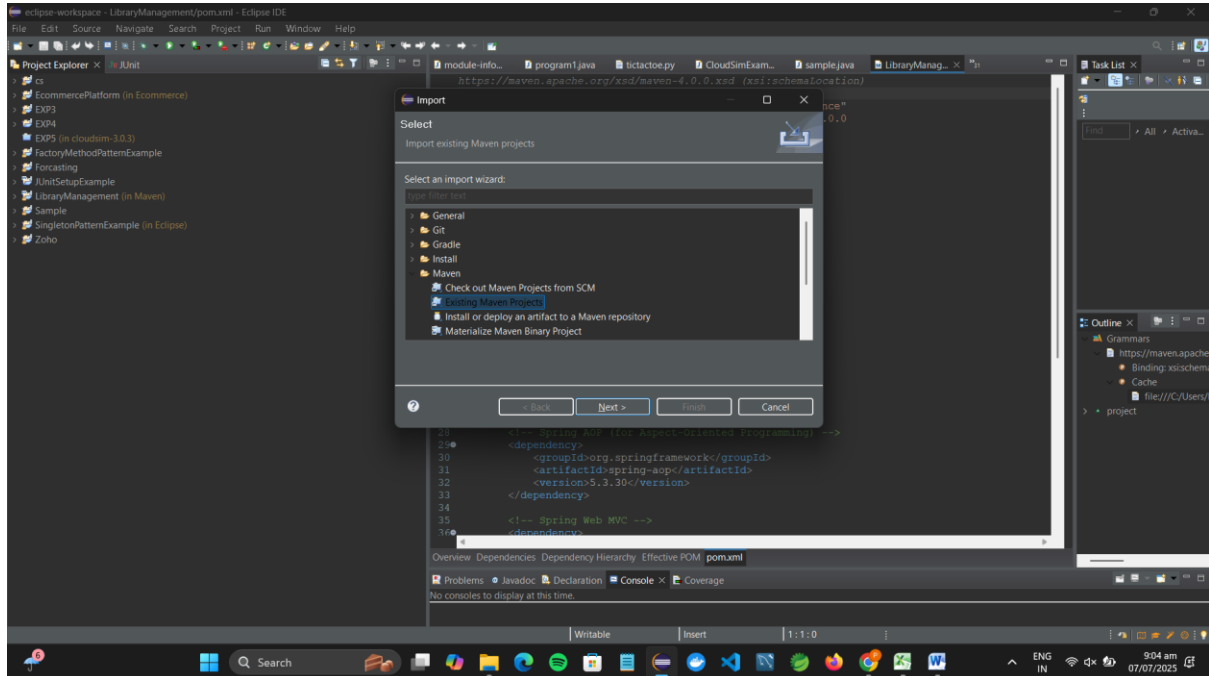
4. MySQL Database Setup

1. Open MySQL Command Line:

```
mysql -u root -p
```

2. Create Schema:

```
create schema ormlearn;
```

5: Build Project via Maven
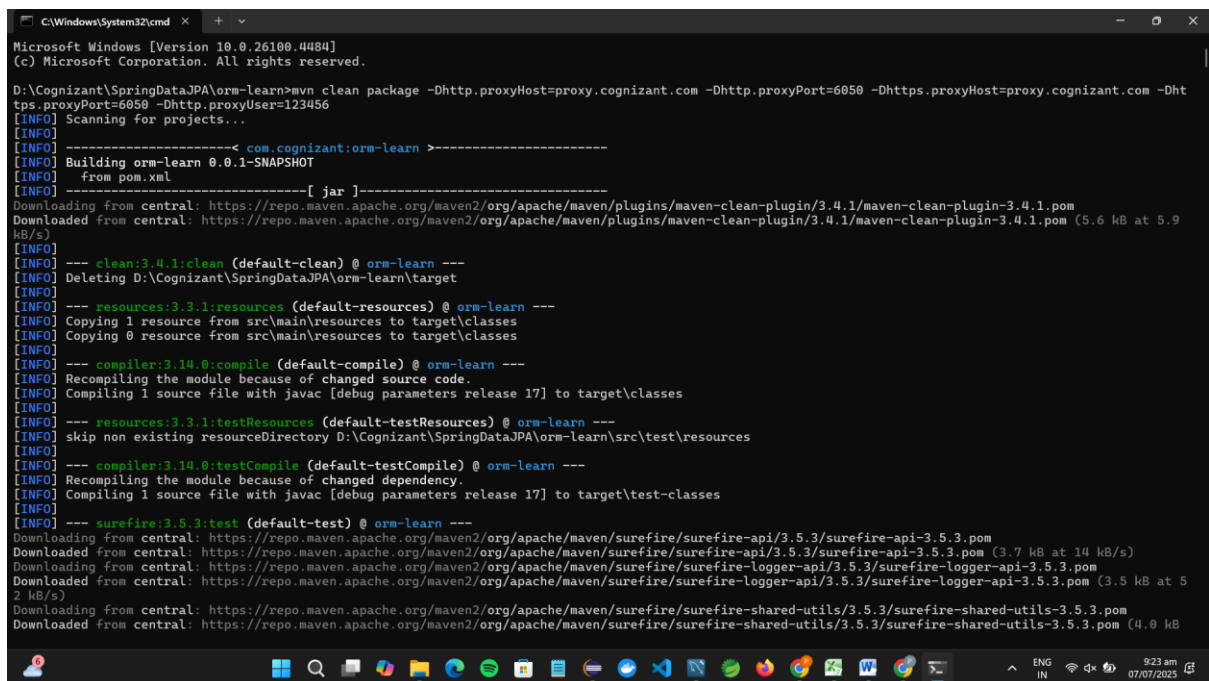
☐ Open Command Prompt:

- Press `Win + R`, type `cmd`, and hit Enter.
- Go to your project directory:

```
cd D:\Cognizant\SpringDataJPA\orm-learn
```

Run Maven Build:

mvn clean package -Dhttp.proxyHost=proxy.cognizant.com -Dhttp.proxyPort=6050 -Dhttps.proxyHost=proxy.cognizant.com -Dhttps.proxyPort=6050 -Dhttp.proxyUser=123456

6.Create `country` Table and Insert Records in MySQL

☐ **Open MySQL Workbench.**

1. Click your connection (e.g., Local instance MySQL80).
2. Choose your schema: `ormlearn`
3. Open a new SQL tab and run:

```sql
CREATE TABLE country (
  code VARCHAR(2) PRIMARY KEY,
  name VARCHAR(50)
);

INSERT INTO country VALUES ('IN', 'India');
INSERT INTO country VALUES ('US', 'United States of America');
```

4. Click **Execute (lightning bolt)**.
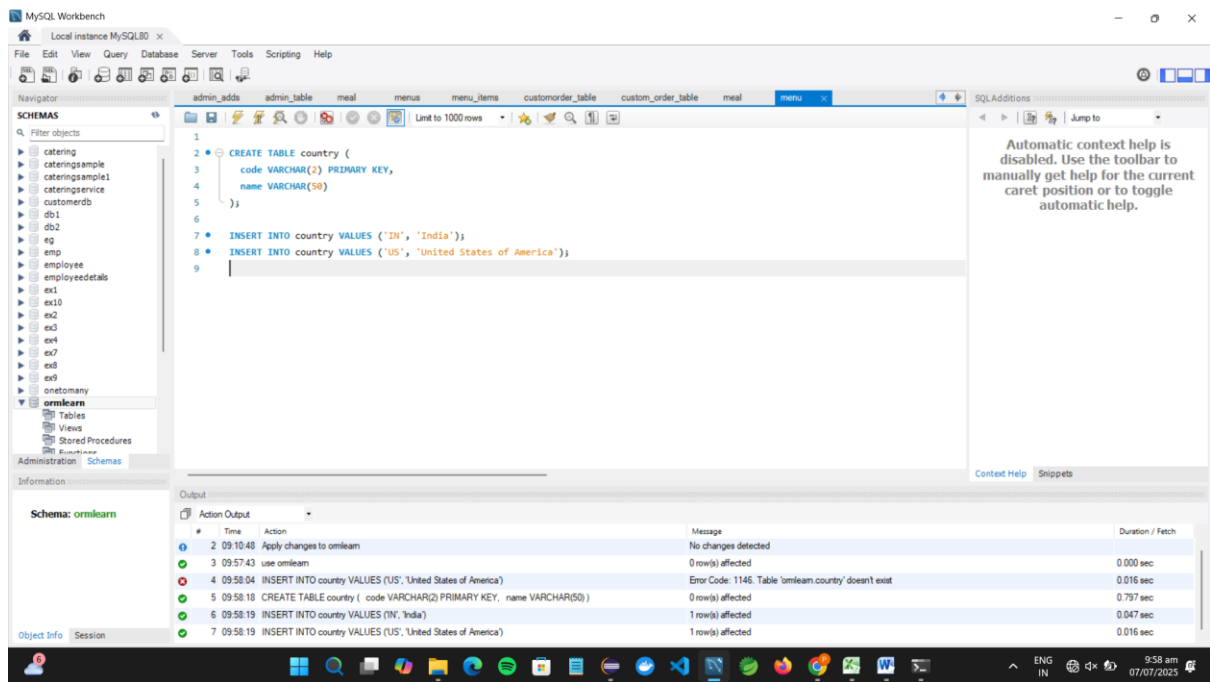
7.Create Entity Class `Country.java`

☐ **Package location:**

`com.cognizant.ormlearn.model`

☐ **Steps:**

1. Right-click `src/main/java > com.cognizant.ormlearn` → **New > Package** → Name it:

`com.cognizant.ormlearn.model`

2. Right-click this package → **New > Class** → Name: `Country`

8.Create Repository Interface

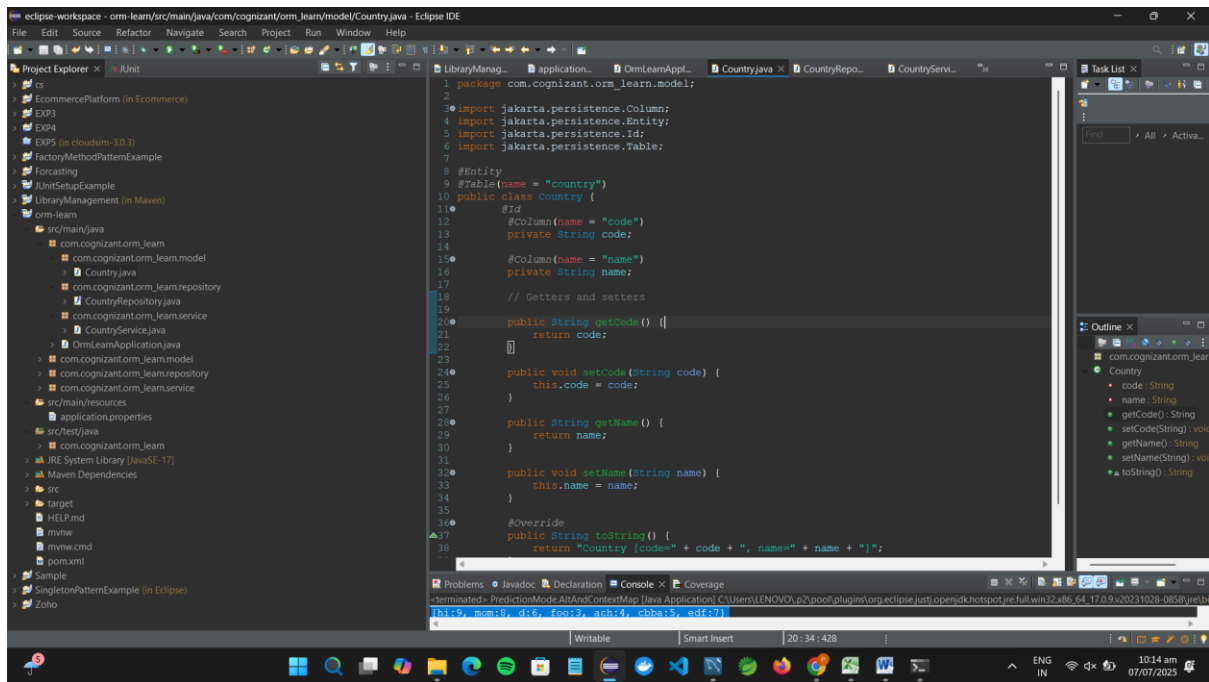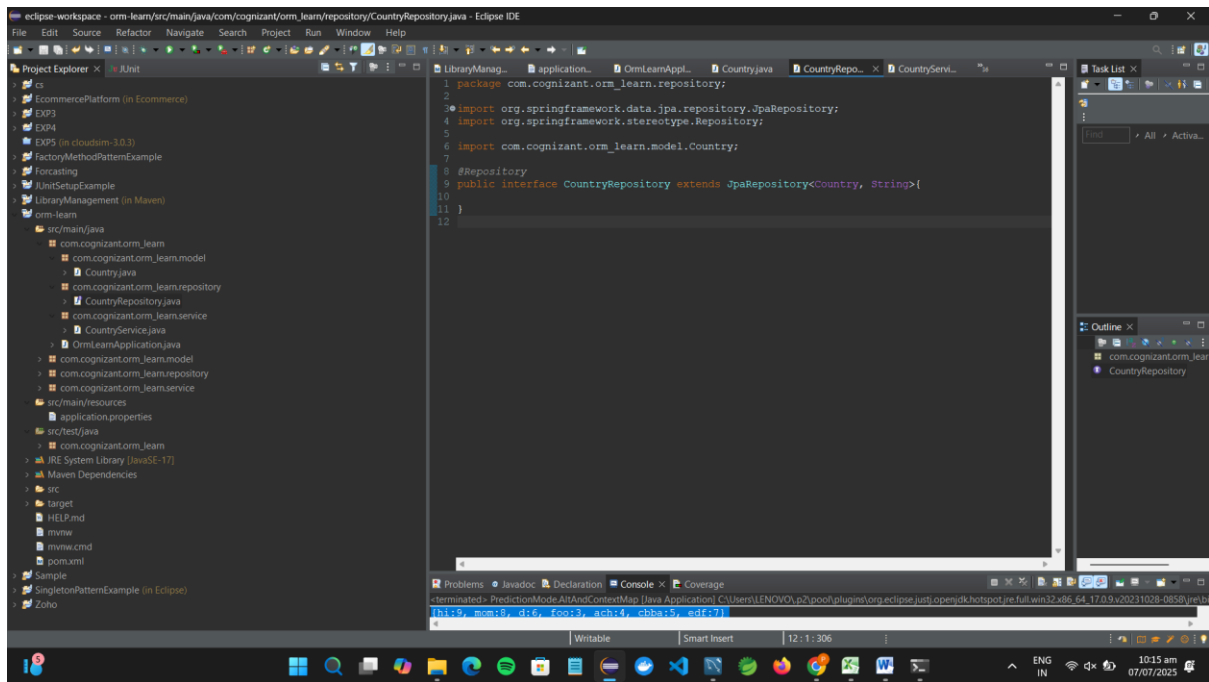☐ **Package location:**

com.cognizant.ormlearn.repository

☐ **Steps:**

1. Create new package:

com.cognizant.ormlearn.repository

CountryRepository Interface:

9.Create Service Class
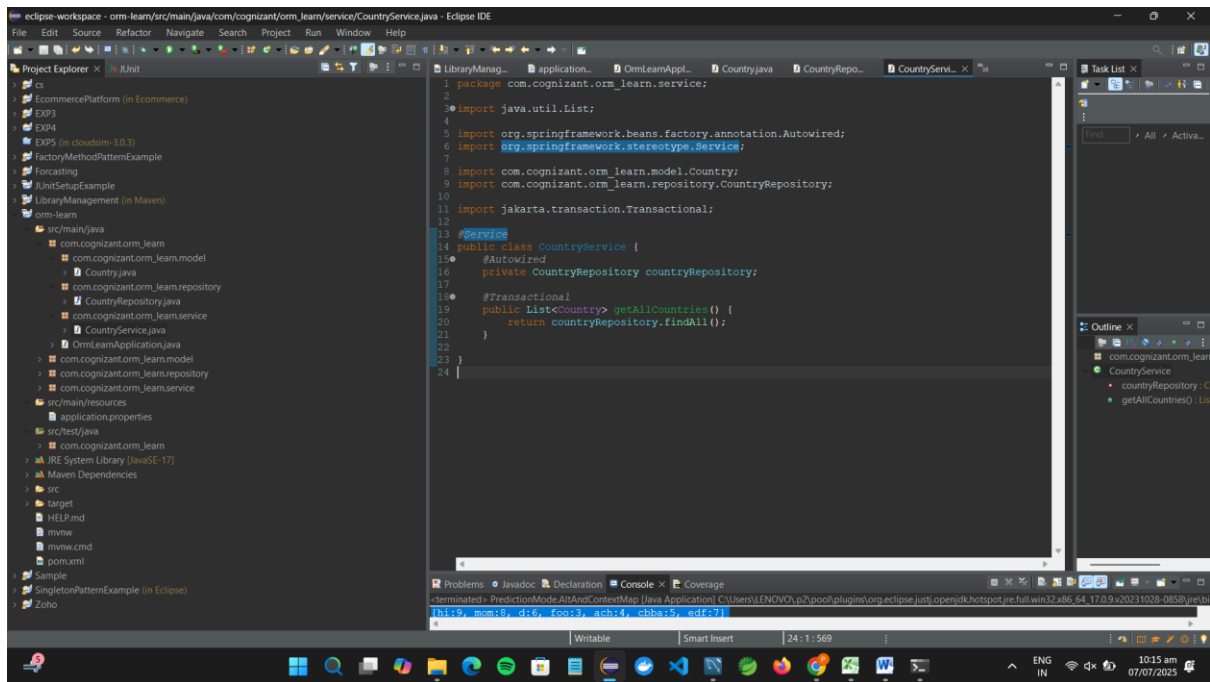
☐ Package location:

com.cognizant.ormlearn.service
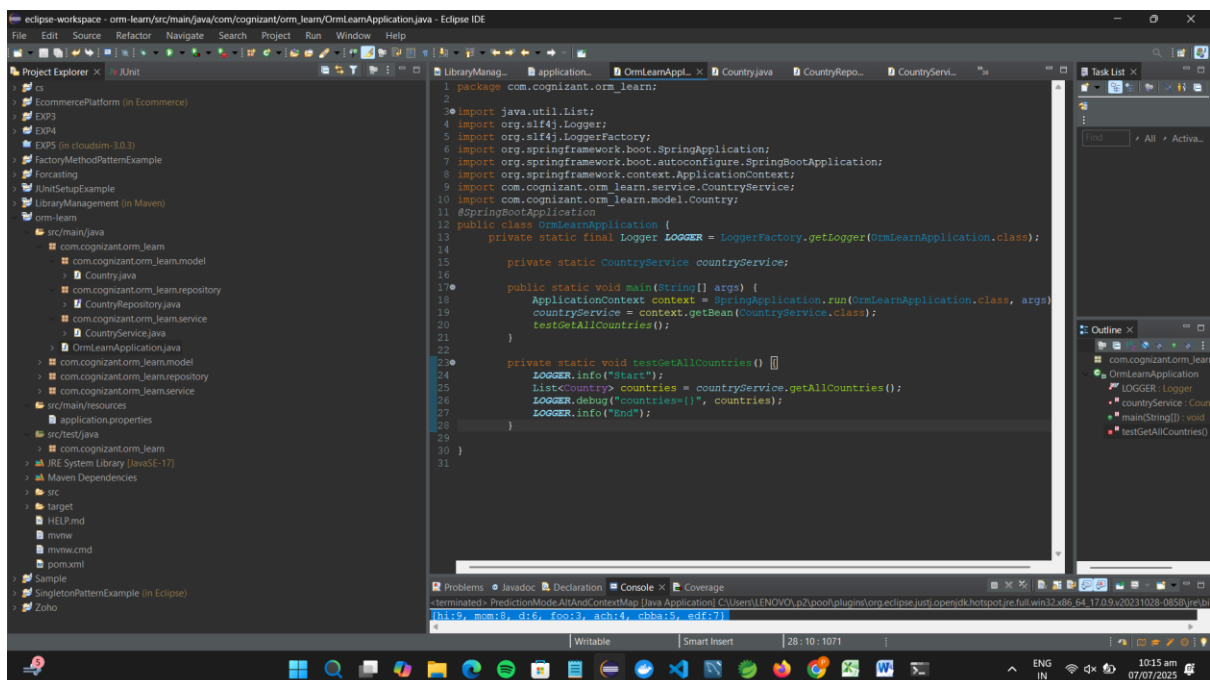
☐ Steps:

1. Create new package:

com.cognizant.ormlearn.service

CountryService Class:

10.Modify Main Class to Call the Service

☐ **Modify `OrmLearnApplication.java` to call the service:**

Output Screenshot: