## Hands on 1 Spring Data JPA - Quick Example

```
Pom.xml:
<dependencies>
  <!-- Spring Boot -->
  <dependency>
    <groupId>org.springframework.boot</groupId>
    <artifactId>spring-boot-starter-data-jpa</artifactId>
  </dependency>
  <!-- MySQL Driver -->
  <dependency>
    <groupId>com.mysql</groupId>
    <artifactId>mysql-connector-j</artifactId>
  </dependency>
  <!-- Logging (optional) -->
  <dependency>
    <groupId>org.springframework.boot</groupId>
    <artifactId>spring-boot-starter-logging</artifactId>
  </dependency>
</dependencies>
application.properties
spring.datasource.url=jdbc:mysql://localhost:3306/orm_learn
spring.datasource.username=root
spring.datasource.password=root
spring.jpa.hibernate.ddl-auto=none
spring.jpa.show-sql=true
```

```
Country.java
package com.cognizant.ormlearn.model;
import jakarta.persistence.Column;
import jakarta.persistence.Entity;
import jakarta.persistence.ld;
@Entity
public class Country {
  @ld
  @Column(name = "code")
  private String code;
  @Column(name = "name")
  private String name;
  public String getCode() {
    return code;
  }
  public void setCode(String code) {
    this.code = code;
  }
  public String getName() {
    return name;
  }
  public void setName(String name) {
    this.name = name;
  }
```

```
@Override
  public String toString() {
    return "Country [code=" + code + ", name=" + name + "]";
  }
}
CountryRepository.java
package com.cognizant.ormlearn.repository;
import org.springframework.data.jpa.repository.JpaRepository;
import org.springframework.stereotype.Repository;
import com.cognizant.ormlearn.model.Country;
@Repository
public interface CountryRepository extends JpaRepository<Country, String> {
}
CountryService.java
package com.cognizant.ormlearn.service;
import java.util.List;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.stereotype.Service;
import com.cognizant.ormlearn.model.Country;
import com.cognizant.ormlearn.repository.CountryRepository;
@Service
public class CountryService {
  @Autowired
  private CountryRepository countryRepository;
  public List<Country> getAllCountries() {
```

```
return countryRepository.findAll();
  }
}
OrmLearnApplication.java
package com.cognizant.ormlearn;
import java.util.List;
import org.slf4j.Logger;
import org.slf4j.LoggerFactory;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.boot.SpringApplication;
import org.springframework.boot.autoconfigure.SpringBootApplication;
import\ org. spring framework. context. annotation. Component Scan;
import com.cognizant.ormlearn.model.Country;
import com.cognizant.ormlearn.service.CountryService;
@SpringBootApplication
@ComponentScan(basePackages = "com.cognizant.ormlearn")
public class OrmLearnApplication {
  private static final Logger LOGGER = LoggerFactory.getLogger(OrmLearnApplication.class);
  @Autowired
  private CountryService countryService;
  public static void main(String[] args) {
    SpringApplication.run(OrmLearnApplication.class, args);
    System.out.println("Inside main");
  }
```

```
@Autowired
public void testGetAllCountries() {
    System.out.println("Start");

    List<Country> countries = countryService.getAllCountries();

    LOGGER.debug("countries={}", countries);

    System.out.println("countries=" + countries);

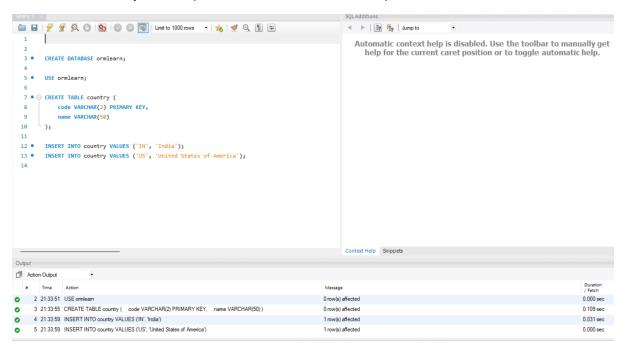
    System.out.println("End");
    }
}

SQL for Country Table

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

## **INSERT INTO country VALUES ('IN', 'India');**

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



```
package com.cognizant.ormlearn.model;
                                                                                                                                       Find
                                                                                                                                                      ► All ► Activate... (3
      import jakarta.persistence.Entity;
import jakarta.persistence.Id;
import jakarta.persistence.Column;
      @Entity
       public class Country {
           @Column(name = "code")
           private String code;
                                                                                                                                      @Column(name = "name")
private String name;
                                                                                                                                         # com.cognizant.ormlearn.model

→ O Country

                                                                                                                                           code : String
name : String
           // Getters and Setter
           public String getCode() {
    return code;
                                                                                                                                           getCode(): String
                                                                                                                                           setCode(String) : void
                                                                                                                                           getName(): String
           public void setCode(String code) {
   this.code = code;
                                                                                                                                           setName(String) : void
                                                                                                                                           ● toString(): String
  Problems @ Javadoc № Declaration ☑ Console × ☜ Progress № Coverage

<terminated > OrmLearnApplication | Java Application | C\Program Files\Eclipse Adoptium\jdk-17.0.15.6-hotspot\bin\javaw.exe (9 Jul 2025, 10:11:30 pm – 10:11:38 pm) [pid: 27484]
                                                                                                                                      :: Spring Boot ::
 restartedMain c.c.ormlearn.OrmLearnApplication
                                                               : Inside main
restartedMain] c.c.ormlearn.OrmLearnApplication restartedMain] org.hibernate.SQL restartedMain] c.c.ormlearn.OrmLearnApplication restartedMain] c.c.ormlearn.OrmLearnApplication
                                                                : Start
                                                                  Start select c1_0.code,c1_0.name from country c1_0 countries=[Country [code=UN, name=United States of America]]
                                                                : End
```