# 1 - **Spring Data JPA - Quick Example**

**Country.java**

package com.cognizant.ormlearn.model;

import jakarta.persistence.Entity;

import jakarta.persistence.Table;

import jakarta.persistence.Id;

import jakarta.persistence.Column;

@Entity

@Table(name = "country")

public class Country {

@Id

@Column(name = "co\_code")

private String code;

@Column(name = "co\_name")

private String name;

@Override

public String toString() {

return "Country " +

"code='" + code + '\'' +

", name='" + name + '\'' ;

}

}

**CountryRepository.java**

package com.cognizant.ormlearn.repository;

import com.cognizant.ormlearn.model.Country;

import org.springframework.data.jpa.repository.JpaRepository;

import org.springframework.stereotype.Repository;

@Repository

public interface CountryRepository extends JpaRepository<Country, String> {

}

**CountryService.java**

package com.cognizant.ormlearn.service;

import com.cognizant.ormlearn.model.Country;

import com.cognizant.ormlearn.repository.CountryRepository;

import org.springframework.beans.factory.annotation.Autowired;

import org.springframework.stereotype.Service;

import org.springframework.transaction.annotation.Transactional;

import java.util.List;

@Service

public class CountryService {

@Autowired

private CountryRepository countryRepository;

@Transactional

public List<Country> getAllCountries() {

return countryRepository.findAll();

}

}

**OrmLearnApplication.java**

package com.cognizant.ormlearn;

import com.cognizant.ormlearn.model.Country;

import com.cognizant.ormlearn.service.CountryService;

import org.springframework.boot.SpringApplication;

import org.springframework.boot.autoconfigure.SpringBootApplication;

import org.slf4j.Logger;

import org.slf4j.LoggerFactory;

import org.springframework.context.ApplicationContext;

import java.util.List;

@SpringBootApplication

public class OrmLearnApplication {

private static final Logger LOGGER = LoggerFactory.getLogger(OrmLearnApplication.class);

private static CountryService countryService;

private static void testGetAllCountries() {

LOGGER.info("Start");

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

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

LOGGER.info("End");

}

public static void main(String[] args) {

ApplicationContext context = SpringApplication.run(OrmLearnApplication.class, args);

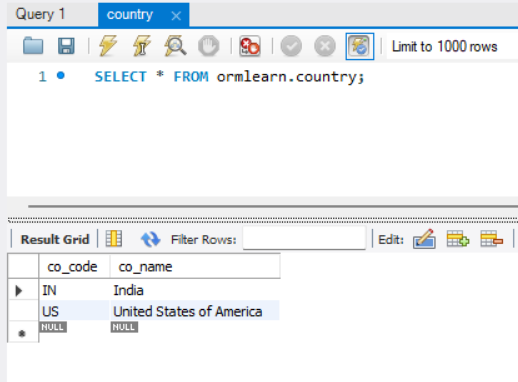
countryService = context.getBean(CountryService.class);

testGetAllCountries();

}

}

**country table in ormlearn:**



**application.properties**

spring.application.name=orm-learn

# Spring Framework and application log

logging.level.org.springframework=info

logging.level.com.cognizant=debug

# Hibernate logs for displaying executed SQL, input and output

logging.level.org.hibernate.SQL=trace

logging.level.org.hibernate.type.descriptor.sql=trace

# Log pattern

logging.pattern.console=%d{dd-MM-yy} %d{HH:mm:ss.SSS} %-20.20thread %5p %-25.25logger{25} %25M %4L %m%n

# Database configuration

spring.datasource.driver-class-name=com.mysql.cj.jdbc.Driver

spring.datasource.url=jdbc:mysql://localhost:3306/ormlearn

spring.datasource.username=root

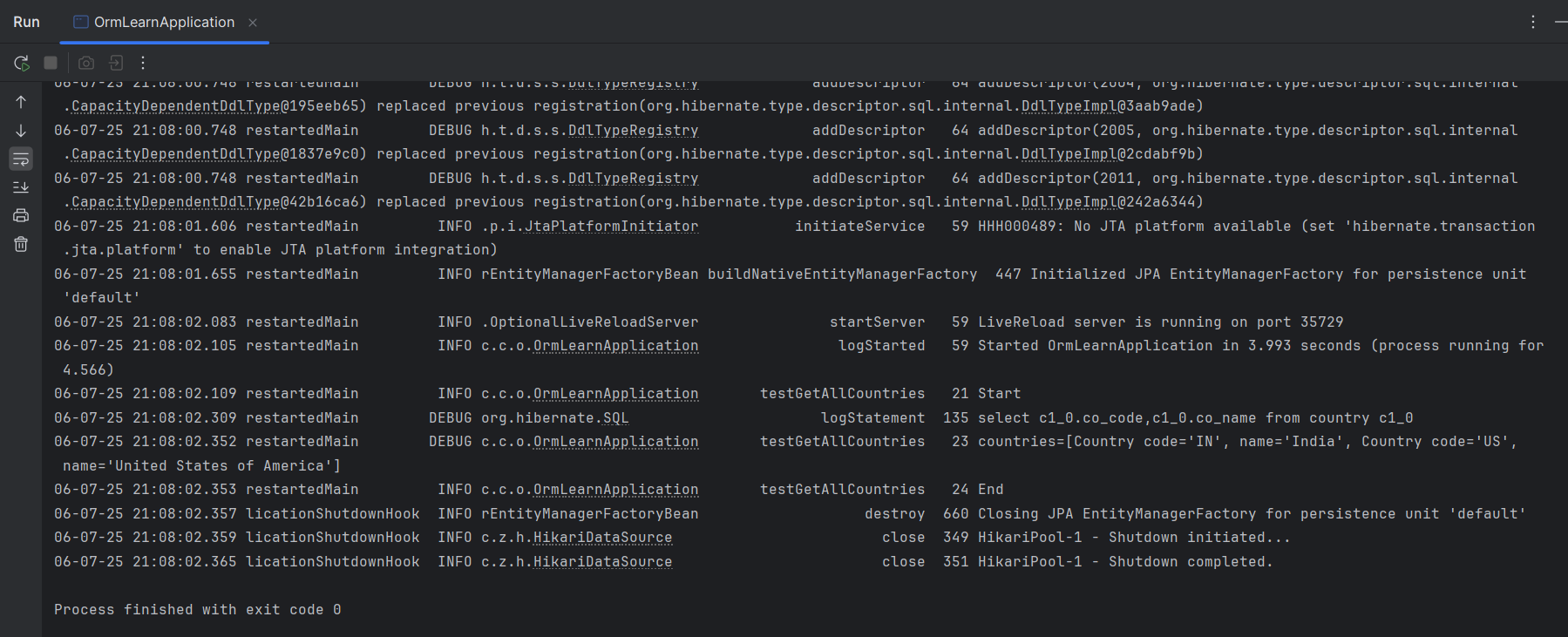
spring.datasource.password=Aysha123\*

# Hibernate configuration

spring.jpa.hibernate.ddl-auto=validate

spring.jpa.properties.hibernate.dialect=org.hibernate.dialect.MySQLDialect

**Output:**



06-07-25 21:08:01.655 restartedMain INFO rEntityManagerFactoryBean buildNativeEntityManagerFactory 447 Initialized JPA EntityManagerFactory for persistence unit 'default'

06-07-25 21:08:02.083 restartedMain INFO .OptionalLiveReloadServer startServer 59 LiveReload server is running on port 35729

06-07-25 21:08:02.105 restartedMain INFO c.c.o.OrmLearnApplication logStarted 59 Started OrmLearnApplication in 3.993 seconds (process running for 4.566)

06-07-25 21:08:02.109 restartedMain INFO c.c.o.OrmLearnApplication testGetAllCountries 21 Start

06-07-25 21:08:02.309 restartedMain DEBUG org.hibernate.SQL logStatement 135 select c1\_0.co\_code,c1\_0.co\_name from country c1\_0

06-07-25 21:08:02.352 restartedMain DEBUG c.c.o.OrmLearnApplication testGetAllCountries 23 countries=[Country code='IN', name='India', Country code='US', name='United States of America']

06-07-25 21:08:02.353 restartedMain INFO c.c.o.OrmLearnApplication testGetAllCountries 24 End

06-07-25 21:08:02.357 licationShutdownHook INFO rEntityManagerFactoryBean destroy 660 Closing JPA EntityManagerFactory for persistence unit 'default'

06-07-25 21:08:02.359 licationShutdownHook INFO c.z.h.HikariDataSource close 349 HikariPool-1 - Shutdown initiated...

06-07-25 21:08:02.365 licationShutdownHook INFO c.z.h.HikariDataSource close 351 HikariPool-1 - Shutdown completed.

Process finished with exit code 0