**CODE**

**src/main/java/com.cognizant.orm-learn/OrmLearnApplication.java**

package com.cognizant.orm\_learn;

import com.cognizant.orm\_learn.model.CountryModel;

import com.cognizant.orm\_learn.service.CountryService;

import org.springframework.boot.SpringApplication;

import org.springframework.boot.autoconfigure.SpringBootApplication;

import org.springframework.context.ApplicationContext;

import java.util.List;

@SpringBootApplication

public class OrmLearnApplication {

public static void main(String[] args) {

*/\*SpringApplication.run(OrmLearnApplication.class, args);*

*CountryService cs = new CountryService();*

*cannot run directly - violates principle of Spring*

*\*/*

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

CountryService countryService = applicationContext.getBean(CountryService.class);

countryService.findAll().forEach(x -> System.out.println(x));

List<CountryModel> listCountries = countryService.findAll();

System.out.println(listCountries.get(0).getCo\_code());

}

}

**src/main/java/com.cognizant.orm-learn/Service/CountryService.java**

package com.cognizant.orm\_learn.service;

import com.cognizant.orm\_learn.model.CountryModel;

import com.cognizant.orm\_learn.repository.CountryRepository;

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

import org.springframework.stereotype.Component;

import org.springframework.stereotype.Service;

import java.util.List;

@Service

public class CountryService

{

@Autowired

CountryRepository countryRepository;

public List<CountryModel> findAll()

{

return countryRepository.findAll();

}

}

**src/main/java/com.cognizant.orm-learn/Repository/CountryRepository.java**

package com.cognizant.orm\_learn.repository;

import com.cognizant.orm\_learn.model.CountryModel;

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

import org.springframework.stereotype.Component;

*//@Component - Nope!!; Spring will automatically make a class and write @Component above*

public interface CountryRepository extends JpaRepository<CountryModel, String>

*//How it works?!!!!*

{

}

**src/main/java/com.cognizant.orm-learn/Model/CountryModel.java**

package com.cognizant.orm\_learn.model;

import jakarta.persistence.Column;

import jakarta.persistence.Entity;

import jakarta.persistence.Id;

import jakarta.persistence.Table;

import lombok.Data;

@Entity *// ✅ Required*

@Table(name = "Country")

@Data *// ✅ Lombok adds getters, setters, toString, equals, hashCode*

public class CountryModel

{

@Id

@Column(name = "code")

private String co\_code;

@Column(name = "name")

private String co\_name;

*/\*public String getCo\_code() {*

*return co\_code;*

*}*

*public void setCo\_code(String co\_code) {*

*this.co\_code = co\_code;*

*}*

*public String getCo\_name() {*

*return co\_name;*

*}*

*public void setCo\_name(String co\_name) {*

*this.co\_name = co\_name;*

*}*

*\*/*

@Override

public String toString()

*//- needed for logging/printing*

*//Lombak writes toString already, but it woul have written CountryMoel raher than Country*

{

return "Country{" +

"code='" + co\_code + '\'' +

", name='" + co\_name + '\'' +

'}';

}

}

**src/main/java/com.cognizant.orm-learn/Service/CountryService.java**

package com.cognizant.orm\_learn.service;

import com.cognizant.orm\_learn.model.CountryModel;

import com.cognizant.orm\_learn.repository.CountryRepository;

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

import org.springframework.stereotype.Component;

import org.springframework.stereotype.Service;

import java.util.List;

@Service

public class CountryService

{

@Autowired

CountryRepository countryRepository;

public List<CountryModel> findAll()

{

return countryRepository.findAll();

}

}

**src/test/java/com.cognizant.orm\_learn/OrmLearnApplicationTests**

package com.cognizant.orm\_learn;

*//Junit and SpringBootTest came through spring-boot-starter-test*

import com.cognizant.orm\_learn.model.CountryModel;

import com.cognizant.orm\_learn.service.CountryService;

import org.junit.jupiter.api.Test;

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

import org.springframework.boot.test.context.SpringBootTest;

import java.util.List;

@SpringBootTest

class OrmLearnApplicationTests {

@Test*//check if dependencies loaing hella fine*

void contextLoads()

{

}

@Autowired

CountryService countryService;

@Test*//Unit Test*

public void testFindAllCountries()

{

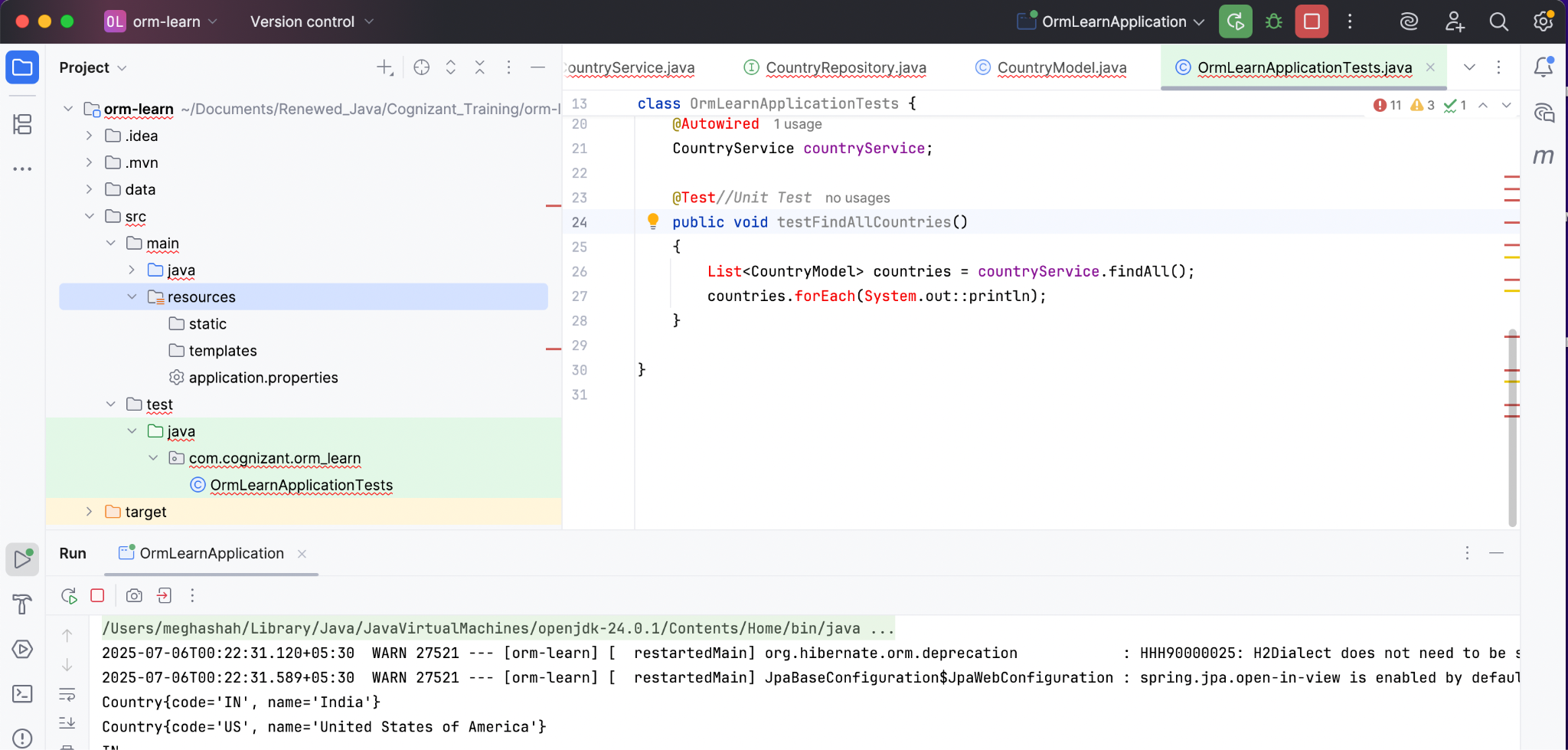
List<CountryModel> countries = countryService.findAll();

countries.forEach(System.out::println);

}

}

**OUTPUT**

****