**Exercise 5: REST - Get country based on country code**

Write a REST service that returns a specific country based on country code. The country code should be case insensitive.

Controller: com.cognizant.spring-learn.controller.CountryController

Method Annotation: @GetMapping("/countries/{code}")

Method Name: getCountry(String code)

Method Implemetation: Invoke countryService.getCountry(code)

Service Method: com.cognizant.spring-learn.service.CountryService.getCountry(String code)

Service Method Implementation:

Get the country code using @PathVariable

Get country list from country.xml

Iterate through the country list

Make a case insensitive matching of country code and return the country.

Lambda expression can also be used instead of iterating the country list

Sample Request: http://localhost:8083/country/in

Sample Response:

{

  "code": "IN",

  "name": "India"

}

**Program:**

**Country.java:**

package com.cognizant.springlearn.model;

public class Country {

private String code;

private String name;

public Country() {}

public Country(String code, String name) {

this.code = code;

this.name = 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 + "]";

}

}

**CountryService.java:**

package com.cognizant.springlearn.service;

import com.cognizant.springlearn.model.Country;

import org.springframework.stereotype.Service;

import java.util.ArrayList;

import java.util.List;

@Service

public class CountryService {

private static List<Country> countryList = new ArrayList<>();

static {

countryList.add(new Country("IN", "India"));

countryList.add(new Country("US", "United States"));

countryList.add(new Country("DE", "Germany"));

countryList.add(new Country("JP", "Japan"));

}

public Country getCountry(String code) {

return countryList.stream()

.filter(c -> c.getCode().equalsIgnoreCase(code))

.findFirst()

.orElse(null);

}

}

**CountryController.java:**

package com.cognizant.springlearn.controller;

import com.cognizant.springlearn.model.Country;

import com.cognizant.springlearn.service.CountryService;

import org.slf4j.Logger;

import org.slf4j.LoggerFactory;

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

import org.springframework.web.bind.annotation.\*;

@RestController

public class CountryController {

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

@Autowired

private CountryService countryService;

@GetMapping("/countries/{code}")

public Country getCountry(@PathVariable String code) {

LOGGER.info("START - getCountry()");

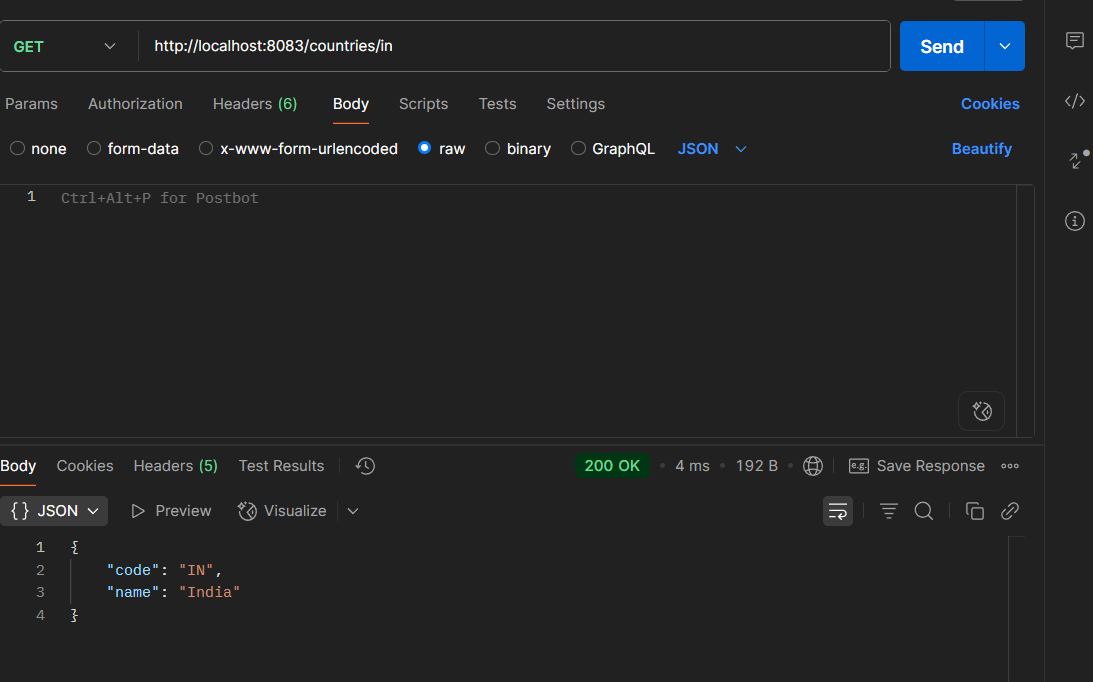
Country country = countryService.getCountry(code);

LOGGER.info("END - getCountry()");

return country;

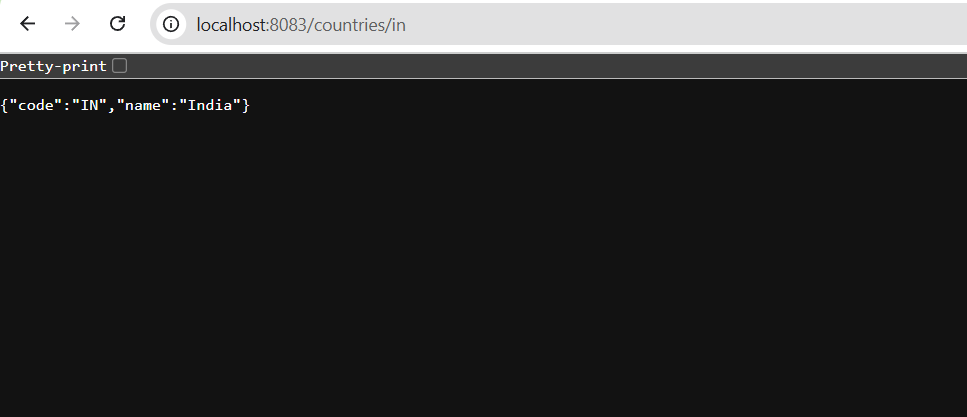
}

}

**Application.properties:**

server.port=8083

**Output:**

****