**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"

}

*CountryController.java:*

package com.cognizant.spring\_learn.controller;

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

import org.springframework.web.bind.annotation.GetMapping;

import org.springframework.web.bind.annotation.PathVariable;

import org.springframework.web.bind.annotation.RestController;

import com.cognizant.spring\_learn.model.Country;

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

*@RestController*

public class CountryController {

*@Autowired*

private CountryService countryService;

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

public Country getCountry(*@PathVariable* String code) {

return countryService.getCountry(code);

}

}

*CountryService.java:*

package com.cognizant.spring\_learn.service;

import java.util.List;

import org.springframework.context.ApplicationContext;

import org.springframework.context.support.ClassPathXmlApplicationContext;

import org.springframework.stereotype.Service;

import com.cognizant.spring\_learn.model.Country;

*@Service*

public class CountryService {

public Country getCountry(String code) {

ApplicationContext context = new ClassPathXmlApplicationContext("country.xml");

*@SuppressWarnings*("unchecked")

List<Country> countries = (List<Country>) context.getBean("countryList");

return countries.stream()

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

.findFirst()

.orElseThrow(() -> new CountryNotFoundException());

}

}

*Country.xml:*

<?xml version="1.0" encoding="UTF-8"?>

<beans xmlns="http://www.springframework.org/schema/beans"

xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"

xsi:schemaLocation="http://www.springframework.org/schema/beans http://www.springframework.org/schema/beans/spring-beans.xsd">

<bean id="countryIN" class="com.cognizant.spring\_learn.model.Country">

<property name="code" value="IN" />

<property name="name" value="India" />

</bean>

<bean id="countryUS" class="com.cognizant.spring\_learn.model.Country">

<property name="code" value="US" />

<property name="name" value="United States" />

</bean>

<bean id="countryDE" class="com.cognizant.spring\_learn.model.Country">

<property name="code" value="DE" />

<property name="name" value="Germany" />

</bean>

<bean id="countryJP" class="com.cognizant.spring\_learn.model.Country">

<property name="code" value="JP" />

<property name="name" value="Japan" />

</bean>

<bean id="countryList" class="java.util.ArrayList">

<constructor-arg>

<list>

<ref bean="countryIN"/>

<ref bean="countryUS"/>

<ref bean="countryJP"/>

<ref bean="countryDE"/>

</list>

</constructor-arg>

</bean>

</beans>

*CountryNotFoundException.java:*

package com.cognizant.spring\_learn.service;

import org.springframework.http.HttpStatus;

import org.springframework.web.bind.annotation.ResponseStatus;

*@ResponseStatus*(value = *HttpStatus*.***NOT\_FOUND***, reason = "Country not found")

public class CountryNotFoundException extends RuntimeException {

}

*SpringLearnApplication.java:*

package com.cognizant.spring\_learn;

import org.springframework.boot.SpringApplication;

import org.springframework.boot.autoconfigure.SpringBootApplication;

import org.springframework.context.annotation.ImportResource;

import org.slf4j.Logger;

import org.slf4j.LoggerFactory;

*@SpringBootApplication*

*@ImportResource*({"classpath:country.xml"})

public class SpringLearnApplication {

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

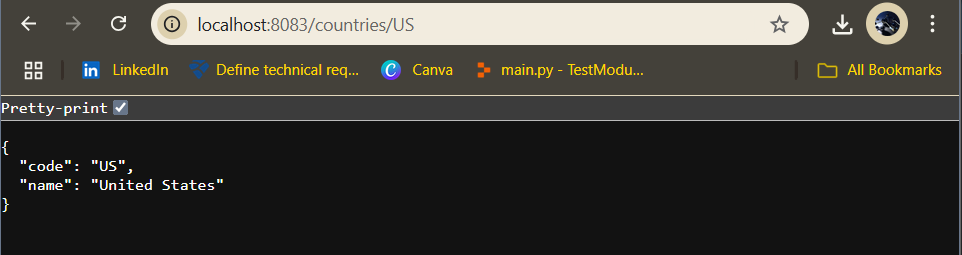
public static void main(String[] args) {

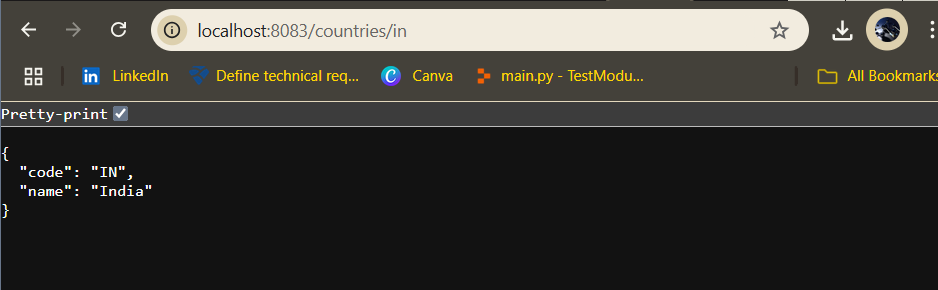
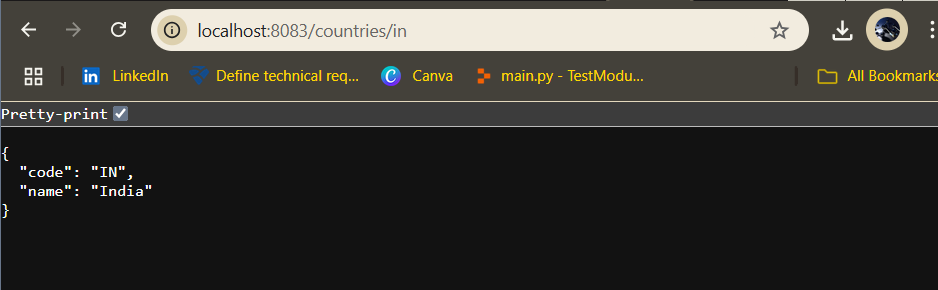
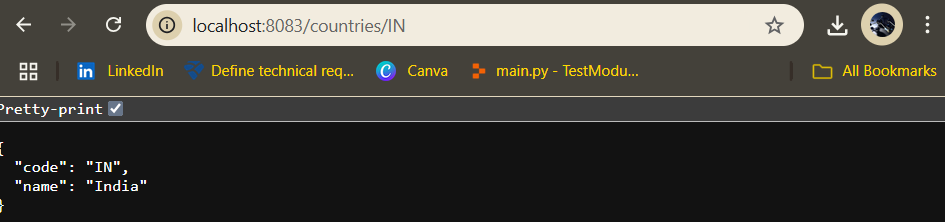
SpringApplication.*run*(SpringLearnApplication.class, args);

***LOGGER***.info("Application started successfully");

}

}

*Output:  
*

**