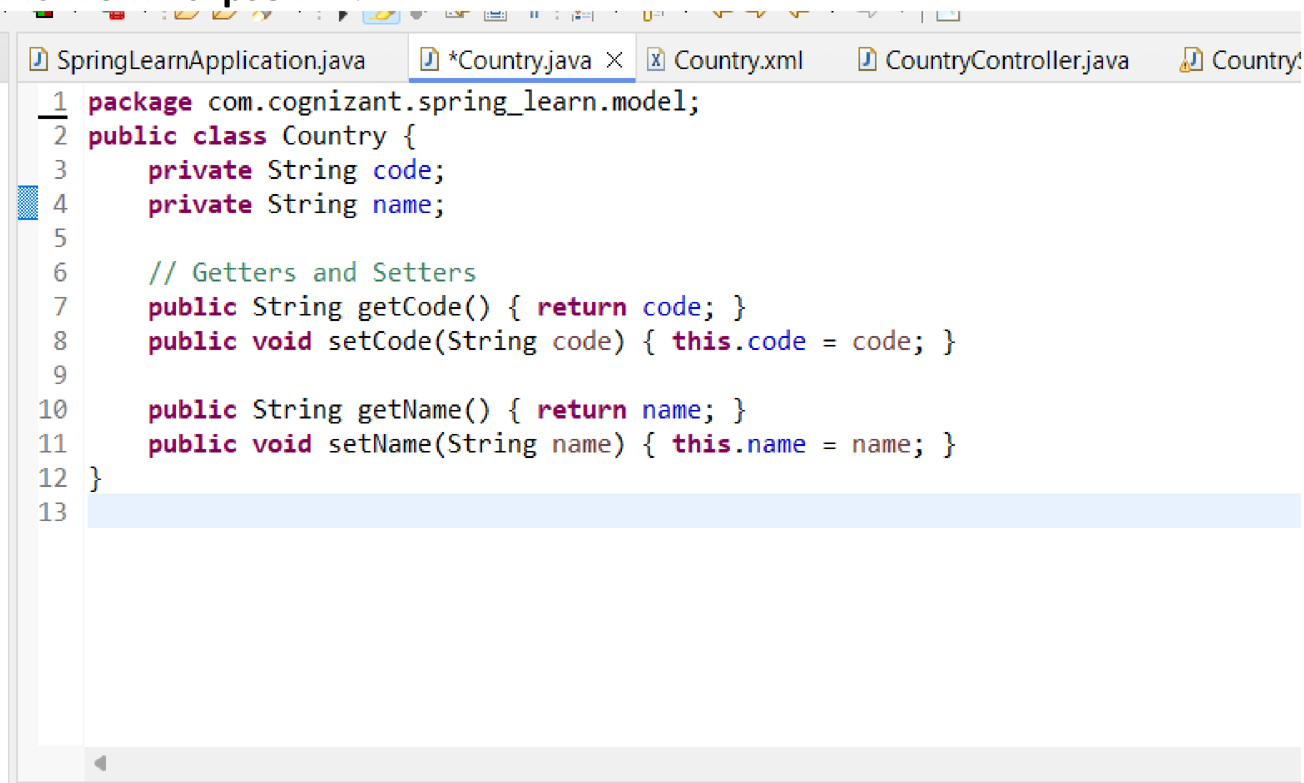
REST - Get country based on country code From File 2. spring-rest-handson

Country.java From Package com. cognizant.spring_learn .model: code:

```
package com.cognizant.spring_learn.model;
public class Country {
   private String code;
   private String name;

   // Getters and Setters
   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; }
}
```

Pic From Eclipse IDE:



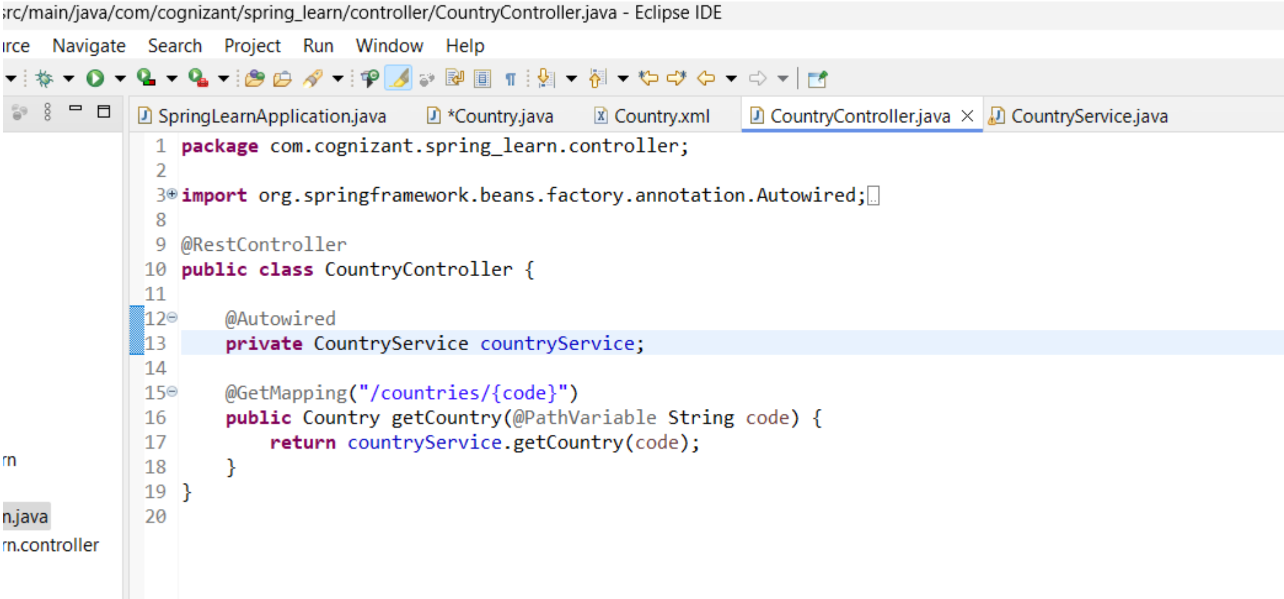
```
package com.cognizant.spring_learn.model;
public class Country {
    private String code;
    private String name;

    // Getters and Setters
    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; }
}
```

CountryController.java From Package com.cognizant.spring_learn. controller;

Code:

```
package com.cognizant.spring_learn.controller;

import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.web.bind.annotation.*;

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);
    }
}
```

Pic From Eclipse IDE:



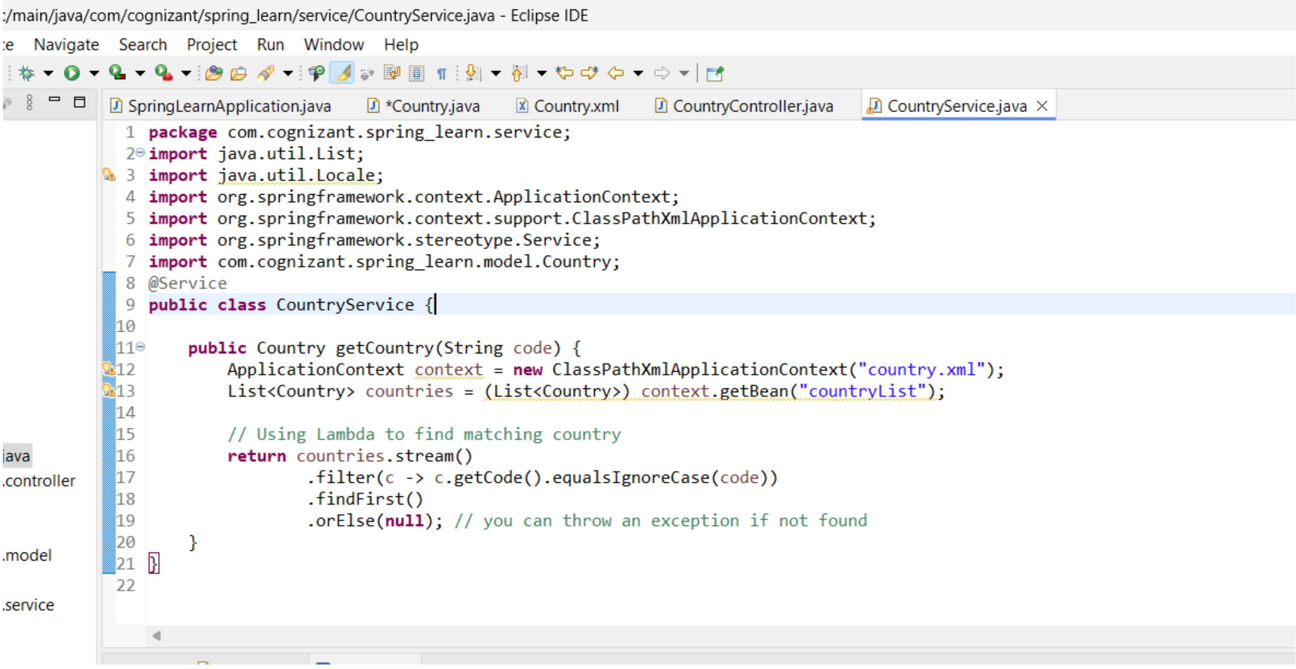
```
package com.cognizant.spring_learn.controller;

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

@RestController
public class CountryController {

    @Autowired
    private CountryService countryService;

    @GetMapping("/countries/{code}")
    public Country getCountry(@PathVariable String code) {
        return countryService.getCountry(code);
    }
}
```

CountryService.java From Package com.cognizant.spring_learn.service;

Code:

```
package com.cognizant.spring_learn.service;
import java.util.List;
import java.util.Locale;
import org.springframework.context.ApplicationContext;
import
org.springframework.context.support.ClassPathXmlApplicationConte
xt;
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");
      List<Country> countries = (List<Country>)
context.getBean("countryList");

      // Using Lambda to find matching country
      return countries.stream()
            .filter(c -> c.getCode().equalsIgnoreCase(code))
            .findFirst()
            .orElse(null); // you can throw an exception if not found
   }
}
```

Pic From Eclipse IDE:

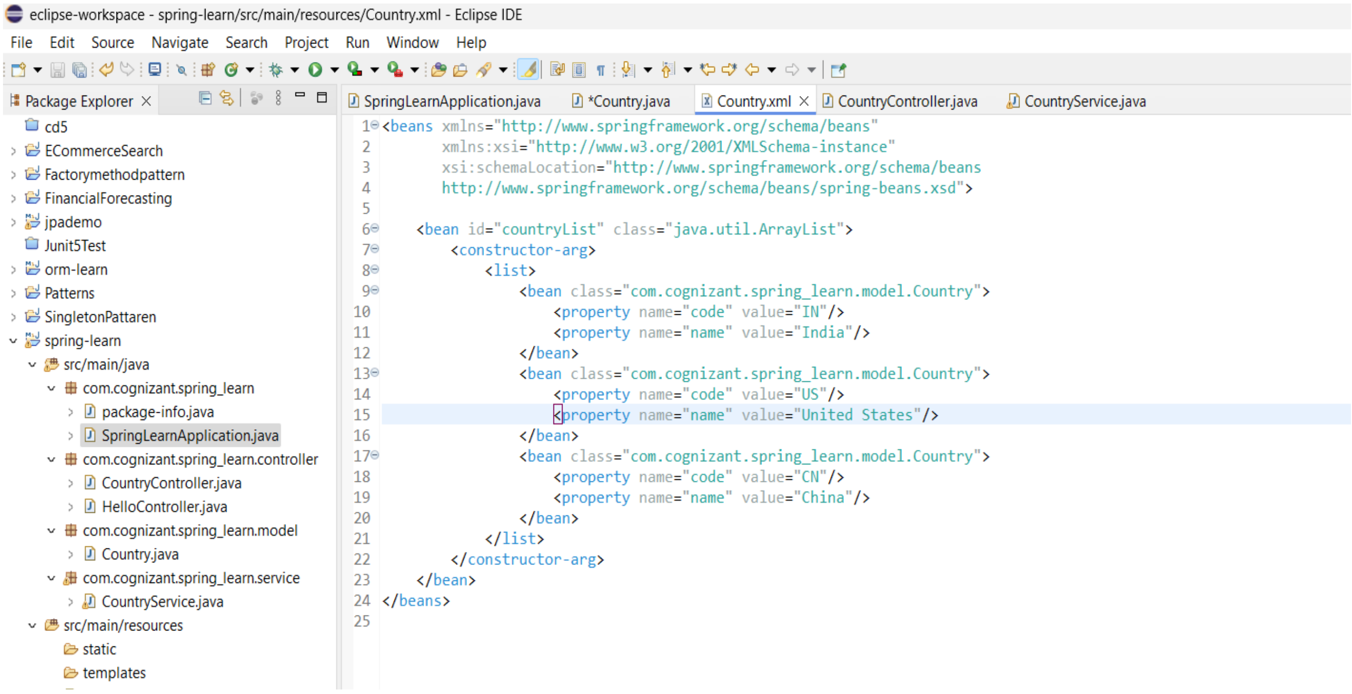


```java
package com.cognizant.spring_learn.service;
import java.util.List;
import java.util.Locale;
import org.springframework.context.ApplicationContext;
import org.springframework.context.support.ClassPathXmlApplicationContext;
import org.springframework.stereotype.Service;
import com.cognizant.spring_learn.model.Country;
@Service
public class CountryService {

    public Country getCountry(String code) {
        ApplicationContext context = new ClassPathXmlApplicationContext("country.xml");
        List<Country> countries = (List<Country>) context.getBean("countryList");

        // Using Lambda to find matching country
        return countries.stream()
                .filter(c -> c.getCode().equalsIgnoreCase(code))
                .findFirst()
                .orElse(null); // you can throw an exception if not found
    }
}
```

Country.xml file:

Code:

```xml
<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="countryList" class="java.util.ArrayList">
        <constructor-arg>
            <list>
                <bean class="com.cognizant.spring_learn.model.Country">
                    <property name="code" value="IN"/>
                    <property name="name" value="India"/>
                </bean>
                <bean class="com.cognizant.spring_learn.model.Country">
                    <property name="code" value="US"/>
                    <property name="name" value="United States"/>
                </bean>
                <bean class="com.cognizant.spring_learn.model.Country">
                    <property name="code" value="CN"/>
                    <property name="name" value="China"/>
                </bean>
            </list>
        </constructor-arg>
    </bean>
</beans>
```



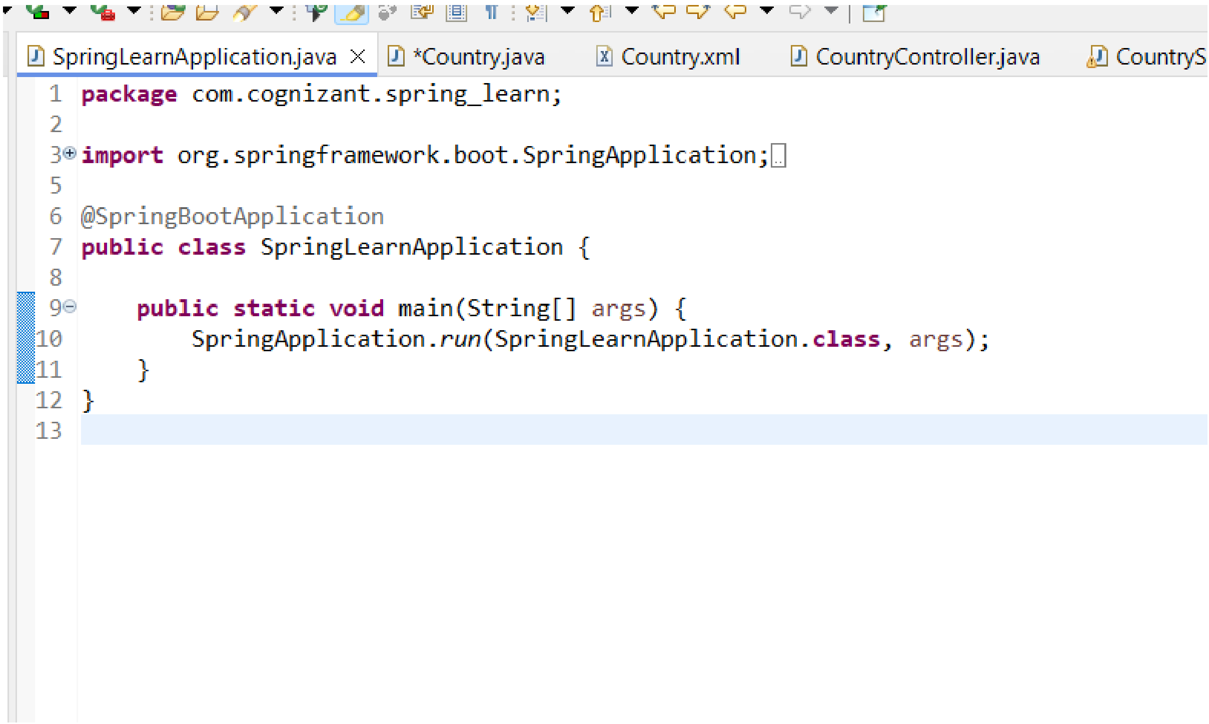
```
<beans xmlns="http://www.springframework.org/schema/beans"
       xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
       xsi:schemaLocation="http://www.springframework.org/schema/beans
       http://www.springframework.org/schema/beans/spring-beans.xsd">

    <bean id="countryList" class="java.util.ArrayList">
        <constructor-arg>
            <list>
                <bean class="com.cognizant.spring_learn.model.Country">
                    <property name="code" value="IN"/>
                    <property name="name" value="India"/>
                </bean>
                <bean class="com.cognizant.spring_learn.model.Country">
                    <property name="code" value="US"/>
                    <property name="name" value="United States"/>
                </bean>
                <bean class="com.cognizant.spring_learn.model.Country">
                    <property name="code" value="CN"/>
                    <property name="name" value="China"/>
                </bean>
            </list>
        </constructor-arg>
    </bean>
</beans>
```

SpringLearnApplication.java From Main Package:

Code:

```
package com.cognizant.spring_learn;

import org.springframework.boot.SpringApplication;

import
org.springframework.boot.autoconfigure.SpringBootApplication;

@SpringBootApplication

public class SpringLearnApplication {

    public static void main(String[] args) {

        SpringApplication.run(SpringLearnApplication.class, args);

    }

}
```

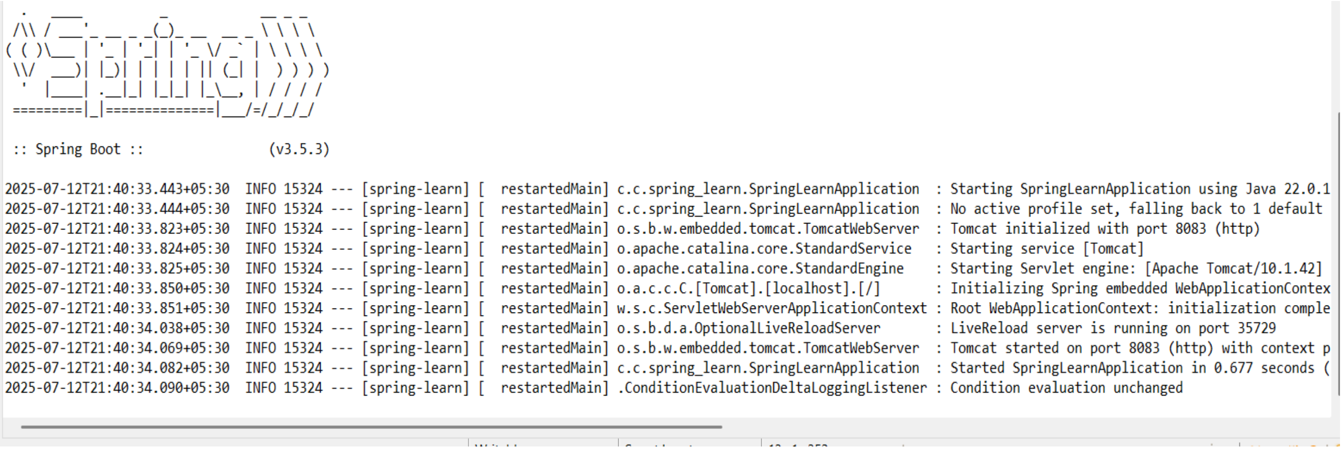
Pic From Eclipse IDE:



```
package com.cognizant.spring_learn;

import org.springframework.boot.SpringApplication;

@SpringBootApplication
public class SpringLearnApplication {

    public static void main(String[] args) {
        SpringApplication.run(SpringLearnApplication.class, args);
    }
}
```

After Running This Class :

Output From Eclipse IDE:



```
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 :: Spring Boot ::                (v3.5.3)

2025-07-12T21:40:33.443+05:30  INFO 15324 --- [spring-learn] [  restartedMain] c.c.spring_learn.SpringLearnApplication  : Starting SpringLearnApplication using Java 22.0.1
2025-07-12T21:40:33.444+05:30  INFO 15324 --- [spring-learn] [  restartedMain] c.c.spring_learn.SpringLearnApplication  : No active profile set, falling back to 1 default
2025-07-12T21:40:33.823+05:30  INFO 15324 --- [spring-learn] [  restartedMain] o.s.b.w.embedded.tomcat.TomcatWebServer  : Tomcat initialized with port 8083 (http)
2025-07-12T21:40:33.824+05:30  INFO 15324 --- [spring-learn] [  restartedMain] o.apache.catalina.core.StandardService   : Starting service [Tomcat]
2025-07-12T21:40:33.825+05:30  INFO 15324 --- [spring-learn] [  restartedMain] o.apache.catalina.core.StandardEngine    : Starting Servlet engine: [Apache Tomcat/10.1.42]
2025-07-12T21:40:33.850+05:30  INFO 15324 --- [spring-learn] [  restartedMain] o.a.c.c.C.[Tomcat].[localhost].[/]       : Initializing Spring embedded WebApplicationContex
2025-07-12T21:40:33.851+05:30  INFO 15324 --- [spring-learn] [  restartedMain] w.s.c.ServletWebServerApplicationContext : Root WebApplicationContext: initialization comple
2025-07-12T21:40:34.038+05:30  INFO 15324 --- [spring-learn] [  restartedMain] o.s.b.d.a.OptionalLiveReloadServer       : LiveReload server is running on port 35729
2025-07-12T21:40:34.069+05:30  INFO 15324 --- [spring-learn] [  restartedMain] o.s.b.w.embedded.tomcat.TomcatWebServer  : Tomcat started on port 8083 (http) with context p
2025-07-12T21:40:34.082+05:30  INFO 15324 --- [spring-learn] [  restartedMain] c.c.spring_learn.SpringLearnApplication  : Started SpringLearnApplication in 0.677 seconds (
2025-07-12T21:40:34.090+05:30  INFO 15324 --- [spring-learn] [  restartedMain] .ConditionEvaluationDeltaLoggingListener : Condition evaluation unchanged
```
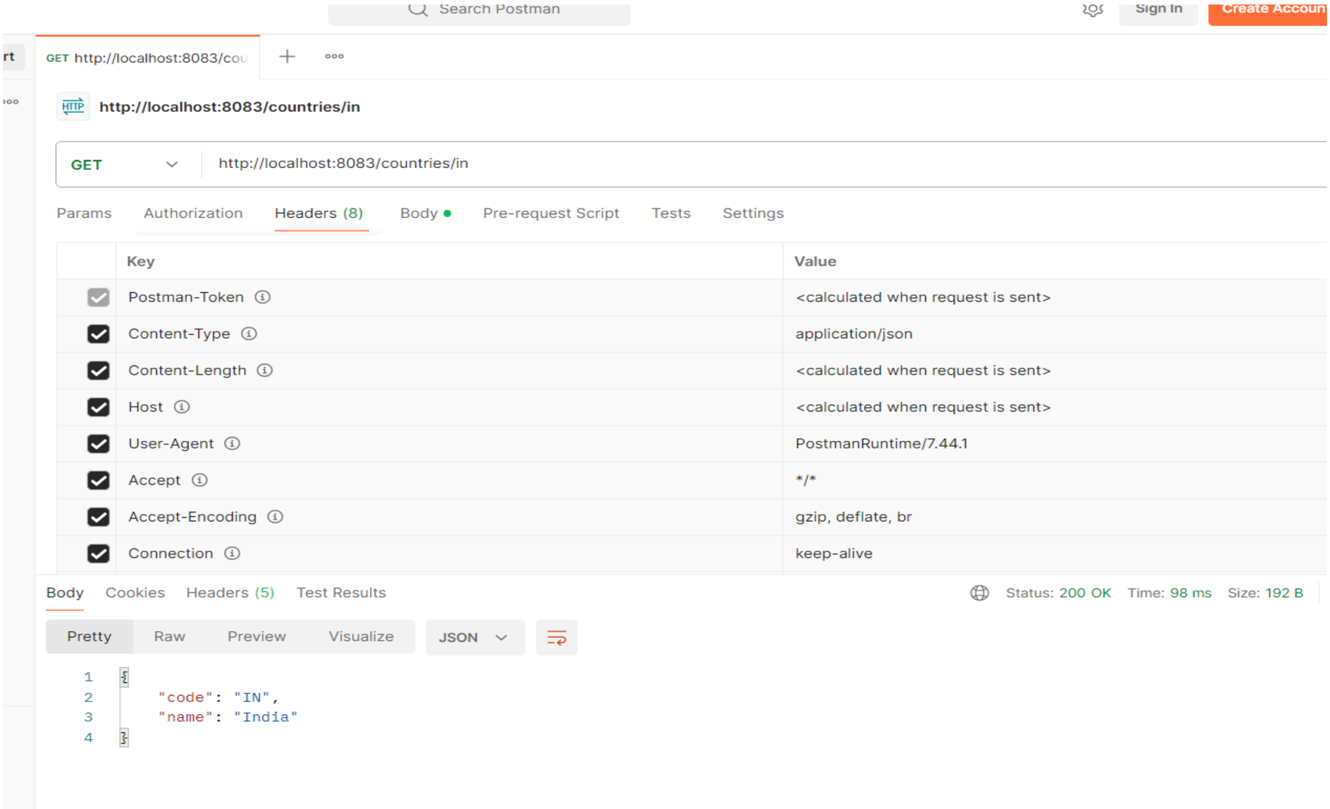

Output and Header From Postman :

```
{
 "code": "IN",
   "name": "India"
}
```



http://localhost:8083/countries/in

GET http://localhost:8083/countries/in

	Key	Value
☑	Postman-Token ⓘ	<calculated when request is sent>
☑	Content-Type ⓘ	application/json
☑	Content-Length ⓘ	<calculated when request is sent>
☑	Host ⓘ	<calculated when request is sent>
☑	User-Agent ⓘ	PostmanRuntime/7.44.1
☑	Accept ⓘ	*/*
☑	Accept-Encoding ⓘ	gzip, deflate, br
☑	Connection ⓘ	keep-alive

Status: 200 OK Time: 98 ms Size: 192 B

```
{
    "code": "IN",
    "name": "India"
}
```