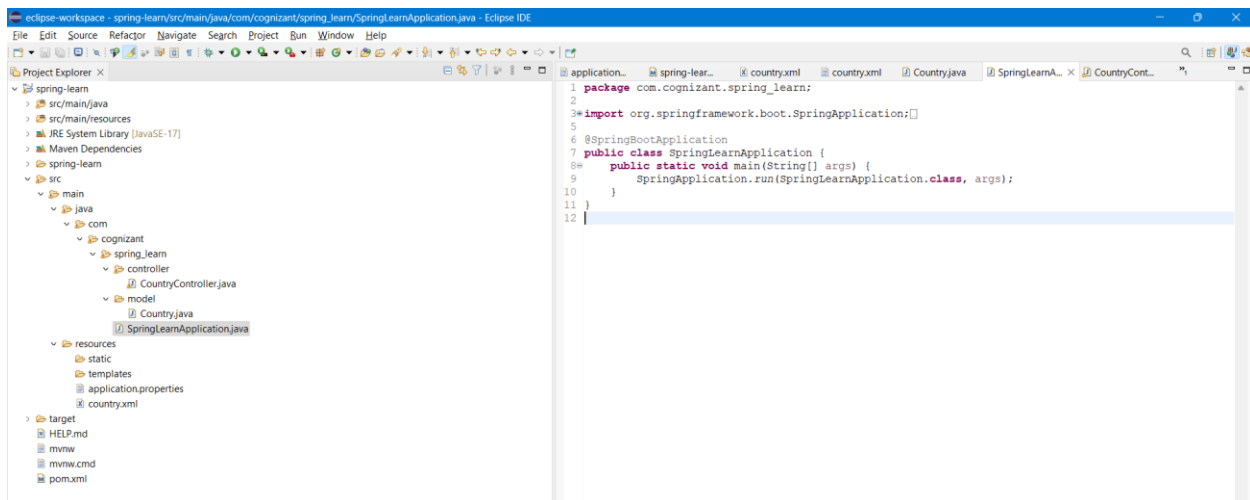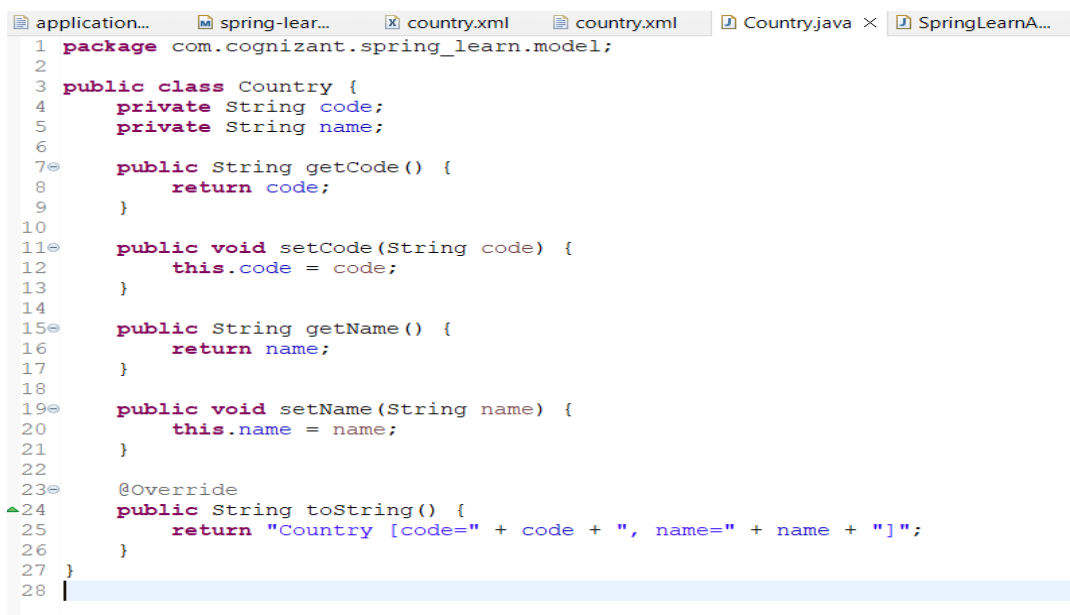# Digital Nurture 4.0 Deep Skilling
Week 4- HANDS ON 4

4.REST - Country Web Service

Write a REST service that returns India country details in the earlier created spring learn application.

Code :

Country.java


```java
1 package com.cognizant.spring_learn.model;
2
3 public class Country {
4     private String code;
5     private String name;
6
7     public String getCode() {
8         return code;
9     }
10
11     public void setCode(String code) {
12         this.code = code;
13     }
14
15     public String getName() {
16         return name;
17     }
18
19     public void setName(String name) {
20         this.name = name;
21     }
22
23     @Override
24     public String toString() {
25         return "Country [code=" + code + ", name=" + name + "]";
26     }
27 }
28
```

Country.xml

```xml
1 <?xml version="1.0" encoding="UTF-8"?>
2 <beans xmlns="http://www.springframework.org/schema/beans"
3     xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
4     xsi:schemaLocation="http://www.springframework.org/schema/beans
5     http://www.springframework.org/schema/beans/spring-beans.xsd">
6
7     <bean id="country" class="com.cognizant.spring_learn.model.Country">
8         <property name="code" value="IN" />
9         <property name="name" value="India" />
10    </bean>
11
12 </beans>
13
```

CountryController.java

```java
1 package com.cognizant.spring_learn.controller;
2
3 import com.cognizant.spring_learn.model.Country;
4 import org.slf4j.Logger;
5 import org.slf4j.LoggerFactory;
6 import org.springframework.context.ApplicationContext;
7 import org.springframework.context.support.ClassPathXmlApplicationContext;
8 import org.springframework.web.bind.annotation.RequestMapping;
9 import org.springframework.web.bind.annotation.RestController;
10
11 @RestController
12 public class CountryController {
13
14     private static final Logger LOGGER = LoggerFactory.getLogger(CountryController.class);
15
16     @RequestMapping("/country")
17     public Country getCountryIndia() {
18         LOGGER.info("START getCountryIndia");
19         ApplicationContext context = new ClassPathXmlApplicationContext("country.xml");
20         Country country = (Country) context.getBean("country", Country.class);
21         LOGGER.info("END getCountryIndia");
22         return country;
23     }
24 }
25
```

Dependencies :


```xml
                    https://maven.apache.org/xsd/maven-4.0.0.xsd (xsi:schemaLocation)
 1 <project xmlns="http://maven.apache.org/POM/4.0.0"
 2          xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 3          xsi:schemaLocation="http://maven.apache.org/POM/4.0.0 https://maven.apache.org/xsd/r
 4     <modelVersion>4.0.0</modelVersion>
 5     <parent>
 6         <groupId>org.springframework.boot</groupId>
 7         <artifactId>spring-boot-starter-parent</artifactId>
 8         <version>3.1.0</version>
 9         <relativePath/>
10     </parent>
11     <groupId>com.cognizant</groupId>
12     <artifactId>spring-learn</artifactId>
13     <version>0.0.1-SNAPSHOT</version>
14     <name>spring-learn</name>
15     <description>Demo Spring Boot Project</description>
16     <properties>
17         <java.version>17</java.version>
18     </properties>
19     <dependencies>
20         <dependency>
21             <groupId>org.springframework.boot</groupId>
22             <artifactId>spring-boot-starter-web</artifactId>
23         </dependency>
24         <dependency>
25             <groupId>org.springframework.boot</groupId>
26             <artifactId>spring-boot-devtools</artifactId>
27             <scope>runtime</scope>
28             <optional>true</optional>
29         </dependency>
30         <dependency>
31             <groupId>org.springframework.boot</groupId>
32             <artifactId>spring-boot-starter-logging</artifactId>
33         </dependency>
34     </dependencies>
35     <build>
36         <plugins>
```

Output :

Port 8083 with Header

```
 Console ✕

SpringLearnApplication [Java Application] C:\Program Files\Java\jdk-20\bin\javaw.exe (Jul 13, 2025, 1:52:59 PM) [pid: 22400]
additions, 0 deletions, 3 modifications)
2025-07-13T13:54:53.394+05:30  INFO 22400 --- [        Thread-5] o.apache.catalina.core.StandardService   : Stopping service [Tomcat]

  .   ____          _            __ _ _
 /\\ / ___'_ __ _ _(_)_ __  __ _ \ \ \ \
( ( )\___ | '_ | '_| | '_ \/ _` | \ \ \ \
 \\/  ___)| |_)| | | | | || (_| |  ) ) ) )
  '  |____| .__|_| |_|_| |_\__, | / / / /
 =========|_|==============|___/=/_/_/_/
 :: Spring Boot ::                (v3.1.0)

2025-07-13T13:54:53.489+05:30 INFO 22400 --- [  restartedMain] c.c.spring_learn.SpringLearnApplication  : Starting SpringLearnApplication using Java 20.0.2
with PID 22400 (C:\Users\HP\eclipse-workspace\spring-learn\target\classes started by HP in C:\Users\HP\eclipse-workspace\spring-learn)
2025-07-13T13:54:53.489+05:30 INFO 22400 --- [  restartedMain] c.c.spring_learn.SpringLearnApplication  : No active profile set, falling back to 1 default
profile: "default"
2025-07-13T13:54:53.765+05:30 INFO 22400 --- [  restartedMain] o.s.b.w.embedded.tomcat.TomcatWebServer  : Tomcat initialized with port(s): 8083 (http)
2025-07-13T13:54:53.766+05:30 INFO 22400 --- [  restartedMain] o.apache.catalina.core.StandardService   : Starting service [Tomcat]
2025-07-13T13:54:53.766+05:30 INFO 22400 --- [  restartedMain] o.apache.catalina.core.StandardEngine    : Starting Servlet engine: [Apache Tomcat/10.1.8]
2025-07-13T13:54:53.791+05:30 INFO 22400 --- [  restartedMain] o.a.c.c.C.[Tomcat].[localhost].[/]        : Initializing Spring embedded WebApplicationContext
2025-07-13T13:54:53.791+05:30 INFO 22400 --- [  restartedMain] w.s.c.ServletWebServerApplicationContext : Root WebApplicationContext: initialization
completed in 300 ms
2025-07-13T13:54:53.897+05:30 INFO 22400 --- [  restartedMain] o.s.b.d.a.OptionalLiveReloadServer       : LiveReload server is running on port 35729
2025-07-13T13:54:53.908+05:30 INFO 22400 --- [  restartedMain] o.s.b.w.embedded.tomcat.TomcatWebServer  : Tomcat started on port(s): 8083 (http) with context
path ''
2025-07-13T13:54:53.914+05:30 INFO 22400 --- [  restartedMain] c.c.spring_learn.SpringLearnApplication  : Started SpringLearnApplication in 0.461 seconds
(process running for 113.502)
2025-07-13T13:54:53.917+05:30 INFO 22400 --- [  restartedMain] .ConditionEvaluationDeltaLoggingListener : Condition evaluation unchanged
2025-07-13T13:55:22.981+05:30 INFO 22400 --- [nio-8083-exec-1] o.a.c.c.C.[Tomcat].[localhost].[/]        : Initializing Spring DispatcherServlet
'dispatcherServlet'
2025-07-13T13:55:22.982+05:30 INFO 22400 --- [nio-8083-exec-1] o.s.web.servlet.DispatcherServlet        : Initializing Servlet 'dispatcherServlet'
2025-07-13T13:55:22.983+05:30 INFO 22400 --- [nio-8083-exec-1] o.s.web.servlet.DispatcherServlet        : Completed initialization in 1 ms
2025-07-13T13:55:23.027+05:30 INFO 22400 --- [nio-8083-exec-1] c.c.s.controller.CountryController       : START getCountryIndia
2025-07-13T13:55:23.233+05:30 INFO 22400 --- [nio-8083-exec-1] c.c.s.controller.CountryController       : END getCountryIndia
2025-07-13T13:56:03.079+05:30 INFO 22400 --- [nio-8083-exec-7] c.c.s.controller.CountryController       : START getCountryIndia
2025-07-13T13:56:03.117+05:30 INFO 22400 --- [nio-8083-exec-7] c.c.s.controller.CountryController       : END getCountryIndia
2025-07-13T13:56:05.969+05:30 INFO 22400 --- [nio-8083-exec-8] c.c.s.controller.CountryController       : START getCountryIndia
2025-07-13T13:56:05.993+05:30 INFO 22400 --- [nio-8083-exec-8] c.c.s.controller.CountryController       : END getCountryIndia
```

Postman :