**Spring REST using Spring Boot 3**

**EXERCISE: REST - Country Web Service**

**Objective**

To create a simple RESTful web service using Spring Boot that returns details of a country (name and capital) as a JSON response.

**Tools & Technologies Used**

\* Spring Boot 3.x

\* Spring Web

\* Java 17+

\* Maven

\* Eclipse IDE

\* Spring Initializr

\* REST API

**Step 1: Generate Spring Boot Application**

1. Go to [<https://start.spring.io](https://start.spring.io)>

2. Fill in the following fields:

| Field | Value |

| ------------ | ---------------------------- |

| Project | Maven |

| Language | Java |

| Spring Boot | 3.x (Latest) |

| Group | `com.example` |

| Artifact | `countryservice` |

| Name | `countryservice` |

| Package Name | `com.example.countryservice` |

| Packaging | Jar |

| Java | 17 or above |

3. Click Add Dependencies → Select `Spring Web`

4. Click Generate

A file `countryservice.zip` will be downloaded.

**Step 2: Import the Project into Eclipse**

1. Extract the downloaded zip file.

2. Open Eclipse IDE

3. Go to:

File > Import > Maven > Existing Maven Projects > Next

4. Browse to the extracted `countryservice` folder.

5. Click Finish

The project is now imported and Maven resolves all dependencies.

**Step 3: Create the `Country` Model Class**

1. Inside `src/main/java`, create the package:

com.example.countryservice.model

2. Inside this package, create a new class:

Country.java

3. Add the following code:

```java

package com.example.countryservice.model;

public class Country {

private String name;

private String capital;

public Country() {}

public Country(String name, String capital) {

this.name = name;

this.capital = capital;

}

// Getters and Setters

public String getName() {

return name;

}

public void setName(String name) {

this.name = name;

}

public String getCapital() {

return capital;

}

public void setCapital(String capital) {

this.capital = capital;

}

}

**Step 4: Create the REST Controller**

1. Create another package:

com.example.countryservice.controller

2. Inside it, create a new class:

CountryController.java

3. Add the following code:

```java

package com.example.countryservice.controller;

import com.example.countryservice.model.Country;

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

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

@RestController

public class CountryController {

@GetMapping("/country")

public Country getCountry() {

return new Country("India", "New Delhi");

}

}

**Step 5: Run the Application**

1. In the root package `com.example.countryservice`, locate:

CountryServiceApplication.java

2. Right-click → `Run As > Java Application`

3. Console output will confirm successful startup:

Tomcat started on port(s): 8080

Started CountryServiceApplication

**Step 6: Test the REST API**

1. Open a browser or Postman.

2. Enter the URL:

<http://localhost:8080/country>

3. Expected Output:

{

"name": "India",

"capital": "New Delhi"

}

**OUTPUT:**

