**1. Hello World RESTful Web Service**

**a) Controller Class**

package com.example.rest;

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

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

@RestController

public class HelloController {

@GetMapping("/hello")

public String sayHello() {

return "Hello World";

}

}

**b) Spring Boot Application Class**

package com.example.rest;

import org.springframework.boot.SpringApplication;

import org.springframework.boot.autoconfigure.SpringBootApplication;

@SpringBootApplication

public class RestApp {

public static void main(String[] args) {

SpringApplication.run(RestApp.class, args);

}

}

**2. REST – Country Web Service**

**a) Country Model**

package com.example.rest.model;

public class Country {

private String code;

private String name;

public Country(String code, String name) {

this.code = code;

this.name = name;

}

public String getCode() {

return code;

}

public String getName() {

return name;

}

}

**b) Country Service**

package com.example.rest.service;

import com.example.rest.model.Country;

import org.springframework.stereotype.Service;

import java.util.Arrays;

import java.util.List;

@Service

public class CountryService {

private final List<Country> countries = Arrays.asList(

new Country("IN", "India"),

new Country("US", "United States"),

new Country("JP", "Japan")

);

public List<Country> getAllCountries() {

return countries;

}

public Country getCountryByCode(String code) {

return countries.stream()

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

.findFirst()

.orElse(null);

}

}

**c) Country Controller**

package com.example.rest.controller;

import com.example.rest.model.Country;

import com.example.rest.service.CountryService;

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

import java.util.List;

@RestController

@RequestMapping("/api/countries")

public class CountryController {

private final CountryService service;

public CountryController(CountryService service) {

this.service = service;

}

@GetMapping

public List<Country> getAllCountries() {

return service.getAllCountries();

}

@GetMapping("/{code}")

public Country getCountryByCode(@PathVariable String code) {

return service.getCountryByCode(code);

}

}