```
Find a country based on country code
Add a new country
package com.example.countryservice.entity;
import jakarta.persistence.*;
@Entity
public class Country {
  @ld
  @GeneratedValue(strategy = GenerationType./DENTITY)
  private int id;
  @Column(unique = true)
  private String code;
 private String name;
 private String capital;
  public int getId() { return id; }
  public void setId(int id) { this.id = id; }
 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; }
```

```
public String getCapital() { return capital; }
  public void setCapital(String capital) { this.capital = capital; }
}
package com.example.countryservice.repository;
import java.util.Optional;
import com.example.countryservice.entity.Country;
import org.springframework.data.jpa.repository.JpaRepository;
public interface CountryRepository extends JpaRepository<Country, Integer> {
  Optional < Country > find By Code (String code);
}
package com.example.countryservice.service;
import com.example.countryservice.entity.Country;
import com.example.countryservice.repository.CountryRepository;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.stereotype.Service;
import java.util.List;
import java.util.Optional;
@Service
public class CountryService {
```

```
@Autowired
private CountryRepository countryRepository;
public Country addCountry(Country country) {
 return countryRepository.save(country);
}
public List<Country> getAllCountries() {
  return countryRepository.findAll();
}
public Optional<Country> getCountryById(int id) {
  return countryRepository.findById(id);
}
public Country updateCountry(Country country) {
  return countryRepository.save(country);
}
public void deleteCountry(int id) {
  countryRepository.deleteById(id);
}
public Optional<Country> getCountryByCode(String code) {
 return countryRepository.findByCode(code);
}
```

}

```
package com.example.countryservice.controller;
import com.example.countryservice.entity.Country;
import com.example.countryservice.service.CountryService;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.web.bind.annotation.*;
import java.util.List;
@RestController
@RequestMapping("/countries")
public class CountryController {
 @Autowired
 private CountryService countryService;
 @PostMapping
 public Country add(@RequestBody Country country) {
   return countryService.addCountry(country);
 }
 @GetMapping
 public List<Country> getAll() {
   return countryService.getAllCountries();
 }
 @GetMapping("/{id}")
 public Country getById(@PathVariable int id) {
```

```
return countryService.getCountryById(id).orElse(null);
 }
  @PutMapping
  public Country update(@RequestBody Country country) {
   return countryService.updateCountry(country);
 }
  @DeleteMapping("/{id}")
  public String delete(@PathVariable int id) {
   countryService.deleteCountry(id);
   return "Country with ID " + id + " deleted";
 }
  @GetMapping("/code/{code}")
  public Country getByCode(@PathVariable String code) {
   return countryService.getCountryByCode(code).orElse(null);
 }
}
package com.example.countryservice;
import org.springframework.boot.SpringApplication;
import org.springframework.boot.autoconfigure.SpringBootApplication;
@SpringBootApplication
public class CountryServiceApplicationn {
  public static void main(String[] args) {
   SpringApplication.run(CountryServiceApplicationn.class, args);
```

```
}
```

OUTPUT:



