**Hands On 1: Write queries on country table using Query Methods**   
  
**Country.java**

package com.cognizant.ormlearn.entity;  
  
import jakarta.persistence.Entity;  
import jakarta.persistence.Id;  
import jakarta.persistence.Table;  
  
@Entity  
@Table(name = "country")  
public class Country {  
  
 @Id  
 private String code;  
 private String name;  
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;  
 }  
}

**CountryRepository.java**

package com.cognizant.ormlearn.repository;  
  
import com.cognizant.ormlearn.entity.Country;  
import org.springframework.data.jpa.repository.JpaRepository;  
import java.util.List;  
  
public interface CountryRepository extends JpaRepository<Country, String> {  
 List<Country> findByNameContaining(String substring);  
 List<Country> findByNameContainingOrderByNameAsc(String substring);  
 List<Country> findByNameStartingWith(String prefix);  
}

**CountryService.java**

package com.cognizant.ormlearn.service;  
  
import com.cognizant.ormlearn.entity.Country;  
import com.cognizant.ormlearn.repository.CountryRepository;  
import org.springframework.beans.factory.annotation.Autowired;  
import org.springframework.stereotype.Service;  
  
import java.util.List;  
  
@Service  
public class CountryService {  
  
 @Autowired  
 private CountryRepository countryRepository;  
  
 public List<Country> searchByName(String substring) {  
 return countryRepository.findByNameContaining(substring);  
 }  
  
 public List<Country> searchByNameSorted(String substring) {  
 return countryRepository.findByNameContainingOrderByNameAsc(substring);  
 }  
  
 public List<Country> searchByStartingLetter(String prefix) {  
 return countryRepository.findByNameStartingWith(prefix);  
 }  
}

**OrmlearnApplication.java**

package com.cognizant.ormlearn;  
  
import com.cognizant.ormlearn.entity.Country;  
import com.cognizant.ormlearn.service.CountryService;  
import org.springframework.beans.factory.annotation.Autowired;  
import org.springframework.boot.CommandLineRunner;  
import org.springframework.boot.SpringApplication;  
import org.springframework.boot.autoconfigure.SpringBootApplication;  
  
import java.util.List;  
  
@SpringBootApplication  
public class OrmlearnApplication implements CommandLineRunner {  
  
 @Autowired  
 private CountryService countryService;  
  
 public static void main(String[] args) {  
 SpringApplication.*run*(OrmlearnApplication.class, args);  
 }  
  
 @Override  
 public void run(String... args) {  
 System.*out*.println("=== Countries containing 'ou' ===");  
 List<Country> list1 = countryService.searchByName("ou");  
 list1.forEach(c -> System.*out*.println(c.getCode() + " - " + c.getName()));  
  
 System.*out*.println("\n=== Countries containing 'ou' (sorted) ===");  
 List<Country> list2 = countryService.searchByNameSorted("ou");  
 list2.forEach(c -> System.*out*.println(c.getCode() + " - " + c.getName()));  
  
 System.*out*.println("\n=== Countries starting with 'Z' ===");  
 List<Country> list3 = countryService.searchByStartingLetter("Z");  
 list3.forEach(c -> System.*out*.println(c.getCode() + " - " + c.getName()));  
 }  
}

**application.properties**

spring.h2.console.enabled=true  
spring.h2.console.path=/h2-console  
  
spring.datasource.url=jdbc:h2:mem:testdb  
spring.datasource.driverClassName=org.h2.Driver  
spring.datasource.username=sa  
spring.datasource.password=  
  
spring.jpa.show-sql=true  
spring.jpa.hibernate.ddl-auto=create  
spring.datasource.initialization-mode=always  
  
logging.level.com.example.country=DEBUG

**Output**