Additional Hands-on: Add a new country

Code:

Country.java

```java
package com.cognizant.orm_learn.model;

import jakarta.persistence.Column;
import jakarta.persistence.Entity;
import jakarta.persistence.Id;
import jakarta.persistence.Table;

@Entity
@Table(name = "country")
public class Country {

    @Id
    @Column(name = "co_code")
    private String code;

    @Column(name = "co_name")
    private String name;

    public Country() {}

    public Country(String code, String name) {
        this.code = code;
        this.name = 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;
    }

    @Override
    public String toString() {
        return "Country{" + "code='" + code + '\'' + ", name='" + name + '\''
+ '}';
```

```
    }
}
```

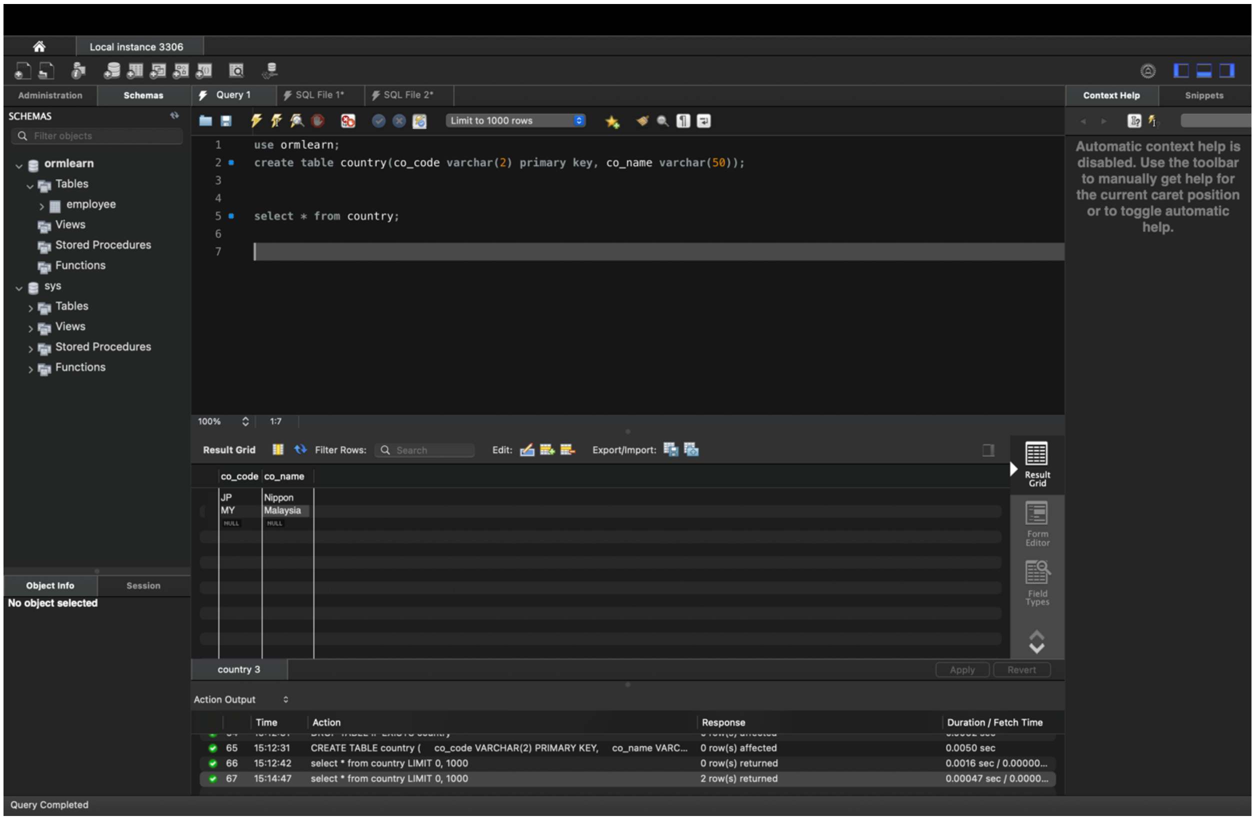
CountryService.java

```
package com.cognizant.orm_learn.service;

import com.cognizant.orm_learn.model.Country;
import com.cognizant.orm_learn.repository.CountryRepository;
import com.cognizant.orm_learn.service.exception.CountryNotFoundException;
import jakarta.transaction.Transactional;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.stereotype.Service;

import java.util.Optional;

@Service
public class CountryService {

    @Autowired
    private CountryRepository countryRepository;

    @Transactional
    public Country findCountryByCode(String code) throws
CountryNotFoundException {
        Optional<Country> result = countryRepository.findById(code);
        if (result.isEmpty()) {
            throw new CountryNotFoundException("Country not found with code:
" + code);
        }
        return result.get();
    }

    @Transactional
    public void addCountry(Country country) {
        countryRepository.save(country);
    }
}
```

OrmLearnApplication.java(Main.java):

```
package com.cognizant.orm_learn;

import com.cognizant.orm_learn.model.Country;
import com.cognizant.orm_learn.service.CountryService;
import com.cognizant.orm_learn.service.exception.CountryNotFoundException;
import org.slf4j.Logger;
import org.slf4j.LoggerFactory;
import org.springframework.boot.SpringApplication;
import org.springframework.boot.autoconfigure.SpringBootApplication;
import org.springframework.context.ApplicationContext;

@SpringBootApplication
public class OrmLearnApplication {

    private static final Logger LOGGER =
LoggerFactory.getLogger(OrmLearnApplication.class);
    private static CountryService countryService;

    public static void main(String[] args) {
        ApplicationContext context =
SpringApplication.run(OrmLearnApplication.class, args);
        countryService = context.getBean(CountryService.class);
        testAddCountry();
    }

    private static void testAddCountry() {
        LOGGER.info("Start");

        Country newCountry = new Country();
        newCountry.setCode("In");
        newCountry.setName("India");

        countryService.addCountry(newCountry);

        try {
            Country country = countryService.findCountryByCode("JP");
            LOGGER.debug("Country: {}", country);
        } catch (CountryNotFoundException e) {
            LOGGER.error("Country not found after adding.");
        }

        LOGGER.info("End");
    }

}
```

OutPut:



```
use ormlearn;
create table country(co_code varchar(2) primary key, co_name varchar(50));


select * from country;

```

co_code	co_name
JP	Nippon
MY	Malaysia
NULL	NULL

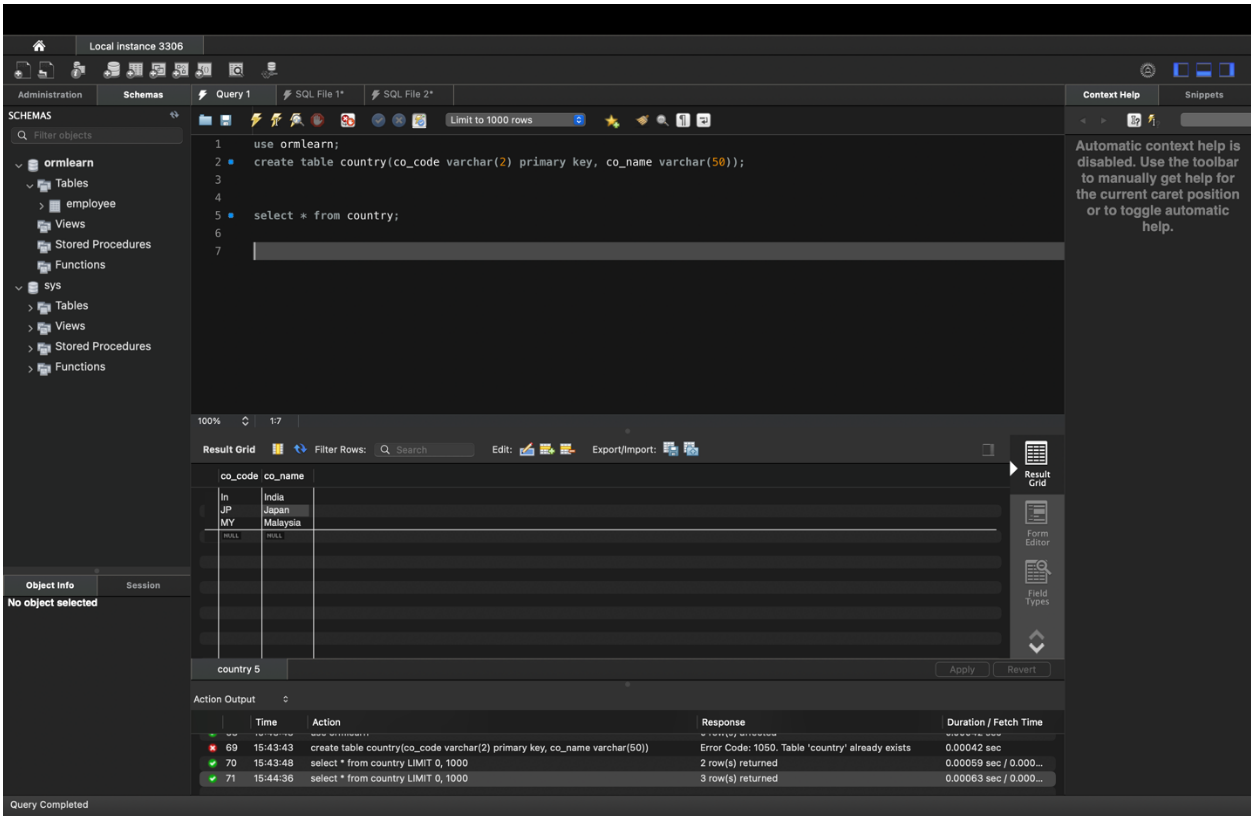
country 3

	Time	Action	Response	Duration / Fetch Time
65	15:12:31	CREATE TABLE country (co_code VARCHAR(2) PRIMARY KEY, co_name VARC...	0 row(s) affected	0.0050 sec
66	15:12:42	select * from country LIMIT 0, 1000	0 row(s) returned	0.0016 sec / 0.00000...
67	15:14:47	select * from country LIMIT 0, 1000	2 row(s) returned	0.00047 sec / 0.0000...

No object selected

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

Query Completed

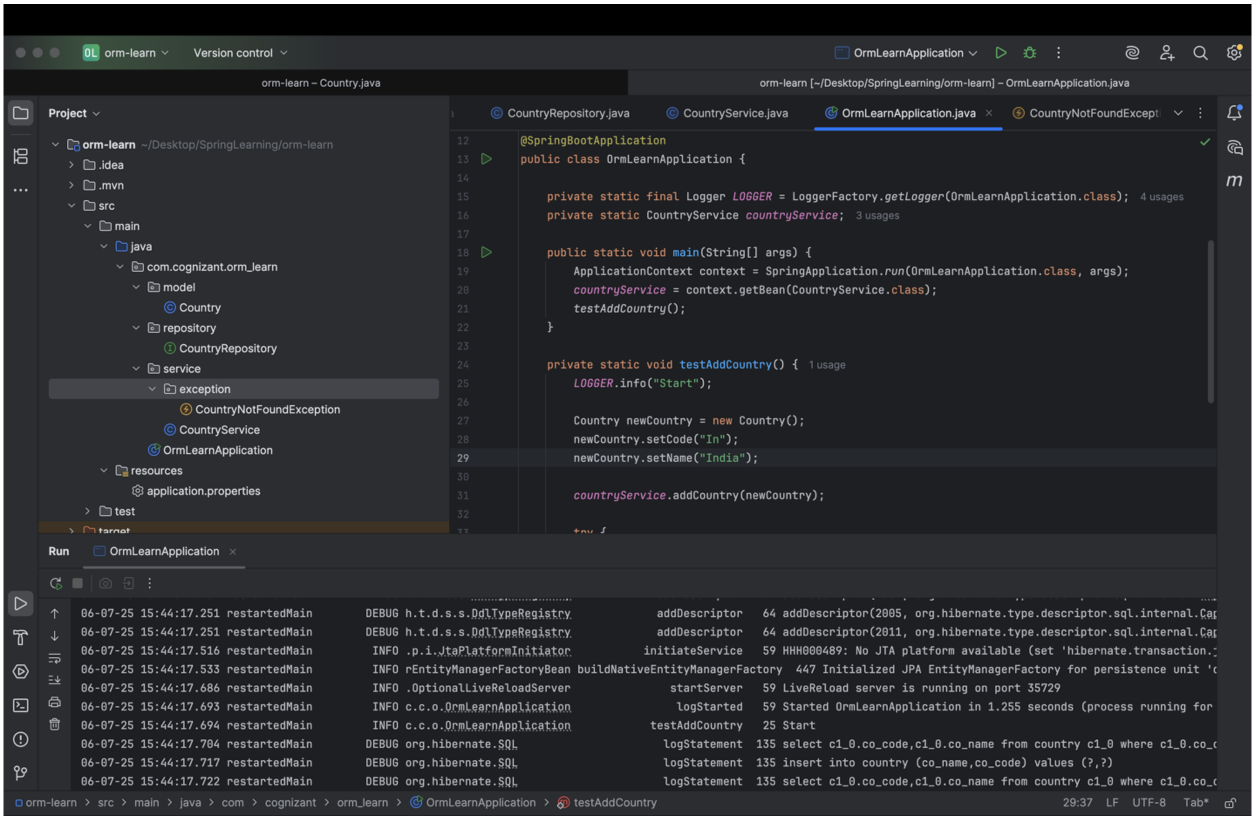


```sql
use ormlearn;
create table country(co_code varchar(2) primary key, co_name varchar(50));


select * from country;

```

co_code	co_name
In	India
JP	Japan
MY	Malaysia
NULL	NULL

Action Output

		Time	Action	Response	Duration / Fetch Time
✗	69	15:43:43	create table country(co_code varchar(2) primary key, co_name varchar(50))	Error Code: 1050. Table 'country' already exists	0.00042 sec
✓	70	15:43:48	select * from country LIMIT 0, 1000	2 row(s) returned	0.00059 sec / 0.000...
✓	71	15:44:36	select * from country LIMIT 0, 1000	3 row(s) returned	0.00063 sec / 0.000...



```java
@SpringBootApplication
public class OrmLearnApplication {

    private static final Logger LOGGER = LoggerFactory.getLogger(OrmLearnApplication.class);  4 usages
    private static CountryService countryService;  3 usages

    public static void main(String[] args) {
        ApplicationContext context = SpringApplication.run(OrmLearnApplication.class, args);
        countryService = context.getBean(CountryService.class);
        testAddCountry();
    }

    private static void testAddCountry() {  1 usage
        LOGGER.info("Start");

        Country newCountry = new Country();
        newCountry.setCode("In");
        newCountry.setName("India");

        countryService.addCountry(newCountry);

        try {
```

```
06-07-25 15:44:17.251 restartedMain       DEBUG h.t.d.s.s.DdlTypeRegistry           addDescriptor   64 addDescriptor(2005, org.hibernate.type.descriptor.sql.internal.Cap
06-07-25 15:44:17.251 restartedMain       DEBUG h.t.d.s.s.DdlTypeRegistry           addDescriptor   64 addDescriptor(2011, org.hibernate.type.descriptor.sql.internal.Cap
06-07-25 15:44:17.516 restartedMain        INFO .p.i.JtaPlatformInitiator         initiateService   59 HHH000489: No JTA platform available (set 'hibernate.transaction.j
06-07-25 15:44:17.533 restartedMain        INFO rEntityManagerFactoryBean buildNativeEntityManagerFactory  447 Initialized JPA EntityManagerFactory for persistence unit 'd
06-07-25 15:44:17.686 restartedMain        INFO .OptionalLiveReloadServer             startServer   59 LiveReload server is running on port 35729
06-07-25 15:44:17.693 restartedMain        INFO c.c.o.OrmLearnApplication              logStarted   59 Started OrmLearnApplication in 1.255 seconds (process running for
06-07-25 15:44:17.694 restartedMain        INFO c.c.o.OrmLearnApplication          testAddCountry   25 Start
06-07-25 15:44:17.704 restartedMain       DEBUG org.hibernate.SQL                    logStatement  135 select c1_0.co_code,c1_0.co_name from country c1_0 where c1_0.co_c
06-07-25 15:44:17.717 restartedMain       DEBUG org.hibernate.SQL                    logStatement  135 insert into country (co_name,co_code) values (?,?)
06-07-25 15:44:17.722 restartedMain       DEBUG org.hibernate.SQL                    logStatement  135 select c1_0.co_code,c1_0.co_name from country c1_0 where c1_0.co_c
```