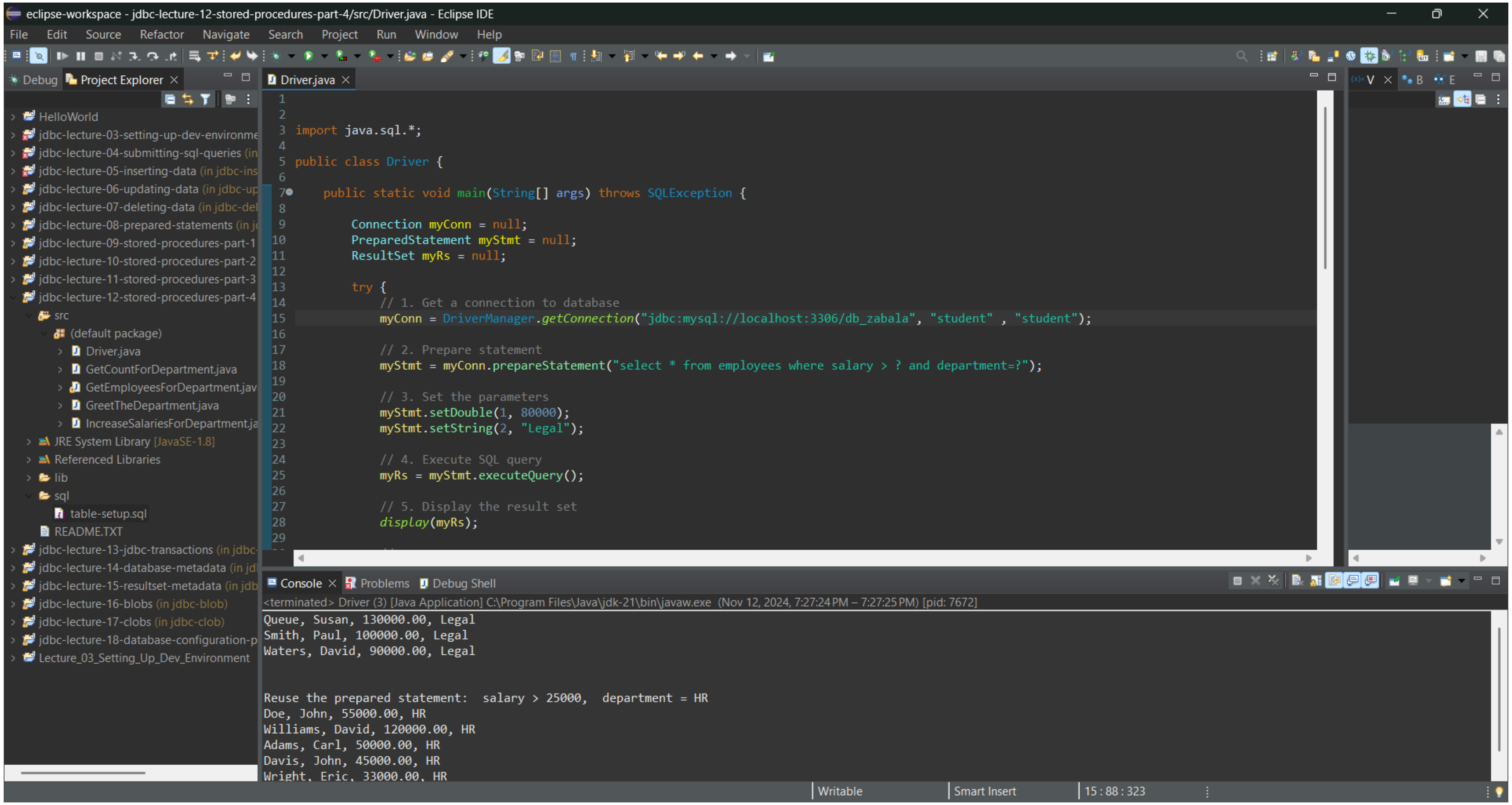
Lecture 12_Stored Procedures Part 4

DRIVER


eclipse-workspace - jdbc-lecture-12-stored-procedures-part-4/src/Driver.java - Eclipse IDE
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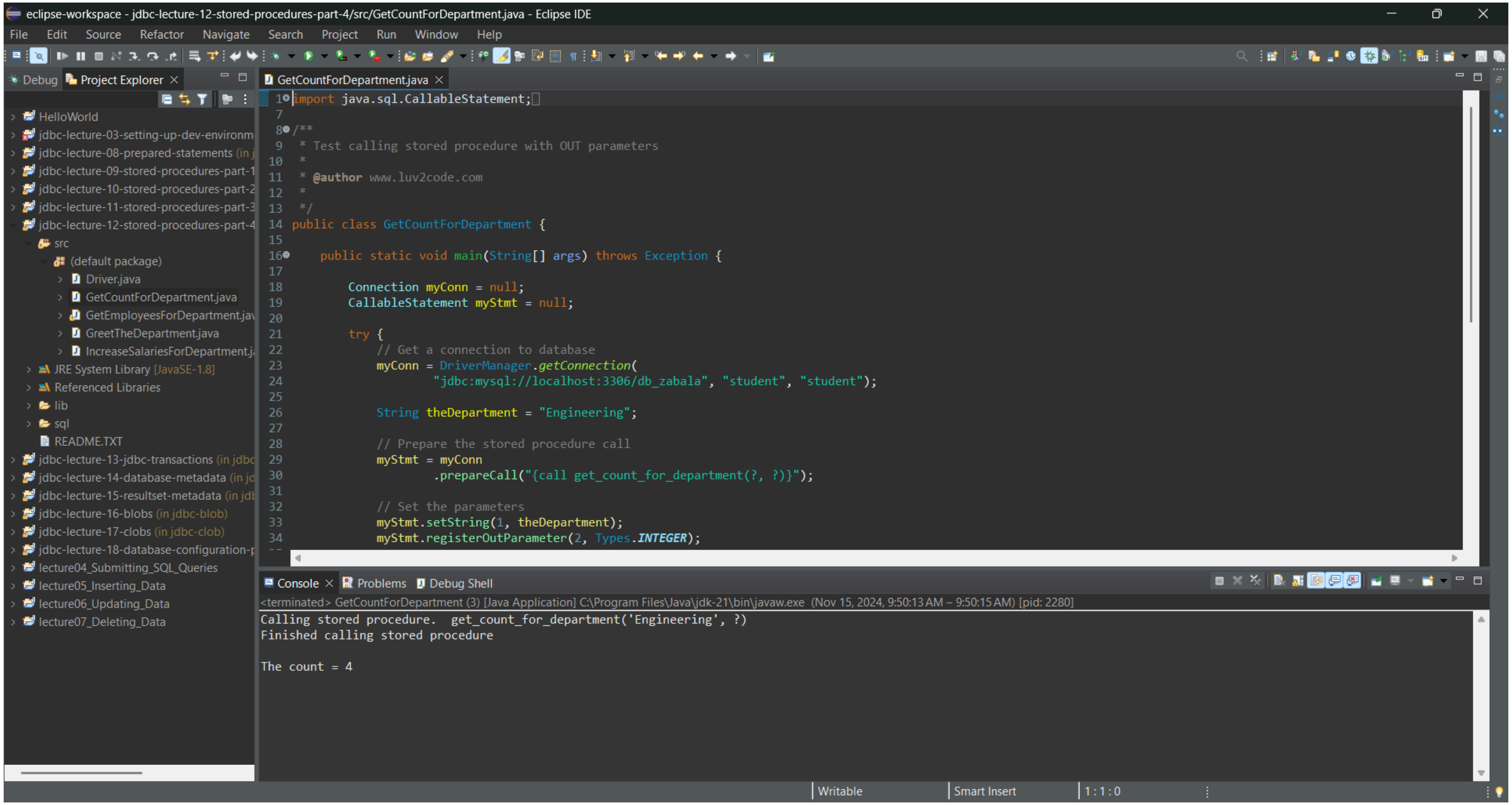
15 : 88 : 323

```java


import java.sql.*;

public class Driver {

    public static void main(String[] args) throws SQLException {

        Connection myConn = null;
        PreparedStatement myStmt = null;
        ResultSet myRs = null;

        try {
            // 1. Get a connection to database
            myConn = DriverManager.getConnection("jdbc:mysql://localhost:3306/db_zabala", "student" , "student");

            // 2. Prepare statement
            myStmt = myConn.prepareStatement("select * from employees where salary > ? and department=?");

            // 3. Set the parameters
            myStmt.setDouble(1, 80000);
            myStmt.setString(2, "Legal");

            // 4. Execute SQL query
            myRs = myStmt.executeQuery();

            // 5. Display the result set
            display(myRs);

```

```
<terminated> Driver (3) [Java Application] C:\Program Files\Java\jdk-21\bin\javaw.exe  (Nov 12, 2024, 7:27:24 PM – 7:27:25 PM) [pid: 7672]
Queue, Susan, 130000.00, Legal
Smith, Paul, 100000.00, Legal
Waters, David, 90000.00, Legal


Reuse the prepared statement:  salary > 25000,  department = HR
Doe, John, 55000.00, HR
Williams, David, 120000.00, HR
Adams, Carl, 50000.00, HR
Davis, John, 45000.00, HR
Wright, Eric, 33000.00, HR
```

Get Count for Department



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GetCountForDepartment.java
Console Problems Debug Shell
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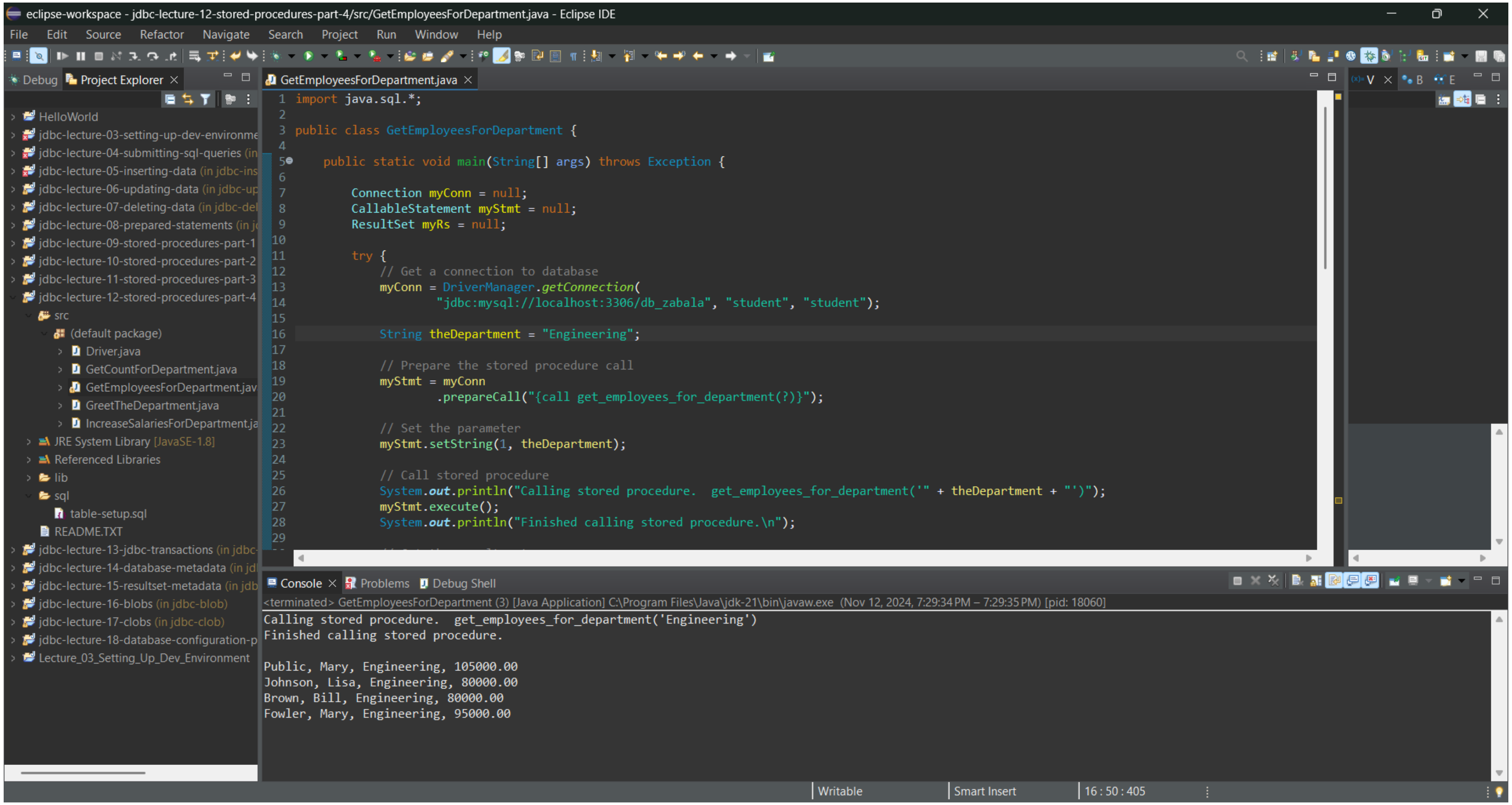
Smart Insert
1 : 1 : 0

```java
import java.sql.CallableStatement;

/**
 * Test calling stored procedure with OUT parameters
 *
 * @author www.luv2code.com
 *
 */
public class GetCountForDepartment {

    public static void main(String[] args) throws Exception {

        Connection myConn = null;
        CallableStatement myStmt = null;

        try {
            // Get a connection to database
            myConn = DriverManager.getConnection(
                    "jdbc:mysql://localhost:3306/db_zabala", "student", "student");

            String theDepartment = "Engineering";

            // Prepare the stored procedure call
            myStmt = myConn
                    .prepareCall("{call get_count_for_department(?, ?)}");

            // Set the parameters
            myStmt.setString(1, theDepartment);
            myStmt.registerOutParameter(2, Types.INTEGER);
```

```
<terminated> GetCountForDepartment (3) [Java Application] C:\Program Files\Java\jdk-21\bin\javaw.exe (Nov 15, 2024, 9:50:13 AM – 9:50:15 AM) [pid: 2280]
Calling stored procedure.  get_count_for_department('Engineering', ?)
Finished calling stored procedure

The count = 4
```

Get Employees for Department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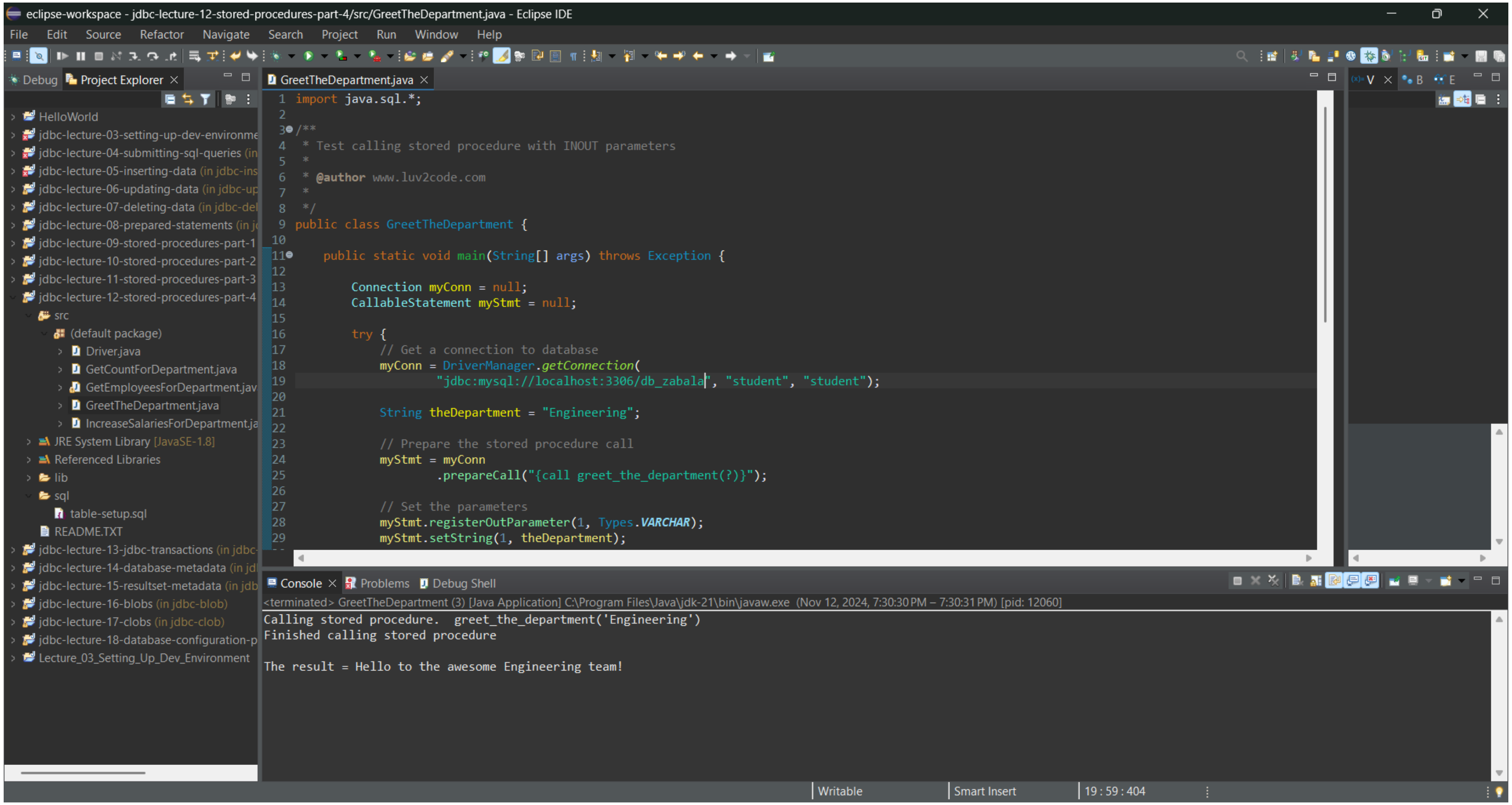
Writable
Smart Insert
16 : 50 : 405

```java
import java.sql.*;

public class GetEmployeesForDepartment {

    public static void main(String[] args) throws Exception {

        Connection myConn = null;
        CallableStatement myStmt = null;
        ResultSet myRs = null;

        try {
            // Get a connection to database
            myConn = DriverManager.getConnection(
                    "jdbc:mysql://localhost:3306/db_zabala", "student", "student");

            String theDepartment = "Engineering";

            // Prepare the stored procedure call
            myStmt = myConn
                    .prepareCall("{call get_employees_for_department(?)}");

            // Set the parameter
            myStmt.setString(1, theDepartment);

            // Call stored procedure
            System.out.println("Calling stored procedure.  get_employees_for_department('" + theDepartment + "')");
            myStmt.execute();
            System.out.println("Finished calling stored procedure.\n");

```

```
<terminated> GetEmployeesForDepartment (3) [Java Application] C:\Program Files\Java\jdk-21\bin\javaw.exe  (Nov 12, 2024, 7:29:34 PM – 7:29:35 PM) [pid: 18060]
Calling stored procedure.  get_employees_for_department('Engineering')
Finished calling stored procedure.

Public, Mary, Engineering, 105000.00
Johnson, Lisa, Engineering, 80000.00
Brown, Bill, Engineering, 80000.00
Fowler, Mary, Engineering, 95000.00
```

Greet the Department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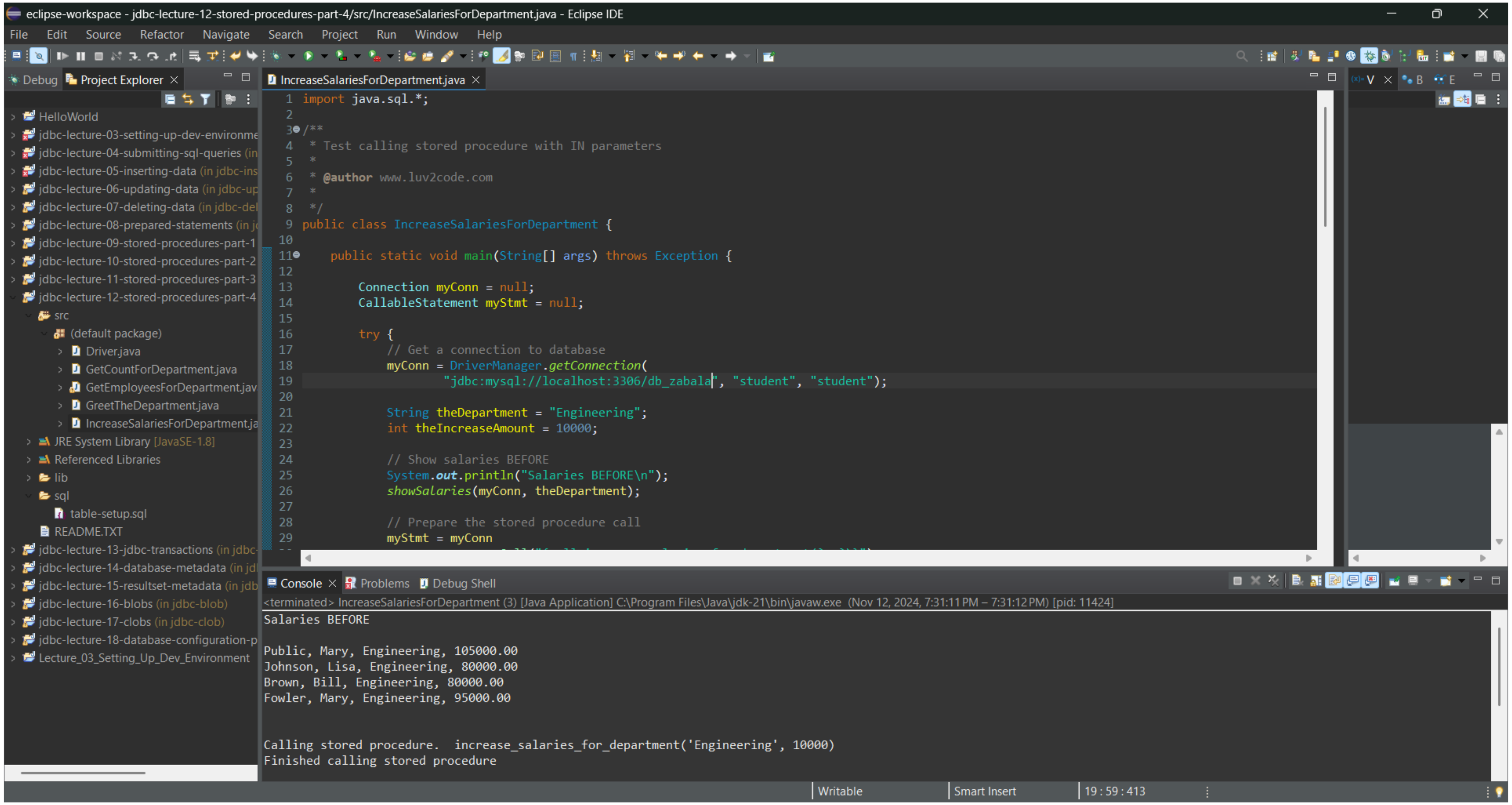
19 : 59 : 404

```java
import java.sql.*;

/**
 * Test calling stored procedure with INOUT parameters
 *
 * @author www.luv2code.com
 *
 */
public class GreetTheDepartment {

    public static void main(String[] args) throws Exception {

        Connection myConn = null;
        CallableStatement myStmt = null;

        try {
            // Get a connection to database
            myConn = DriverManager.getConnection(
                    "jdbc:mysql://localhost:3306/db_zabala", "student", "student");

            String theDepartment = "Engineering";

            // Prepare the stored procedure call
            myStmt = myConn
                    .prepareCall("{call greet_the_department(?)}");

            // Set the parameters
            myStmt.registerOutParameter(1, Types.VARCHAR);
            myStmt.setString(1, theDepartment);
```

```
<terminated> GreetTheDepartment (3) [Java Application] C:\Program Files\Java\jdk-21\bin\javaw.exe (Nov 12, 2024, 7:30:30 PM – 7:30:31 PM) [pid: 12060]
Calling stored procedure.  greet_the_department('Engineering')
Finished calling stored procedure

The result = Hello to the awesome Engineering team!
```

Increase Salaries for Department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IncreaseSalariesForDepartment.java
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Debug Shell
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19 : 59 : 413

```java
import java.sql.*;

/**
 * Test calling stored procedure with IN parameters
 *
 * @author www.luv2code.com
 *
 */
public class IncreaseSalariesForDepartment {

    public static void main(String[] args) throws Exception {

        Connection myConn = null;
        CallableStatement myStmt = null;

        try {
            // Get a connection to database
            myConn = DriverManager.getConnection(
                    "jdbc:mysql://localhost:3306/db_zabala", "student", "student");

            String theDepartment = "Engineering";
            int theIncreaseAmount = 10000;

            // Show salaries BEFORE
            System.out.println("Salaries BEFORE\n");
            showSalaries(myConn, theDepartment);

            // Prepare the stored procedure call
            myStmt = myConn
```

```
<terminated> IncreaseSalariesForDepartment (3) [Java Application] C:\Program Files\Java\jdk-21\bin\javaw.exe (Nov 12, 2024, 7:31:11 PM – 7:31:12 PM) [pid: 11424]
Salaries BEFORE

Public, Mary, Engineering, 105000.00
Johnson, Lisa, Engineering, 80000.00
Brown, Bill, Engineering, 80000.00
Fowler, Mary, Engineering, 95000.00


Calling stored procedure.  increase_salaries_for_department('Engineering', 10000)
Finished calling stored procedure
```