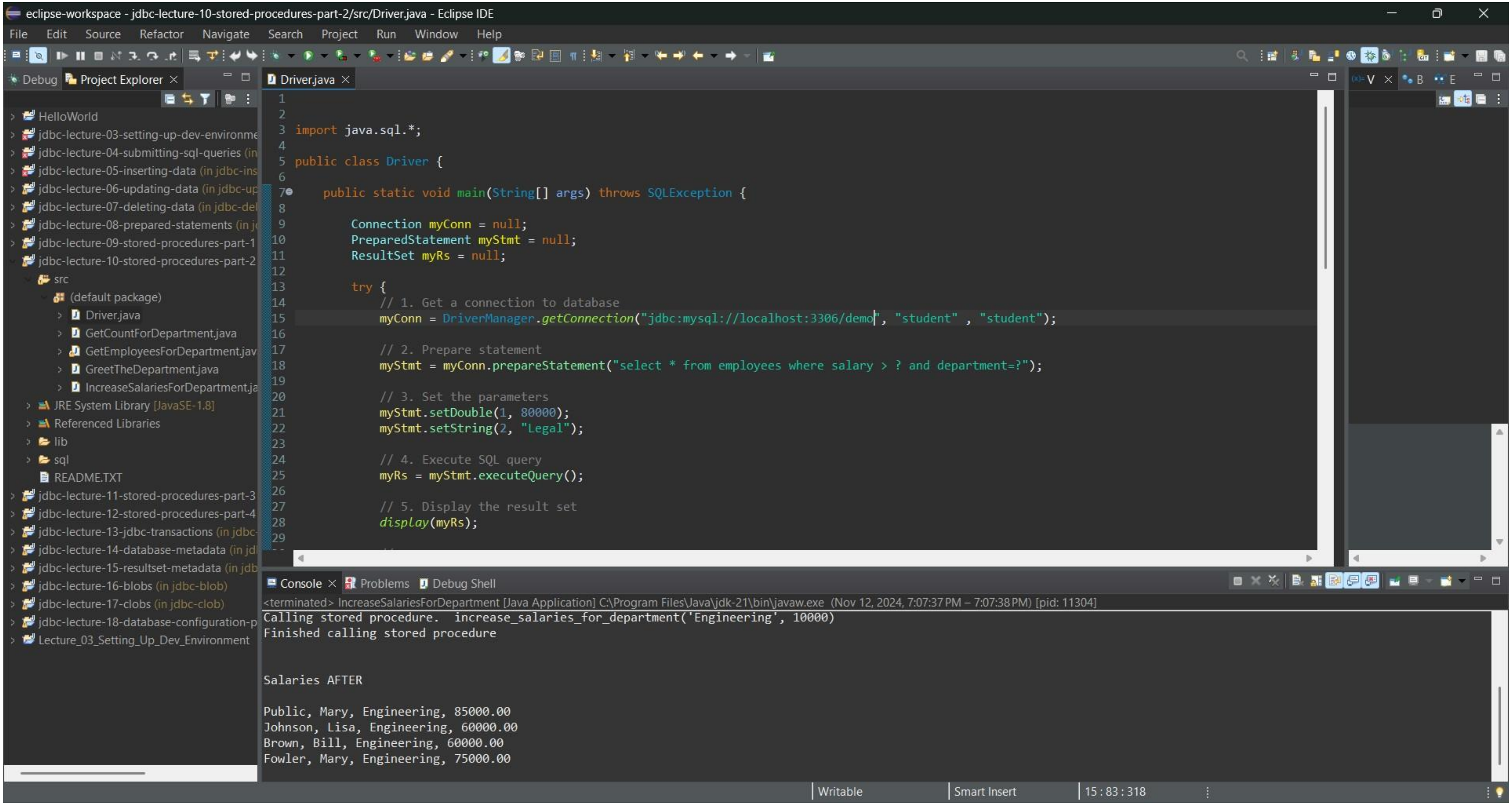
Lecture 10_Stored Procedures Part 2

DRIVER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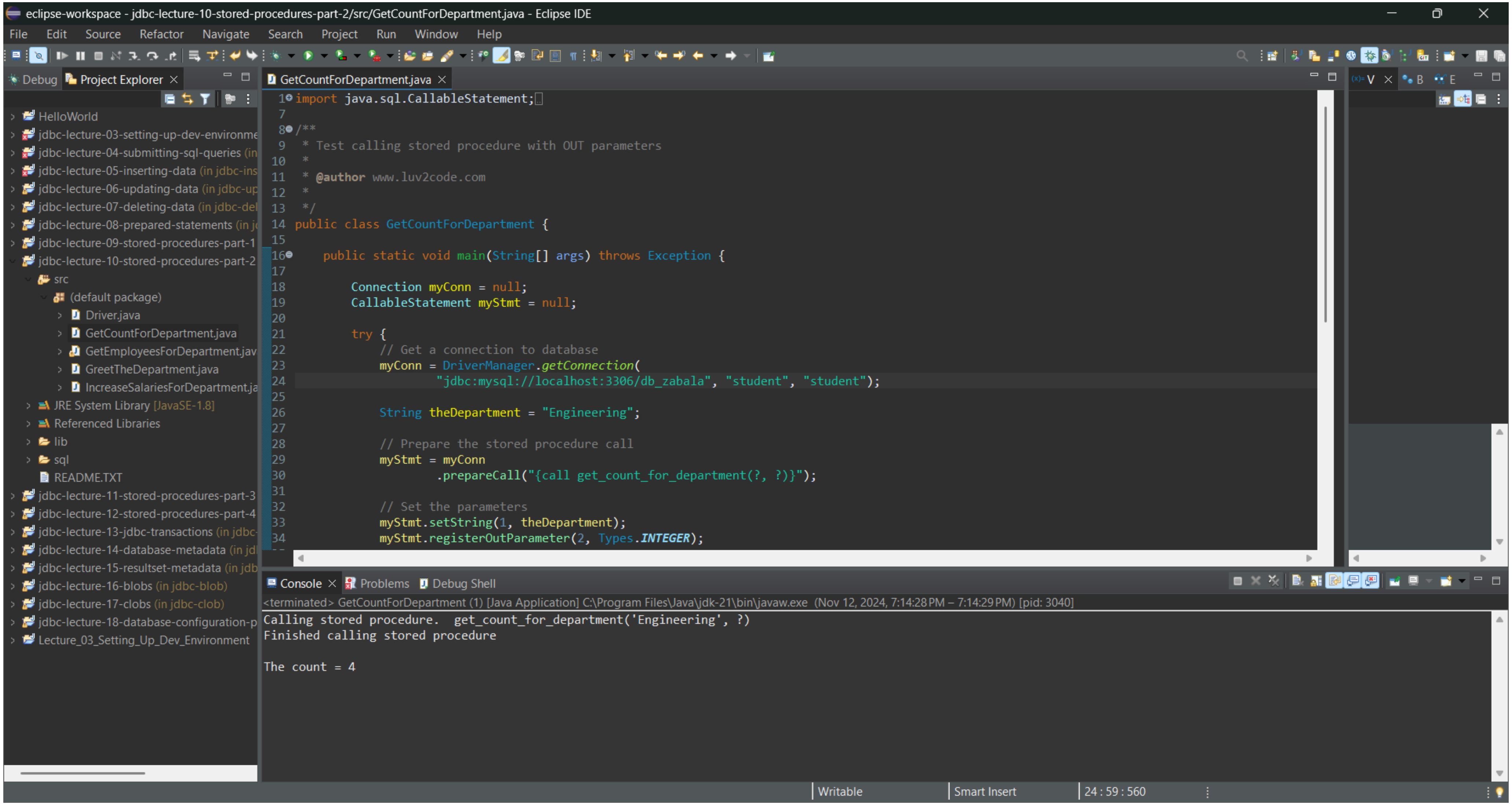
```java


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/demo", "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> IncreaseSalariesForDepartment [Java Application] C:\Program Files\Java\jdk-21\bin\javaw.exe  (Nov 12, 2024, 7:07:37 PM – 7:07:38 PM) [pid: 11304]
Calling stored procedure.  increase_salaries_for_department('Engineering', 10000)
Finished calling stored procedure


Salaries AFTER

Public, Mary, Engineering, 85000.00
Johnson, Lisa, Engineering, 60000.00
Brown, Bill, Engineering, 60000.00
Fowler, Mary, Engineering, 75000.00
```

Get Count for Department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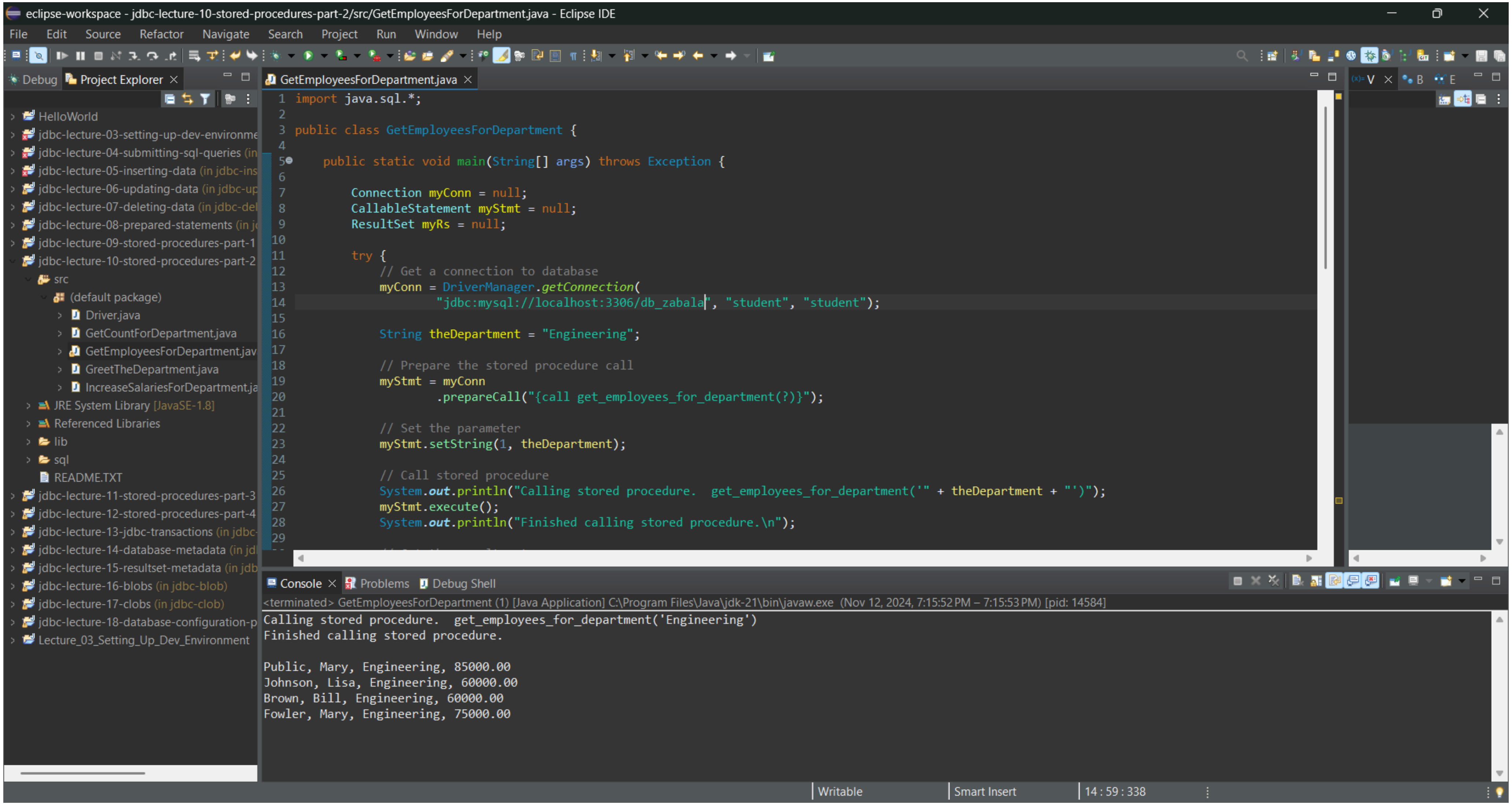
```java
import java.sql.CallableStatement;

/**
 * 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 (1) [Java Application] C:\Program Files\Java\jdk-21\bin\javaw.exe  (Nov 12, 2024, 7:14:28 PM – 7:14:29 PM) [pid: 3040]
Calling stored procedure.  get_count_for_department('Engineering', ?)
Finished calling stored procedure

The count = 4
```

Get Employees for Department


eclipse-workspace - jdbc-lecture-10-stored-procedures-part-2/src/GetEmployeesForDepartment.java - Eclipse IDE
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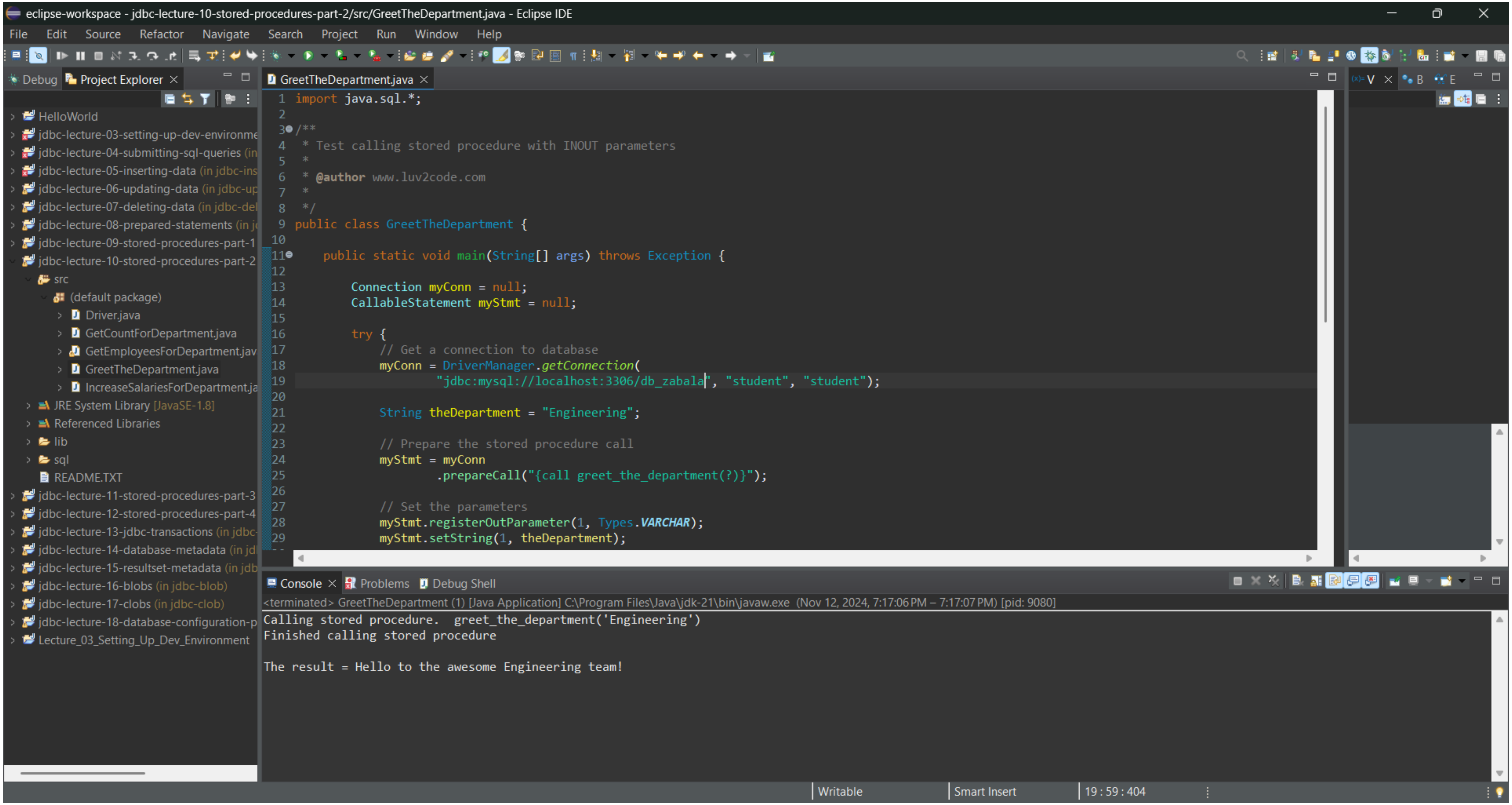
```java
import java.sql.*;

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 (1) [Java Application] C:\Program Files\Java\jdk-21\bin\javaw.exe  (Nov 12, 2024, 7:15:52 PM – 7:15:53 PM) [pid: 14584]
Calling stored procedure.  get_employees_for_department('Engineering')
Finished calling stored procedure.

Public, Mary, Engineering, 85000.00
Johnson, Lisa, Engineering, 60000.00
Brown, Bill, Engineering, 60000.00
Fowler, Mary, Engineering, 75000.00
```

Greet the Department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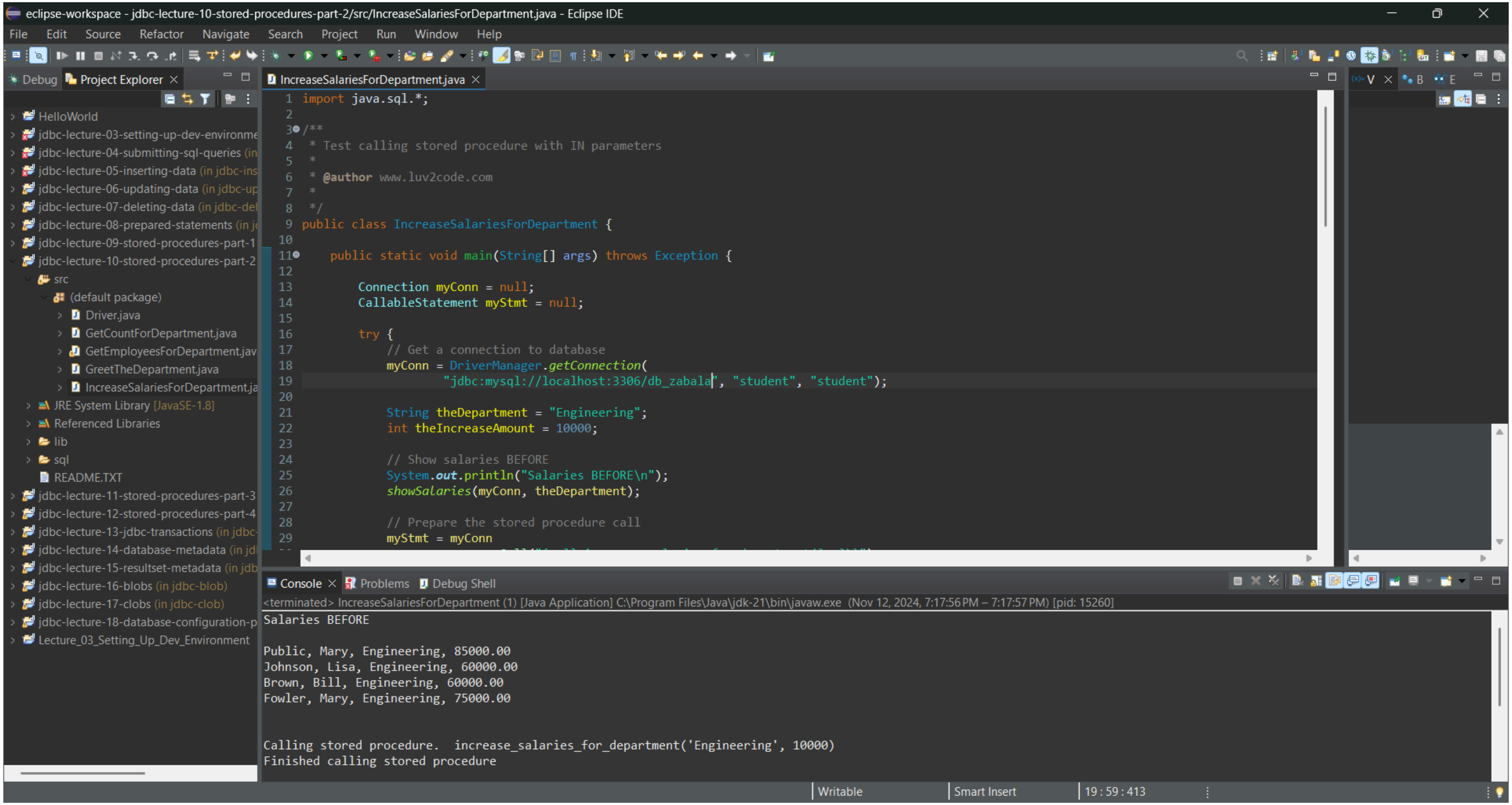
```java
import java.sql.*;

/**
 * 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 (1) [Java Application] C:\Program Files\Java\jdk-21\bin\javaw.exe  (Nov 12, 2024, 7:17:06 PM – 7:17:07 PM) [pid: 9080]
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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```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 (1) [Java Application] C:\Program Files\Java\jdk-21\bin\javaw.exe  (Nov 12, 2024, 7:17:56 PM – 7:17:57 PM) [pid: 15260]
Salaries BEFORE

Public, Mary, Engineering, 85000.00
Johnson, Lisa, Engineering, 60000.00
Brown, Bill, Engineering, 60000.00
Fowler, Mary, Engineering, 75000.00


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