

To create a one-to-one relationship between two tables in MySQL using JDBC, you need to follow these steps:

Create two tables that you want to relate. For example, let's consider two tables named "employee" and "employee\_details". The "employee" table contains basic employee information, and the "employee\_details" table contains additional employee information like address, phone number, etc.

Create a primary key in the "employee" table. For example, the primary key can be the "employee\_id" field.

Create a foreign key in the "employee\_details" table that references the "employee\_id" field in the "employee" table. This foreign key establishes the one-to-one relationship between the two tables. The foreign key column should have the same data type as the primary key column.

In your Java code using JDBC, create two separate queries to insert data into each table. When inserting data into the "employee\_details" table, make sure to include the "employee\_id" field and set it equal to the corresponding primary key value in the "employee" table.

Here's some sample code to create a one-to-one relationship between the two tables using JDBC:

scss

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```
// create connection
Connection conn = DriverManager.getConnection(url, username, password);

// create employee table
Statement stmt1 = conn.createStatement();
String sql1 = "CREATE TABLE employee (employee_id INT NOT NULL AUTO_INCREMENT,
name VARCHAR(50), PRIMARY KEY (employee_id))";
stmt1.executeUpdate(sql1);

// create employee_details table
Statement stmt2 = conn.createStatement();
```

```
String sql2 = "CREATE TABLE employee_details (employee_details_id INT NOT NULL  
AUTO_INCREMENT, address VARCHAR(50), phone_number VARCHAR(20), employee_id INT,  
PRIMARY KEY (employee_details_id), FOREIGN KEY (employee_id) REFERENCES  
employee(employee_id))";  
stmt2.executeUpdate(sql2);
```

```
// insert data into employee table
```

```
PreparedStatement pstmt1 = conn.prepareStatement("INSERT INTO employee (name)  
VALUES (?)");
```

```
pstmt1.setString(1, "John Doe");
```

```
pstmt1.executeUpdate();
```

```
// get the generated primary key value
```

```
ResultSet rs = pstmt1.getGeneratedKeys();
```

```
int employeeId = 0;
```

```
if (rs.next()) {
```

```
    employeeId = rs.getInt(1);
```

```
}
```

```
// insert data into employee_details table
```

```
PreparedStatement pstmt2 = conn.prepareStatement("INSERT INTO employee_details  
(address, phone_number, employee_id) VALUES (?, ?, ?)");
```

```
pstmt2.setString(1, "123 Main St");
```

```
pstmt2.setString(2, "555-1234");
```

```
pstmt2.setInt(3, employeeId);
```

```
pstmt2.executeUpdate();
```

This code creates two tables, "employee" and "employee\_details", and establishes a one-to-one relationship between them using a foreign key. It then inserts data into both tables, ensuring that the foreign key in the "employee\_details" table is set to the corresponding primary key value in the "employee" table.