CODE

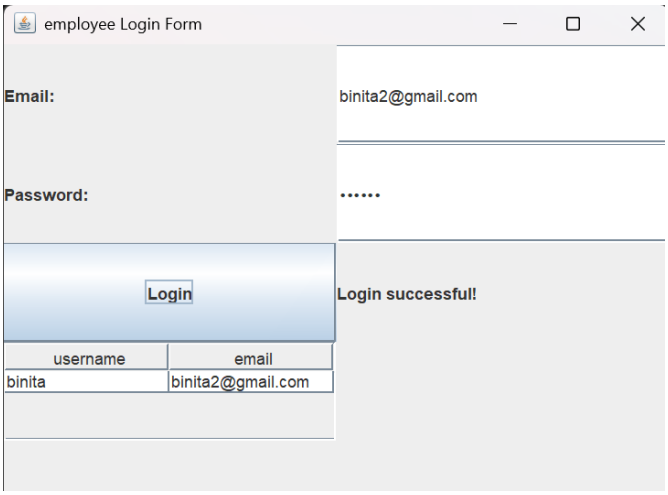
```
package JDBC_Program;
import javax.swing.*;
        import java.awt.*;
        import java.awt.event.*;
        import java.sql.*;
        import javax.swing.table.DefaultTableModel;

public class DisplayInTable extends JFrame {

    private JLabel emailLabel, passwordLabel, resultLabel;
    private JTextField emailField;
    private JPasswordField passwordField;
    private JButton loginButton;
    private JTable userTable;
    private JScrollPane scrollPane;

    private String url = "jdbc:mysql://localhost:3306/my_db";
    private String dbUsername = "root";
    private String dbPassword = "";

    public DisplayInTable() {
        setTitle("employee Login Form");
        setSize(500, 400);
        setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
        setLocationRelativeTo(null);

        emailLabel = new JLabel("Email:");
        passwordLabel = new JLabel("Password:");
        resultLabel = new JLabel("");

        emailField = new JTextField(20);
        passwordField = new JPasswordField(20);

        loginButton = new JButton("Login");

        // Set layout for form
        setLayout(new GridLayout(5, 2));
        add(emailLabel);
        add(emailField);
```

```
        add(passwordLabel);
        add(passwordField);
        add(loginButton);
        add(resultLabel);

        // Create the table to display user data
        String[] columnNames = {"username", "email"};  //
Removed "User ID" and "Age"
        DefaultTableModel model = new
DefaultTableModel(columnNames, 0);
        userTable = new JTable(model);
        scrollPane = new JScrollPane(userTable);
        scrollPane.setPreferredSize(new Dimension(550, 200)); //
Adjusting the scroll pane size
        add(scrollPane);  // Add table to the frame (at the
bottom of the layout)

        loginButton.addActionListener(new ActionListener() {
            public void actionPerformed(ActionEvent e) {
                String email = emailField.getText();
                String password = new
String(passwordField.getPassword());
                authenticateUser(email, password);
            }
        });
    }

    private void authenticateUser(String email, String password)
{
        Connection connection = null;
        PreparedStatement preparedStatement = null;
        ResultSet resultSet = null;

        try {
            connection = DriverManager.getConnection(url,
dbUsername, dbPassword);

            // Authenticate the user
            String query = "SELECT * FROM employee WHERE email =
? AND password = ?";
            preparedStatement =
```

```
connection.prepareStatement(query);
            preparedStatement.setString(1, email);
            preparedStatement.setString(2, password);

            resultSet = preparedStatement.executeQuery();

            if (resultSet.next()) {
                resultLabel.setText("Login successful!");


                displayUserData(connection);
            } else {
                resultLabel.setText("Invalid email or
password.");
            }

        } catch (SQLException e) {
            e.printStackTrace();
            resultLabel.setText("Error: " + e.getMessage());
        } finally {
            try {
                if (resultSet != null) {
                    resultSet.close();
                }
                if (preparedStatement != null) {
                    preparedStatement.close();
                }
                if (connection != null) {
                    connection.close();
                }
            } catch (SQLException e) {
                e.printStackTrace();
            }
        }
    }

    private void displayUserData(Connection connection) {
        String query = "SELECT username, email FROM employee";
// Query to retrieve employee username and email
        PreparedStatement preparedStatement = null;
        ResultSet resultSet = null;
```

```
        try {
            preparedStatement =
connection.prepareStatement(query);
            resultSet = preparedStatement.executeQuery();

            // Clear the existing data in the table
            DefaultTableModel model = (DefaultTableModel)
userTable.getModel();
            model.setRowCount(0);

            // Add new data to the table
            while (resultSet.next()) {
                String name = resultSet.getString("username");
                String email = resultSet.getString("email");

                // Add a row for each user to the table
                model.addRow(new Object[]{name, email});
            }

        } catch (SQLException e) {
            e.printStackTrace();
            resultLabel.setText("Error loading employee data: "
+ e.getMessage());
        }
    }

    public static void main(String[] args) {
        SwingUtilities.invokeLater(new Runnable() {
            public void run() {
                new DisplayInTable().setVisible(true);
            }
        });
    }
}
```

OUTPUT



CONCLUSION

This program effectively implements user authentication and data retrieval using Java JDBC and Swing components. It first validates the login credentials and, if successful, fetches user data from the MySQL database and displays it in a JTable. The program ensures security using prepared statements to prevent SQL injection and enhances usability by providing real-time feedback for incorrect login attempts. By integrating database connectivity and a graphical interface, this implementation serves as a practical example of secure user authentication and data visualization in Java applications.