

Assignment No. 8

```
import java.awt.*;
import javax.swing.*;
import java.sql.*;
import java.awt.event.*;
class LoginPage extends JFrame implements ActionListener{
    JLabel l1, l2, l3, l4;
    JTextField t1;
    JPasswordField t2;
    JButton b1;
    Connection cn;
    Statement st;
    LoginPage() {
        l1 = new JLabel("Username");
        l2 = new JLabel("Password");
        l3 = new JLabel("Login Page",JLabel.CENTER);
        l4 = new JLabel("Login",JLabel.CENTER);
        t1 = new JTextField(5);
        t2 = new JPasswordField(20);
        b1 = new JButton("Login");
        b1.setFont(new Font("Arial", Font.BOLD, 20));
        b1.setSize(150, 40);
        setLayout(new FlowLayout());
        JPanel p1 = new JPanel();
        p1.setLayout(new GridLayout(2,2,30,30));
        l3.setFont(new Font("Times New Roman", Font.BOLD, 40));
        l4.setFont(new Font("Times New Roman", Font.BOLD, 35));
        l4.setForeground(Color.red);
        p1.add(l4);
        p1.add(l3);
        JPanel p2 = new JPanel();
        p2.setLayout(new GridLayout(2,2));
        Font f = new Font("Times New Roman", Font.BOLD, 18);
        p2.add(l1);
        l1.setFont(f);
        p2.add(t1);
        t1.setFont(f);
        p2.add(l2);
        l2.setFont(f);
        p2.add(t2);
        t2.setFont(f);
        JPanel p3 = new JPanel();
        p3.add(b1);
        JPanel p4 = new JPanel();
        p4.setLayout(new GridLayout(5,2));
        p4.add(p1);
        p4.add(new JPanel());
        p4.add(p2);
        p4.add(new JPanel());
        p4.add(p3);
        setLayout(new FlowLayout());
        add(p4);
        setVisible(true);
        setBounds(200, 0, 700, 600);
        setTitle("Login");
        setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
        b1.addActionListener(this);
    }
}
```

```

        try {
            Class.forName("com.mysql.jdbc.Driver");
            cn =
DriverManager.getConnection("jdbc:mysql://localhost:3306/student?characterEncoding=utf8","root",
"r2314");

            System.out.println("Connection to the database created");
            st = cn.createStatement();
        }
        catch(Exception e) {
            JOptionPane.showMessageDialog(null,"Error is "+e);
        }
    }

    public void actionPerformed(ActionEvent ae) {
        try {
            if(ae.getSource()==b1) {
                if(t1.getText().trim().length()>0) {
                    if(t2.getText().trim().length()>0) {
                        ResultSet rs = st.executeQuery("Select Password from Login where
Username='"+t1.getText()+"'");
                        if(rs.next()) {
                            if(rs.getString(1).equals(t2.getText())) {
                                JOptionPane.showMessageDialog(null,"Login Successful!!");
                            }
                            else
                                JOptionPane.showMessageDialog(null,"Invalid password");
                        }
                        else
                            JOptionPane.showMessageDialog(null,"Invalid username");
                    }
                    else
                        JOptionPane.showMessageDialog(null,"Please Enter the Password");
                }
                else
                    JOptionPane.showMessageDialog(null,"Please Enter the Username");
            }
        }
        catch(Exception e) {
            JOptionPane.showMessageDialog(null,""+e);
        }
    }

    public static void main(String args[]) {
        new LoginPage();
    }
}

```

Output:

```

PS C:\Users\rutuj\OneDrive\Desktop> javac LoginPage.java
PS C:\Users\rutuj\OneDrive\Desktop> java LoginPage
Connection to the database created

```

Login

Login

Login Page

Username

Password

Login

Login

Login

Login Page

Message

Login Successful!!

OK

Username

Password

a111

....

Login

Login

Login

Login Page

Message

Invalid username

OK

Username

Password

aaa

....

Login

The screenshot shows a Java Swing window titled "Login". The window has a light gray background. At the top center, the word "Login" is written in a large, bold, red serif font. Below it, the words "Login Page" are written in a large, bold, black serif font. In the center of the window, there is a light gray rectangular area containing a message dialog box. The dialog box has a title bar that says "Message" and a close button (X) in the top right corner. Inside the dialog box, there is a purple circular icon with a white lowercase 'i' on the left, and the text "Invalid password" in a black sans-serif font to its right. Below the text is a blue button with the text "OK" in white. To the left of the message dialog box, the labels "Username" and "Password" are written in a bold, black serif font. To the right of these labels are two white rectangular input fields. The top input field contains the text "a111". The bottom input field contains four black dots, indicating a password. At the bottom center of the window, there is a blue button with the text "Login" in white.