

JAVA PROGRAMMING – S.SRIHARI – 2018103601—P BATCH

Student.java (INSERTING RECORDS)

```
package dbproject;
import java.sql.*;
import javax.swing.*;

public class Student extends javax.swing.JFrame {

    public Student() {
        initComponents();
    }

    @SuppressWarnings("unchecked")
    // <editor-fold defaultstate="collapsed" desc="Generated Code">
    private void initComponents() {

        jLabel1 = new javax.swing.JLabel();
        jLabel2 = new javax.swing.JLabel();
        jLabel3 = new javax.swing.JLabel();
        jLabel4 = new javax.swing.JLabel();
        jLabel5 = new javax.swing.JLabel();
        jLabel6 = new javax.swing.JLabel();
        jLabel7 = new javax.swing.JLabel();
        jLabel8 = new javax.swing.JLabel();
        jLabel9 = new javax.swing.JLabel();
        jLabel10 = new javax.swing.JLabel();
        jLabel11 = new javax.swing.JLabel();
        jLabel12 = new javax.swing.JLabel();
        rollno = new javax.swing.JTextField();
        name = new javax.swing.JTextField();
        address = new javax.swing.JTextField();
        age = new javax.swing.JTextField();
        compiler = new javax.swing.JComboBox();
        ooad = new javax.swing.JComboBox();
        software = new javax.swing.JComboBox();
        javasc = new javax.swing.JComboBox();
        networks = new javax.swing.JComboBox();
        jLabel13 = new javax.swing.JLabel();
        gender = new javax.swing.JTextField();
        submit = new javax.swing.JButton();
        clear = new javax.swing.JButton();
        jButton1 = new javax.swing.JButton();
    }
}
```

```

setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);

jLabel1.setFont(new java.awt.Font("Simplified Arabic Fixed", 1, 14)); // NOI18N
jLabel1.setForeground(new java.awt.Color(255, 51, 51));
jLabel1.setText("Insert Student Information");

jLabel2.setText("RollNo");

jLabel3.setText("Name");
jLabel4.setText("Age");
jLabel5.setText("Address");
jLabel6.setText("Compiler");
jLabel7.setText("OOAD");
jLabel8.setText("Software");
jLabel9.setText("Java");
jLabel10.setText("Networks");
jLabel11.setForeground(new java.awt.Color(0, 51, 255));
jLabel11.setText("Personal Details");
jLabel12.setForeground(new java.awt.Color(51, 0, 255));
jLabel12.setText("Scores");

compiler.setModel(new javax.swing.DefaultComboBoxModel(new String[] { "10", "9", "8", "7", "6"
}));
ood.setModel(new javax.swing.DefaultComboBoxModel(new String[] { "10", "9", "8", "7", "6" }));
software.setModel(new javax.swing.DefaultComboBoxModel(new String[] { "10", "9", "8", "7", "6"
}));
javasc.setModel(new javax.swing.DefaultComboBoxModel(new String[] { "10", "9", "8", "7", "6" }));
networks.setModel(new javax.swing.DefaultComboBoxModel(new String[] { "10", "9", "8", "7", "6"
}));

jLabel13.setText("Gender");

submit.setText("Submit");
submit.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        submitActionPerformed(evt);
    }
});

clear.setText("Clear");
clear.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        clearActionPerformed(evt);
    }
});

jButton1.setText("Back");
jButton1.addActionListener(new java.awt.event.ActionListener() {

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```

        public void actionPerformed(java.awt.event.ActionEvent evt) {
            jButton1ActionPerformed(evt);
        }
    });

    javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
    getContentPane().setLayout(layout);
    layout.setHorizontalGroup(
        layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(layout.createSequentialGroup()
                .addContainerGap()
                .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                    .addComponent(jLabel6)
                    .addComponent(compiler, javax.swing.GroupLayout.PREFERRED_SIZE,
                        javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                    .addComponent(jLabel8)
                    .addComponent(software, javax.swing.GroupLayout.PREFERRED_SIZE,
                        javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)
                    .addComponent(jLabel9)
                    .addComponent(jLabel10))
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                    .addComponent(jLabel12)
                    .addComponent(jLabel11))
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                .addComponent(jLabel2))
            .addGroup(layout.createSequentialGroup()
                .addGap(41, 41, 41)
                .addComponent(jLabel10))))
    .addContainerGap(57, 57)
    .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addComponent(jLabel2))
    );

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        .addComponent(rollno, javax.swing.GroupLayout.PREFERRED_SIZE, 69,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(layout.createSequentialGroup()
                .addGap(33, 33, 33)
                .addComponent(jLabel3))
            .addGroup(layout.createSequentialGroup()
                .addGap(18, 18, 18)

        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addComponent(jLabel7)
            .addComponent(name, javax.swing.GroupLayout.PREFERRED_SIZE, 64,
javax.swing.GroupLayout.PREFERRED_SIZE)))
        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(layout.createSequentialGroup()
                .addGap(51, 51, 51)
                .addComponent(jLabel4)
                .addGap(61, 61, 61)
                .addComponent(jLabel5))
            .addGroup(layout.createSequentialGroup()
                .addGap(40, 40, 40)
                .addComponent(age, javax.swing.GroupLayout.PREFERRED_SIZE, 38,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addGap(35, 35, 35)
                .addComponent(address, javax.swing.GroupLayout.PREFERRED_SIZE, 76,
javax.swing.GroupLayout.PREFERRED_SIZE)))
        .addGroup(layout.createSequentialGroup()
            .addGap(138, 138, 138)
            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addComponent(ooad, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(jLabel1)))
        .addGap(0, 29, Short.MAX_VALUE))
        .addGap(14, 14, 14)
        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addComponent(jLabel13)
            .addComponent(gender, javax.swing.GroupLayout.PREFERRED_SIZE, 47,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addGap(23, 23, 23)
        .addGroup(layout.createSequentialGroup()
            .addGap(118, 118, 118)
            .addComponent(submit)
            .addGap(74, 74, 74)
            .addComponent(clear)
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
            .addComponent(jButton1)
            .addGap(65, 65, 65))

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);
layout.setVerticalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(layout.createSequentialGroup()
            .addGap(53, 53, 53)
            .addComponent(jLabel1)
            .addGap(16, 16, 16)
            .addComponent(jLabel11)
            .addGap(18, 18, 18)
            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel2)
                .addComponent(jLabel3)
                .addComponent(jLabel4)
                .addComponent(jLabel5)
                .addComponent(jLabel13))
            .addGap(18, 18, 18)
            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(rollno, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(name, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(address, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(age, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(gender, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                .addComponent(jLabel12)
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                    .addComponent(jLabel6)
                    .addComponent(jLabel7)
                    .addComponent(jLabel8)
                    .addComponent(jLabel9)
                    .addComponent(jLabel10))
                .addGap(18, 18, 18)
                .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                    .addComponent(compiler, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addComponent(ooad, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addComponent(software, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addComponent(javasc, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)

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        .addComponent(networks, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))
        .addGap(27, 27, 27)
        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
        .addComponent(submit)
        .addComponent(clear)
        .addComponent(jButton1))
        .addGap(59, 59, 59))
    );

    pack();
} // </editor-fold>

private void submitActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
    try{
        Connection con =
DriverManager.getConnection("jdbc:derby://localhost:1527/StudentRecord","srihari","srihari");
        PreparedStatement st = con.prepareStatement("insert into studentrepository
values(?,?,?,?,?,?,?,?,?,?)");

        st.setInt(1,Integer.parseInt(rollno.getText()));
        st.setString(2,name.getText());
        st.setInt(3,Integer.parseInt(age.getText()));
        st.setString(4,address.getText());
        st.setInt(5,Integer.parseInt(compiler.getSelectedItem().toString()));
        st.setInt(6,Integer.parseInt(ooad.getSelectedItem().toString()));
        st.setInt(7,Integer.parseInt(software.getSelectedItem().toString()));
        st.setInt(8,Integer.parseInt(javasc.getSelectedItem().toString()));
        st.setInt(9,Integer.parseInt(networks.getSelectedItem().toString()));
        st.setString(10,gender.getText());
        st.setFloat(11,0);

        int ab = st.executeUpdate();
        if(ab > 0){
            System.out.println("Row inserted");
            JOptionPane.showMessageDialog(null,"insertion successful");
            new Dashboard().setVisible(true);
            dispose();
        }
        con.close();
    }
    catch(Exception e){
        JOptionPane.showMessageDialog(null,e);
    }
}

private void clearActionPerformed(java.awt.event.ActionEvent evt) {

```

```

// TODO add your handling code here:
rollNo.setText("");
name.setText("");
age.setText("");
address.setText("");
gender.setText("");
compiler.setSelectedIndex(0);
ood.setSelectedIndex(0);
software.setSelectedIndex(0);
javasc.setSelectedIndex(0);
networks.setSelectedIndex(0);
}

private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
// TODO add your handling code here:
new Dashboard().setVisible(true);
dispose();
}

public static void main(String args[]) {

    try {
        for (javax.swing.UIManager.LookAndFeelInfo info :
javax.swing.UIManager.getInstalledLookAndFeels()) {
            if ("Nimbus".equals(info.getName())) {
                javax.swing.UIManager.setLookAndFeel(info.getClassName());
                break;
            }
        }
    } catch (ClassNotFoundException ex) {
        java.util.logging.Logger.getLogger(Student.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
    } catch (InstantiationException ex) {
        java.util.logging.Logger.getLogger(Student.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
    } catch (IllegalAccessException ex) {
        java.util.logging.Logger.getLogger(Student.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
    } catch (javax.swing.UnsupportedLookAndFeelException ex) {
        java.util.logging.Logger.getLogger(Student.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
    }

    java.awt.EventQueue.invokeLater(new Runnable() {
        public void run() {
            new Student().setVisible(true);
        }
    });
}

```

```
}  
  
// Variables declaration - do not modify  
private javax.swing.JTextField address;  
private javax.swing.JTextField age;  
private javax.swing.JButton clear;  
private javax.swing.JComboBox compiler;  
private javax.swing.JTextField gender;  
private javax.swing.JButton jButton1;  
private javax.swing.JLabel jLabel1;  
private javax.swing.JLabel jLabel10;  
private javax.swing.JLabel jLabel11;  
private javax.swing.JLabel jLabel12;  
private javax.swing.JLabel jLabel13;  
private javax.swing.JLabel jLabel2;  
private javax.swing.JLabel jLabel3;  
private javax.swing.JLabel jLabel4;  
private javax.swing.JLabel jLabel5;  
private javax.swing.JLabel jLabel6;  
private javax.swing.JLabel jLabel7;  
private javax.swing.JLabel jLabel8;  
private javax.swing.JLabel jLabel9;  
private javax.swing.JComboBox javasc;  
private javax.swing.JTextField name;  
private javax.swing.JComboBox networks;  
private javax.swing.JComboBox ooad;  
private javax.swing.JTextField rollno;  
private javax.swing.JComboBox software;  
private javax.swing.JButton submit;  
// End of variables declaration  
}
```


CalCGPA.java (Calculating CGPA)

```
package dbproject;

import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.PreparedStatement;
import java.sql.ResultSet;
import java.sql.SQLException;
import java.sql.Statement;
import java.util.logging.Level;
import java.util.logging.Logger;
import javax.swing.JOptionPane;

public class CalCGPA extends javax.swing.JFrame {

    public CalCGPA() {
        initComponents();
    }

    @SuppressWarnings("unchecked")
    // <editor-fold defaultstate="collapsed" desc="Generated Code">
    private void initComponents() {

        jLabel1 = new javax.swing.JLabel();
        jLabel2 = new javax.swing.JLabel();
        rollNo = new javax.swing.JTextField();
        submit = new javax.swing.JButton();
        jButton1 = new javax.swing.JButton();

        setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);

        jLabel1.setFont(new java.awt.Font("Tahoma", 1, 18)); // NOI18N
        jLabel1.setForeground(new java.awt.Color(255, 0, 102));
        jLabel1.setText("CGPA Calculator");

        jLabel2.setForeground(new java.awt.Color(255, 0, 102));
        jLabel2.setText("Enter Roll No");

        submit.setForeground(new java.awt.Color(255, 102, 0));
        submit.setText("Submit");
        submit.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                submitActionPerformed(evt);
            }
        })
    }
}
```

```

});

jButton1.setForeground(new java.awt.Color(255, 0, 0));
jButton1.setText("Back");
jButton1.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton1ActionPerformed(evt);
    }
});

javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
getContentPane().setLayout(layout);
layout.setHorizontalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(layout.createSequentialGroup()
            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addGroup(layout.createSequentialGroup()
                    .addGap(83, 83, 83)
                    .addComponent(jLabel2))
                .addGroup(layout.createSequentialGroup()
                    .addGap(146, 146, 146)
                    .addComponent(submit)))
            .addGap(26, 26, 26)
            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addComponent(jButton1)
                .addGroup(layout.createSequentialGroup()
                    .addComponent(rollNo, javax.swing.GroupLayout.PREFERRED_SIZE, 89,
javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addGap(74, 74, Short.MAX_VALUE))
                .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING, false)
                    .addComponent(jLabel1, javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                    .addGap(118, 118, 118)))
            .addContainerGap(118, true));
layout.setVerticalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(layout.createSequentialGroup()
            .addGap(59, 59, 59)
            .addComponent(jLabel1)
            .addGap(18, 18, 18)
            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel2)
                .addComponent(rollNo, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addGap(42, 42, 42)
                .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                    .addComponent(submit)
                    .addComponent(jButton1))
                .addGap(116, 116, Short.MAX_VALUE))
            .addContainerGap(118, true));

```

```

    );

    pack();
} // </editor-fold>

private void submitActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
    try{
        Connection conn =
DriverManager.getConnection("jdbc:derby://localhost:1527/StudentRecord","srihari","srihari");
        System.out.println("Connection created");
        String sql = "select * from studentrepository where rollno = ?";
        PreparedStatement stmt = conn.prepareStatement(sql);
        stmt.setInt(1,Integer.parseInt(rollno.getText()));
        ResultSet rs = stmt.executeQuery();

        float cgpa_tot = 0;
        if(rs.next()){

            cgpa_tot += Integer.parseInt(rs.getString("compiler"));
            cgpa_tot += Integer.parseInt(rs.getString("ood"));
            cgpa_tot += Integer.parseInt(rs.getString("software"));
            cgpa_tot += Integer.parseInt(rs.getString("java"));
            cgpa_tot += Integer.parseInt(rs.getString("networks"));

        }
        else{
            JOptionPane.showMessageDialog(null,"Record Not found");
        }
        cgpa_tot /= 5.0;
        String sql2 = "update studentrepository set cgpa = ? where rollno = ?";
        PreparedStatement stmt2 = conn.prepareStatement(sql2);
        //stmt.setString(1,name.getText());

        stmt2.setFloat(1,cgpa_tot);
        stmt2.setInt(2,Integer.parseInt(rollno.getText()));
        stmt2.executeUpdate();
        JOptionPane.showMessageDialog(null,rs.getString("name").toUpperCase() + "'s CGPA:
"+cgpa_tot);
        conn.close();
    } catch (SQLException ex) {
        // JOptionPane.showMessageDialog(null,"Record doesnt exist");
        JOptionPane.showMessageDialog(null,ex);
        Logger.getLogger(CalCGPA.class.getName()).log(Level.SEVERE, null, ex);
    }
}

private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {

```

```

        // TODO add your handling code here:
        new Dashboard().setVisible(true);
        dispose();
    }

    public static void main(String args[]) {
        try {
            for (javax.swing.UIManager.LookAndFeelInfo info :
                javax.swing.UIManager.getInstalledLookAndFeels()) {
                if ("Nimbus".equals(info.getName())) {
                    javax.swing.UIManager.setLookAndFeel(info.getClassName());
                    break;
                }
            }
        } catch (ClassNotFoundException ex) {
            java.util.logging.Logger.getLogger(CalCGPA.class.getName()).log(java.util.logging.Level.SEVERE,
                null, ex);
        } catch (InstantiationException ex) {
            java.util.logging.Logger.getLogger(CalCGPA.class.getName()).log(java.util.logging.Level.SEVERE,
                null, ex);
        } catch (IllegalAccessException ex) {
            java.util.logging.Logger.getLogger(CalCGPA.class.getName()).log(java.util.logging.Level.SEVERE,
                null, ex);
        } catch (javax.swing.UnsupportedLookAndFeelException ex) {
            java.util.logging.Logger.getLogger(CalCGPA.class.getName()).log(java.util.logging.Level.SEVERE,
                null, ex);
        }
    }
    //</editor-fold>

    /* Create and display the form */
    java.awt.EventQueue.invokeLater(new Runnable() {
        public void run() {
            new CalCGPA().setVisible(true);
        }
    });
}

// Variables declaration - do not modify
private javax.swing.JButton jButton1;
private javax.swing.JLabel jLabel1;
private javax.swing.JLabel jLabel2;
private javax.swing.JTextField rollNo;
private javax.swing.JButton submit;
// End of variables declaration
}

```

StudentDetails.java(Retrieving details)

```
package dbproject;

import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.PreparedStatement;
import java.sql.ResultSet;
import java.sql.SQLException;
import java.sql.Statement;
import java.util.logging.Level;
import java.util.logging.Logger;
import javax.swing.JOptionPane;

public class StudentDetails extends javax.swing.JFrame {

    public StudentDetails() {
        initComponents();
    }

    @SuppressWarnings("unchecked")
    // <editor-fold defaultstate="collapsed" desc="Generated Code">
    private void initComponents() {

        jLabel1 = new javax.swing.JLabel();
        jLabel2 = new javax.swing.JLabel();
        jLabel3 = new javax.swing.JLabel();
        jLabel4 = new javax.swing.JLabel();
        jLabel5 = new javax.swing.JLabel();
        jLabel6 = new javax.swing.JLabel();
        jLabel7 = new javax.swing.JLabel();
        jLabel8 = new javax.swing.JLabel();
        jLabel9 = new javax.swing.JLabel();
        jLabel10 = new javax.swing.JLabel();
        jLabel11 = new javax.swing.JLabel();
        jLabel12 = new javax.swing.JLabel();
        rollno = new javax.swing.JTextField();
        name = new javax.swing.JTextField();
        age = new javax.swing.JTextField();
        gender = new javax.swing.JTextField();
        address = new javax.swing.JTextField();
        compiler = new javax.swing.JTextField();
        ooad = new javax.swing.JTextField();
        software = new javax.swing.JTextField();
        networks = new javax.swing.JTextField();
        javasc = new javax.swing.JTextField();
        cgpa = new javax.swing.JTextField();
    }
}
```

```
jButton1 = new javax.swing.JButton();
jButton2 = new javax.swing.JButton();
jButton3 = new javax.swing.JButton();
jButton4 = new javax.swing.JButton();

setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);

jLabel1.setFont(new java.awt.Font("Times New Roman", 3, 14)); // NOI18N
jLabel1.setForeground(new java.awt.Color(255, 0, 51));
jLabel1.setText("Displaying Student Information");
jLabel2.setText("Rollno");
jLabel3.setText("Name");
jLabel4.setText("Age");
jLabel5.setText("Gender");
jLabel6.setText("Address");
jLabel7.setText("Compiler");
jLabel8.setText("OOAD");
jLabel9.setText("Java");
jLabel10.setText("Software");
jLabel11.setText("Networks");
jLabel12.setText("CGPA");
jButton1.setText("Search");
jButton1.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton1ActionPerformed(evt);
    }
});

jButton2.setText("Clear");
jButton2.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton2ActionPerformed(evt);
    }
});

jButton3.setText("Back");
jButton3.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton3ActionPerformed(evt);
    }
});

jButton4.setText("Update");
jButton4.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton4ActionPerformed(evt);
    }
});
```

```

javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
getContentPane().setLayout(layout);
layout.setHorizontalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(layout.createSequentialGroup()
            .addGap(37, 37, 37)
            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addGroup(layout.createSequentialGroup()
                    .addGap(70, 70, 70)
                    .addComponent(javasc, javax.swing.GroupLayout.PREFERRED_SIZE, 56,
javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                    .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                        .addComponent(age, javax.swing.GroupLayout.PREFERRED_SIZE, 52,
javax.swing.GroupLayout.PREFERRED_SIZE)
                        .addComponent(jLabel4))
                    .addGap(18, 18, 18)
                        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                            .addGroup(layout.createSequentialGroup()
                                .addComponent(jLabel5)
                                .addGap(46, 46, 46)
                                .addComponent(jLabel6))
                            .addGroup(layout.createSequentialGroup()
                                .addComponent(gender, javax.swing.GroupLayout.PREFERRED_SIZE, 54,
javax.swing.GroupLayout.PREFERRED_SIZE)
                                .addGap(18, 18, 18)
                                .addComponent(address, javax.swing.GroupLayout.PREFERRED_SIZE, 101,
javax.swing.GroupLayout.PREFERRED_SIZE)))
                            .addGap(31, 31, 31))
                        .addGroup(layout.createSequentialGroup()
                            .addGap(12, 12, 12)
                            .addComponent(jLabel2)
                            .addGap(42, 42, 42)
                            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                                .addGroup(layout.createSequentialGroup()
                                    .addComponent(jLabel3)
                                    .addGap(0, 0, Short.MAX_VALUE))
                                .addComponent(jLabel1, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
                            .addContainerGap())
                        .addGroup(layout.createSequentialGroup()
                            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                                .addComponent(rollno, javax.swing.GroupLayout.PREFERRED_SIZE, 60,
javax.swing.GroupLayout.PREFERRED_SIZE)
                                .addComponent(jLabel7))
                            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)

```

```

        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)
            .addComponent(compiler)
            .addComponent(name, javax.swing.GroupLayout.PREFERRED_SIZE, 74,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addComponent(software, javax.swing.GroupLayout.Alignment.TRAILING))
        .addGap(33, 33, 33)
        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addComponent(jLabel8)
            .addGroup(layout.createSequentialGroup()
                .addGap(70, 70, 70)
                .addComponent(ooad)))
        .addGap(147, 147, 147)
        .addComponent(jLabel12)
        .addGap(96, 96, 96))
        .addGroup(layout.createSequentialGroup()
            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addGroup(layout.createSequentialGroup()
                    .addComponent(jLabel10)
                    .addGap(133, 133, 133)
                    .addComponent(jLabel11)
                    .addGap(25, 25, 25)
                    .addComponent(networks)
                    .addGap(118, 118, 118))
                .addGroup(layout.createSequentialGroup()
                    .addComponent(jLabel9)
                    .addGap(186, 186, 186)
                    .addComponent(jButton2, javax.swing.GroupLayout.PREFERRED_SIZE, 65,
javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
                    .addComponent(jButton4)
                    .addGap(16, 16, 16)
                    .addComponent(jButton1)
                    .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)))
                .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                    .addGroup(layout.createSequentialGroup()
                        .addGap(63, 63, 63)
                        .addComponent(jButton3, javax.swing.GroupLayout.PREFERRED_SIZE, 65,
javax.swing.GroupLayout.PREFERRED_SIZE))
                        .addComponent(cgpa, javax.swing.GroupLayout.PREFERRED_SIZE, 80,
javax.swing.GroupLayout.PREFERRED_SIZE))
                    .addGap(0, 25, Short.MAX_VALUE))))
    );
    layout.setVerticalGroup(
        layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(layout.createSequentialGroup()
            .addGap(20, 20, 20)
            .addComponent(jLabel1)

```



```

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)
    .addGroup(javax.swing.GroupLayout.Alignment.LEADING, layout.createSequentialGroup()
        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
            .addComponent(jLabel2)
            .addComponent(jLabel3))
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
            .addComponent(rollNo, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addComponent(name, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))
        .addGap(24, 24, 24)
        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
            .addComponent(jLabel7)
            .addComponent(compiler, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addComponent(jLabel8)
            .addComponent(ooad, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))
        .addGap(18, 18, 18)
        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
            .addComponent(jLabel10)
            .addComponent(jLabel11)
            .addComponent(networks, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addComponent(software, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)))
        .addGroup(layout.createSequentialGroup())
            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel4)
                .addComponent(jLabel5)
                .addComponent(jLabel6))
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(age, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(gender, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(address, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))
                .addGap(36, 36, 36)
                .addComponent(jLabel12)
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                .addComponent(cgpa, javax.swing.GroupLayout.PREFERRED_SIZE, 59,
javax.swing.GroupLayout.PREFERRED_SIZE)))
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)

```

```

        .addComponent(javasc, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
        .addComponent(jButton4)
        .addComponent(jButton3)
        .addComponent(jButton1)
        .addComponent(jButton2)
        .addComponent(jLabel9)
        .addContainerGap(198, Short.MAX_VALUE)
    );

    pack();
} // </editor-fold>

private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
    try{
        Connection conn =
DriverManager.getConnection("jdbc:derby://localhost:1527/StudentRecord","srihari","srihari");
        System.out.println("Connection created");
        //Statement st = conn.createStatement();
        String sql = "select * from studentrepository where rollno = ?";
        PreparedStatement stmt = conn.prepareStatement(sql);
        stmt.setInt(1,Integer.parseInt(rollno.getText()));
        ResultSet rs = stmt.executeQuery();

        if(rs.next()){
            name.setText(rs.getString("name"));
            age.setText(rs.getString("age"));
            gender.setText(rs.getString("gender"));
            address.setText(rs.getString("address"));
            compiler.setText(rs.getString("compiler"));
            ooad.setText(rs.getString("ood"));
            software.setText(rs.getString("software"));
            javasc.setText(rs.getString("java"));
            networks.setText(rs.getString("networks"));
            cgpa.setText(rs.getString("cgpa"));
        }
        else{
            JOptionPane.showMessageDialog(null,"Record Not found");
        }
        conn.close();
    } catch (SQLException ex) {
        JOptionPane.showMessageDialog(null,ex);
        Logger.getLogger(StudentDetails.class.getName()).log(Level.SEVERE, null, ex);
    }
}

```

```

private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
    rollno.setText("");
    name.setText("");
    age.setText("");
    address.setText("");
    compiler.setText("");
    ooad.setText("");
    javasc.setText("");
    networks.setText("");
    software.setText("");
    gender.setText("");
    cgpa.setText("");
}

private void jButton3ActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
    new Dashboard().setVisible(true);
    dispose();
}

private void jButton4ActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
    try{
        Connection conn =
DriverManager.getConnection("jdbc:derby://localhost:1527/StudentRecord","srihari","srihari");
        System.out.println("Connection created");
        String sql = "update studentrepository set name = ?,age = ?,gender = ?,address = ?,compiler =
?,java = ?,ooad = ?,software = ?,networks = ?,cgpa = ? where rollno = ?";
        PreparedStatement stmt = conn.prepareStatement(sql);
        stmt.setString(1,name.getText());
        stmt.setInt(2,Integer.parseInt(age.getText()));
        stmt.setString(4,address.getText());
        stmt.setInt(5,Integer.parseInt(compiler.getText()));
        stmt.setInt(7,Integer.parseInt(ooad.getText()));
        stmt.setInt(8,Integer.parseInt(software.getText()));
        stmt.setInt(6,Integer.parseInt(javasc.getText()));
        stmt.setInt(9,Integer.parseInt(networks.getText()));
        stmt.setString(3,gender.getText());
        stmt.setFloat(10,Float.parseFloat(cgpa.getText()));
        stmt.setInt(11,Integer.parseInt(rollno.getText()));
        stmt.executeUpdate();
        JOptionPane.showMessageDialog(null,"Record Updated Successfully");
        conn.close();
    } catch (SQLException ex) {
        JOptionPane.showMessageDialog(null,ex);
        Logger.getLogger(StudentDetails.class.getName()).log(Level.SEVERE, null, ex);
    }
}

```

```

    }

    public static void main(String args[]) {

        try {
            for (javax.swing.UIManager.LookAndFeelInfo info :
                javax.swing.UIManager.getInstalledLookAndFeels()) {
                if ("Nimbus".equals(info.getName())) {
                    javax.swing.UIManager.setLookAndFeel(info.getClassName());
                    break;
                }
            }
        } catch (ClassNotFoundException ex) {

            java.util.logging.Logger.getLogger(StudentDetails.class.getName()).log(java.util.logging.Level.SEVERE,
                null, ex);
        } catch (InstantiationException ex) {

            java.util.logging.Logger.getLogger(StudentDetails.class.getName()).log(java.util.logging.Level.SEVERE,
                null, ex);
        } catch (IllegalAccessException ex) {

            java.util.logging.Logger.getLogger(StudentDetails.class.getName()).log(java.util.logging.Level.SEVERE,
                null, ex);
        } catch (javax.swing.UnsupportedLookAndFeelException ex) {

            java.util.logging.Logger.getLogger(StudentDetails.class.getName()).log(java.util.logging.Level.SEVERE,
                null, ex);
        }
    }
}
//</editor-fold>

/* Create and display the form */
java.awt.EventQueue.invokeLater(new Runnable() {
    public void run() {
        new StudentDetails().setVisible(true);
    }
});
}

// Variables declaration - do not modify
private javax.swing.JTextField address;
private javax.swing.JTextField age;
private javax.swing.JTextField cgpa;
private javax.swing.JTextField compiler;
private javax.swing.JTextField gender;
private javax.swing.JButton jButton1;
private javax.swing.JButton jButton2;

```

```
private javax.swing.JButton jButton3;  
private javax.swing.JButton jButton4;  
private javax.swing.JLabel jLabel1;  
private javax.swing.JLabel jLabel10;  
private javax.swing.JLabel jLabel11;  
private javax.swing.JLabel jLabel12;  
private javax.swing.JLabel jLabel2;  
private javax.swing.JLabel jLabel3;  
private javax.swing.JLabel jLabel4;  
private javax.swing.JLabel jLabel5;  
private javax.swing.JLabel jLabel6;  
private javax.swing.JLabel jLabel7;  
private javax.swing.JLabel jLabel8;  
private javax.swing.JLabel jLabel9;  
private javax.swing.JTextField javasc;  
private javax.swing.JTextField name;  
private javax.swing.JTextField networks;  
private javax.swing.JTextField ooad;  
private javax.swing.JTextField rollno;  
private javax.swing.JTextField software;  
// End of variables declaration  
}
```

Dashboard.java

```
package dbproject;
public class Dashboard extends javax.swing.JFrame {

    public Dashboard() {
        initComponents();
    }

    @SuppressWarnings("unchecked")
    // <editor-fold defaultstate="collapsed" desc="Generated Code">
    private void initComponents() {

        jLabel1 = new javax.swing.JLabel();
        jButton1 = new javax.swing.JButton();
        jButton3 = new javax.swing.JButton();
        jButton4 = new javax.swing.JButton();

        setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);
        setTitle("Student Portal");
        setBackground(new java.awt.Color(0, 204, 204));

        jLabel1.setFont(new java.awt.Font("Calibri", 1, 24)); // NOI18N
        jLabel1.setForeground(new java.awt.Color(255, 51, 51));
        jLabel1.setText("Student Portal");

        jButton1.setForeground(new java.awt.Color(255, 153, 0));
        jButton1.setText("Insert Data");
        jButton1.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                jButton1ActionPerformed(evt);
            }
        });

        jButton3.setForeground(new java.awt.Color(255, 153, 0));
        jButton3.setText("Retrieve or Update Details");
        jButton3.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                jButton3ActionPerformed(evt);
            }
        });

        jButton4.setForeground(new java.awt.Color(255, 153, 0));
        jButton4.setText("Calculate CGPA");
        jButton4.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                jButton4ActionPerformed(evt);
            }
        })
    }
}
```

```

});

javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
getContentPane().setLayout(layout);
layout.setHorizontalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(layout.createSequentialGroup()
            .addGap(88, 88, 88)
            .addComponent(jButton3, javax.swing.GroupLayout.PREFERRED_SIZE, 177,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addGroup(layout.createSequentialGroup()
                    .addGap(167, 167, 167)
                    .addComponent(jButton4))
                .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                    .addComponent(jLabel1)
                    .addGroup(javax.swing.GroupLayout.Alignment.TRAILING, layout.createSequentialGroup()
                        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                        .addComponent(jButton1)
                        .addGap(24, 24, 24))))
            .addGap(75, Short.MAX_VALUE))
        );
layout.setVerticalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(layout.createSequentialGroup()
            .addGap(51, 51, 51)
            .addComponent(jLabel1)
            .addGap(64, 64, 64)
            .addComponent(jButton1)
            .addGap(53, 53, 53)
            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jButton3)
                .addComponent(jButton4))
            .addGap(137, Short.MAX_VALUE))
        );

pack();
} // </editor-fold>

private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
    new Student().setVisible(true);
    dispose();
}

private void jButton3ActionPerformed(java.awt.event.ActionEvent evt) {
    new StudentDetails().setVisible(true);
    dispose();
}

```

```

    }

    private void jButton4ActionPerformed(java.awt.event.ActionEvent evt) {
        new CalCGPA().setVisible(true);
        dispose();
    }

    public static void main(String args[]) {
        try {
            for (javax.swing.UIManager.LookAndFeelInfo info :
                javax.swing.UIManager.getInstalledLookAndFeels()) {
                if ("Nimbus".equals(info.getName())) {
                    javax.swing.UIManager.setLookAndFeel(info.getClassName());
                    break;
                }
            }
        } catch (ClassNotFoundException ex) {
            java.util.logging.Logger.getLogger(Dashboard.class.getName()).log(java.util.logging.Level.SEVERE,
            null, ex);
        } catch (InstantiationException ex) {
            java.util.logging.Logger.getLogger(Dashboard.class.getName()).log(java.util.logging.Level.SEVERE,
            null, ex);
        } catch (IllegalAccessException ex) {
            java.util.logging.Logger.getLogger(Dashboard.class.getName()).log(java.util.logging.Level.SEVERE,
            null, ex);
        } catch (javax.swing.UnsupportedLookAndFeelException ex) {
            java.util.logging.Logger.getLogger(Dashboard.class.getName()).log(java.util.logging.Level.SEVERE,
            null, ex);
        }
        //</editor-fold>
        java.awt.EventQueue.invokeLater(new Runnable() {
            public void run() {
                new Dashboard().setVisible(true);
            }
        });
    }

    // Variables declaration - do not modify
    private javax.swing.JButton jButton1;
    private javax.swing.JButton jButton3;
    private javax.swing.JButton jButton4;
    private javax.swing.JLabel jLabel1;
    // End of variables declaration
}

```