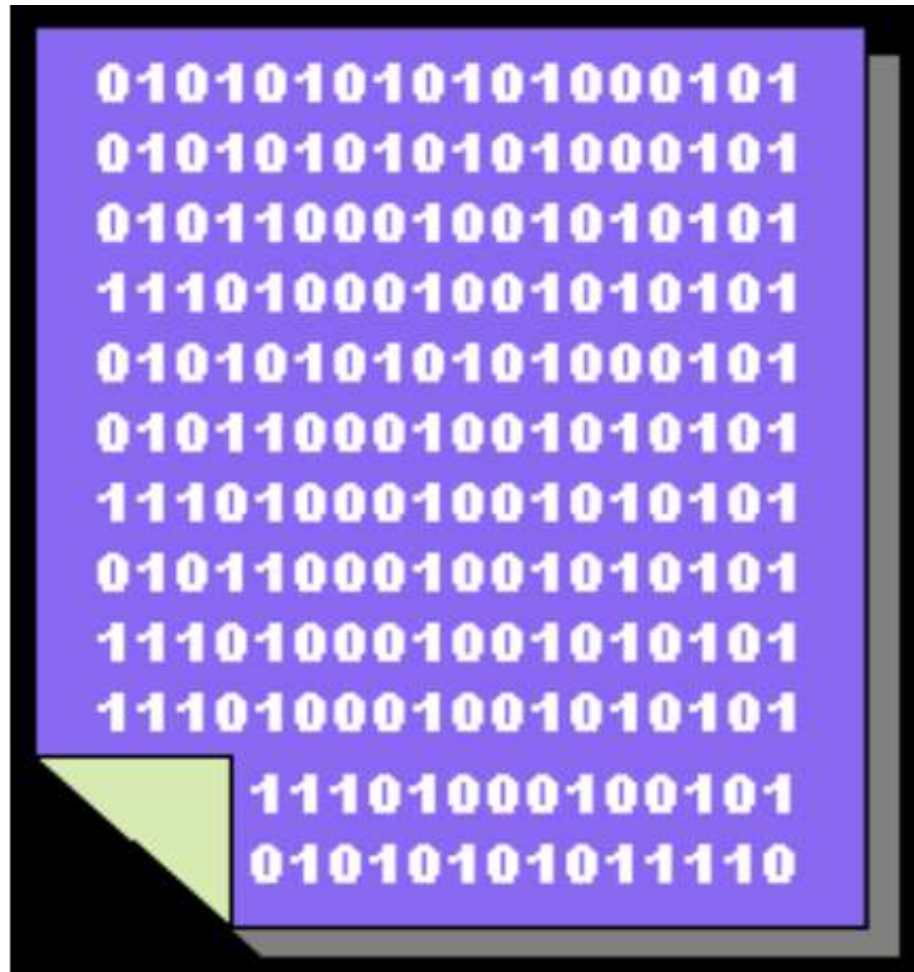


SOURCE CODE



LOGIN

```
//Importing javax.swing.JOptionPane.
import javax.swing.JOptionPane;

/**
 *
 * @author RIZWAN
 */
public class Login extends javax.swing.JFrame {

    /**
     * Creates new form Login
     */
    public Login() {
        initComponents();
    }

    /**
     * This method is called from within the constructor to initialize the form
     */
    @SuppressWarnings("unchecked")
    // <editor-fold defaultstate="collapsed" desc="Generated Code">
    private void initComponents() {

        // Creating the GUI for the login page by using java swing.
        jLabel1 = new javax.swing.JLabel();
        jLabel2 = new javax.swing.JLabel();
```

```
jLabel3 = new javax.swing.JLabel();
jTextField1 = new javax.swing.JTextField();
jPasswordField1 = new javax.swing.JPasswordField();
jButton1 = new javax.swing.JButton();
jButton2 = new javax.swing.JButton();

setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);
setTitle("Login");
setBackground(new java.awt.Color(255, 255, 255));

jLabel1.setFont(new java.awt.Font("Adobe Devanagari", 1, 36)); // NOI18N
jLabel1.setForeground(new java.awt.Color(102, 102, 255));
jLabel1.setText("Login");

jLabel2.setFont(new java.awt.Font("Tahoma", 0, 18)); // NOI18N
jLabel2.setText("Username ");

jLabel3.setFont(new java.awt.Font("Tahoma", 0, 18)); // NOI18N
jLabel3.setText("Password");

jTextField1.setForeground(new java.awt.Color(51, 51, 51));
jTextField1.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jTextField1ActionPerformed(evt);
    }
});

jButton1.setBackground(new java.awt.Color(51, 255, 204));
jButton1.setFont(new java.awt.Font("Segoe UI", 1, 14)); // NOI18N
jButton1.setText("Login");
jButton1.addActionListener(new java.awt.event.ActionListener() {
```



```
.addComponent(jLabel3)

.addGap(76, 76, 76)

.addComponent(jPasswordField1, javax.swing.GroupLayout.PREFERRED_SIZE, 147,
javax.swing.GroupLayout.PREFERRED_SIZE))

.addGroup(layout.createSequentialGroup())

.addGap(100, 100, 100)

.addComponent(jButton1, javax.swing.GroupLayout.PREFERRED_SIZE, 80,
javax.swing.GroupLayout.PREFERRED_SIZE)

.addGap(40, 40, 40)

.addComponent(jButton2, javax.swing.GroupLayout.PREFERRED_SIZE, 80,
javax.swing.GroupLayout.PREFERRED_SIZE)))

.addContainerGap(70, Short.MAX_VALUE))
);
layout.setVerticalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
.addGroup(layout.createSequentialGroup()

.addGap(17, 17, 17)

.addComponent(jLabel1)

.addGap(54, 54, 54)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

.addComponent(jLabel2)

.addComponent(jTextField1, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))

.addGap(28, 28, 28)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

.addComponent(jLabel3)

.addComponent(jPasswordField1, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))

.addGap(48, 48, 48)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

.addComponent(jButton1, javax.swing.GroupLayout.PREFERRED_SIZE, 30,
javax.swing.GroupLayout.PREFERRED_SIZE)
```

```
.addComponent(jButton2, javax.swing.GroupLayout.PREFERRED_SIZE, 30,
javax.swing.GroupLayout.PREFERRED_SIZE))

.addContainerGap(46, Short.MAX_VALUE))

);

pack();

setLocationRelativeTo(null);
} // </editor-fold>

private void jTextField1ActionPerformed(java.awt.event.ActionEvent evt) {

}

private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
// Setting the function of login button.
if(jTextField1.getText().equals("admin")&&jPasswordField1.getText().equals("12345")) {
    setVisible(false);
    new Home().setVisible(true);
}
else{
JOptionPane.showMessageDialog(null,"Incorrect Username or Password.");

}

}

private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {
// Setting the function of exit button.

System.exit(0);

}
```

```
public static void main(String args[]) {  
    /* Set the Nimbus look and feel */  
    //<editor-fold defaultstate="collapsed" desc=" Look and feel setting code (optional) ">  
    /* If Nimbus (introduced in Java SE 6) is not available, stay with the default look and feel.  
     * For details see http://download.oracle.com/javase/tutorial/uiswing/lookandfeel/plaf.html  
     */  
    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(Login.class.getName()).log(java.util.logging.Level.SEVERE,  
            null, ex);  
    } catch (InstantiationException ex) {  
        java.util.logging.Logger.getLogger(Login.class.getName()).log(java.util.logging.Level.SEVERE,  
            null, ex);  
    } catch (IllegalAccessException ex) {  
        java.util.logging.Logger.getLogger(Login.class.getName()).log(java.util.logging.Level.SEVERE,  
            null, ex);  
    } catch (javax.swing.UnsupportedLookAndFeelException ex) {  
        java.util.logging.Logger.getLogger(Login.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 Login().setVisible(true);  
        }  
    });  
}
```

```
    }  
    });  
}  
  
// Variables declaration -  
private javax.swing.JButton jButton1;  
private javax.swing.JButton jButton2;  
private javax.swing.JLabel jLabel1;  
private javax.swing.JLabel jLabel2;  
private javax.swing.JLabel jLabel3;  
private javax.swing.JPasswordField jPasswordField1;  
private javax.swing.JTextField jTextField1;  
// End of variables declaration  
}
```


HOME PAGE

```
/**
 *
 * @author RIZWAN
 */
public class Home extends javax.swing.JFrame {

    /**
     * Creates new form Home
     */
    public Home() {
        initComponents();
        setExtendedState(MAXIMIZED_BOTH);
    }

    /**
     * This method is called from within the constructor to initialize the form.
     */
    @SuppressWarnings("unchecked")
    // <editor-fold defaultstate="collapsed" desc="Generated Code">
    private void initComponents() {
        // Creating the GUI for the home page by using java swing.

        jLabel1 = new javax.swing.JLabel();
        jButton1 = new javax.swing.JButton();
        jButton2 = new javax.swing.JButton();
        jButton3 = new javax.swing.JButton();
    }
}
```

```
jButton4 = new javax.swing.JButton();
jButton5 = new javax.swing.JButton();
jButton6 = new javax.swing.JButton();
jButton7 = new javax.swing.JButton();
jLabel3 = new javax.swing.JLabel();
jButton8 = new javax.swing.JButton();

jLabel1.setText("jLabel1");

setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);
setTitle("Home");
getContentPane().setLayout(new org.netbeans.lib.awtextra.AbsoluteLayout());

jButton1.setBackground(new java.awt.Color(204, 204, 255));
jButton1.setFont(new java.awt.Font("Times New Roman", 1, 18)); // NOI18N
jButton1.setIcon(new javax.swing.ImageIcon(getClass().getResource("/Student.png"))); //
NOI18N
jButton1.setText("Enter New Student");
jButton1.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton1ActionPerformed(evt);
    }
});
getContentPane().add(jButton1, new org.netbeans.lib.awtextra.AbsoluteConstraints(290, 100, -
1, -1));

jButton2.setBackground(new java.awt.Color(204, 204, 255));
jButton2.setFont(new java.awt.Font("Times New Roman", 1, 18)); // NOI18N
jButton2.setIcon(new javax.swing.ImageIcon(getClass().getResource("/book.png"))); // NOI18N
jButton2.setText(" Enter New Book");
jButton2.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
```

```
        jButton2ActionPerformed(evt);
    }
});

getContentPane().add(jButton2, new org.netbeans.lib.awtextra.AbsoluteConstraints(290, 230,
253, 70));

jButton3.setBackground(new java.awt.Color(204, 204, 255));
jButton3.setFont(new java.awt.Font("Times New Roman", 1, 18)); // NOI18N
jButton3.setIcon(new javax.swing.ImageIcon(getClass().getResource("/book_issue.png"))); //
NOI18N
jButton3.setText(" Book Issue ");
jButton3.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton3ActionPerformed(evt);
    }
});

getContentPane().add(jButton3, new org.netbeans.lib.awtextra.AbsoluteConstraints(290, 360,
253, -1));

jButton4.setBackground(new java.awt.Color(204, 204, 255));
jButton4.setFont(new java.awt.Font("Times New Roman", 1, 18)); // NOI18N
jButton4.setIcon(new javax.swing.ImageIcon(getClass().getResource("/Book_return.png"))); //
NOI18N
jButton4.setText(" Return Book ");
jButton4.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton4ActionPerformed(evt);
    }
});

getContentPane().add(jButton4, new org.netbeans.lib.awtextra.AbsoluteConstraints(290, 500,
253, -1));

jButton5.setBackground(new java.awt.Color(204, 204, 255));
```

```
jButton5.setFont(new java.awt.Font("Times New Roman", 1, 18)); // NOI18N
jButton5.setIcon(new javax.swing.ImageIcon(getClass().getResource("/report.png"))); // NOI18N
jButton5.setText("  Report      ");
jButton5.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton5ActionPerformed(evt);
    }
});
getContentPane().add(jButton5, new org.netbeans.lib.awtextra.AbsoluteConstraints(290, 640,
253, -1));
```

```
jButton6.setBackground(new java.awt.Color(255, 255, 153));
jButton6.setFont(new java.awt.Font("Times New Roman", 1, 18)); // NOI18N
jButton6.setIcon(new javax.swing.ImageIcon(getClass().getResource("/logout.png"))); // NOI18N
jButton6.setText("Log Out");
jButton6.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton6ActionPerformed(evt);
    }
});
getContentPane().add(jButton6, new org.netbeans.lib.awtextra.AbsoluteConstraints(1680, 40,
170, 70));
```

```
jButton7.setBackground(new java.awt.Color(204, 204, 255));
jButton7.setFont(new java.awt.Font("Times New Roman", 1, 18)); // NOI18N
jButton7.setIcon(new javax.swing.ImageIcon(getClass().getResource("/exit.png"))); // NOI18N
jButton7.setText("  Exit      ");
jButton7.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton7ActionPerformed(evt);
    }
});
```

```
getContentPane().add(jButton7, new org.netbeans.lib.awtextra.AbsoluteConstraints(290, 790,
253, 72));

jLabel3.setIcon(new javax.swing.ImageIcon(getClass().getResource("/BG.jpg"))); // NOI18N
getContentPane().add(jLabel3, new org.netbeans.lib.awtextra.AbsoluteConstraints(50, 0, 1900,
1040));

jButton8.setFont(new java.awt.Font("Times New Roman", 1, 18)); // NOI18N
jButton8.setIcon(new
javax.swing.ImageIcon("C:\\Users\\RIZWAN\\Documents\\NetBeansProjects\\Library.Management.
System\\Image\\exit.png")); // NOI18N
jButton8.setText(" Exit ");
jButton8.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton8ActionPerformed(evt);
    }
});
getContentPane().add(jButton8, new org.netbeans.lib.awtextra.AbsoluteConstraints(290, 790,
253, 72));

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

// Creating the function for every button.
private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {

new Student().setVisible(true);
}

private void jButton5ActionPerformed(java.awt.event.ActionEvent evt) {
new Report().setVisible(true);
```

```
}

private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {
new Book().setVisible(true);
}

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

private void jButton6ActionPerformed(java.awt.event.ActionEvent evt) {
setVisible(false);
new Login().setVisible(true);
}

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

private void jButton7ActionPerformed(java.awt.event.ActionEvent evt) {
System.exit(0);
}

private void jButton8ActionPerformed(java.awt.event.ActionEvent evt) {

}

/**
 * @param args the command line arguments
 */
public static void main(String args[]) {
```

```
/* Set the Nimbus look and feel */
//<editor-fold defaultstate="collapsed" desc=" Look and feel setting code (optional) ">
/* If Nimbus (introduced in Java SE 6) is not available, stay with the default look and feel.
 * For details see http://download.oracle.com/javase/tutorial/uiswing/lookandfeel/plaf.html
 */
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(Home.class.getName()).log(java.util.logging.Level.SEVERE,
        null, ex);
} catch (InstantiationException ex) {
    java.util.logging.Logger.getLogger(Home.class.getName()).log(java.util.logging.Level.SEVERE,
        null, ex);
} catch (IllegalAccessException ex) {
    java.util.logging.Logger.getLogger(Home.class.getName()).log(java.util.logging.Level.SEVERE,
        null, ex);
} catch (javax.swing.UnsupportedLookAndFeelException ex) {
    java.util.logging.Logger.getLogger(Home.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 Home().setVisible(true);
    }
})
```

```
    });  
}  
  
// Variables declaration  
private javax.swing.JButton jButton1;  
private javax.swing.JButton jButton2;  
private javax.swing.JButton jButton3;  
private javax.swing.JButton jButton4;  
private javax.swing.JButton jButton5;  
private javax.swing.JButton jButton6;  
private javax.swing.JButton jButton7;  
private javax.swing.JButton jButton8;  
private javax.swing.JLabel jLabel1;  
private javax.swing.JLabel jLabel3;  
// End of variables declaration  
}
```


STUDENT DETAILS ENTRY

```
//Importing some packages.
import java.util.logging.Level;
import java.util.logging.Logger;
import java.sql.*;
import javax.swing.JOptionPane;

/**
 *
 * @author RIZWAN
 */
public class Student extends javax.swing.JFrame {

    /**
     * Creates new form Student
     */
    public Student() {
        initComponents();
        Connection();
    }

    Connection con;
    PreparedStatement pst;
    public void Connection(){

        //Connecting database.
        try {
            Class.forName("org.sqlite.JDBC");
            con = DriverManager.getConnection("jdbc:sqlite:lms.sqlite");
```

```
}  
  
    catch (ClassNotFoundException ex) {  
        Logger.getLogger(Student.class.getName()).log(Level.SEVERE, null, ex);  
    } catch (SQLException ex) {  
        Logger.getLogger(Student.class.getName()).log(Level.SEVERE, null, ex);  
    }  
  
}
```

```
/**
```

```
 * This method is called from within the constructor to initialize the form.
```

```
 */
```

```
// <editor-fold defaultstate="collapsed" desc="Generated Code">
```

```
// <editor-fold defaultstate="collapsed" desc="Generated Code">
```

```
private void initComponents() {
```

```
// Creating GUI for student entry form.
```

```
    jLabel1 = 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();
```

```
txtsname = new javax.swing.JTextField();
txtrn = new javax.swing.JTextField();
jButton1 = new javax.swing.JButton();
jButton2 = new javax.swing.JButton();
txtsection = new javax.swing.JComboBox<>();
txtclass = new javax.swing.JComboBox<>();

setDefaultCloseOperation(javax.swing.WindowConstants.DISPOSE_ON_CLOSE);

jLabel1.setFont(new java.awt.Font("Times New Roman", 1, 24)); // NOI18N
jLabel1.setForeground(new java.awt.Color(0, 0, 102));
jLabel1.setText("Enter Student Details");

jLabel3.setFont(new java.awt.Font("Tahoma", 0, 18)); // NOI18N
jLabel3.setText("Name");

jLabel4.setFont(new java.awt.Font("Tahoma", 0, 18)); // NOI18N
jLabel4.setText("Roll No");

jLabel5.setFont(new java.awt.Font("Tahoma", 0, 18)); // NOI18N
jLabel5.setText("Class");

jLabel7.setFont(new java.awt.Font("Tahoma", 0, 18)); // NOI18N
jLabel7.setText("Section");

txtrn.addKeyListener(new java.awt.event.KeyAdapter() {
    public void keyPressed(java.awt.event.KeyEvent evt) {
        txtrnKeyPressed(evt);
    }
});
```

```
        jButton1.setBackground(new java.awt.Color(102, 255, 102));
        jButton1.setFont(new java.awt.Font("Tahoma", 1, 14)); // NOI18N
        jButton1.setForeground(new java.awt.Color(255, 255, 255));
        jButton1.setText("Save");
        jButton1.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                jButton1ActionPerformed(evt);
            }
        });

        jButton2.setBackground(new java.awt.Color(255, 0, 0));
        jButton2.setFont(new java.awt.Font("Tahoma", 1, 14)); // NOI18N
        jButton2.setForeground(new java.awt.Color(255, 255, 255));
        jButton2.setText("Exit");
        jButton2.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                jButton2ActionPerformed(evt);
            }
        });

        txtsection.setFont(new java.awt.Font("Tahoma", 0, 12)); // NOI18N
        txtsection.setForeground(new java.awt.Color(51, 51, 51));
        txtsection.setModel(new javax.swing.DefaultComboBoxModel<>(new String[] { "Select Section",
"A", "B", "C", "D" }));

        txtclass.setFont(new java.awt.Font("Tahoma", 0, 12)); // NOI18N
        txtclass.setForeground(new java.awt.Color(51, 51, 51));
        txtclass.setModel(new javax.swing.DefaultComboBoxModel<>(new String[] { "Select Class", "1",
"2", "3", "4", "5", "6", "7", "8", "9", "10", "11", "12" }));

        javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
        getContentPane().setLayout(layout);
```

```
layout.setHorizontalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(javax.swing.GroupLayout.Alignment.TRAILING, layout.createSequentialGroup()
            .addGap(0, 0, Short.MAX_VALUE)
            .addComponent(jLabel1)
            .addGap(104, 104, 104))
        .addGroup(layout.createSequentialGroup()
            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addGroup(layout.createSequentialGroup()
                    .addGap(168, 168, 168)
                    .addComponent(jLabel6))
                .addGroup(layout.createSequentialGroup()
                    .addGap(47, 47, 47)
                    .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                        .addComponent(jLabel3)
                        .addComponent(jLabel5)
                        .addComponent(jLabel4)
                        .addComponent(jLabel7))
                    .addGap(65, 65, 65)
                    .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING,
false)
                        .addComponent(txtrn, javax.swing.GroupLayout.DEFAULT_SIZE, 217,
Short.MAX_VALUE)
                        .addComponent(txtsname, javax.swing.GroupLayout.DEFAULT_SIZE, 217,
Short.MAX_VALUE)
                        .addComponent(txtsection, 0, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)
                        .addComponent(txtclass, 0, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)))
                .addGroup(layout.createSequentialGroup()
                    .addGap(124, 124, 124)
                    .addComponent(jButton1, javax.swing.GroupLayout.PREFERRED_SIZE, 81,
javax.swing.GroupLayout.PREFERRED_SIZE)
```

```
.addGap(53, 53, 53)

.addComponent(jButton2, javax.swing.GroupLayout.PREFERRED_SIZE, 81,
javax.swing.GroupLayout.PREFERRED_SIZE)))

.addContainerGap(50, Short.MAX_VALUE))

);

layout.setVerticalGroup(

    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

        .addGroup(layout.createSequentialGroup()

            .addContainerGap(13, Short.MAX_VALUE)

            .addComponent(jLabel1, javax.swing.GroupLayout.PREFERRED_SIZE, 38,
javax.swing.GroupLayout.PREFERRED_SIZE)

            .addGap(47, 47, 47)

            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)

                .addComponent(jLabel3)

                .addComponent(txtsname, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))

            .addGap(39, 39, 39)

            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)

                .addComponent(jLabel5)

                .addComponent(txtclass, javax.swing.GroupLayout.PREFERRED_SIZE, 30,
javax.swing.GroupLayout.PREFERRED_SIZE))

            .addGap(45, 45, 45)

            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)

                .addComponent(jLabel4)

                .addComponent(txtrn, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))

            .addGap(46, 46, 46)

            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)

                .addComponent(jLabel7)

                .addComponent(txtsection, javax.swing.GroupLayout.PREFERRED_SIZE, 29,
javax.swing.GroupLayout.PREFERRED_SIZE))

            .addGap(63, 63, 63)

            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
```

```
.addComponent(jButton1, javax.swing.GroupLayout.PREFERRED_SIZE, 31,
javax.swing.GroupLayout.PREFERRED_SIZE)

.addComponent(jButton2, javax.swing.GroupLayout.PREFERRED_SIZE, 31,
javax.swing.GroupLayout.PREFERRED_SIZE))

.addGap(40, 40, 40)

.addComponent(jLabel6))

);

pack();

setLocationRelativeTo(null);
} // </editor-fold>

private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {
// action performed by exit button.
setVisible(false);
}

private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
// action performed by save button.

if(txtsname.getText().equals("") || txtclass.getSelectedItem().equals("Select
Class") || txtrn.getText().equals("") || txtsection.getSelectedItem().equals("Select Section")) {
JOptionPane.showMessageDialog(this, "Please fill all the columns!");
}

else{
try{
//Converting the user given data into String.

String Student_Name = txtsname.getText();

String Clas = txtclass.getSelectedItem().toString();

String Roll_No=txtrn.getText();
```

```
String Section = txtsection.getSelectedItemAt().toString();

//Inserting the data into the database.

pst = con.prepareStatement("INSERT INTO student(Student_Name, Class, Roll_No, Section)
VALUES(?,?,?,?)");

pst.setString(1,Student_Name);
pst.setString(2,Clas);
pst.setString(3,Roll_No);
pst.setString(4,Section);
pst.executeUpdate();

JOptionPane.showMessageDialog(this, "Successfully Saved!");

txtsname.setText("");
txtclass.setSelectedItemAt("Select Class");
txtrn.setText("");
txtsection.setSelectedItemAt("Select Section");

txtsname.requestFocus();

pst.close();
```



```
}

    catch (SQLException ex) {

        Logger.getLogger(Student.class.getName()).log(Level.SEVERE, null, ex);

    }

}

}

private void txtrnKeyPressed(java.awt.event.KeyEvent evt) {

}

/**
 * @param args the command line arguments
 */

public static void main(String args[]) {
    /* Set the Nimbus look and feel */
    //<editor-fold defaultstate="collapsed" desc=" Look and feel setting code (optional) ">
    /* If Nimbus (introduced in Java SE 6) is not available, stay with the default look and feel.
     * For details see http://download.oracle.com/javase/tutorial/uiswing/lookandfeel/plaf.html
     */
}
```

```
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);
}
//</editor-fold>
```

```
/* Create and display the form */
```

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

```
    });  
}  
  
// Variables declaration - do not modify  
private javax.swing.JButton jButton1;  
private javax.swing.JButton jButton2;  
private javax.swing.JLabel jLabel1;  
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.JComboBox<String> txtclass;  
private javax.swing.JTextField txtrn;  
private javax.swing.JComboBox<String> txtsection;  
private javax.swing.JTextField txtsname;  
// End of variables declaration  
  
}
```

BOOK DETAILS ENTRY

```
//Importing some packages.
import java.util.logging.Level;
import java.util.logging.Logger;
import java.sql.*;
import javax.swing.JOptionPane;

/**
 *
 * @author RIZWAN
 */
public class Book extends javax.swing.JFrame {

    /**
     * Creates new form Book
     */
    public Book() {
        initComponents();
        Connection();
    }
    Connection con;
    PreparedStatement pst;
    public void Connection(){

        //Connecting to database.
        try {

            Class.forName("org.sqlite.JDBC");
```

```
        con = DriverManager.getConnection("jdbc:sqlite:lms.sqlite");
    }

    catch (ClassNotFoundException ex) {
        Logger.getLogger(Student.class.getName()).log(Level.SEVERE, null, ex);
    } catch (SQLException ex) {
        Logger.getLogger(Student.class.getName()).log(Level.SEVERE, null, ex);
    }
}
```

```
/**
 * This method is called from within the constructor to initialize the form.
 *
 */
@SuppressWarnings("unchecked")
// <editor-fold defaultstate="collapsed" desc="Generated Code">
private void initComponents() {
```

```
//Creating GUI for Book Entry Form.
```

```
    jButton1 = new javax.swing.JButton();
    jButton2 = new javax.swing.JButton();
    jLabel1 = 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();
    txtbname = new javax.swing.JTextField();
    txtprice = new javax.swing.JTextField();
```

```
txtyear = new javax.swing.JTextField();
txtpname = new javax.swing.JTextField();
jButton3 = new javax.swing.JButton();
jButton4 = new javax.swing.JButton();
txtstatus = new javax.swing.JComboBox<>();

jButton1.setBackground(new java.awt.Color(102, 255, 102));
jButton1.setFont(new java.awt.Font("Tahoma", 1, 14)); // NOI18N
jButton1.setForeground(new java.awt.Color(255, 255, 255));
jButton1.setText("Save");

jButton2.setBackground(new java.awt.Color(255, 0, 0));
jButton2.setFont(new java.awt.Font("Tahoma", 1, 14)); // NOI18N
jButton2.setForeground(new java.awt.Color(255, 255, 255));
jButton2.setText("Exit");

setDefaultCloseOperation(javax.swing.WindowConstants.DISPOSE_ON_CLOSE);

jLabel1.setFont(new java.awt.Font("Times New Roman", 1, 24)); // NOI18N
jLabel1.setForeground(new java.awt.Color(0, 0, 102));
jLabel1.setText("Enter Book Details");

jLabel3.setFont(new java.awt.Font("Tahoma", 0, 18)); // NOI18N
jLabel3.setText("Year");

jLabel4.setFont(new java.awt.Font("Tahoma", 0, 18)); // NOI18N
jLabel4.setText("Name");

jLabel5.setFont(new java.awt.Font("Tahoma", 0, 18)); // NOI18N
jLabel5.setText("Price");
```

```
jLabel6.setFont(new java.awt.Font("Tahoma", 0, 18)); // NOI18N
jLabel6.setText("Status");

jLabel7.setFont(new java.awt.Font("Tahoma", 0, 18)); // NOI18N
jLabel7.setText("Publisher");

jButton3.setBackground(new java.awt.Color(102, 255, 102));
jButton3.setFont(new java.awt.Font("Tahoma", 1, 14)); // NOI18N
jButton3.setForeground(new java.awt.Color(255, 255, 255));
jButton3.setText("Save");
jButton3.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton3ActionPerformed(evt);
    }
});

jButton4.setBackground(new java.awt.Color(255, 0, 0));
jButton4.setFont(new java.awt.Font("Tahoma", 1, 14)); // NOI18N
jButton4.setForeground(new java.awt.Color(255, 255, 255));
jButton4.setText("Exit");
jButton4.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton4ActionPerformed(evt);
    }
});

txtstatus.setForeground(new java.awt.Color(102, 102, 102));
txtstatus.setModel(new javax.swing.DefaultComboBoxModel<>(new String[] { "Select Status",
"Available", "Not Available" }));
txtstatus.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
```

```
        txtstatusActionPerformed(evt);
    }
});

javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
getContentPane().setLayout(layout);
layout.setHorizontalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(javax.swing.GroupLayout.Alignment.TRAILING, layout.createSequentialGroup()
            .addGap(61, 61, 61)
            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addComponent(jLabel3)
                .addComponent(jLabel4)
                .addComponent(jLabel6)
                .addComponent(jLabel5)
                .addComponent(jLabel7, javax.swing.GroupLayout.PREFERRED_SIZE, 85,
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, false)
                .addComponent(txtprice, javax.swing.GroupLayout.DEFAULT_SIZE, 217,
Short.MAX_VALUE)
                .addComponent(txtyear, javax.swing.GroupLayout.DEFAULT_SIZE, 217,
Short.MAX_VALUE)
                .addComponent(txtbname, javax.swing.GroupLayout.DEFAULT_SIZE, 217,
Short.MAX_VALUE)
                .addComponent(txtpname, javax.swing.GroupLayout.DEFAULT_SIZE, 217,
Short.MAX_VALUE)
                .addComponent(txtstatus, 0, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))
            .addGap(48, 48, 48))
        .addGroup(javax.swing.GroupLayout.Alignment.TRAILING, layout.createSequentialGroup()
            .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
```



```
.addComponent(jLabel1)

.addGap(116, 116, 116))

.addGroup(layout.createSequentialGroup())

.addGap(103, 103, 103)

.addComponent(jButton3, javax.swing.GroupLayout.PREFERRED_SIZE, 81,
javax.swing.GroupLayout.PREFERRED_SIZE)

.addGap(59, 59, 59)

.addComponent(jButton4, javax.swing.GroupLayout.PREFERRED_SIZE, 81,
javax.swing.GroupLayout.PREFERRED_SIZE)

.addContainerGap(111, Short.MAX_VALUE))

);

layout.setVerticalGroup(

layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

.addGroup(layout.createSequentialGroup())

.addGap(24, 24, 24)

.addComponent(jLabel1)

.addGap(60, 60, 60)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)

.addComponent(txtbname, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)

.addComponent(jLabel4))

.addGap(41, 41, 41)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)

.addComponent(txtprice, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)

.addComponent(jLabel5))

.addGap(37, 37, 37)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)

.addComponent(txtpname, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)

.addComponent(jLabel7))

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, 35,
Short.MAX_VALUE)
```

```

        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)

            .addComponent(txtyear, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)

            .addComponent(jLabel3))

        .addGap(34, 34, 34)

        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)

            .addComponent(jLabel6)

            .addComponent(txtstatus, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))

        .addGap(53, 53, 53)

        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)

            .addComponent(jButton3, javax.swing.GroupLayout.PREFERRED_SIZE, 31,
javax.swing.GroupLayout.PREFERRED_SIZE)

            .addComponent(jButton4, javax.swing.GroupLayout.PREFERRED_SIZE, 31,
javax.swing.GroupLayout.PREFERRED_SIZE))

        .addGap(50, 50, 50))

    );

    pack();

    setLocationRelativeTo(null);
} // </editor-fold>

private void jButton4ActionPerformed(java.awt.event.ActionEvent evt) {
//Creating function for exit button.

    setVisible(false);
}

private void jButton3ActionPerformed(java.awt.event.ActionEvent evt) {
//Creating function for save button.

    if(txtbname.getText().equals("") || txtstatus.getSelectedIndex().equals("Select
Status") || txtprice.getText().equals("") || txtpname.getText().equals("") || txtprice.getText().equals("")
|| txtyear.getText().equals("")) {

```

```
JOptionPane.showMessageDialog(this, "Please fill all the columns!");  
}  
  
else{  
try{  
    // Converting the user input into String.  
    String Book_Name = txtbname.getText();  
    String Status = txtstatus.getSelectedItem().toString();  
    String Price=txtprice.getText();  
    String Publisher =txtpname.getText();  
    String Year=txtyear.getText();  
  
    //Inserting the deta into the database.  
  
    pst = con.prepareStatement("INSERT INTO book(Book_Name, Publisher, Price, Year, Status)  
values(?,?,?,?,?)");  
    pst.setString(1,Book_Name);  
    pst.setString(2,Publisher);  
    pst.setString(3,Price);  
    pst.setString(4,Year);  
    pst.setString(5,Status);  
  
    pst.executeUpdate();  
  
    JOptionPane.showMessageDialog(this, "Successfully Saved!");  
  
    txtbname.setText("");  
    txtstatus.setSelectedItem("Select Status");  
    txtprice.setText("");
```

```
        txtpname.setText("");
        txtyear.setText("");

        txtbname.requestFocus();

        pst.close();

    }

    catch (SQLException ex) {

        Logger.getLogger(Student.class.getName()).log(Level.SEVERE, null, ex);

    }

}

}

}

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

}

/**
 * @param args the command line arguments
 */
public static void main(String args[]) {
```

```

/* Set the Nimbus look and feel */
//<editor-fold defaultstate="collapsed" desc=" Look and feel setting code (optional) ">
/* If Nimbus (introduced in Java SE 6) is not available, stay with the default look and feel.
 * For details see http://download.oracle.com/javase/tutorial/uiswing/lookandfeel/plaf.html
 */
try {
    for (javax.swing.UIManager.LookAndFeelInfo info :
        javax.swing.UIManager.getInstalledLookAndFeels()) {
        if ("Windows".equals(info.getName())) {
            javax.swing.UIManager.setLookAndFeel(info.getClassName());
            break;
        }
    }
} catch (ClassNotFoundException ex) {
    java.util.logging.Logger.getLogger(Book.class.getName()).log(java.util.logging.Level.SEVERE,
        null, ex);
} catch (InstantiationException ex) {
    java.util.logging.Logger.getLogger(Book.class.getName()).log(java.util.logging.Level.SEVERE,
        null, ex);
} catch (IllegalAccessException ex) {
    java.util.logging.Logger.getLogger(Book.class.getName()).log(java.util.logging.Level.SEVERE,
        null, ex);
} catch (javax.swing.UnsupportedLookAndFeelException ex) {
    java.util.logging.Logger.getLogger(Book.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 Book().setVisible(true);
    }
}

```

```
    }  
    });  
}
```

```
// Variables declaration  
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 jLabel3;  
private javax.swing.JLabel jLabel4;  
private javax.swing.JLabel jLabel5;  
private javax.swing.JLabel jLabel6;  
private javax.swing.JLabel jLabel7;  
private javax.swing.JTextField txtbname;  
private javax.swing.JTextField txtpname;  
private javax.swing.JTextField txtprice;  
private javax.swing.JComboBox<String> txtstatus;  
private javax.swing.JTextField txtyear;  
// End of variables declaration  
}
```

BOOK ISSUE ENTRY

```
//Importing some packages.
import java.util.logging.Level;
import java.util.logging.Logger;
import java.sql.*;
import java.text.SimpleDateFormat;
import javax.swing.JOptionPane;

/**
 *
 * @author RIZWAN
 */
public class BookIssue extends javax.swing.JFrame {

    /**
     * Creates new form BookIssue
     */
    public BookIssue() {
        initComponents();
        Connection();
    }

    private Connection con;

    private PreparedStatement pst;

    public void Connection(){
```

```
//Connecting database.
try {

    Class.forName("org.sqlite.JDBC");
    con = DriverManager.getConnection("jdbc:sqlite:lms.sqlite");
}

catch (ClassNotFoundException ex) {
    Logger.getLogger(Student.class.getName()).log(Level.SEVERE, null, ex);
} catch (SQLException ex) {
    Logger.getLogger(Student.class.getName()).log(Level.SEVERE, null, ex);
}

}

/**
 * This method is called from within the constructor to initialize the form.
 *
 */
@SuppressWarnings("unchecked")
// <editor-fold defaultstate="collapsed" desc="Generated Code">
private void initComponents() {

    // Creating GUI for Book Issue Form.

    jYearChooser1 = new com.toedter.calendar.JYearChooser();
    jLabel7 = new javax.swing.JLabel();
    txtbid = new javax.swing.JTextField();
    txtsid = new javax.swing.JTextField();
```



```
jLabel1 = new javax.swing.JLabel();
jLabel3 = new javax.swing.JLabel();
jLabel4 = new javax.swing.JLabel();
jButton3 = new javax.swing.JButton();
jButton4 = new javax.swing.JButton();
jDateChooser1 = new com.toedter.calendar.JDateChooser();

setDefaultCloseOperation(javax.swing.WindowConstants.DISPOSE_ON_CLOSE);

jLabel7.setFont(new java.awt.Font("Tahoma", 0, 18)); // NOI18N
jLabel7.setText("Date");

txtbid.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        txtbidActionPerformed(evt);
    }
});

jLabel1.setFont(new java.awt.Font("Times New Roman", 1, 24)); // NOI18N
jLabel1.setForeground(new java.awt.Color(0, 0, 102));
jLabel1.setText("Issue Book");

jLabel3.setFont(new java.awt.Font("Tahoma", 0, 18)); // NOI18N
jLabel3.setText("Book ID");

jLabel4.setFont(new java.awt.Font("Tahoma", 0, 18)); // NOI18N
jLabel4.setText("Student ID");

jButton3.setBackground(new java.awt.Color(102, 255, 102));
jButton3.setFont(new java.awt.Font("Tahoma", 1, 14)); // NOI18N
jButton3.setForeground(new java.awt.Color(255, 255, 255));
```

```
jButton3.setText("Save");

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

jButton4.setBackground(new java.awt.Color(255, 0, 0));
jButton4.setFont(new java.awt.Font("Tahoma", 1, 14)); // NOI18N
jButton4.setForeground(new java.awt.Color(255, 255, 255));
jButton4.setText("Exit");
jButton4.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton4ActionPerformed(evt);
    }
});

jDateChooser1.setDateFormatString("dd-MM-yyyy"); // NOI18N

javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
getContentPane().setLayout(layout);
layout.setHorizontalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(javax.swing.GroupLayout.Alignment.TRAILING, layout.createSequentialGroup()
            .addGap(60, 60, 60)
            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addComponent(jLabel3)
                .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)
                    .addComponent(jLabel4)
                    .addComponent(jLabel7, javax.swing.GroupLayout.PREFERRED_SIZE, 85,
                        javax.swing.GroupLayout.PREFERRED_SIZE)))
        )
    );
```

```

        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, 7,
Short.MAX_VALUE)

        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

            .addComponent(jLabel1)

            .addGroup(layout.createSequentialGroup())

                .addGap(19, 19, 19)

                .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING,
false)

                    .addComponent(txtsid, javax.swing.GroupLayout.DEFAULT_SIZE, 217,
Short.MAX_VALUE)

                    .addComponent(txtbid, javax.swing.GroupLayout.DEFAULT_SIZE, 217,
Short.MAX_VALUE)

                    .addComponent(jDateChooser1, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))))

                .addGap(29, 29, 29))

            .addGroup(layout.createSequentialGroup())

                .addGap(101, 101, 101)

                .addComponent(jButton3, javax.swing.GroupLayout.PREFERRED_SIZE, 81,
javax.swing.GroupLayout.PREFERRED_SIZE)

                .addGap(60, 60, 60)

                .addComponent(jButton4, javax.swing.GroupLayout.PREFERRED_SIZE, 81,
javax.swing.GroupLayout.PREFERRED_SIZE)

                .addContainerGap(95, Short.MAX_VALUE))

        );

        layout.setVerticalGroup(

            layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

                .addGroup(layout.createSequentialGroup())

                    .addGap(27, 27, 27)

                    .addComponent(jLabel1)

                    .addGap(59, 59, 59)

                    .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)

                        .addComponent(txtbid, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)

                        .addComponent(jLabel3))

```

```

        .addGap(41, 41, 41)

        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)

            .addComponent(jLabel4)

            .addComponent(txtsid, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))

        .addGap(37, 37, 37)

        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)

            .addComponent(jLabel7)

            .addComponent(jDateChooser1, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))

        .addGap(82, 82, 82)

        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)

            .addComponent(jButton3, javax.swing.GroupLayout.PREFERRED_SIZE, 31,
javax.swing.GroupLayout.PREFERRED_SIZE)

            .addComponent(jButton4, javax.swing.GroupLayout.PREFERRED_SIZE, 31,
javax.swing.GroupLayout.PREFERRED_SIZE))

        .addContainerGap(32, Short.MAX_VALUE))

    );

    pack();

    setLocationRelativeTo(null);
} // </editor-fold>

private void jButton4ActionPerformed(java.awt.event.ActionEvent evt) {
//Creating function for exit button.
setVisible(false);
}

private void jButton3ActionPerformed(java.awt.event.ActionEvent evt) {

Creating function for save button.

if(txtbid.getText().equals("") || txtsid.getText().equals("")) {

```

```
JOptionPane.showMessageDialog(this, "Please fill all the columns!");  
}  
  
else{  
try{  
    //Converting the user input into String.  
  
    String Book_ID = txtbid.getText();  
  
    String Student_ID = txtsid.getText();  
    SimpleDateFormat df = new SimpleDateFormat("dd-MM-yyyy");  
  
    String Issue_Date = df.format(jDateChooser1.getDate());  
  
    //Performing some database query to get the job done.  
  
    Statement stmt = con.createStatement();  
    ResultSet rs = stmt.executeQuery("select Student_ID from student where  
Student_ID='"+Student_ID+"'");  
  
    if(rs.next()){  
  
        ResultSet rs1 = stmt.executeQuery("select Book_ID from book where Book_ID='"+  
");  
  
        if(rs1.next()){
```

```
ResultSet rs2 = stmt.executeQuery("select Status from book where Book_ID='"+Book_ID+"' ");
rs2.next();

String a = rs2.getString("Status");

String b= "Available";

if(a.equals(b)){

//Inserting the data into database.

    pst = con.prepareStatement("insert into
book_issue(Book_ID,Student_ID,Issue_Date)values(?,?,?)");

    pst.setString(1,Book_ID);

    pst.setString(2,Student_ID);

    pst.setString(3,Issue_Date);

    pst.executeUpdate();

JOptionPane.showMessageDialog(this, "Successfully Saved!");

txtsid.setText("");
txtbid.setText("");

jDateChooser1.setDate(null);

txtbid.requestFocus();

//Updating the status of book after issuing.
pst= con.prepareStatement("UPDATE book SET Status = 'Not Available' WHERE Book_ID =
?");
```

```
pst.setString(1,Book_ID);

pst.executeUpdate();

//Closing the connection.

rs.close();
rs1.close();
rs2.close();
pst.close();
}
else{JOptionPane.showMessageDialog(this, "This book is not available!");}
}
else{JOptionPane.showMessageDialog(this, "Invalid Book ID!");

}}

else{

JOptionPane.showMessageDialog(this, "Invalid Student ID!");
}

}

catch (SQLException ex) {

Logger.getLogger(Student.class.getName()).log(Level.SEVERE, null, ex);

}
```

```
finally{
    try{

        pst.close();

    }

    catch(Exception e){

    }

}

}

}

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

}

/**
 * @param args the command line arguments
 */
public static void main(String args[]) {
    /* Set the Nimbus look and feel */
    //<editor-fold defaultstate="collapsed" desc=" Look and feel setting code (optional) ">
    /* If Nimbus (introduced in Java SE 6) is not available, stay with the default look and feel.
     * For details see http://download.oracle.com/javase/tutorial/uiswing/lookandfeel/plaf.html
     */
    try {
```



```

        for (javax.swing.UIManager.LookAndFeelInfo info :
javax.swing.UIManager.getInstalledLookAndFeels()) {

            if ("Windows".equals(info.getName())) {

                javax.swing.UIManager.setLookAndFeel(info.getClassName());
                break;
            }
        }
    } catch (ClassNotFoundException ex) {

java.util.logging.Logger.getLogger(BookIssue.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);

        } catch (InstantiationException ex) {

java.util.logging.Logger.getLogger(BookIssue.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);

        } catch (IllegalAccessException ex) {

java.util.logging.Logger.getLogger(BookIssue.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);

        } catch (javax.swing.UnsupportedLookAndFeelException ex) {

java.util.logging.Logger.getLogger(BookIssue.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 BookIssue().setVisible(true);
    }
});

```

```
}

// Variables declaration
private javax.swing.JButton jButton3;
private javax.swing.JButton jButton4;
private com.toedter.calendar.JDateChooser jDateChooser1;
private javax.swing.JLabel jLabel1;
private javax.swing.JLabel jLabel3;
private javax.swing.JLabel jLabel4;
private javax.swing.JLabel jLabel7;
private com.toedter.calendar.JYearChooser jYearChooser1;
private javax.swing.JTextField txtbid;
private javax.swing.JTextField txtsid;
// End of variables declaration
}
```

BOOK RETURN ENTRY

```
//Importing some packages
import java.util.logging.Level;
import java.util.logging.Logger;
import java.sql.*;
import java.text.SimpleDateFormat;
import javax.swing.JOptionPane;

/**
 *
 * @author RIZWAN
 */
public class ReturnBook extends javax.swing.JFrame {

    /**
     * Creates new form ReturnBook
     */
    public ReturnBook() {
        initComponents();
        Connection();
    }

    private Connection con;

    private PreparedStatement pst;

    public void Connection(){
```

```
//Connecting database.
```

```
try {

    Class.forName("org.sqlite.JDBC");
    con = DriverManager.getConnection("jdbc:sqlite:lms.sqlite");
}

catch (ClassNotFoundException ex) {
    Logger.getLogger(Student.class.getName()).log(Level.SEVERE, null, ex);
} catch (SQLException ex) {
    Logger.getLogger(Student.class.getName()).log(Level.SEVERE, null, ex);
}

}
```

```
/**
 * This method is called from within the constructor to initialize the form.
 */
@SuppressWarnings("unchecked")
// <editor-fold defaultstate="collapsed" desc="Generated Code">
private void initComponents() {
```

```
//Creating GUI for for Book Return Form
```

```
jLabel1 = new javax.swing.JLabel();
jLabel3 = new javax.swing.JLabel();
jLabel4 = new javax.swing.JLabel();
jButton3 = new javax.swing.JButton();
jButton4 = new javax.swing.JButton();
jLabel7 = new javax.swing.JLabel();
```

```
txtbid = new javax.swing.JTextField();
txtsid = new javax.swing.JTextField();
txtdt = new com.toedter.calendar.JDateChooser();

setDefaultCloseOperation(javax.swing.WindowConstants.DISPOSE_ON_CLOSE);

jLabel1.setFont(new java.awt.Font("Times New Roman", 1, 24)); // NOI18N
jLabel1.setForeground(new java.awt.Color(0, 0, 102));
jLabel1.setText("Return Book");

jLabel3.setFont(new java.awt.Font("Tahoma", 0, 18)); // NOI18N
jLabel3.setText("Book ID");

jLabel4.setFont(new java.awt.Font("Tahoma", 0, 18)); // NOI18N
jLabel4.setText("Student ID");

jButton3.setBackground(new java.awt.Color(102, 255, 102));
jButton3.setFont(new java.awt.Font("Tahoma", 1, 14)); // NOI18N
jButton3.setForeground(new java.awt.Color(255, 255, 255));
jButton3.setText("Save");
jButton3.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton3ActionPerformed(evt);
    }
});

jButton4.setBackground(new java.awt.Color(255, 0, 0));
jButton4.setFont(new java.awt.Font("Tahoma", 1, 14)); // NOI18N
jButton4.setForeground(new java.awt.Color(255, 255, 255));
jButton4.setText("Exit");
jButton4.addActionListener(new java.awt.event.ActionListener() {
```



```
.addGroup(layout.createSequentialGroup())
    .addGap(60, 60, 60)
    .addComponent(jLabel4))
    .addGroup(layout.createSequentialGroup())
    .addGap(61, 61, 61)
    .addComponent(jLabel7, javax.swing.GroupLayout.PREFERRED_SIZE, 85,
javax.swing.GroupLayout.PREFERRED_SIZE)))
    .addGap(25, 25, 25)
    .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING,
false)
        .addComponent(txtsid, javax.swing.GroupLayout.DEFAULT_SIZE, 217,
Short.MAX_VALUE)
        .addComponent(txtdt, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))))
    .addContainerGap(27, Short.MAX_VALUE))
);
layout.setVerticalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(layout.createSequentialGroup()
            .addGap(27, 27, 27)
            .addComponent(jLabel1)
            .addGap(59, 59, 59)
            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addComponent(jLabel3)
                .addGroup(layout.createSequentialGroup()
                    .addGap(2, 2, 2)
                    .addComponent(txtbid, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)))
                .addGap(41, 41, 41)
                .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                    .addComponent(jLabel4)
                    .addGroup(layout.createSequentialGroup()
                        .addGap(2, 2, 2)
```

```

        .addComponent(txtsid, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)))

        .addGap(37, 37, 37)

        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)

            .addComponent(jLabel7)

            .addComponent(txtidt, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))

        .addGap(67, 67, 67)

        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)

            .addComponent(jButton3, javax.swing.GroupLayout.PREFERRED_SIZE, 31,
javax.swing.GroupLayout.PREFERRED_SIZE)

            .addComponent(jButton4, javax.swing.GroupLayout.PREFERRED_SIZE, 31,
javax.swing.GroupLayout.PREFERRED_SIZE))

        .addContainerGap(45, Short.MAX_VALUE))

    );

    pack();

    setLocationRelativeTo(null);
} // </editor-fold>

private void jButton4ActionPerformed(java.awt.event.ActionEvent evt) {

//Creating the function for exit button.
setVisible(false);

}

private void jButton3ActionPerformed(java.awt.event.ActionEvent evt) {

//Creating the function for save button.

if(txtbid.getText().equals("") || txtsid.getText().equals("")) {

    JOptionPane.showMessageDialog(this, "Please fill all the columns!");
}
}

```



```
}

else{
try{
    //Converting user input into String.

    String Book_ID = txtbid.getText();

    String Student_ID =txtsid.getText();
    SimpleDateFormat df = new SimpleDateFormat("dd-MM-yyyy");

    String Return_Date =df.format(txttdt.getDate());

    //Performing some queries to get the job done.

    Statement stmt = con.createStatement();

    ResultSet rs = stmt.executeQuery("select Student_ID,Book_ID from book_issue where
Student_ID='"+Student_ID+"'and Book_ID='"+Book_ID+"' ");

    if(rs.next()){

        ResultSet rs2 = stmt.executeQuery("select Status from book where Book_ID='"+Book_ID+"' ");
        rs2.next();
        String a = rs2.getString("Status");
        String b= "Not Available";
```

```
if(a.equals(b)){
```

```
    pst = con.prepareStatement("insert into  
book_return(Book_ID,Student_ID,Return_Date)values(?,?,?)");
```

```
    pst.setString(1,Book_ID);
```

```
    pst.setString(2,Student_ID);
```

```
    pst.setString(3,Return_Date);
```

```
    pst.executeUpdate();
```

```
OptionPane.showMessageDialog(this, "Successfully Saved!");
```

```
txtsid.setText("");
```

```
txtbid.setText("");
```

```
txtdt.setDate(null);
```

```
txtbid.requestFocus();
```

```
pst= con.prepareStatement("UPDATE book SET Status = 'Available' WHERE Book_ID = ?");
```

```
pst.setString(1,Book_ID);
```

```
pst.executeUpdate();

//Closing the connection

rs.close();
rs2.close();
pst.close();

}
else{JOptionPane.showMessageDialog(this, "Please enter correct details!");}
}

else{

JOptionPane.showMessageDialog(this, "Please enter correct details!");
}

}

catch (SQLException ex) {

Logger.getLogger(Student.class.getName()).log(Level.SEVERE, null, ex);

}

}

}
```

```
/**
 * @param args the command line arguments
 */
public static void main(String args[]) {
    /* Set the Nimbus look and feel */
    //<editor-fold defaultstate="collapsed" desc=" Look and feel setting code (optional) ">
    /* If Nimbus (introduced in Java SE 6) is not available, stay with the default look and feel.
     * For details see http://download.oracle.com/javase/tutorial/uiswing/lookandfeel/plaf.html
     */
    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(ReturnBook.class.getName()).log(java.util.logging.Level.SEVERE,
            null, ex);

    } catch (InstantiationException ex) {

        java.util.logging.Logger.getLogger(ReturnBook.class.getName()).log(java.util.logging.Level.SEVERE,
            null, ex);

    } catch (IllegalAccessException ex) {

        java.util.logging.Logger.getLogger(ReturnBook.class.getName()).log(java.util.logging.Level.SEVERE,
            null, ex);

    } catch (javax.swing.UnsupportedLookAndFeelException ex) {

        java.util.logging.Logger.getLogger(ReturnBook.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 ReturnBook().setVisible(true);  
    }  
});  
}  
  
// Variables declaration  
private javax.swing.JButton jButton3;  
private javax.swing.JButton jButton4;  
private javax.swing.JLabel jLabel1;  
private javax.swing.JLabel jLabel3;  
private javax.swing.JLabel jLabel4;  
private javax.swing.JLabel jLabel7;  
private javax.swing.JTextField txtbid;  
private com.toedter.calendar.JDateChooser txtdt;  
private javax.swing.JTextField txtsid;  
// End of variables declaration  
}
```

REPORT

```
//Importing some packages.
import java.util.logging.Level;
import java.util.logging.Logger;
import java.sql.*;

/**
 *
 * @author RIZWAN
 */
public class Report extends javax.swing.JFrame {

    /**
     * Creates new form Report
     */
    public Report() {
        initComponents();
        Connection();
    }

    private Connection con;

    public void Connection(){

        //Connecting database

        try {
```

```
Class.forName("org.sqlite.JDBC");

con = DriverManager.getConnection("jdbc:sqlite:lms.sqlite");

//Performing some queries to get the job done.

Statement stmt = con.createStatement();

ResultSet rs = stmt.executeQuery("select* from student");

jTable4.setModel(DbUtils.resultSetToTableModel(rs));


ResultSet rs1 = stmt.executeQuery("select* from book");

jTable1.setModel(DbUtils.resultSetToTableModel(rs1));


ResultSet rs2 = stmt.executeQuery("select
book_issue.Issue_Date,book_issue.Issue_Ref_No,book.Book_ID,book.Book_Name,book.Publisher,b
ook.Price,book.Year,student.Student_ID,student.Student_Name from book_issue inner join book
inner join student where book_issue.Book_ID=book.Book_ID and
book_issue.Student_ID=student.Student_ID");

jTable2.setModel(DbUtils.resultSetToTableModel(rs2));


ResultSet rs3 = stmt.executeQuery("select
book_return.Return_Date,book_return.Return_Ref_No,
book_return.Book_ID,book.Book_Name,book.Publisher,book.Price,book.Year,book_return.Student_
ID,student.Student_Name,book_issue.Issue_Ref_No, book_issue.Issue_Date from book_issue inner
join book inner join student inner join book_return where book_issue.Book_ID=book.Book_ID and
book.Book_ID=book_return.Book_ID and book_issue.Student_ID=student.Student_ID and
student.Student_ID=book_return.Student_ID");

jTable3.setModel(DbUtils.resultSetToTableModel(rs3));

//Closing the connection.

rs.close();

rs1.close();

rs2.close();
```

```
rs3.close();

}

catch (ClassNotFoundException ex) {
    Logger.getLogger(Student.class.getName()).log(Level.SEVERE, null, ex);
} catch (SQLException ex) {
    Logger.getLogger(Student.class.getName()).log(Level.SEVERE, null, ex);
}

}

/**
 * This method is called from within the constructor to initialize the form.
 */
@SuppressWarnings("unchecked")
// <editor-fold defaultstate="collapsed" desc="Generated Code">
private void initComponents() {

    //Creating GUI for Report Page.

    jLabel1 = new javax.swing.JLabel();
    jLabel2 = new javax.swing.JLabel();
    jLabel3 = new javax.swing.JLabel();
    jLabel4 = new javax.swing.JLabel();
    jScrollPane1 = new javax.swing.JScrollPane();
    jTable1 = new javax.swing.JTable();
    jScrollPane2 = new javax.swing.JScrollPane();
    jTable2 = new javax.swing.JTable();
```



```
jScrollPane3 = new javax.swing.JScrollPane();
jTable3 = new javax.swing.JTable();
jScrollPane4 = new javax.swing.JScrollPane();
jTable4 = new javax.swing.JTable();
jButton2 = new javax.swing.JButton();

setDefaultCloseOperation(javax.swing.WindowConstants.DISPOSE_ON_CLOSE);

jLabel1.setBackground(new java.awt.Color(255, 255, 255));
jLabel1.setFont(new java.awt.Font("Times New Roman", 1, 24)); // NOI18N
jLabel1.setForeground(new java.awt.Color(0, 0, 102));
jLabel1.setText("Book Issue Details");

jLabel2.setBackground(new java.awt.Color(255, 255, 255));
jLabel2.setFont(new java.awt.Font("Times New Roman", 1, 24)); // NOI18N
jLabel2.setForeground(new java.awt.Color(0, 0, 102));
jLabel2.setText("Student List");

jLabel3.setBackground(new java.awt.Color(255, 255, 255));
jLabel3.setFont(new java.awt.Font("Times New Roman", 1, 24)); // NOI18N
jLabel3.setForeground(new java.awt.Color(0, 0, 102));
jLabel3.setText("Book List");

jLabel4.setBackground(new java.awt.Color(255, 255, 255));
jLabel4.setFont(new java.awt.Font("Times New Roman", 1, 24)); // NOI18N
jLabel4.setForeground(new java.awt.Color(0, 0, 102));
jLabel4.setText("Book Return Details");

jTable1.setModel(new javax.swing.table.DefaultTableModel(
    new Object [][] {
        {null, null, null, null, null, null},
```

```
{null, null, null, null, null, null},
{null, null, null, null, null, null},
{null, null, null, null, null, null}
},
new String [] {
    "ID", "Name", "Publisher", "Price", "Year", "Status"
}
));
jScrollPane1.setViewportViewView(jTable1);

jTable2.setModel(new javax.swing.table.DefaultTableModel(
    new Object [][] {
        {null, null, null, null, null, null, null, null, null},
        {null, null, null, null, null, null, null, null, null},
        {null, null, null, null, null, null, null, null, null},
        {null, null, null, null, null, null, null, null, null}
    },
    new String [] {
        "Date", "Ref.No.", "Book_ID", "Book_Name", "Publisher", "Price", "Year", "Student_ID",
"Student_Name"
    }
));
jScrollPane2.setViewportViewView(jTable2);

jTable3.setModel(new javax.swing.table.DefaultTableModel(
    new Object [][] {
        {null, null, null, null, null, null, null, null, null, null},
        {null, null, null, null, null, null, null, null, null, null},
        {null, null, null, null, null, null, null, null, null, null},
        {null, null, null, null, null, null, null, null, null, null}
    },
    new String [] {
        "Date", "Ref.No.", "Book_ID", "Book_Name", "Publisher", "Price", "Year", "Student_ID",
"Student_Name"
    }
));
jScrollPane3.setViewportViewView(jTable3);
```

```
        new String [] {
            "Date", "Ref.No.", "Book_ID", "Book_Name", "Publisher", "Price", "Year", "Student_ID",
            "Student_Name", "Issue_Date"
        }
    ));
    jScrollPane3.setViewportViewView(jTable3);

    jTable4.setModel(new javax.swing.table.DefaultTableModel(
        new Object [][] {

        },
        new String [] {

        }
    ));
    jScrollPane4.setViewportViewView(jTable4);

    jButton2.setBackground(new java.awt.Color(255, 0, 0));
    jButton2.setFont(new java.awt.Font("Tahoma", 1, 14)); // NOI18N
    jButton2.setForeground(new java.awt.Color(255, 255, 255));
    jButton2.setText("Exit");
    jButton2.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
            jButton2ActionPerformed(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(93, 93, 93)
            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addComponent(jLabel2, javax.swing.GroupLayout.PREFERRED_SIZE, 637,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(jScrollPane4, javax.swing.GroupLayout.PREFERRED_SIZE, 752,
javax.swing.GroupLayout.PREFERRED_SIZE)))
            .addGroup(layout.createSequentialGroup())
                .addGap(27, 27, 27)
                .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                    .addComponent(jLabel1, javax.swing.GroupLayout.PREFERRED_SIZE, 201,
javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addComponent(jScrollPane2, javax.swing.GroupLayout.PREFERRED_SIZE, 833,
javax.swing.GroupLayout.PREFERRED_SIZE)))
                .addGap(47, 47, 47)
                .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                    .addComponent(jScrollPane3)
                    .addGroup(layout.createSequentialGroup())
                        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                            .addComponent(jScrollPane1, javax.swing.GroupLayout.PREFERRED_SIZE, 651,
javax.swing.GroupLayout.PREFERRED_SIZE)
                            .addComponent(jLabel3, javax.swing.GroupLayout.PREFERRED_SIZE, 139,
javax.swing.GroupLayout.PREFERRED_SIZE)
                            .addComponent(jLabel4, javax.swing.GroupLayout.PREFERRED_SIZE, 265,
javax.swing.GroupLayout.PREFERRED_SIZE))
                        .addGap(0, 290, Short.MAX_VALUE)))
                    .addGap(50, 50, 50))
            .addGroup(layout.createSequentialGroup())
                .addGap(827, 827, 827)
                .addComponent(jButton2, javax.swing.GroupLayout.PREFERRED_SIZE, 120,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
```

```
);  
layout.setVerticalGroup(  
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)  
        .addGroup(javax.swing.GroupLayout.Alignment.TRAILING, layout.createSequentialGroup()  
            .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)  
            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)  
                .addGroup(layout.createSequentialGroup()  
                    .addComponent(jLabel2)  
                    .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)  
                    .addComponent(jScrollPane4, javax.swing.GroupLayout.PREFERRED_SIZE, 294,  
javax.swing.GroupLayout.PREFERRED_SIZE))  
                .addGroup(layout.createSequentialGroup()  
                    .addComponent(jLabel3)  
                    .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)  
                    .addComponent(jScrollPane1, javax.swing.GroupLayout.PREFERRED_SIZE, 287,  
javax.swing.GroupLayout.PREFERRED_SIZE)))  
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, 39,  
Short.MAX_VALUE)  
            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)  
                .addComponent(jLabel4, javax.swing.GroupLayout.Alignment.TRAILING)  
                .addComponent(jLabel1, javax.swing.GroupLayout.Alignment.TRAILING))  
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)  
            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)  
                .addComponent(jScrollPane2, javax.swing.GroupLayout.PREFERRED_SIZE, 343,  
javax.swing.GroupLayout.PREFERRED_SIZE)  
                .addComponent(jScrollPane3, javax.swing.GroupLayout.PREFERRED_SIZE, 343,  
javax.swing.GroupLayout.PREFERRED_SIZE))  
            .addGap(34, 34, 34)  
            .addComponent(jButton2, javax.swing.GroupLayout.PREFERRED_SIZE, 54,  
javax.swing.GroupLayout.PREFERRED_SIZE)  
            .addGap(16, 16, 16))  
    );  
pack();
```

```
        setLocationRelativeTo(null);
    } // </editor-fold>

    private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {

//Creating function for exit button.
setVisible(false);
    }

    /**
     * @param args the command line arguments
     */
    public static void main(String args[]) {
        /* Set the Nimbus look and feel */
        //<editor-fold defaultstate="collapsed" desc=" Look and feel setting code (optional) ">
        /* If Nimbus (introduced in Java SE 6) is not available, stay with the default look and feel.
         * For details see http://download.oracle.com/javase/tutorial/uiswing/lookandfeel/plaf.html
         */
        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(Report.class.getName()).log(java.util.logging.Level.SEVERE,
                null, ex);
        } catch (InstantiationException ex) {
            java.util.logging.Logger.getLogger(Report.class.getName()).log(java.util.logging.Level.SEVERE,
                null, ex);
        } catch (IllegalAccessException ex) {
```

```
        java.util.logging.Logger.getLogger(Report.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);

        } catch (javax.swing.UnsupportedLookAndFeelException ex) {

            java.util.logging.Logger.getLogger(Report.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 Report().setVisible(true);
        }
    });
}

// Variables declaration
private javax.swing.JButton jButton2;
private javax.swing.JLabel jLabel1;
private javax.swing.JLabel jLabel2;
private javax.swing.JLabel jLabel3;
private javax.swing.JLabel jLabel4;
private javax.swing.JScrollPane jScrollPane1;
private javax.swing.JScrollPane jScrollPane2;
private javax.swing.JScrollPane jScrollPane3;
private javax.swing.JScrollPane jScrollPane4;
private javax.swing.JTable jTable1;
private javax.swing.JTable jTable2;
private javax.swing.JTable jTable3;
private javax.swing.JTable jTable4;

// End of variables declaration
}
```