FRONT-END: NET BEANS IDE

```java
package ex09;
import javax.swing.*;
import java.sql.*;
import java.sql.Statement.*;

public class employee extends javax.swing.JFrame {
    Connection con;
    Statement st;
    PreparedStatement stmt;
    ResultSet rs;
    CallableStatement cstmt;
    int i;

    public employee() {
        initComponents();
        try{
        Class.forName("oracle.jdbc.driver.OracleDriver");
        JOptionPane.showMessageDialog(this,"Driver
Loaded...");
        try{
            con =
DriverManager.getConnection("jdbc:oracle:thin:@localhost:1521
:orcl","system","vaishali");
            JOptionPane.showMessageDialog(this,"Connected to
Oracle Database...");
        }
        catch(SQLException ex)
        {
         JOptionPane.showMessageDialog(this,ex.getMessage());
        }
        }
        catch(ClassNotFoundException ex)
        {

JOptionPane.showMessageDialog(this,ex.getMessage());
        }
    }
    @SuppressWarnings("unchecked")
  // <editor-fold defaultstate="collapsed" desc="Generated
Code">
    private void initComponents() {

        jPanel2 = new javax.swing.JPanel();
        jLabel22 = new javax.swing.JLabel();
        jPanel1 = new javax.swing.JPanel();
        jLabel1 = new javax.swing.JLabel();
        jLabel2 = new javax.swing.JLabel();
        jLabel3 = new javax.swing.JLabel();
```

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        jLabel4 = new javax.swing.JLabel();
        jLabel5 = new javax.swing.JLabel();
        jLabel6 = new javax.swing.JLabel();
        jTextField1 = new javax.swing.JTextField();
        jTextField2 = new javax.swing.JTextField();
        jTextField3 = new javax.swing.JTextField();
        jTextField4 = new javax.swing.JTextField();
        jTextField5 = new javax.swing.JTextField();
        jTextField6 = new javax.swing.JTextField();
        Insert = new javax.swing.JButton();
        Update = new javax.swing.JButton();
        Delete = new javax.swing.JButton();
        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();
        jLabel13 = new javax.swing.JLabel();
        jLabel20 = new javax.swing.JLabel();
        jLabel14 = new javax.swing.JLabel();
        jLabel15 = new javax.swing.JLabel();
        jLabel16 = new javax.swing.JLabel();
        jLabel18 = new javax.swing.JLabel();
        jLabel19 = new javax.swing.JLabel();
        jLabel21 = new javax.swing.JLabel();
        jLabel17 = new javax.swing.JLabel();
        Search_PayRoll = new javax.swing.JButton();
        Exit = new javax.swing.JButton();
        Reset = new javax.swing.JButton();

        javax.swing.GroupLayout jPanel2Layout = new
javax.swing.GroupLayout(jPanel2);
        jPanel2.setLayout(jPanel2Layout);
        jPanel2Layout.setHorizontalGroup(

jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Ali
gnment.LEADING)
            .addGap(0, 100, Short.MAX_VALUE)
        );
        jPanel2Layout.setVerticalGroup(

jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Ali
gnment.LEADING)
            .addGap(0, 100, Short.MAX_VALUE)
        );

        jLabel22.setText("jLabel22");
```

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setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_
CLOSE);

        jLabel1.setText("EID");

        jLabel2.setText("ENAME");

        jLabel3.setText("DOB");

        jLabel4.setText("SEX");

        jLabel5.setText("DESIGNATION");

        jLabel6.setText("BASIC PAY");


        Insert.setText("INSERT");
        Insert.addActionListener(new
java.awt.event.ActionListener() {
            public void
actionPerformed(java.awt.event.ActionEvent evt) {
                InsertActionPerformed(evt);
            }
        });

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

        Delete.setText("DELETE");
        Delete.addActionListener(new
java.awt.event.ActionListener() {
            public void
actionPerformed(java.awt.event.ActionEvent evt) {
                DeleteActionPerformed(evt);
            }
        });


jLabel7.setHorizontalAlignment(javax.swing.SwingConstants.CEN
TER);
        jLabel7.setText("EMPLOYEE  DATABASE SYSTEM");

        jLabel8.setText("DA");
```

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        jLabel9.setText("HRA");

        jLabel10.setText("PF");

        jLabel11.setText("MC");

        jLabel12.setText("GROSS PAY");

        jLabel13.setText("TOTAL DEDUCTION");

        jLabel20.setText("NET PAY");

        jLabel14.setToolTipText("");

jLabel14.setBorder(javax.swing.BorderFactory.createBevelBorde
r(javax.swing.border.BevelBorder.RAISED));

        jLabel15.setToolTipText("0");

jLabel15.setBorder(javax.swing.BorderFactory.createBevelBorde
r(javax.swing.border.BevelBorder.RAISED));


jLabel16.setBorder(javax.swing.BorderFactory.createBevelBorde
r(javax.swing.border.BevelBorder.RAISED));


jLabel18.setBorder(javax.swing.BorderFactory.createBevelBorde
r(javax.swing.border.BevelBorder.RAISED));


jLabel19.setBorder(javax.swing.BorderFactory.createBevelBorde
r(javax.swing.border.BevelBorder.RAISED));


jLabel21.setBorder(javax.swing.BorderFactory.createBevelBorde
r(javax.swing.border.BevelBorder.RAISED));


jLabel17.setBorder(javax.swing.BorderFactory.createBevelBorde
r(javax.swing.border.BevelBorder.RAISED));

        Search_PayRoll.setText("SEARCH / VIEW PAY ROLL");
        Search_PayRoll.addActionListener(new
java.awt.event.ActionListener() {
            public void
actionPerformed(java.awt.event.ActionEvent evt) {
                Search_PayRollActionPerformed(evt);
            }
```

```java
        });

        Exit.setText("EXIT");
        Exit.addActionListener(new
java.awt.event.ActionListener() {
            public void
actionPerformed(java.awt.event.ActionEvent evt) {
                ExitActionPerformed(evt);
            }
        });

        Reset.setText("RESET");
        Reset.addActionListener(new
java.awt.event.ActionListener() {
            public void
actionPerformed(java.awt.event.ActionEvent evt) {
                ResetActionPerformed(evt);
            }
        });

        javax.swing.GroupLayout jPanel1Layout = new
javax.swing.GroupLayout(jPanel1);
        jPanel1.setLayout(jPanel1Layout);
        jPanel1Layout.setHorizontalGroup(

jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Ali
gnment.LEADING)

.addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
jPanel1Layout.createSequentialGroup()

.addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)
                .addComponent(jLabel7,
javax.swing.GroupLayout.PREFERRED_SIZE, 284,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addGap(0, 0, Short.MAX_VALUE))

.addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
jPanel1Layout.createSequentialGroup()
                .addGap(34, 34, 34)

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.Group
Layout.Alignment.LEADING)

.addGroup(jPanel1Layout.createSequentialGroup()

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.Group
Layout.Alignment.LEADING)
```

```
.addGroup(jPanel1Layout.createParallelGroup(javax.swing.Group
Layout.Alignment.LEADING, false)
                               .addComponent(jLabel1,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                               .addComponent(jLabel2,
javax.swing.GroupLayout.DEFAULT_SIZE, 140, Short.MAX_VALUE)
                               .addComponent(jLabel3,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
                          .addComponent(jLabel4,
javax.swing.GroupLayout.PREFERRED_SIZE, 140,
javax.swing.GroupLayout.PREFERRED_SIZE)
                          .addComponent(jLabel5,
javax.swing.GroupLayout.PREFERRED_SIZE, 140,
javax.swing.GroupLayout.PREFERRED_SIZE)
                          .addComponent(jLabel6,
javax.swing.GroupLayout.PREFERRED_SIZE, 140,
javax.swing.GroupLayout.PREFERRED_SIZE))
                     .addGap(44, 44, 44)

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.Group
Layout.Alignment.LEADING, false)
                          .addComponent(jTextField1)
                          .addComponent(jTextField2)
                          .addComponent(jTextField3)
                          .addComponent(jTextField4,
javax.swing.GroupLayout.Alignment.TRAILING)
                          .addComponent(jTextField5)
                          .addComponent(jTextField6,
javax.swing.GroupLayout.DEFAULT_SIZE, 161, Short.MAX_VALUE)))

.addGroup(jPanel1Layout.createSequentialGroup()
                     .addGap(35, 35, 35)
                     .addComponent(Insert)
                     .addGap(63, 63, 63)
                     .addComponent(Update)
                     .addGap(77, 77, 77)
                     .addComponent(Delete)))
               .addGap(47, 47, 47)

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.Group
Layout.Alignment.TRAILING)

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.Group
Layout.Alignment.LEADING, false)
                     .addComponent(jLabel20,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
```

```
                                .addComponent(jLabel8,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                                .addComponent(jLabel9,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                                .addComponent(jLabel10,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                                .addComponent(jLabel11,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                                .addComponent(jLabel12,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                                .addComponent(jLabel13,
javax.swing.GroupLayout.DEFAULT_SIZE, 152, Short.MAX_VALUE))
                        .addComponent(Search_PayRoll))
                    .addGap(31, 31, 31)

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.Group
Layout.Alignment.TRAILING)

.addGroup(javax.swing.GroupLayout.Alignment.LEADING,
jPanel1Layout.createSequentialGroup()
                        .addGap(61, 61, 61)

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.Group
Layout.Alignment.LEADING)
                                .addComponent(jLabel14,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                                .addComponent(jLabel15,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                                .addComponent(jLabel16,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                                .addComponent(jLabel18,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                                .addComponent(jLabel19,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                                .addComponent(jLabel21,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                                .addComponent(jLabel17,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)))
```

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            .addGroup(jPanel1Layout.createSequentialGroup()

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.R
ELATED, 7, Short.MAX_VALUE)
                        .addComponent(Reset)
                        .addGap(57, 57, 57)
                        .addComponent(Exit)
                        .addGap(26, 26, 26)))
                .addContainerGap())
        );
        jPanel1Layout.setVerticalGroup(

jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Ali
gnment.LEADING)
            .addGroup(jPanel1Layout.createSequentialGroup()
                .addContainerGap()
                .addComponent(jLabel7,
javax.swing.GroupLayout.PREFERRED_SIZE, 45,
javax.swing.GroupLayout.PREFERRED_SIZE)

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.R
ELATED)

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.Group
Layout.Alignment.TRAILING)

.addGroup(jPanel1Layout.createSequentialGroup()

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.Group
Layout.Alignment.TRAILING)

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.Group
Layout.Alignment.LEADING, false)
                                .addComponent(jTextField1,
javax.swing.GroupLayout.PREFERRED_SIZE, 34,
javax.swing.GroupLayout.PREFERRED_SIZE)
                                .addComponent(jLabel1,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
                            .addComponent(jLabel14,
javax.swing.GroupLayout.PREFERRED_SIZE, 29,
javax.swing.GroupLayout.PREFERRED_SIZE))
                        .addGap(27, 27, 27)

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.Group
Layout.Alignment.BASELINE)
                                .addComponent(jTextField2,
javax.swing.GroupLayout.PREFERRED_SIZE, 33,
javax.swing.GroupLayout.PREFERRED_SIZE)
```

```
                                    .addComponent(jLabel2,
javax.swing.GroupLayout.PREFERRED_SIZE, 36,
javax.swing.GroupLayout.PREFERRED_SIZE)))

.addGroup(jPanel1Layout.createSequentialGroup()
                        .addComponent(jLabel8,
javax.swing.GroupLayout.PREFERRED_SIZE, 39,
javax.swing.GroupLayout.PREFERRED_SIZE)

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.U
NRELATED)

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.Group
Layout.Alignment.BASELINE)
                                .addComponent(jLabel9,
javax.swing.GroupLayout.PREFERRED_SIZE, 36,
javax.swing.GroupLayout.PREFERRED_SIZE)
                                .addComponent(jLabel15,
javax.swing.GroupLayout.PREFERRED_SIZE, 26,
javax.swing.GroupLayout.PREFERRED_SIZE))))

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.Group
Layout.Alignment.LEADING)

.addGroup(jPanel1Layout.createSequentialGroup()
                        .addGap(27, 27, 27)

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.Group
Layout.Alignment.BASELINE)
                                .addComponent(jTextField3,
javax.swing.GroupLayout.PREFERRED_SIZE, 32,
javax.swing.GroupLayout.PREFERRED_SIZE)
                                .addComponent(jLabel3,
javax.swing.GroupLayout.PREFERRED_SIZE, 38,
javax.swing.GroupLayout.PREFERRED_SIZE))
                        .addGap(18, 18, 18)

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.Group
Layout.Alignment.BASELINE)
                                .addComponent(jTextField4,
javax.swing.GroupLayout.PREFERRED_SIZE, 35,
javax.swing.GroupLayout.PREFERRED_SIZE)
                                .addComponent(jLabel4,
javax.swing.GroupLayout.PREFERRED_SIZE, 35,
javax.swing.GroupLayout.PREFERRED_SIZE))
                        .addGap(27, 27, 27)

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.Group
Layout.Alignment.LEADING)
```

```
                                  .addComponent(jTextField5,
javax.swing.GroupLayout.PREFERRED_SIZE, 40,
javax.swing.GroupLayout.PREFERRED_SIZE)
                                  .addComponent(jLabel5,
javax.swing.GroupLayout.PREFERRED_SIZE, 32,
javax.swing.GroupLayout.PREFERRED_SIZE))
                              .addGap(18, 18, 18)

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.Group
Layout.Alignment.TRAILING)
                                  .addComponent(jLabel6,
javax.swing.GroupLayout.PREFERRED_SIZE, 38,
javax.swing.GroupLayout.PREFERRED_SIZE)

.addGroup(jPanel1Layout.createSequentialGroup()
                                  .addComponent(jTextField6,
javax.swing.GroupLayout.PREFERRED_SIZE, 36,
javax.swing.GroupLayout.PREFERRED_SIZE)
                                  .addGap(8, 8, 8)))
                              .addGap(69, 69, 69)

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.Group
Layout.Alignment.BASELINE)
                                  .addComponent(Insert)
                                  .addComponent(Update)
                                  .addComponent(Delete)
                                  .addComponent(Search_PayRoll)
                                  .addComponent(Exit)
                                  .addComponent(Reset)))

.addGroup(jPanel1Layout.createSequentialGroup()
                              .addGap(18, 18, 18)

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.Group
Layout.Alignment.TRAILING, false)
                                  .addComponent(jLabel10,
javax.swing.GroupLayout.Alignment.LEADING,
javax.swing.GroupLayout.DEFAULT_SIZE, 28, Short.MAX_VALUE)
                                  .addComponent(jLabel16,
javax.swing.GroupLayout.Alignment.LEADING,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
                              .addGap(18, 18, 18)

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.Group
Layout.Alignment.BASELINE)
                                  .addComponent(jLabel11,
javax.swing.GroupLayout.PREFERRED_SIZE, 35,
javax.swing.GroupLayout.PREFERRED_SIZE)
```

```
                                .addComponent(jLabel17,
javax.swing.GroupLayout.PREFERRED_SIZE, 28,
javax.swing.GroupLayout.PREFERRED_SIZE))

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.U
NRELATED)

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.Group
Layout.Alignment.BASELINE)
                                .addComponent(jLabel12,
javax.swing.GroupLayout.PREFERRED_SIZE, 40,
javax.swing.GroupLayout.PREFERRED_SIZE)
                                .addComponent(jLabel18,
javax.swing.GroupLayout.PREFERRED_SIZE, 29,
javax.swing.GroupLayout.PREFERRED_SIZE))

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.U
NRELATED)

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.Group
Layout.Alignment.LEADING)
                                .addComponent(jLabel13,
javax.swing.GroupLayout.PREFERRED_SIZE, 36,
javax.swing.GroupLayout.PREFERRED_SIZE)
                                .addComponent(jLabel19,
javax.swing.GroupLayout.PREFERRED_SIZE, 29,
javax.swing.GroupLayout.PREFERRED_SIZE))
                        .addGap(18, 18, 18)

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.Group
Layout.Alignment.BASELINE)
                                .addComponent(jLabel20,
javax.swing.GroupLayout.PREFERRED_SIZE, 31,
javax.swing.GroupLayout.PREFERRED_SIZE)
                                .addComponent(jLabel21,
javax.swing.GroupLayout.PREFERRED_SIZE, 31,
javax.swing.GroupLayout.PREFERRED_SIZE))))
                .addContainerGap(28, Short.MAX_VALUE))
        );

        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(35, 35, 35)
```

```java
                .addComponent(jPanel1,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addContainerGap(64, Short.MAX_VALUE))
        );
        layout.setVerticalGroup(

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

.addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
layout.createSequentialGroup()
                .addComponent(jPanel1,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                    .addContainerGap())
        );

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


    private void
InsertActionPerformed(java.awt.event.ActionEvent evt) {
        try{
        cstmt = con.prepareCall("{call
netpay_calc(?,?,?,?,?,?,?,?,?)}");
        cstmt.setInt(1,
Integer.parseInt(jTextField1.getText()));
        cstmt.setFloat(2,
Float.parseFloat(jTextField6.getText()));
        cstmt.registerOutParameter(3,Types.FLOAT);
        cstmt.registerOutParameter(4,Types.FLOAT);
        cstmt.registerOutParameter(5,Types.FLOAT);
        cstmt.registerOutParameter(6,Types.FLOAT);
        cstmt.registerOutParameter(7,Types.FLOAT);
        cstmt.registerOutParameter(8,Types.FLOAT);
        cstmt.registerOutParameter(9,Types.FLOAT);
        cstmt.executeUpdate();
        Float da=cstmt.getFloat(3),
        hra=cstmt.getFloat(4),
        mc=cstmt.getFloat(5),
        pf=cstmt.getFloat(6),
        gross=cstmt.getFloat(7),
        tot_deduc=cstmt.getFloat(8),
        net_pay=cstmt.getFloat(9);

        stmt=con.prepareStatement("insert into emp_payroll
values(?,?,?,?,?,?,?,?,?,?,?,?,?)");
```

```java
stmt.setInt(1,Integer.parseInt(jTextField1.getText()));
        stmt.setString(2,jTextField2.getText());
        stmt.setString(3,jTextField3.getText());
        stmt.setString(4,jTextField4.getText());
        stmt.setString(5,jTextField5.getText());
stmt.setFloat(6,Float.parseFloat(jTextField6.getText()));
        stmt.setFloat(7, da);
        stmt.setFloat(8, hra);
        stmt.setFloat(9, pf);
        stmt.setFloat(10,mc);
        stmt.setFloat(11,gross);
        stmt.setFloat(12,tot_deduc);
        stmt.setFloat(13, net_pay);
        i=stmt.executeUpdate();
        JOptionPane.showMessageDialog(this,i+" record(s)
inserted...... ");
        }
      catch(SQLException ex){
      JOptionPane.showMessageDialog(this,ex.getMessage());
        }
    }

    private void
UpdateActionPerformed(java.awt.event.ActionEvent evt) {
        try{
        cstmt = con.prepareCall("{call
netpay_calc(?,?,?,?,?,?,?,?,?)}");
        cstmt.setInt(1,
Integer.parseInt(jTextField1.getText()));
        cstmt.setFloat(2,
Float.parseFloat(jTextField6.getText()));
        cstmt.registerOutParameter(3,Types.FLOAT);
        cstmt.registerOutParameter(4,Types.FLOAT);
        cstmt.registerOutParameter(5,Types.FLOAT);
        cstmt.registerOutParameter(6,Types.FLOAT);
        cstmt.registerOutParameter(7,Types.FLOAT);
        cstmt.registerOutParameter(8,Types.FLOAT);
        cstmt.registerOutParameter(9,Types.FLOAT);
        cstmt.executeUpdate();

        Float da=cstmt.getFloat(3),
        hra=cstmt.getFloat(4),
        mc=cstmt.getFloat(5),
        pf=cstmt.getFloat(6),
        gross=cstmt.getFloat(7),
        tot_deduc=cstmt.getFloat(8),
        net_pay=cstmt.getFloat(9);
```

```java
        stmt=con.prepareStatement("update emp_payroll set
designation=?,basic=?,da=?,hra=?,pf=?,mc=?,gross=?,tot_deduc=
?,net_pay=? where eid=?");

        stmt.setString(1,jTextField5.getText());
stmt.setFloat(2,Float.parseFloat(jTextField6.getText()));
        stmt.setFloat(3, da);
        stmt.setFloat(4, hra);
        stmt.setFloat(5, pf);
        stmt.setFloat(6,mc);
        stmt.setFloat(7,gross);
        stmt.setFloat(8,tot_deduc);
        stmt.setFloat(9,net_pay);

stmt.setInt(10,Integer.parseInt(jTextField1.getText()));
        i=stmt.executeUpdate();
        JOptionPane.showMessageDialog(this,i+" record(s)
updated...... ");
        }
        catch(SQLException ex){
    JOptionPane.showMessageDialog(this,ex.getMessage());
        }       // TODO add your handling code here:
    }

    private void
DeleteActionPerformed(java.awt.event.ActionEvent evt) {
        try{
        stmt=con.prepareStatement("delete from emp_payroll
where eid=?");


stmt.setInt(1,Integer.parseInt(jTextField1.getText()));
        i=stmt.executeUpdate();
        JOptionPane.showMessageDialog(this,i+" record(s)
deleted...... ");
        }
        catch(SQLException ex){
        JOptionPane.showMessageDialog(this,ex.getMessage());
        }  // TODO add your handling code here:
    }

    private void
Search_PayRollActionPerformed(java.awt.event.ActionEvent evt)
{
         try{
        stmt=con.prepareStatement("select * from emp_payroll
where eid=?");

stmt.setInt(1,Integer.parseInt(jTextField1.getText()));
        rs=stmt.executeQuery();
```

```java
        if(rs.next())
        {
        jTextField1.setText(Integer.toString(rs.getInt(1)));
        jTextField2.setText(rs.getString(2));
        jTextField3.setText(rs.getString(3));
        jTextField4.setText(rs.getString(4));
        jTextField5.setText(rs.getString(5));
        jTextField6.setText(Float.toString(rs.getFloat(6)));
        jLabel14.setText(Float.toString(rs.getFloat(7)));
        jLabel15.setText(Float.toString(rs.getFloat(8)));
        jLabel16.setText(Float.toString(rs.getFloat(9)));
        jLabel17.setText(Float.toString(rs.getFloat(10)));
        jLabel18.setText(Float.toString(rs.getFloat(11)));
        jLabel19.setText(Float.toString(rs.getFloat(12)));
        jLabel21.setText(Float.toString(rs.getFloat(13)));

        JOptionPane.showMessageDialog(this,"record found......
");
        }
        else
        {
        JOptionPane.showMessageDialog(this,"record not found
...... ");
        }
        }
        catch(SQLException ex){

JOptionPane.showMessageDialog(this,ex.getMessage());
        } // TODO add your handling code here:
    }

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

    private void
ResetActionPerformed(java.awt.event.ActionEvent evt) {
        jTextField1.setText("");
        jTextField2.setText("");
        jTextField3.setText("");
        jTextField4.setText("");
        jTextField5.setText("");
        jTextField6.setText("");
        jLabel14.setText("");
        jLabel14.setText("");
        jLabel15.setText("");
        jLabel16.setText("");
        jLabel17.setText("");
        jLabel18.setText("");
        jLabel19.setText("");
```

```java
            jLabel21.setText("");
    }

    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/lookandfee
l/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(employee.class.getName()).
log(java.util.logging.Level.SEVERE, null, ex);
        } catch (InstantiationException ex) {

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

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

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

    }
```

```
        // Variables declaration - do not modify
    private javax.swing.JButton Delete;
    private javax.swing.JButton Exit;
    private javax.swing.JButton Insert;
    private javax.swing.JButton Reset;
    private javax.swing.JButton Search_PayRoll;
    private javax.swing.JButton Update;
    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 jLabel14;
    private javax.swing.JLabel jLabel15;
    private javax.swing.JLabel jLabel16;
    private javax.swing.JLabel jLabel17;
    private javax.swing.JLabel jLabel18;
    private javax.swing.JLabel jLabel19;
    private javax.swing.JLabel jLabel2;
    private javax.swing.JLabel jLabel20;
    private javax.swing.JLabel jLabel21;
    private javax.swing.JLabel jLabel22;
    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.JPanel jPanel1;
    private javax.swing.JPanel jPanel2;
    private javax.swing.JTextField jTextField1;
    private javax.swing.JTextField jTextField2;
    private javax.swing.JTextField jTextField3;
    private javax.swing.JTextField jTextField4;
    private javax.swing.JTextField jTextField5;
    private javax.swing.JTextField jTextField6;
    // End of variables declaration
}
```

BACK-END: ORACLE 11G

```
SQL> set echo on
SQL> drop table emp_payroll;

Table dropped.

SQL> rem procedure to calculate net pay
SQL> CREATE TABLE emp_payroll(
```

```
  2  eid number(3) constraint eid_pk PRIMARY KEY,
  3  ename varchar2(20) constraint ename_nn NOT NULL,
  4  dob date,
  5  sex varchar2(5),
  6  designation varchar2(20) ,
  7  basic float(6) ,
  8  da float(6),
  9  hra float(6),
 10  pf float(6),
 11  mc float(6),
 12  gross float(6),
 13  tot_deduc float(6),
 14  net_pay float(6)
 15  );

Table created.

SQL> desc emp_payroll
 Name                                      Null?    Type
 ----------------------------------------- -------- ----------
 EID                                       NOT NULL NUMBER(3)
 ENAME                                     NOT NULL VARCHAR2(20)
 DOB                                                DATE
 SEX                                                VARCHAR2(5)
 DESIGNATION                                        VARCHAR2(20)
 BASIC                                              FLOAT(6)
 DA                                                 FLOAT(6)
 HRA                                                FLOAT(6)
 PF                                                 FLOAT(6)
 MC                                                 FLOAT(6)
 GROSS                                              FLOAT(6)
 TOT_DEDUC                                          FLOAT(6)
 NET_PAY                                            FLOAT(6)

SQL> REM PL/SQL for calculating payroll
SQL> set serveroutput on;
SQL>
SQL> CREATE OR REPLACE PROCEDURE netpay_calc(
  2  eid IN emp_payroll.eid%type,
  3  basic IN emp_payroll.basic%type,
  4  da OUT emp_payroll.da%type,
  5  hra OUT emp_payroll.hra%type,
  6  mc OUT emp_payroll.mc%type,
  7  pf OUT emp_payroll.pf%type,
  8  gross OUT emp_payroll.gross%type,
  9  tot_deduc OUT emp_payroll.tot_deduc%type,
 10  net_pay OUT emp_payroll.net_pay%type)
 11
 12  IS
 13  BEGIN
 14  da:=0.6*basic;
 15  hra:=0.11*basic;
 16  mc:=0.03*basic;
 17  pf:=0.04*basic;
```

```
18  gross:=basic+da+hra;
19  tot_deduc:=pf+mc;
20  net_pay:=gross-tot_deduc;
21  end;
22  /
```

Procedure created.

SQL> select * from emp_payroll;

no rows selected

SQL> rem after insertion in application
SQL> select * from emp_payroll;

EID	ENAME	DOB	SEX	DESIGNATION	BASIC
DA	HRA	PF	MC	GROSS	TOT_DEDUC	NET_PAY
---	---	---	---	---	---	---
101	VAISHALI	13-DEC-99	F	TEACHER	60000
36000	6600	2400	1800	100000	4200	96000
102	RAJA	26-FEB-65	M	Sr.Manager	75000
45000	8300	3000	2300	130000	5300	120000

SQL> rem after updating record 101-desn,net in application
SQL> SELECT * FROM EMP_PAYROLL ;

EID	ENAME	DOB	SEX	DESIGNATION	BASIC
DA	HRA	PF	MC	GROSS	TOT_DEDUC	NET_PAY
---	---	---	---	---	---	---
101	VAISHALI	13-DEC-99	F	PROFESSOR	80000
48000	8800	3200	2400	140000	5600	130000
102	RAJA	26-FEB-65	M	Sr.Manager	75000
45000	8300	3000	2300	130000	5300	120000

SQL> rem delete record 102 in application
SQL> SELECT * FROM EMP_PAYROLL WHERE EID=102;

no rows selected

SQL> INSERT INTO EMP_PAYROLL (EID,ENAME,DOB,SEX,DESIGNATION,BASIC)
VALUES(103,'SANTHI','25-Jul-1980','F','ASSISTANT',300000);

1 row created.

SQL> SELECT * FROM EMP_PAYROLL;

EID	ENAME	DOB	SEX	DESIGNATION	BASIC
DA	HRA	PF	MC	GROSS	TOT_DEDUC	NET_PAY

```
------- ------- ------- ------- ---------- ---------- ----------
    101 VAISHALI        13-DEC-99 F     PROFESSOR       80000
  48000     8800    3200    2400    140000      5600     130000
    103 SANTHI          25-JUL-80 F     ASSISTANT      300000


SQL> INSERT INTO EMP_PAYROLL VALUES(104,'REKHA','25-Jul-
1970','F','DIRECTOR',300000,18000,3300,1200,900,51300,2100,49200);

1 row created.

SQL> SELECT * FROM EMP_PAYROLL;

    EID ENAME           DOB       SEX   DESIGNATION    BASIC
------- -------------- --------- ----- -------------- ----------
     DA     HRA      PF      MC     GROSS  TOT_DEDUC    NET_PAY
------- ------- ------- ------- ---------- ---------- ----------
    101 VAISHALI        13-DEC-99 F     PROFESSOR       80000
  48000     8800    3200    2400    140000      5600     130000
    104 REKHA           25-JUL-70 F     DIRECTOR       300000
  18000     3300    1200     900     51000      2100      49000
    103 SANTHI          25-JUL-80 F     ASSISTANT      300000


SQL> UPDATE EMP_PAYROLL SET DOB='30-Sep-1999' WHERE EID=101;

1 row updated.

SQL> SELECT * FROM EMP_PAYROLL;

    EID ENAME           DOB       SEX   DESIGNATION    BASIC
------- -------------- --------- ----- -------------- ----------
     DA     HRA      PF      MC     GROSS  TOT_DEDUC    NET_PAY
------- ------- ------- ------- ---------- ---------- ----------
    101 VAISHALI        30-SEP-99 F     PROFESSOR       80000
  48000     8800    3200    2400    140000      5600     130000
    104 REKHA           25-JUL-70 F     DIRECTOR       300000
  18000     3300    1200     900     51000      2100      49000
    103 SANTHI          25-JUL-80 F     ASSISTANT      300000

SQL> delete from emp_payroll where eid=104;

1 row deleted.

SQL> select * from emp_payroll where eid=104;

no rows selected

SQL> SPOOL OFF;
```
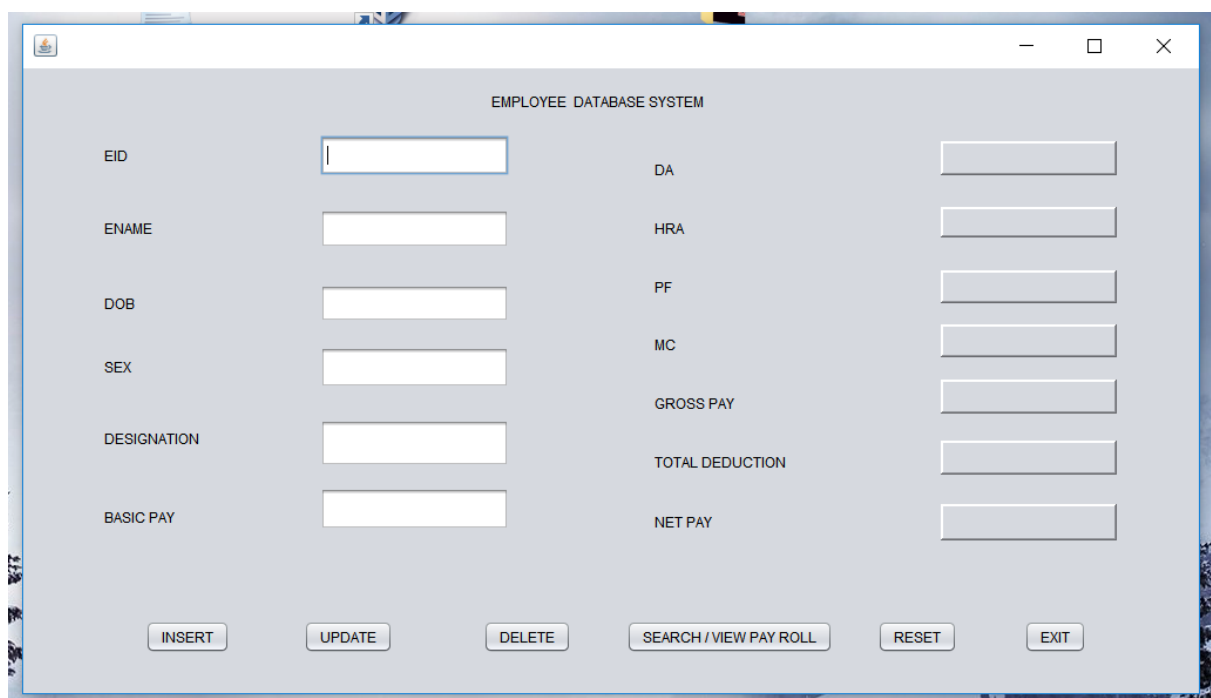
OUTPUT:
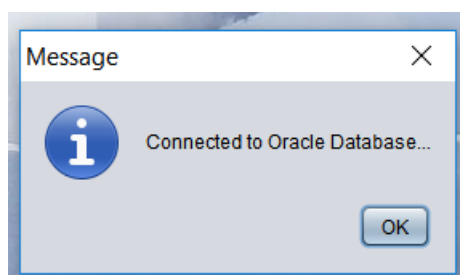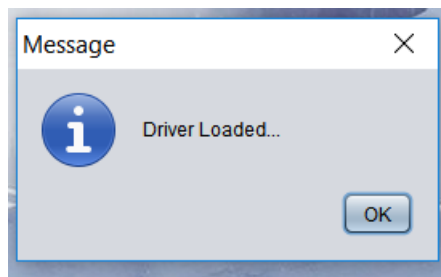
INSERTING IN APPLICATION:

EMPLOYEE DATABASE SYSTEM

EID	101	DA	
ENAME	VAISHALI	HRA	
DOB	13-Dec-1999	PF	
SEX	F	MC	
DESIGNATION	TEACHER	GROSS PAY	
BASIC PAY	60000	TOTAL DEDUCTION	
		NET PAY	

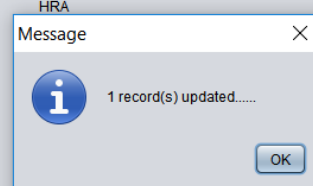INSERT   UPDATE   DELETE   SEARCH / VIEW PAY ROLL   RESET   EXIT

Message ✕

ⓘ 1 record(s) inserted......

OK

EMPLOYEE DATABASE SYSTEM

EID	101	DA	
ENAME	RAJA	HRA	
DOB	26-Feb-1965	PF	
SEX	M	MC	
DESIGNATION	Sr.Manager	GROSS PAY	
BASIC PAY	75000	TOTAL DEDUCTION	
		NET PAY	

INSERT   UPDATE   DELETE   SEARCH / VIEW PAY ROLL   RESET   EXIT

Message ✕

ⓘ ORA-00001: unique constraint (SYSTEM.EID_PK) violated

OK

SEARCH/VIEW PAYROLL:

Message   ✕

ⓘ   record found......

OK
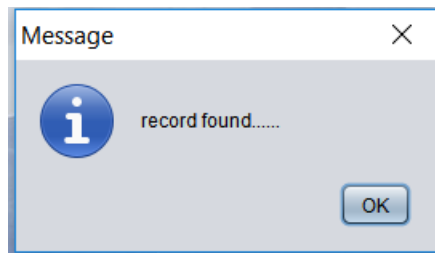
EMPLOYEE DATABASE SYSTEM

EID   103   DA

ENAME

DOB

SEX

DESIGNATION

BASIC PAY

Message   ✕

ⓘ   record not found ......

OK

GROSS PAY

TOTAL DEDUCTION

NET PAY

INSERT   UPDATE   DELETE   SEARCH / VIEW PAY ROLL   RESET   EXIT
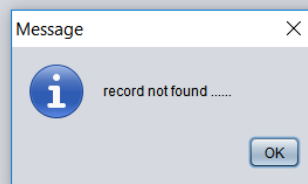
UPDATING IN APPLICATION:

EMPLOYEE DATABASE SYSTEM

EID   101   DA

ENAME   HRA

DOB

SEX

DESIGNATION   PROFESSOR

BASIC PAY   80000

Message   ✕

ⓘ   1 record(s) updated......

OK

TOTAL DEDUCTION

NET PAY

INSERT   UPDATE   DELETE   SEARCH / VIEW PAY ROLL   RESET   EXIT

DELETING IN APPLICATION:

INSERTING IN DATABASE:

UPDATE IN DATABASE:

DELETING IN DATABASE: