“UNIVERSIDAD PERUANA LOS ANDES”

FACULTAD DE INGENIERÍA

ESCUELA PROFESIONAL DE INGENIERÍA DE SISTEMAS Y COMPUTACIÓN

ASIGNATURA: Desarrollo de Aplicaciones
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CICLO: IV
SECCIÓN: A1

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ACTIVIDAD 01

Una tienda ha puesto en oferta la venta de un producto ofreciendo un porcentaje de descuento sobre el importe de la compra de acuerdo con la siguiente tabla:

Docenas adquiridas	Descuento
≥ 10	20%
< 10	10%

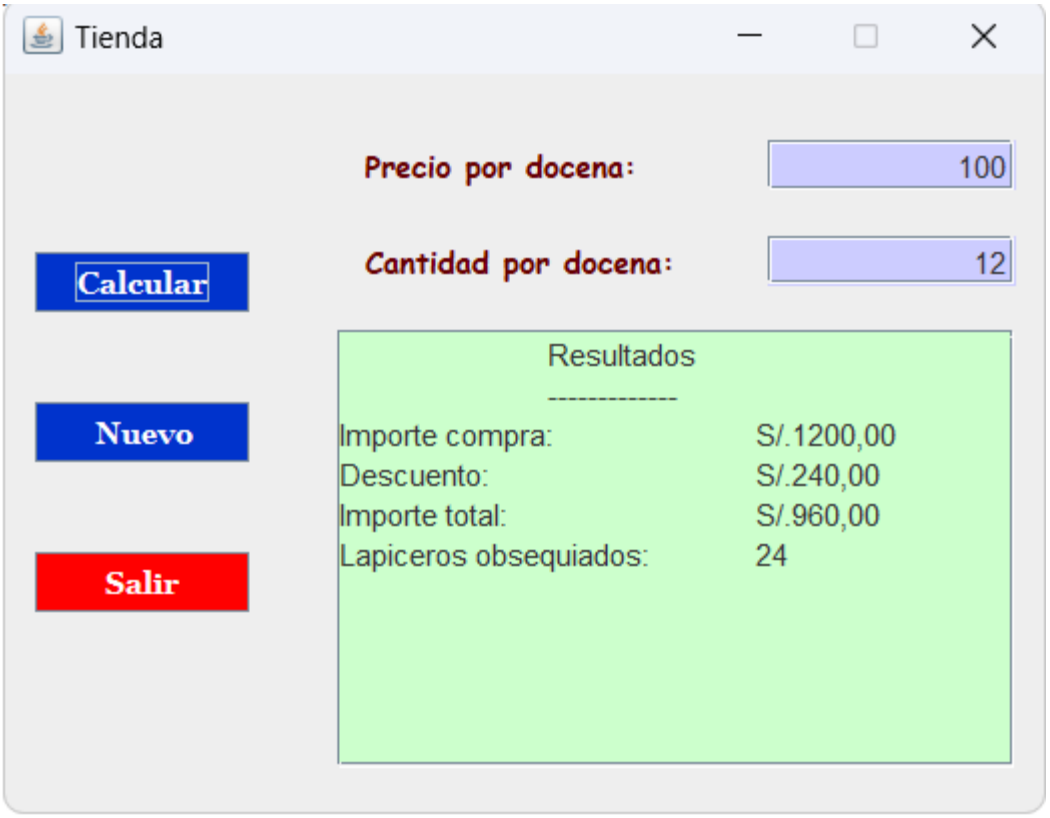
Adicionalmente, la tienda obsequia lapiceros de acuerdo con a la siguiente tabla:

Importe a pagar	Lapiceros
≥ 200	2 por cada docena
< 200	0

Dado el precio de la docena y la cantidad de docenas adquiridas, diseñe un programa que determine el importe de la compra, el importe del descuento, el importe a pagar y la cantidad de lapiceros de obsequio.

DIAGRAMA DE CLASES

DISEÑO DE LA APLICACIÓN



CODIGO DE LA APLICACIÓN

```
package Vista;


import javax.swing.JOptionPane;


/**
 *
 * @author USUARIO
 */
public class Tienda extends javax.swing.JFrame {


   private double precio;
```

```
private double importe_compra;
private double descuento;
private double importe_total;
private int cantidad;
private int nlapiceros;
private boolean validacion;

public Tienda() {
   initComponents();
   Formulario();
}

private void Formulario() {
   this.setTitle("Tienda");
   this.setLocationRelativeTo(this);
   this.setResizable(false);
   txtPrecio.requestFocus();
}

void inicializarDatos() {
   validacion = false;
   if (txtPrecio.getText().isEmpty()) {
      JOptionPane.showMessageDialog(this, "Ingrese el precio.");
      this.txtPrecio.requestFocus();
   } else {
      precio = Double.parseDouble(txtPrecio.getText().trim());
```

```
        if (txtCantidad.getText().isEmpty()) {
            JOptionPane.showMessageDialog(this, "Ingrese la cantidad a comprar.");
            this.txtCantidad.requestFocus();
        } else {
            cantidad = Integer.parseInt(txtCantidad.getText().trim());
            validacion = true;
        }
    }

}

void calcularImporte() {
    importe_compra = precio * cantidad;
}

void calcularDescuento() {
    if (cantidad >= 10) {
        descuento = 0.2 * importe_compra;
    } else {
        descuento = 0.1 * importe_compra;
    }
}

void calcularImporteTotal() {
    importe_total = importe_compra - descuento;
}
```

```
  void obsequiarLapiceros() {
    if (importe_total >= 200) {
      nlapiceros = 2 * cantidad;
    } else {
      nlapiceros = 0;
    }
  }

  void Imprimir() {
    this.txtResultados.setText("\tResultados");
    this.txtResultados.append("\n\t----------");
    this.txtResultados.append("\nImporte compra: \tS/." + String.format("%.2f",
importe_compra));
    this.txtResultados.append("\nDescuento: \t\tS/." + String.format("%.2f",
descuento));
    this.txtResultados.append("\nImporte total: \t\tS/." + String.format("%.2f",
importe_total));
    this.txtResultados.append("\nLapiceros obsequiados: \t" + nlapiceros);
  }

  /**
   * This method is called from within the constructor to initialize the form.
   * WARNING: Do NOT modify this code. The content of this method is always
   * regenerated by the Form Editor.
   */
  @SuppressWarnings("unchecked")
```

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

    panelCalcular = new javax.swing.JPanel();
    btnCalcular = new javax.swing.JButton();
    btnNuevo = new javax.swing.JButton();
    btnSalir = new javax.swing.JButton();
    panelDatos = new javax.swing.JPanel();
    jLabel1 = new javax.swing.JLabel();
    jLabel2 = new javax.swing.JLabel();
    txtPrecio = new javax.swing.JTextField();
    txtCantidad = new javax.swing.JTextField();
    jScrollPane1 = new javax.swing.JScrollPane();
    txtResultados = new javax.swing.JTextArea();

    setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);

    btnCalcular.setBackground(new java.awt.Color(0, 51, 204));
    btnCalcular.setFont(new java.awt.Font("Georgia", 1, 12)); // NOI18N
    btnCalcular.setForeground(new java.awt.Color(255, 255, 255));
    btnCalcular.setText("Calcular");
    btnCalcular.setCursor(new java.awt.Cursor(java.awt.Cursor.HAND_CURSOR));
    btnCalcular.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
            btnCalcularActionPerformed(evt);
        }
```

```
        });

        btnNuevo.setBackground(new java.awt.Color(0, 51, 204));
        btnNuevo.setFont(new java.awt.Font("Georgia", 1, 12)); // NOI18N
        btnNuevo.setForeground(new java.awt.Color(255, 255, 255));
        btnNuevo.setText("Nuevo");
        btnNuevo.setCursor(new java.awt.Cursor(java.awt.Cursor.HAND_CURSOR));
        btnNuevo.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                btnNuevoActionPerformed(evt);
            }
        });

        btnSalir.setBackground(new java.awt.Color(255, 0, 0));
        btnSalir.setFont(new java.awt.Font("Georgia", 1, 12)); // NOI18N
        btnSalir.setForeground(new java.awt.Color(255, 255, 255));
        btnSalir.setText("Salir");
        btnSalir.setCursor(new java.awt.Cursor(java.awt.Cursor.HAND_CURSOR));
        btnSalir.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                btnSalirActionPerformed(evt);
            }
        });

        javax.swing.GroupLayout panelCalcularLayout = new
javax.swing.GroupLayout(panelCalcular);
```

```
    panelCalcular.setLayout(panelCalcularLayout);
    panelCalcularLayout.setHorizontalGroup(
panelCalcularLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(panelCalcularLayout.createSequentialGroup()
            .addContainerGap()
.addGroup(panelCalcularLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING, false)
                .addComponent(btnNuevo, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                .addComponent(btnCalcular, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                .addComponent(btnSalir, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
            .addContainerGap(17, Short.MAX_VALUE))
    );
    panelCalcularLayout.setVerticalGroup(
panelCalcularLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(panelCalcularLayout.createSequentialGroup()
            .addGap(72, 72, 72)
            .addComponent(btnCalcular)
            .addGap(36, 36, 36)
            .addComponent(btnNuevo)
            .addGap(36, 36, 36)
            .addComponent(btnSalir)
```

```
            .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))
        );

        jLabel1.setFont(new java.awt.Font("Comic Sans MS", 1, 12)); // NOI18N
        jLabel1.setForeground(new java.awt.Color(102, 0, 0));
        jLabel1.setText("Precio por docena:");

        jLabel2.setFont(new java.awt.Font("Comic Sans MS", 1, 12)); // NOI18N
        jLabel2.setForeground(new java.awt.Color(102, 0, 0));
        jLabel2.setText("Cantidad por docena:");

        txtPrecio.setBackground(new java.awt.Color(204, 204, 255));
        txtPrecio.setHorizontalAlignment(javax.swing.JTextField.RIGHT);
        txtPrecio.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                txtPrecioActionPerformed(evt);
            }
        });
        txtPrecio.addKeyListener(new java.awt.event.KeyAdapter() {
            public void keyTyped(java.awt.event.KeyEvent evt) {
                txtPrecioKeyTyped(evt);
            }
        });

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

```
        txtCantidad.setHorizontalAlignment(javax.swing.JTextField.RIGHT);
        txtCantidad.addKeyListener(new java.awt.event.KeyAdapter() {
            public void keyTyped(java.awt.event.KeyEvent evt) {
                txtCantidadKeyTyped(evt);
            }
        });

        txtResultados.setBackground(new java.awt.Color(204, 255, 204));
        txtResultados.setColumns(20);
        txtResultados.setRows(5);
        jScrollPane1.setViewportView(txtResultados);

        javax.swing.GroupLayout panelDatosLayout = new
javax.swing.GroupLayout(panelDatos);
        panelDatos.setLayout(panelDatosLayout);
        panelDatosLayout.setHorizontalGroup(

panelDatosLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADIN
G)
            .addGroup(panelDatosLayout.createSequentialGroup()

.addGroup(panelDatosLayout.createParallelGroup(javax.swing.GroupLayout.Alignme
nt.LEADING)
                    .addGroup(panelDatosLayout.createSequentialGroup()
                        .addGap(23, 23, 23)

.addGroup(panelDatosLayout.createParallelGroup(javax.swing.GroupLayout.Alignme
nt.LEADING)
```

```
                .addComponent(jLabel1, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                .addGroup(panelDatosLayout.createSequentialGroup()
                  .addComponent(jLabel2, javax.swing.GroupLayout.PREFERRED_SIZE,
128, javax.swing.GroupLayout.PREFERRED_SIZE)
                  .addGap(0, 15, Short.MAX_VALUE)))
              .addGap(18, 18, 18)

.addGroup(panelDatosLayout.createParallelGroup(javax.swing.GroupLayout.Alignme
nt.LEADING, false)
                .addComponent(txtCantidad, javax.swing.GroupLayout.DEFAULT_SIZE,
99, Short.MAX_VALUE)
                .addComponent(txtPrecio)))
            .addGroup(panelDatosLayout.createSequentialGroup()
              .addContainerGap()
              .addComponent(jScrollPane1)))
          .addContainerGap())
    );
    panelDatosLayout.setVerticalGroup(

panelDatosLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADIN
G)
        .addGroup(panelDatosLayout.createSequentialGroup()
          .addGap(27, 27, 27)

.addGroup(panelDatosLayout.createParallelGroup(javax.swing.GroupLayout.Alignme
nt.BASELINE)
            .addComponent(jLabel1)
```

```
                .addComponent(txtPrecio, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))

            .addGap(18, 18, 18)


.addGroup(panelDatosLayout.createParallelGroup(javax.swing.GroupLayout.Alignme
nt.BASELINE)

                .addComponent(jLabel2)

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

            .addGap(18, 18, 18)

            .addComponent(jScrollPane1, javax.swing.GroupLayout.PREFERRED_SIZE,
175, javax.swing.GroupLayout.PREFERRED_SIZE)

            .addContainerGap(18, 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()

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

                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

                .addComponent(panelDatos, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
```

```
        );
        layout.setVerticalGroup(
            layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addComponent(panelCalcular, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
            .addComponent(panelDatos, javax.swing.GroupLayout.Alignment.TRAILING,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)
        );

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

    private void txtPrecioActionPerformed(java.awt.event.ActionEvent evt) {
        // TODO add your handling code here:
    }

    private void btnCalcularActionPerformed(java.awt.event.ActionEvent evt) {
        inicializarDatos();
        if (validacion == true) {
            calcularImporte();
            calcularDescuento();
            calcularImporteTotal();
            obsequiarLapiceros();
            Imprimir();
        }
```

```
}

private void btnNuevoActionPerformed(java.awt.event.ActionEvent evt) {
   this.txtPrecio.setText("");
   this.txtPrecio.requestFocus();
   this.txtCantidad.setText("");
   this.txtResultados.setText("");

}

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

private void txtPrecioKeyTyped(java.awt.event.KeyEvent evt) {
   char c = evt.getKeyChar();

   if (!Character.isDigit(c) && c != '.') {
      evt.consume();
   }
   if (c == '.' && txtPrecio.getText().contains(".")) {
      evt.consume();
   }
}

private void txtCantidadKeyTyped(java.awt.event.KeyEvent evt) {
```

```
        int key = evt.getKeyChar();
        boolean numeros = key >= 48 && key <= 57;
        if (!numeros) {
            evt.consume();
        }
    }

    /**
     * @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(Tienda.class.getName()).log(java.util.logging.Level.
SEVERE, null, ex);

        } catch (InstantiationException ex) {

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

        } catch (IllegalAccessException ex) {

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

        } catch (javax.swing.UnsupportedLookAndFeelException ex) {

java.util.logging.Logger.getLogger(Tienda.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 Tienda().setVisible(true);

            }

        });

    }


    // Variables declaration - do not modify

    private javax.swing.JButton btnCalcular;
```

```
    private javax.swing.JButton btnNuevo;
    private javax.swing.JButton btnSalir;
    private javax.swing.JLabel jLabel1;
    private javax.swing.JLabel jLabel2;
    private javax.swing.JScrollPane jScrollPane1;
    private javax.swing.JPanel panelCalcular;
    private javax.swing.JPanel panelDatos;
    private javax.swing.JTextField txtCantidad;
    private javax.swing.JTextField txtPrecio;
    private javax.swing.JTextArea txtResultados;
    // End of variables declaration
}
```

ACTIVIDAD 02

El sueldo bruto de los empleados de una empresa se calcula sumando el sueldo básico más la bonificación por hijos.

El sueldo básico se calcula multiplicando las horas trabajadas por la tarifa horaria. La tarifa horaria depende de la categoría del empleado de acuerdo con la siguiente tabla:

Categoría	Tarifa horaria (S/.)
A	45.0
B	37.5

La bonificación por hijos se calcula de acuerdo con la siguiente tabla:

Número de hijos	Bonificación
Hasta 3	S/. 40.5 por cada hijo
Más de 3	S/. 35.0 por cada hijo

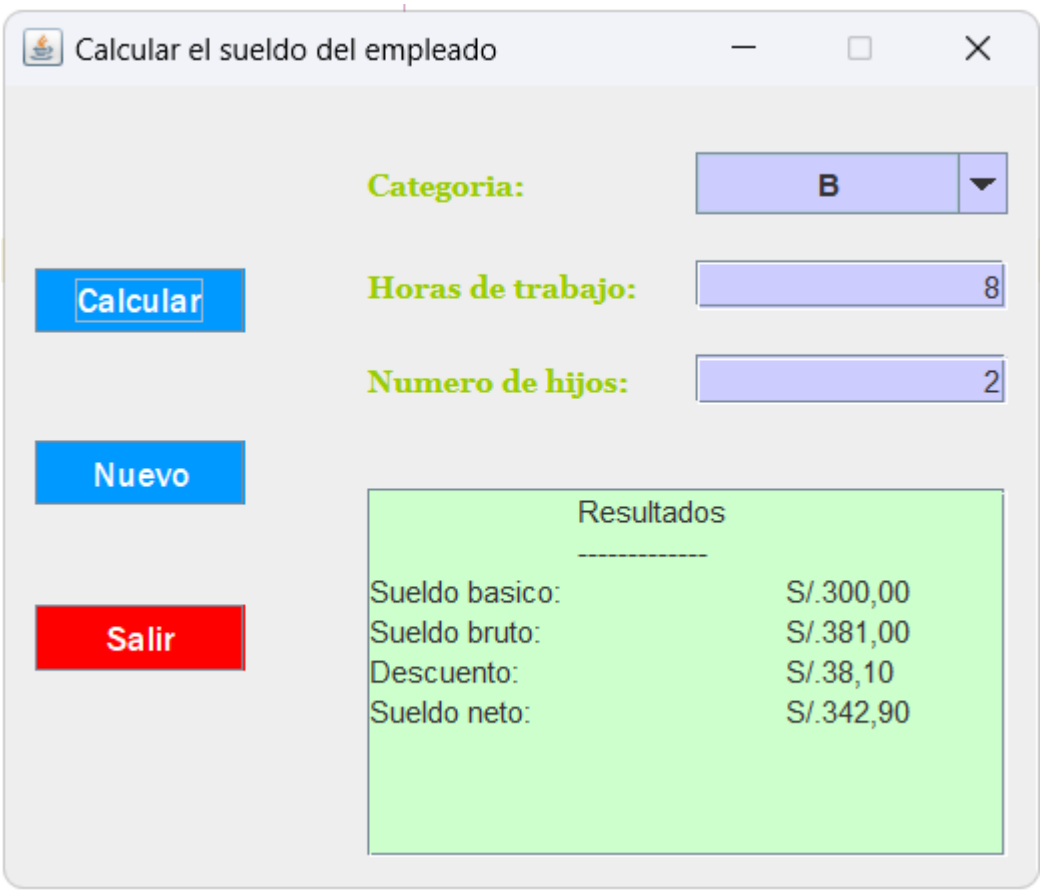
Por ley, todo empleado está sujeto a un porcentaje de descuento sobre el sueldo bruto de acuerdo con la siguiente tabla:

Sueldo bruto (S/.)	Descuento
≥ 3500	13.5%
< 3500	10.0%

Dadas la categoría y la cantidad de horas trabajadas de un empleado, **diseñe un programa** que determine el sueldo básico, el sueldo bruto, el descuento y el sueldo neto que le corresponden.

DIAGRAMA DE CLASES

DISEÑO DE LA APLICACIÓN



CODIGO DE LA APLICACIÓN

```
package Vista;


import javax.swing.DefaultListCellRenderer;

import javax.swing.JOptionPane;


/**

 *

 * @author USUARIO

 */

public class Empresa extends javax.swing.JFrame {
```

```
private DefaultListCellRenderer lista;
private int categoria;
private int nhijos;
private int htrabajo;
private double sueldo_bruto;
private double sueldo_basico;
private double descuento;
private double sueldo_neto;
boolean validacion;

public Empresa() {
   initComponents();
   Formulario();
   inicializarDatos();
}

private void Formulario() {
   this.setTitle("Calcular el sueldo del empleado");
   this.setLocationRelativeTo(this);
   this.setResizable(false);
}

public void inicializarDatos() {
   lista = new DefaultListCellRenderer();
   lista.setHorizontalAlignment(DefaultListCellRenderer.CENTER);
```

```
    cboCategoria.setRenderer(lista);
    this.cboCategoria.addItem("Seleccione...");
    this.cboCategoria.addItem("A");
    this.cboCategoria.addItem("B");
    this.cboCategoria.requestFocus();

  }

  public void ingresarDatos() {
    validacion = false;
    if (cboCategoria.getSelectedIndex() == 0) {
      JOptionPane.showMessageDialog(this, "Debe seleccionar una categoria.");
      cboCategoria.requestFocus();
    } else {
      categoria = cboCategoria.getSelectedIndex();
      if (txtHtrabajo.getText().isEmpty()) {
        JOptionPane.showMessageDialog(this, "Debe ingresar la cantidad de horas
trabajadas.");
        txtHtrabajo.requestFocus();
      } else {
        htrabajo = Integer.parseInt(txtHtrabajo.getText().trim());
        if (txtNhijos.getText().isEmpty()) {
          JOptionPane.showMessageDialog(this, "Debe ingresar la cantidad de
hijos.");
          txtNhijos.requestFocus();
        } else {
```

```
            nhijos = Integer.parseInt(txtNhijos.getText().trim());
            validacion = true;
          }
        }
    }
}

void calcularSueldoBasico() {
    if (categoria == 1) {
        sueldo_basico = htrabajo * 45;
    } else {
        sueldo_basico = htrabajo * 37.5;
    }
}

void calcularSueldoBruto() {
    double bonificacion;
    if (nhijos <= 3) {
        bonificacion = 40.5 * nhijos;
    } else {
        bonificacion = 35 * nhijos;
    }
    sueldo_bruto = sueldo_basico + bonificacion;
}

void calcularDescuento() {
```

```
    if (sueldo_bruto < 3500) {
        descuento = 0.1 * sueldo_bruto;
    } else {
        descuento = 0.135 * sueldo_bruto;
    }
  }

  void calcularSueldoNeto() {
    sueldo_neto = sueldo_bruto - descuento;
  }

  void Imprimir() {
    this.txtResultados.setText("\tResultados");
    this.txtResultados.append("\n\t----------");
    this.txtResultados.append("\nSueldo basico: \t\tS/." + String.format("%.2f",
sueldo_basico));
    this.txtResultados.append("\nSueldo bruto: \t\tS/." + String.format("%.2f",
sueldo_bruto));
    this.txtResultados.append("\nDescuento: \t\tS/." + String.format("%.2f",
descuento));
    this.txtResultados.append("\nSueldo neto: \t\tS/." + String.format("%.2f",
sueldo_neto));
  }

  /**
   * This method is called from within the constructor to initialize the form.
   * WARNING: Do NOT modify this code. The content of this method is always
```

```
     * regenerated by the Form Editor.
     */
    @SuppressWarnings("unchecked")
    // <editor-fold defaultstate="collapsed" desc="Generated Code">
    private void initComponents() {

        panelCalcular = new javax.swing.JPanel();
        btnCalcular = new javax.swing.JButton();
        btnNuevo = new javax.swing.JButton();
        btnSalir = new javax.swing.JButton();
        panelDatos = new javax.swing.JPanel();
        jLabel1 = new javax.swing.JLabel();
        jLabel2 = new javax.swing.JLabel();
        cboCategoria = new javax.swing.JComboBox<>();
        txtHtrabajo = new javax.swing.JTextField();
        jScrollPane1 = new javax.swing.JScrollPane();
        txtResultados = new javax.swing.JTextArea();
        jLabel3 = new javax.swing.JLabel();
        txtNhijos = new javax.swing.JTextField();

        setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);

        btnCalcular.setBackground(new java.awt.Color(0, 153, 255));
        btnCalcular.setFont(new java.awt.Font("Franklin Gothic Medium", 0, 14)); // 
NOI18N
        btnCalcular.setForeground(new java.awt.Color(255, 255, 255));
```

```
btnCalcular.setText("Calcular");
btnCalcular.setCursor(new java.awt.Cursor(java.awt.Cursor.HAND_CURSOR));
btnCalcular.addActionListener(new java.awt.event.ActionListener() {
   public void actionPerformed(java.awt.event.ActionEvent evt) {
      btnCalcularActionPerformed(evt);
   }
});

btnNuevo.setBackground(new java.awt.Color(0, 153, 255));
btnNuevo.setFont(new java.awt.Font("Franklin Gothic Medium", 0, 14)); // NOI18N
btnNuevo.setForeground(new java.awt.Color(255, 255, 255));
btnNuevo.setText("Nuevo");
btnNuevo.setCursor(new java.awt.Cursor(java.awt.Cursor.HAND_CURSOR));
btnNuevo.addActionListener(new java.awt.event.ActionListener() {
   public void actionPerformed(java.awt.event.ActionEvent evt) {
      btnNuevoActionPerformed(evt);
   }
});

btnSalir.setBackground(new java.awt.Color(255, 0, 0));
btnSalir.setFont(new java.awt.Font("Franklin Gothic Medium", 0, 14)); // NOI18N
btnSalir.setForeground(new java.awt.Color(255, 255, 255));
btnSalir.setText("Salir");
btnSalir.setCursor(new java.awt.Cursor(java.awt.Cursor.HAND_CURSOR));
btnSalir.addActionListener(new java.awt.event.ActionListener() {
   public void actionPerformed(java.awt.event.ActionEvent evt) {
```

```
            btnSalirActionPerformed(evt);
        }
    });

    javax.swing.GroupLayout panelCalcularLayout = new
javax.swing.GroupLayout(panelCalcular);
    panelCalcular.setLayout(panelCalcularLayout);
    panelCalcularLayout.setHorizontalGroup(

panelCalcularLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADI
NG)
        .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
panelCalcularLayout.createSequentialGroup()
            .addContainerGap()

.addGroup(panelCalcularLayout.createParallelGroup(javax.swing.GroupLayout.Align
ment.TRAILING)
                .addComponent(btnNuevo, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                .addComponent(btnCalcular, javax.swing.GroupLayout.DEFAULT_SIZE, 83,
Short.MAX_VALUE)
                .addComponent(btnSalir, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
            .addGap(14, 14, 14))
    );
    panelCalcularLayout.setVerticalGroup(

panelCalcularLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADI
NG)
```

```
        .addGroup(panelCalcularLayout.createSequentialGroup()
            .addGap(73, 73, 73)
            .addComponent(btnCalcular)
            .addGap(43, 43, 43)
            .addComponent(btnNuevo)
            .addGap(40, 40, 40)
            .addComponent(btnSalir)
            .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))
    );

    jLabel1.setFont(new java.awt.Font("Georgia", 1, 12)); // NOI18N
    jLabel1.setForeground(new java.awt.Color(153, 204, 0));
    jLabel1.setText("Categoria:");

    jLabel2.setFont(new java.awt.Font("Georgia", 1, 12)); // NOI18N
    jLabel2.setForeground(new java.awt.Color(153, 204, 0));
    jLabel2.setText("Horas de trabajo:");

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

    txtHtrabajo.setBackground(new java.awt.Color(204, 204, 255));
    txtHtrabajo.setHorizontalAlignment(javax.swing.JTextField.RIGHT);
    txtHtrabajo.addKeyListener(new java.awt.event.KeyAdapter() {
        public void keyTyped(java.awt.event.KeyEvent evt) {
            txtHtrabajoKeyTyped(evt);
```

```
        }
    });

    txtResultados.setBackground(new java.awt.Color(204, 255, 204));
    txtResultados.setColumns(20);
    txtResultados.setRows(5);
    jScrollPane1.setViewportView(txtResultados);

    jLabel3.setFont(new java.awt.Font("Georgia", 1, 12)); // NOI18N
    jLabel3.setForeground(new java.awt.Color(153, 204, 0));
    jLabel3.setText("Numero de hijos:");

    txtNhijos.setBackground(new java.awt.Color(204, 204, 255));
    txtNhijos.setHorizontalAlignment(javax.swing.JTextField.RIGHT);
    txtNhijos.addKeyListener(new java.awt.event.KeyAdapter() {
        public void keyTyped(java.awt.event.KeyEvent evt) {
            txtNhijosKeyTyped(evt);
        }
    });

    javax.swing.GroupLayout panelDatosLayout = new
javax.swing.GroupLayout(panelDatos);
    panelDatos.setLayout(panelDatosLayout);
    panelDatosLayout.setHorizontalGroup(

panelDatosLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADIN
G)
```

```
        .addGroup(panelDatosLayout.createSequentialGroup()
            .addGap(29, 29, 29)

.addGroup(panelDatosLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addComponent(jScrollPane1, javax.swing.GroupLayout.DEFAULT_SIZE, 256, Short.MAX_VALUE)
                .addGroup(javax.swing.GroupLayout.Alignment.TRAILING, panelDatosLayout.createSequentialGroup()

.addGroup(panelDatosLayout.createParallelGroup(javax.swing.GroupLayout.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, javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                        .addComponent(jLabel3, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))

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

.addGroup(panelDatosLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)
                        .addComponent(txtHtrabajo)
                        .addComponent(cboCategoria, 0, 125, Short.MAX_VALUE)
                        .addComponent(txtNhijos))))
            .addContainerGap())
    );
    panelDatosLayout.setVerticalGroup(
```

```
panelDatosLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADIN
G)
        .addGroup(panelDatosLayout.createSequentialGroup()
            .addGap(27, 27, 27)

.addGroup(panelDatosLayout.createParallelGroup(javax.swing.GroupLayout.Alignme
nt.BASELINE)
                .addComponent(jLabel1)
                .addComponent(cboCategoria, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
            .addGap(18, 18, 18)

.addGroup(panelDatosLayout.createParallelGroup(javax.swing.GroupLayout.Alignme
nt.BASELINE)
                .addComponent(jLabel2)
                .addComponent(txtHtrabajo, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
            .addGap(18, 18, 18)

.addGroup(panelDatosLayout.createParallelGroup(javax.swing.GroupLayout.Alignme
nt.BASELINE)
                .addComponent(jLabel3)
                .addComponent(txtNhijos, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,
33, Short.MAX_VALUE)
```

```
            .addComponent(jScrollPane1, javax.swing.GroupLayout.PREFERRED_SIZE,
148, javax.swing.GroupLayout.PREFERRED_SIZE)

            .addContainerGap())

      );


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

      getContentPane().setLayout(layout);

      layout.setHorizontalGroup(

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

        .addGroup(layout.createSequentialGroup()

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

          .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

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

      );

      layout.setVerticalGroup(

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

        .addGroup(layout.createSequentialGroup()


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

            .addComponent(panelDatos,
javax.swing.GroupLayout.Alignment.LEADING,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)
```

```
                .addComponent(panelCalcular,
javax.swing.GroupLayout.Alignment.LEADING,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))
            .addGap(0, 0, Short.MAX_VALUE))
    );

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

  private void btnCalcularActionPerformed(java.awt.event.ActionEvent evt) {
    ingresarDatos();
    if (validacion == true) {
      calcularSueldoBasico();
      calcularSueldoBruto();
      calcularDescuento();
      calcularSueldoNeto();
      Imprimir();
    }
  }

  private void btnNuevoActionPerformed(java.awt.event.ActionEvent evt) {
    this.cboCategoria.setSelectedIndex(0);
    this.cboCategoria.requestFocus();
    this.txtHtrabajo.setText("");
    this.txtNhijos.setText("");
    this.txtResultados.setText("");
```

```
}

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

private void txtHtrabajoKeyTyped(java.awt.event.KeyEvent evt) {
   int key = evt.getKeyChar();
   boolean numeros = key >= 48 && key <= 57;
   if (!numeros) {
      evt.consume();
   }
}

private void txtNhijosKeyTyped(java.awt.event.KeyEvent evt) {
   int key = evt.getKeyChar();
   boolean numeros = key >= 48 && key <= 57;
   if (!numeros) {
      evt.consume();
   }
}

/**
 * @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(Empresa.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);
        } catch (InstantiationException ex) {
            java.util.logging.Logger.getLogger(Empresa.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);
        } catch (IllegalAccessException ex) {
            java.util.logging.Logger.getLogger(Empresa.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);
        } catch (javax.swing.UnsupportedLookAndFeelException ex) {
```

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

// Variables declaration - do not modify
private javax.swing.JButton btnCalcular;
private javax.swing.JButton btnNuevo;
private javax.swing.JButton btnSalir;
private javax.swing.JComboBox<String> cboCategoria;
private javax.swing.JLabel jLabel1;
private javax.swing.JLabel jLabel2;
private javax.swing.JLabel jLabel3;
private javax.swing.JScrollPane jScrollPane1;
private javax.swing.JPanel panelCalcular;
private javax.swing.JPanel panelDatos;
private javax.swing.JTextField txtHtrabajo;
private javax.swing.JTextField txtNhijos;
```

```
    private javax.swing.JTextArea txtResultados;
    // End of variables declaration
}
```