MANUAL DE USUARIO

Aplicación de Matriz Ortogonal

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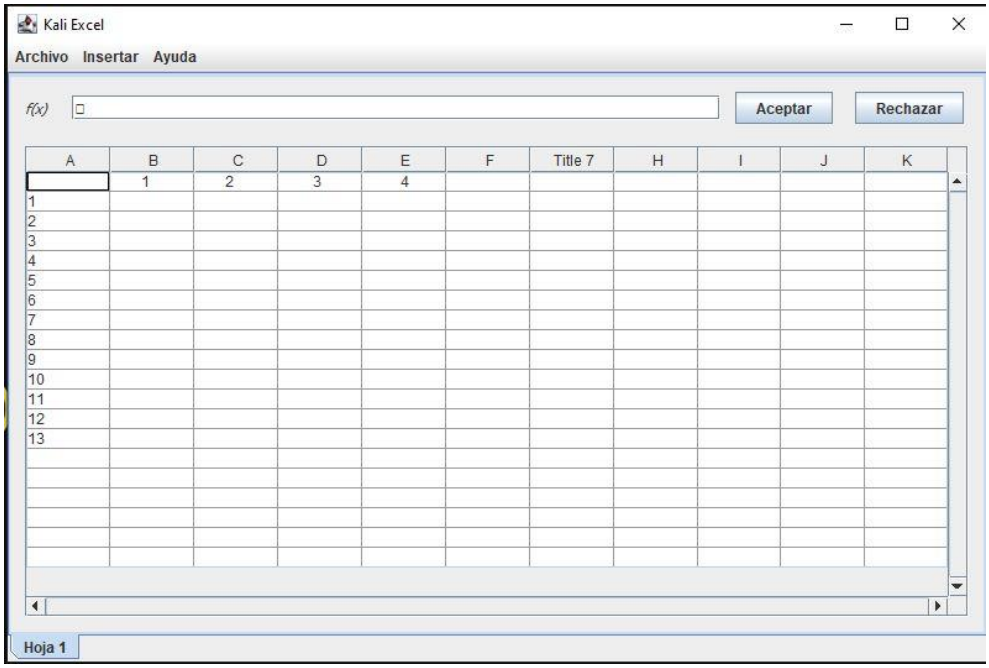
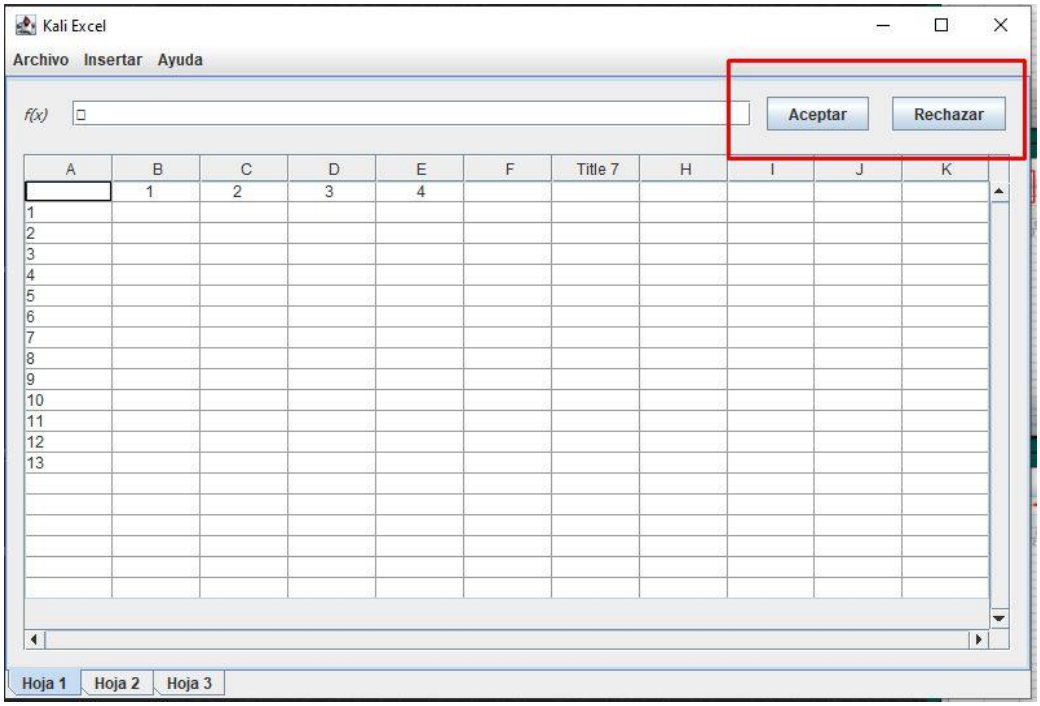
Tabla de Contenido

Ingreso a la aplicación:

Al momento de ingresar a la aplicación se encontrará con la siguiente ventana:



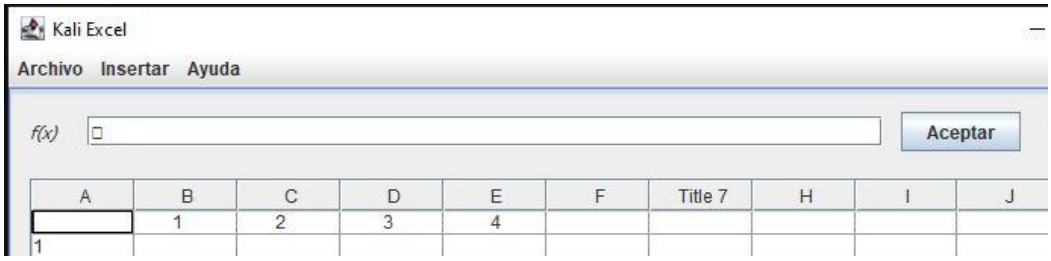
Encontramos la primera hoja de cálculo la cual en su interfaz gráfica contiene una el diseño de nuestro Excel, también detallaremos el uso de los botones, la barra de fórmulas y las opciones en el NavBar:



Botón Aceptar: Su función es colocar la información que se coloca en el jTextField, a la celda seleccionada.

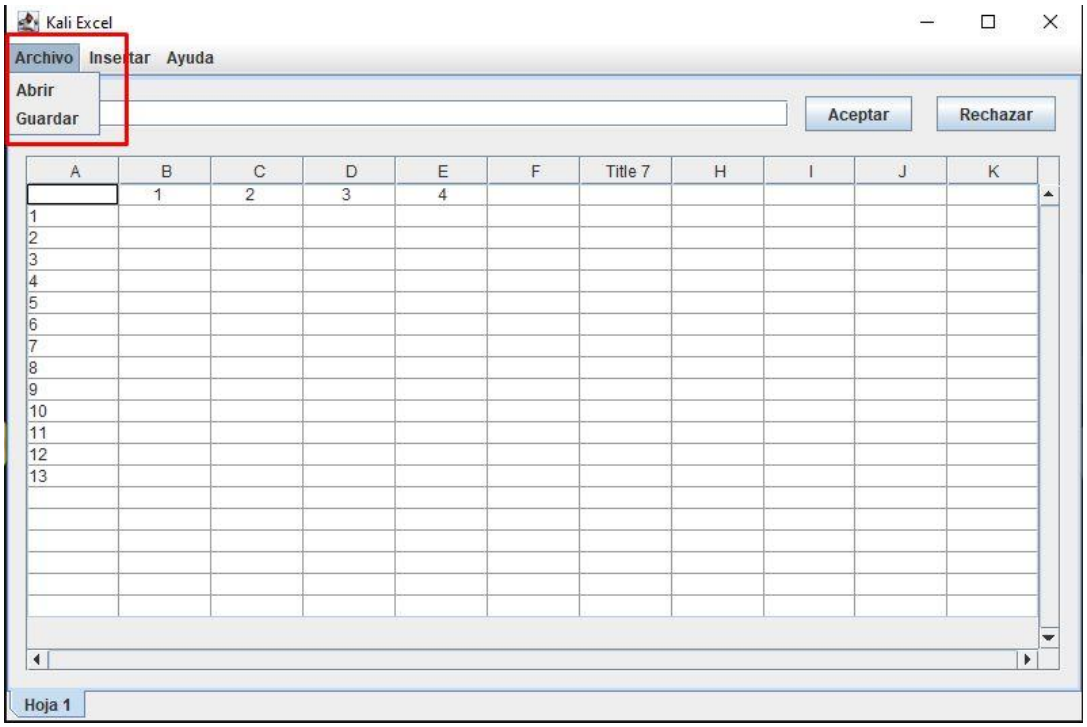
Boton Rechazar: Su funcion es eliminar el contenido del jTextField y de la celda seleccionada.

Barra de formula:

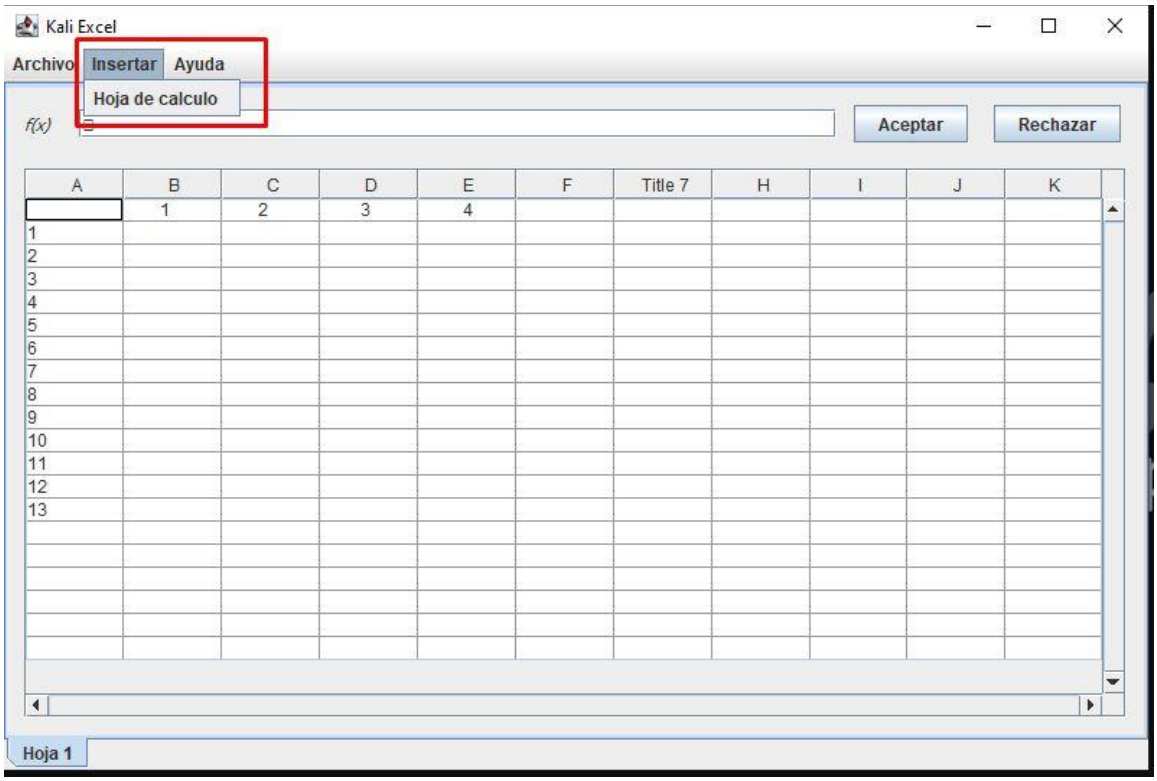


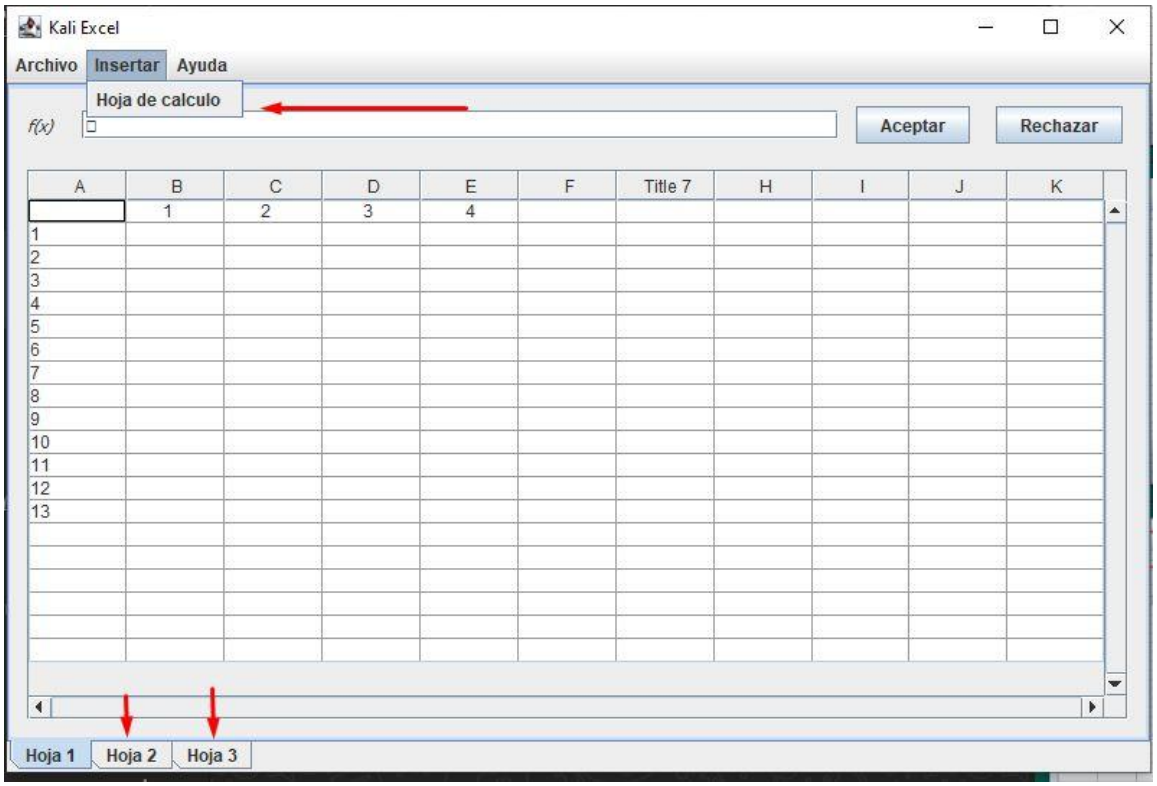
Esta vista es para que el usuario pueda ingresar las fórmulas o el contenido que desea colocar el usuario en la celda, utilizando el botón aceptar.

Pestañas de la interfaz:



Pestaña Archivo: En este campo nos permite guardar y abrir archivos en jPane.

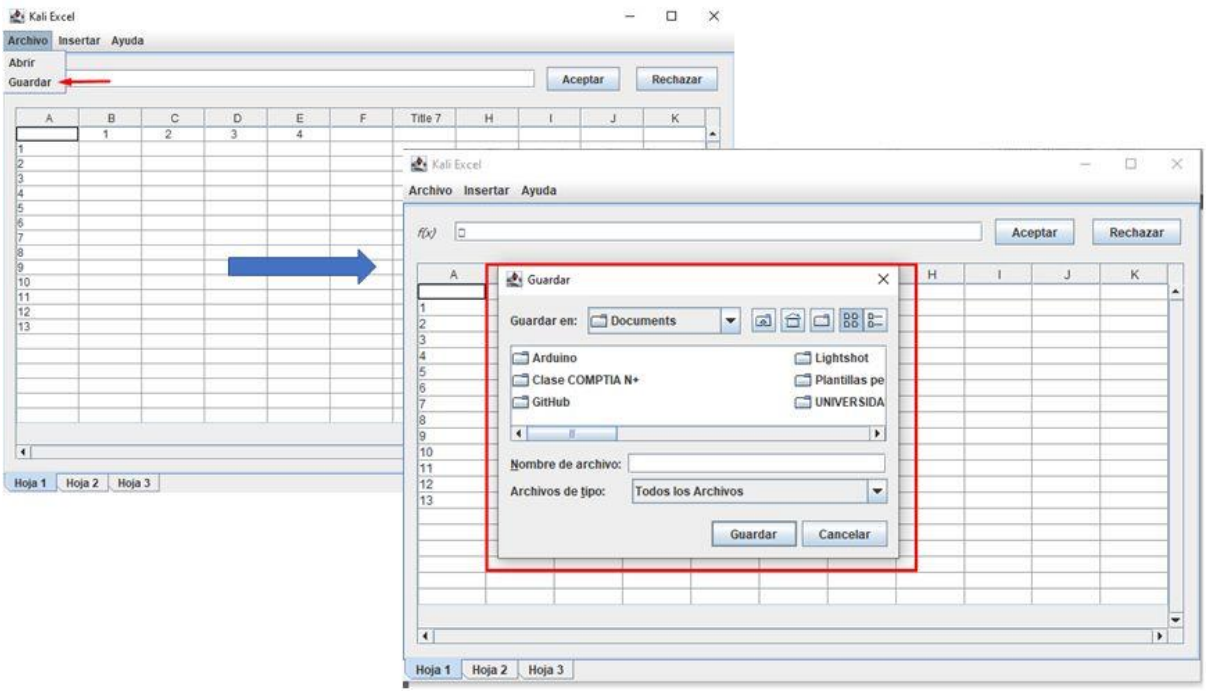




Pestaña Insertar: En este campo existe la función de agregar hojas de cálculo de manera dinámica, como un Excel original.

Pestaña Ayuda: Obtiene un mensaje de la version del programa KaliExcel.

Opcion de Guardado:



Esta opcion nos permite guardar la información en la ubicacion de preferencia del usuario dentro del ordenador, puedes colocar el nombre que desees al archivo.

Código

- https://github.com/MarcoTohom/SpreadSheet

MANUAL TECNICO

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Requerimientos

- Computadora:
    - Resolución mínima 1024 x 768
    - JDK 8 (Recomendable).
- IDE’s de Desarrollo:
    - IntelliJ Idea Community/Ultimate 22.3.2.
    - Visual Studio Code.
    - NetBeans 8.2.
    - Apache NetBeans 9.0 (Versiones en adelante para su ejecución).

CODIGO

Controlador

- **FactorySheet.java**

```
package Controlador;
public class FactorySheet {
    public static void main(String[] args) {
        System.out.println("test");
    }

    public javax.swing.JPanel createJPanel(){
        javax.swing.JPanel jPanel = new javax.swing.JPanel();
        javax.swing.JLabel jLabel = new javax.swing.JLabel();
        jPanel.setVisible(true);
        jLabel.setVisible(true);
        jLabel.setText("Hello world");
        jPanel.add(jLabel);
        return jPanel;
    }
}
```

- **Matriz.java**

```
package Controlador;
import Modelo.Nodo;


import java.util.ArrayList;
import java.util.HashSet;
import java.util.List;
import java.util.Set;

public class Matriz {
    Nodo raiz;
    public Matriz() {
        this.raiz = null;


    }
    public void insertar(Object dato, int fila, int columna) {
            Nodo nuevo = new Nodo(dato, fila, columna);

        System.out.println();

         if (raiz == null) {
            // Si la matriz está vacía el nuevo nodo será la raíz
            raiz = nuevo;

         } else {
            // Buscar la posición adecuada para el nuevo nodo
            Nodo actual = raiz;
            Nodo anterior = null;

            System.out.println("Buscando posición para el nuevo nodo...");

            while (actual != null && actual.fila <= fila && actual.columna <= columna) {
                anterior = actual;
                actual = actual.abajo;
                System.out.println("Actual: " + actual);
                System.out.println("Anterior: " + anterior);
            }

            System.out.println("Se encontró la posición adecuada para el modelo...");
            /**
             * actual.fila < nuevo.fila;
             * actual.linea.compareTo(nuevo.linea) < 0
             *
             */
            while (actual != null && actual.fila <= nuevo.fila && actual.columna <=
nuevo.columna ) {
                anterior = actual;
                actual = actual.derecha;
                System.out.println("Actual: " + actual);
                System.out.println("Anterior: " + anterior);
            }
```

```
            System.out.println("Se encontró la posición adecuada para la línea...");


            //No permite valores duplicados
            if (actual != null && actual.dato.equals(dato) && actual.fila == fila && actual.columna
== columna) {
                System.out.println("El nodo ya existe en la matriz");
                return;
            }
            /**/

            System.out.println("Posición encontrada: " + anterior + ", " + actual);


            //
            if (anterior == null) {
                raiz = nuevo;
            } else if (anterior.abajo == null) {
                anterior.abajo = nuevo;
                nuevo.arriba = anterior;
            } else {
                nuevo.abajo = actual;
                actual.arriba = nuevo;
                nuevo.arriba = anterior;
                anterior.abajo = nuevo;
            }

            System.out.println("Nodo agregado en la dirección vertical...");


            //
            if (anterior == null) {
                raiz = nuevo;
            } else if (anterior.derecha == null) {
                anterior.derecha = nuevo;
                nuevo.izquierda = anterior;
            } else {
                nuevo.derecha = actual;
                actual.izquierda = nuevo;
                nuevo.izquierda = anterior;
                anterior.derecha = nuevo;
            }


            System.out.println("Nodo agregado en la dirección horizontal...");

            System.out.println("--------------------------");


        }
    }


    public List<Nodo> buscar(Object dato) {
        List<Nodo> resultados = new ArrayList<>();
```

```
    Set<Nodo> nodosAgregados = new HashSet<>();

    Nodo actual = raiz;
    while (actual != null) {
        Nodo temp = actual;
        while (temp != null) {
            if ((dato == null || temp.dato.equals(dato))) {
                if (!nodosAgregados.contains(temp)) {
                    resultados.add(temp);
                    nodosAgregados.add(temp);


                }
            }
            temp = temp.derecha;
        }
        actual = actual.abajo;
    }

    return resultados;
}


public void eliminar(Object dato) {
    List<Nodo> nodosAEliminar = buscar(dato);
    if (nodosAEliminar.isEmpty()) {
        System.out.println("No se encontraron nodos para eliminar");
        return;
    }
    for (Nodo nodoActual : nodosAEliminar) {
        Object placaEliminada = nodoActual.dato;

        Nodo nodoArriba = nodoActual.arriba;
        Nodo nodoAbajo = nodoActual.abajo;
        Nodo nodoIzquierda = nodoActual.izquierda;
        Nodo nodoDerecha = nodoActual.derecha;

        if (nodoArriba != null) {
            nodoArriba.abajo = nodoAbajo;
        }
        if (nodoAbajo != null) {
            nodoAbajo.arriba = nodoArriba;
        }
        if (nodoIzquierda != null) {
            nodoIzquierda.derecha = nodoDerecha;
        }
        if (nodoDerecha != null) {
            nodoDerecha.izquierda = nodoIzquierda;
        }

        if (nodoActual == raiz) {
            raiz = nodoActual.derecha != null ? nodoActual.derecha : nodoActual.abajo;
        }

        nodoActual = null;
```

```
            System.out.println("Se eliminó correctamente la placa " + placaEliminada);

        }

        System.out.println("Se han eliminado " + nodosAEliminar.size() + " nodos");

    }
}
```

- **SpreadSheet.java**

```
package Controlador;

import java.io.IOException;
public class SpreadSheet {

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

    int [][] spreadSheetSimulation = {{1,2,3,4},
        {5,6,7,8},
        {9,10,11,12},
        {13,14,15,16}};
    /*public static void main(String[] args) {
        try {
            // TODO code application logic here
            String txtInput = "=suma(3,5,10,20)";
            String[] numbers = txtInput.split("[^0-9()]");
            System.out.println(function(txtInput));
        } catch (IOException ex) {
            System.err.println("Error");
        }
    }*/

    public static String function(String ecuation) throws IOException{
        if (ecuation.startsWith("=")){
            ecuation = ecuation.replace("=", "");
            String[] numbers;
            String switchTxt = ecuation.split("[^a-zA-Z]")[0].toLowerCase();
            switch (switchTxt){
                case "suma": /*Coding suma*/
                    ecuation = ecuation.replace(switchTxt, "");
                    System.out.println("Ecuation until now:"+ecuation+".");
                    numbers = ecuation.split("[^0-9()]");
                    numbers = replace(numbers);
                    System.out.println("Numeros a sumar");
                    printArray("suma", numbers);
                    break;
                case "multiplicacion": /* Coding multiplicacion*/
                    ecuation = ecuation.replace(switchTxt, "");
                    System.out.println("Ecuation until now:"+ecuation+".");
                    numbers = ecuation.split("[^0-9()]");
                    numbers = replace(numbers);
                    System.out.println("Numeros a multiplicar");
```

```
                printArray("multi", numbers);
                break;
            default: System.out.println("not a valid operation");break;
        }
    }else{
        throw new IOException();
    }
    return null;
  }

  public static void printArray(String id, String[] elements){
    for (int i = 0; i < elements.length; i++) {
        System.out.println(id + " " + elements[i]);
    }
  }

  public static String[] replace(String[] elements){
    for (int i = 0; i < elements.length; i++) {
        elements[i] = elements[i].replaceAll("[^0-9]", "");
    }
    return elements;
  }

}
```

Modelo

- **KaliPanel.form**

```
<?xml version="1.0" encoding="UTF-8" ?>

<Form version="1.6" maxVersion="1.9"
type="org.netbeans.modules.form.forminfo.JPanelFormInfo">
  <AuxValues>
    <AuxValue name="FormSettings_autoResourcing" type="java.lang.Integer" value="0"/>
    <AuxValue name="FormSettings_autoSetComponentName" type="java.lang.Boolean"
value="false"/>
    <AuxValue name="FormSettings_generateFQN" type="java.lang.Boolean" value="true"/>
    <AuxValue name="FormSettings_generateMnemonicsCode" type="java.lang.Boolean"
value="false"/>
    <AuxValue name="FormSettings_i18nAutoMode" type="java.lang.Boolean"
value="false"/>
    <AuxValue name="FormSettings_layoutCodeTarget" type="java.lang.Integer" value="1"/>
    <AuxValue name="FormSettings_listenerGenerationStyle" type="java.lang.Integer"
value="0"/>
    <AuxValue name="FormSettings_variablesLocal" type="java.lang.Boolean"
value="false"/>
    <AuxValue name="FormSettings_variablesModifier" type="java.lang.Integer" value="2"/>
  </AuxValues>

  <Layout>
    <DimensionLayout dim="0">
      <Group type="103" groupAlignment="0" attributes="0">
          <Group type="102" alignment="0" attributes="0">
              <EmptySpace max="-2" attributes="0"/>
              <Group type="103" groupAlignment="0" attributes="0">
```

```
            <Component id="jScrollPane" alignment="0" max="32767" attributes="0"/>
            <Group type="102" alignment="0" attributes="0">
              <Component id="funcion" min="-2" pref="26" max="-2" attributes="0"/>
              <EmptySpace max="-2" attributes="0"/>
              <Component id="input" min="-2" pref="525" max="-2" attributes="0"/>
              <EmptySpace type="unrelated" max="-2" attributes="0"/>
              <Component id="aceptar" min="-2" max="-2" attributes="0"/>
              <EmptySpace type="separate" max="-2" attributes="0"/>
              <Component id="rechazar" min="-2" max="-2" attributes="0"/>
              <EmptySpace min="0" pref="0" max="32767" attributes="0"/>
            </Group>
          </Group>
          <EmptySpace max="-2" attributes="0"/>
        </Group>
      </Group>
    </DimensionLayout>
    <DimensionLayout dim="1">
      <Group type="103" groupAlignment="0" attributes="0">
        <Group type="102" alignment="0" attributes="0">
          <EmptySpace max="-2" attributes="0"/>
          <Group type="103" groupAlignment="3" attributes="0">
            <Component id="funcion" alignment="3" min="-2" max="-2" attributes="0"/>
            <Component id="input" alignment="3" min="-2" max="-2" attributes="0"/>
            <Component id="aceptar" alignment="3" min="-2" max="-2" attributes="0"/>
            <Component id="rechazar" alignment="3" min="-2" max="-2" attributes="0"/>
          </Group>
          <EmptySpace type="separate" max="-2" attributes="0"/>
          <Component id="jScrollPane" pref="296" max="32767" attributes="0"/>
          <EmptySpace max="-2" attributes="0"/>
        </Group>
      </Group>
    </DimensionLayout>
  </Layout>
  <SubComponents>
    <Component class="javax.swing.JLabel" name="funcion">
      <Properties>
        <Property name="font" type="java.awt.Font"
editor="org.netbeans.beaninfo.editors.FontEditor">
          <Font name="Tahoma" size="11" style="2"/>
        </Property>
        <Property name="text" type="java.lang.String" value="f(x)"/>
      </Properties>
    </Component>
    <Component class="javax.swing.JTextField" name="input">
    </Component>
    <Component class="javax.swing.JButton" name="aceptar">
      <Properties>
        <Property name="text" type="java.lang.String" value="Aceptar"/>
      </Properties>
      <Events>
        <EventHandler event="actionPerformed" listener="java.awt.event.ActionListener"
parameters="java.awt.event.ActionEvent" handler="aceptarActionPerformed"/>
      </Events>
    </Component>
    <Component class="javax.swing.JButton" name="rechazar">
```

```
      <Properties>
        <Property name="text" type="java.lang.String" value="Rechazar"/>
      </Properties>
      <Events>
        <EventHandler event="actionPerformed" listener="java.awt.event.ActionListener"
parameters="java.awt.event.ActionEvent" handler="rechazarActionPerformed"/>
      </Events>
    </Component>
    <Container class="javax.swing.JScrollPane" name="jScrollPane">
      <AuxValues>
        <AuxValue name="autoScrollPane" type="java.lang.Boolean" value="true"/>
      </AuxValues>

      <Layout
class="org.netbeans.modules.form.compat2.layouts.support.JScrollPaneSupportLayout"/>
      <SubComponents>
        <Component class="javax.swing.JTable" name="hoja">
          <Properties>
            <Property name="border" type="javax.swing.border.Border"
editor="org.netbeans.modules.form.editors2.BorderEditor">
              <Border info="org.netbeans.modules.form.compat2.border.TitledBorderInfo">
                <TitledBorder/>
              </Border>
            </Property>
            <Property name="model" type="javax.swing.table.TableModel"
editor="org.netbeans.modules.form.editors2.TableModelEditor">
              <Table columnCount="0" rowCount="0"/>
            </Property>
            <Property name="autoResizeMode" type="int" value="4"/>
            <Property name="cellSelectionEnabled" type="boolean" value="true"/>
            <Property name="cursor" type="java.awt.Cursor"
editor="org.netbeans.modules.form.editors2.CursorEditor">
              <Color id="Cursor Por defecto"/>
            </Property>
            <Property name="gridColor" type="java.awt.Color"
editor="org.netbeans.beaninfo.editors.ColorEditor">
              <Color blue="99" green="99" red="99" type="rgb"/>
            </Property>
            <Property name="selectionModel" type="javax.swing.ListSelectionModel"
editor="org.netbeans.modules.form.editors2.JTableSelectionModelEditor">
              <JTableSelectionModel selectionMode="0"/>
            </Property>
            <Property name="tableHeader" type="javax.swing.table.JTableHeader"
editor="org.netbeans.modules.form.editors2.JTableHeaderEditor">
              <TableHeader reorderingAllowed="true" resizingAllowed="true"/>
            </Property>
          </Properties>
          <Events>
            <EventHandler event="mouseClicked" listener="java.awt.event.MouseListener"
parameters="java.awt.event.MouseEvent" handler="hojaMouseClicked"/>
            <EventHandler event="keyPressed" listener="java.awt.event.KeyListener"
parameters="java.awt.event.KeyEvent" handler="hojaKeyPressed"/>
          </Events>
          <AuxValues>
```

```
        <AuxValue name="JavaCodeGenerator_SerializeTo" type="java.lang.String"
value="KaliExcel_jTable1"/>
      </AuxValues>
    </Component>
  </SubComponents>
 </Container>
</SubComponents>
</Form>
```

- **KaliPanel.java**

```
package Modelo;

import javax.swing.table.TableModel;
public class KaliPanel extends javax.swing.JPanel {
    int row = 0, col = 0;
    /**
     * Creates new form KaliPanel
     */
    public KaliPanel() {
        initComponents();

        hoja.setModel(new javax.swing.table.DefaultTableModel(
                new Object[][]{
                    {"", "       1", "       2", "       3", "       4", null, null},
                    {"1", "", null, null, null, null, null},
                    {"2", null, null, null, null, null, null},
                    {"3", null, null, null, null, null, null},
                    {"4", null, null, null, null, null, null},
                    {"5", null, null, null, null, null, null},
                    {"6", null, null, null, null, null, null},
                    {"7", null, null, null, null, null, null},
                    {"8", null, null, null, null, null, null},
                    {"9", null, null, null, null, null, null},
                    {"10", null, null, null, null, null, null},
                    {"11", null, null, null, null, null, null},
                    {"12", null, null, null, null, null, null},
                    {"13", 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, null},
                    {null, null, null, null, null, null, null}
                },
                new String[]{
                    "A", "B", "C", "D", "E", "F", "G", "H", "I", "J", "K"
            }
        ));

        TableModel tableModel = hoja.getModel();
        for (int i = 0; i < tableModel.getRowCount(); i++) {
            for (int j = 0; j < tableModel.getColumnCount(); j++) {
                System.out.print("\t" + tableModel.getValueAt(i, j));
            }
            System.out.println("");
```

```
        }
    }

    public javax.swing.JPanel createPane(){
        return this;
    }

    /**
     * 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">//GEN-
BEGIN:initComponents
    private void initComponents() {

        funcion = new javax.swing.JLabel();
        input = new javax.swing.JTextField();
        aceptar = new javax.swing.JButton();
        rechazar = new javax.swing.JButton();
        jScrollPane = new javax.swing.JScrollPane();
        hoja = new javax.swing.JTable();

        funcion.setFont(new java.awt.Font("Tahoma", 2, 11)); // NOI18N
        funcion.setText("f(x)");

        aceptar.setText("Aceptar");
        aceptar.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                aceptarActionPerformed(evt);
            }
        });

        rechazar.setText("Rechazar");
        rechazar.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                rechazarActionPerformed(evt);
            }
        });

        hoja.setBorder(javax.swing.BorderFactory.createTitledBorder(""));
        hoja.setModel(new javax.swing.table.DefaultTableModel(
            new Object [][] {

            },
            new String [] {

            }
        ));
        hoja.setAutoResizeMode(javax.swing.JTable.AUTO_RESIZE_ALL_COLUMNS);
        hoja.setCellSelectionEnabled(true);
        hoja.setCursor(new java.awt.Cursor(java.awt.Cursor.DEFAULT_CURSOR));
        hoja.setGridColor(new java.awt.Color(153, 153, 153));
        hoja.setSelectionMode(javax.swing.ListSelectionModel.SINGLE_SELECTION);
```

```
        hoja.addMouseListener(new java.awt.event.MouseAdapter() {
            public void mouseClicked(java.awt.event.MouseEvent evt) {
                hojaMouseClicked(evt);
            }
        });
        hoja.addKeyListener(new java.awt.event.KeyAdapter() {
            public void keyPressed(java.awt.event.KeyEvent evt) {
                hojaKeyPressed(evt);
            }
        });
        jScrollPane.setViewportView(hoja);

        javax.swing.GroupLayout layout = new javax.swing.GroupLayout(this);
        this.setLayout(layout);
        layout.setHorizontalGroup(
            layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(layout.createSequentialGroup()
                .addContainerGap()

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                    .addComponent(jScrollPane)
                    .addGroup(layout.createSequentialGroup()
                        .addComponent(funcion, javax.swing.GroupLayout.PREFERRED_SIZE, 26,
javax.swing.GroupLayout.PREFERRED_SIZE)

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                        .addComponent(input, javax.swing.GroupLayout.PREFERRED_SIZE, 525,
javax.swing.GroupLayout.PREFERRED_SIZE)

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
                        .addComponent(aceptar)
                        .addGap(18, 18, 18)
                        .addComponent(rechazar)
                        .addGap(0, 0, Short.MAX_VALUE)))
                .addContainerGap())
        );
        layout.setVerticalGroup(
            layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(layout.createSequentialGroup()
                .addContainerGap()

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                    .addComponent(funcion)
                    .addComponent(input, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addComponent(aceptar)
                    .addComponent(rechazar))
                .addGap(18, 18, 18)
                .addComponent(jScrollPane, javax.swing.GroupLayout.DEFAULT_SIZE, 296,
Short.MAX_VALUE)
                .addContainerGap())
        );
    }// </editor-fold>//GEN-END:initComponents
```

```
    private void aceptarActionPerformed(java.awt.event.ActionEvent evt) {//GEN-
FIRST:event_aceptarActionPerformed
        // TODO add your handling code here:
        hoja.getModel().setValueAt(input.getText(), row, col);
    }//GEN-LAST:event_aceptarActionPerformed

    private void rechazarActionPerformed(java.awt.event.ActionEvent evt) {//GEN-
FIRST:event_rechazarActionPerformed
        // TODO add your handling code here:
        input.setText("");
        hoja.getModel().setValueAt(null, row, col);
        // Eliminar modelo y for, es solo para debug
        TableModel tableModel = hoja.getModel();
        for (int i = 0; i < tableModel.getRowCount(); i++) {
            for (int j = 0; j < tableModel.getColumnCount(); j++) {
                System.out.print("\t" + tableModel.getValueAt(i, j));
            }
            System.out.println("");
        }
    }//GEN-LAST:event_rechazarActionPerformed

    private void hojaMouseClicked(java.awt.event.MouseEvent evt) {//GEN-
FIRST:event_hojaMouseClicked
        // TODO add your handling code here:
        row = hoja.rowAtPoint(evt.getPoint());
        col = hoja.columnAtPoint(evt.getPoint());

        System.out.println("\nRow: " + row + ". Col: " + col + ".");
        String texto;
        if (hoja.getModel().getValueAt(row, col) != null) {
            texto = hoja.getModel().getValueAt(row, col).toString();
        } else {
            texto = "";
        }
        input.setText(texto);
    }//GEN-LAST:event_hojaMouseClicked

    private void hojaKeyPressed(java.awt.event.KeyEvent evt) {//GEN-
FIRST:event_hojaKeyPressed
        // TODO add your handling code here:
        char key = evt.getKeyChar();
        System.out.println("key pressed: " + key);

        String texto = input.getText();
        if (hoja.getModel().getValueAt(row, col) != null) {
            texto = texto.concat(String.valueOf(key));
        } else {
            texto = "";
        }
        input.setText(texto);
    }//GEN-LAST:event_hojaKeyPressed


    // Variables declaration - do not modify//GEN-BEGIN:variables
    private javax.swing.JButton aceptar;
```

```
    private javax.swing.JLabel funcion;
    private javax.swing.JTable hoja;
    private javax.swing.JTextField input;
    private javax.swing.JScrollPane jScrollPane;
    private javax.swing.JButton rechazar;
    // End of variables declaration//GEN-END:variables
}
```

- **Nodo.Java**

```
package Modelo;

/**
 *
 * @author Alcan
*/
public class Nodo {

    public Nodo abajo, arriba, izquierda, derecha;
    public Object dato;
    public int fila;
    public int columna;

    public Nodo(Object dato, int fila, int columna) {
        this.dato = dato;
        this.fila = fila;
        this.columna = columna;
    }
}
```

Vista

- **KaliExcel.form**

```
<?xml version="1.0" encoding="UTF-8" ?>

<Form version="1.6" maxVersion="1.9"
type="org.netbeans.modules.form.forminfo.JFrameFormInfo">
  <NonVisualComponents>
    <Menu class="javax.swing.JMenuBar" name="menu">
      <SubComponents>
        <Menu class="javax.swing.JMenu" name="menuArchivo">
          <Properties>
            <Property name="text" type="java.lang.String" value="Archivo"/>
          </Properties>
          <SubComponents>
            <MenuItem class="javax.swing.JMenuItem" name="abrir">
              <Properties>
                <Property name="text" type="java.lang.String" value="Abrir"/>
              </Properties>
              <Events>
                <EventHandler event="actionPerformed" listener="java.awt.event.ActionListener"
parameters="java.awt.event.ActionEvent" handler="abrirActionPerformed"/>
              </Events>
            </MenuItem>
```

```
          <MenuItem class="javax.swing.JMenuItem" name="guardar">
            <Properties>
              <Property name="text" type="java.lang.String" value="Guardar"/>
            </Properties>
            <Events>
              <EventHandler event="actionPerformed" listener="java.awt.event.ActionListener"
parameters="java.awt.event.ActionEvent" handler="guardarActionPerformed"/>
            </Events>
          </MenuItem>
        </SubComponents>
      </Menu>
      <Menu class="javax.swing.JMenu" name="menuInsertar">
        <Properties>
          <Property name="text" type="java.lang.String" value="Insertar"/>
        </Properties>
        <SubComponents>
          <MenuItem class="javax.swing.JMenuItem" name="hojaCalculo">
            <Properties>
              <Property name="text" type="java.lang.String" value="Hoja de calculo"/>
            </Properties>
            <Events>
              <EventHandler event="actionPerformed" listener="java.awt.event.ActionListener"
parameters="java.awt.event.ActionEvent" handler="hojaCalculoActionPerformed"/>
            </Events>
          </MenuItem>
        </SubComponents>
      </Menu>
      <Menu class="javax.swing.JMenu" name="menuAyuda">
        <Properties>
          <Property name="text" type="java.lang.String" value="Ayuda"/>
        </Properties>
        <SubComponents>
          <MenuItem class="javax.swing.JMenuItem" name="jMenuItem1">
            <Properties>
              <Property name="text" type="java.lang.String" value="Informacion"/>
            </Properties>
            <Events>
              <EventHandler event="actionPerformed" listener="java.awt.event.ActionListener"
parameters="java.awt.event.ActionEvent" handler="jMenuItem1ActionPerformed"/>
            </Events>
          </MenuItem>
        </SubComponents>
      </Menu>
    </SubComponents>
  </Menu>
 </NonVisualComponents>
 <Properties>
  <Property name="defaultCloseOperation" type="int" value="3"/>
  <Property name="minimumSize" type="java.awt.Dimension"
editor="org.netbeans.beaninfo.editors.DimensionEditor">
```

```
    <Dimension value="[400, 400]"/>
   </Property>
  </Properties>
  <SyntheticProperties>
   <SyntheticProperty name="menuBar" type="java.lang.String" value="menu"/>
   <SyntheticProperty name="formSizePolicy" type="int" value="1"/>
   <SyntheticProperty name="generateCenter" type="boolean" value="false"/>
  </SyntheticProperties>
  <AuxValues>
   <AuxValue name="FormSettings_autoResourcing" type="java.lang.Integer" value="0"/>
   <AuxValue name="FormSettings_autoSetComponentName" type="java.lang.Boolean"
value="false"/>
   <AuxValue name="FormSettings_generateFQN" type="java.lang.Boolean" value="true"/>
   <AuxValue name="FormSettings_generateMnemonicsCode" type="java.lang.Boolean"
value="false"/>
   <AuxValue name="FormSettings_i18nAutoMode" type="java.lang.Boolean"
value="false"/>
   <AuxValue name="FormSettings_layoutCodeTarget" type="java.lang.Integer"
value="1"/>
   <AuxValue name="FormSettings_listenerGenerationStyle" type="java.lang.Integer"
value="0"/>
   <AuxValue name="FormSettings_variablesLocal" type="java.lang.Boolean"
value="false"/>
   <AuxValue name="FormSettings_variablesModifier" type="java.lang.Integer"
value="2"/>
  </AuxValues>

  <Layout>
   <DimensionLayout dim="0">
    <Group type="103" groupAlignment="0" attributes="0">
       <Component id="tabPanel" alignment="1" max="32767" attributes="0"/>
    </Group>
   </DimensionLayout>
   <DimensionLayout dim="1">
    <Group type="103" groupAlignment="0" attributes="0">
       <Group type="102" alignment="0" attributes="0">
          <Component id="tabPanel" min="-2" pref="477" max="-2" attributes="0"/>
          <EmptySpace min="0" pref="0" max="32767" attributes="0"/>
       </Group>
    </Group>
   </DimensionLayout>
  </Layout>
  <SubComponents>
   <Container class="javax.swing.JTabbedPane" name="tabPanel">
    <Properties>
     <Property name="tabPlacement" type="int" value="3"/>
    </Properties>

    <Layout
class="org.netbeans.modules.form.compat2.layouts.support.JTabbedPaneSupportLayout"/>
```

```
    <SubComponents>
      <Container class="javax.swing.JPanel" name="ventana">
        <Constraints>
          <Constraint
layoutClass="org.netbeans.modules.form.compat2.layouts.support.JTabbedPaneSupportLayo
ut"
value="org.netbeans.modules.form.compat2.layouts.support.JTabbedPaneSupportLayout$JT
abbedPaneConstraintsDescription">
            <JTabbedPaneConstraints tabName="Hoja 1">
              <Property name="tabTitle" type="java.lang.String" value="Hoja 1"/>
            </JTabbedPaneConstraints>
          </Constraint>
        </Constraints>

        <Layout>
          <DimensionLayout dim="0">
            <Group type="103" groupAlignment="0" attributes="0">
              <Group type="102" alignment="0" attributes="0">
                <EmptySpace max="-2" attributes="0"/>
                <Group type="103" groupAlignment="0" attributes="0">
                  <Component id="jScrollPane" max="32767" attributes="0"/>
                  <Group type="102" attributes="0">
                    <Component id="funcion" min="-2" pref="26" max="-2" attributes="0"/>
                    <EmptySpace max="-2" attributes="0"/>
                    <Component id="input" min="-2" pref="525" max="-2" attributes="0"/>
                    <EmptySpace type="unrelated" max="-2" attributes="0"/>
                    <Component id="aceptar" min="-2" max="-2" attributes="0"/>
                    <EmptySpace type="separate" max="-2" attributes="0"/>
                    <Component id="rechazar" min="-2" max="-2" attributes="0"/>
                    <EmptySpace min="0" pref="4" max="32767" attributes="0"/>
                  </Group>
                </Group>
                <EmptySpace max="-2" attributes="0"/>
              </Group>
            </Group>
          </DimensionLayout>
          <DimensionLayout dim="1">
            <Group type="103" groupAlignment="0" attributes="0">
              <Group type="102" alignment="0" attributes="0">
                <EmptySpace max="-2" attributes="0"/>
                <Group type="103" groupAlignment="3" attributes="0">
                  <Component id="funcion" alignment="3" min="-2" max="-2"
attributes="0"/>
                  <Component id="input" alignment="3" min="-2" max="-2" attributes="0"/>
                  <Component id="aceptar" alignment="3" min="-2" max="-2"
attributes="0"/>
                  <Component id="rechazar" alignment="3" min="-2" max="-2"
attributes="0"/>
                </Group>
                <EmptySpace type="separate" max="-2" attributes="0"/>
```

```
                    <Component id="jScrollPane" pref="394" max="32767" attributes="0"/>
                    <EmptySpace max="-2" attributes="0"/>
                </Group>
            </Group>
        </DimensionLayout>
    </Layout>
    <SubComponents>
        <Component class="javax.swing.JLabel" name="funcion">
            <Properties>
                <Property name="font" type="java.awt.Font"
editor="org.netbeans.beaninfo.editors.FontEditor">
                    <Font name="Tahoma" size="11" style="2"/>
                </Property>
                <Property name="text" type="java.lang.String" value="f(x)"/>
            </Properties>
        </Component>
        <Component class="javax.swing.JTextField" name="input">
        </Component>
        <Component class="javax.swing.JButton" name="aceptar">
            <Properties>
                <Property name="text" type="java.lang.String" value="Aceptar"/>
            </Properties>
            <Events>
                <EventHandler event="actionPerformed" listener="java.awt.event.ActionListener"
parameters="java.awt.event.ActionEvent" handler="aceptarActionPerformed"/>
            </Events>
        </Component>
        <Component class="javax.swing.JButton" name="rechazar">
            <Properties>
                <Property name="text" type="java.lang.String" value="Rechazar"/>
            </Properties>
            <Events>
                <EventHandler event="actionPerformed" listener="java.awt.event.ActionListener"
parameters="java.awt.event.ActionEvent" handler="rechazarActionPerformed"/>
            </Events>
        </Component>
        <Container class="javax.swing.JScrollPane" name="jScrollPane">
            <Properties>
                <Property name="horizontalScrollBarPolicy" type="int" value="32"/>
                <Property name="verticalScrollBarPolicy" type="int" value="22"/>
            </Properties>
            <AuxValues>
                <AuxValue name="autoScrollPane" type="java.lang.Boolean" value="true"/>
            </AuxValues>

            <Layout
class="org.netbeans.modules.form.compat2.layouts.support.JScrollPaneSupportLayout"/>
            <SubComponents>
                <Component class="javax.swing.JTable" name="hoja">
                    <Properties>
```

```
          <Property name="border" type="javax.swing.border.Border"
editor="org.netbeans.modules.form.editors2.BorderEditor">
            <Border info="org.netbeans.modules.form.compat2.border.TitledBorderInfo">
              <TitledBorder/>
            </Border>
          </Property>
          <Property name="model" type="javax.swing.table.TableModel"
editor="org.netbeans.modules.form.editors2.TableModelEditor">
            <Table columnCount="0" rowCount="0"/>
          </Property>
          <Property name="autoResizeMode" type="int" value="4"/>
          <Property name="cellSelectionEnabled" type="boolean" value="true"/>
          <Property name="columnModel" type="javax.swing.table.TableColumnModel"
editor="org.netbeans.modules.form.editors2.TableColumnModelEditor">
            <TableColumnModel selectionModel="2">
              <Column maxWidth="-1" minWidth="-1" prefWidth="-1" resizable="true">
                <Title/>
                <Editor/>
                <Renderer/>
              </Column>
              <Column maxWidth="-1" minWidth="-1" prefWidth="-1" resizable="true">
                <Title/>
                <Editor/>
                <Renderer/>
              </Column>
              <Column maxWidth="-1" minWidth="-1" prefWidth="-1" resizable="true">
                <Title/>
                <Editor/>
                <Renderer/>
              </Column>
              <Column maxWidth="-1" minWidth="-1" prefWidth="-1" resizable="true">
                <Title/>
                <Editor/>
                <Renderer/>
              </Column>
              <Column maxWidth="-1" minWidth="-1" prefWidth="-1" resizable="true">
                <Title/>
                <Editor/>
                <Renderer/>
              </Column>
            </TableColumnModel>
          </Property>
          <Property name="cursor" type="java.awt.Cursor"
editor="org.netbeans.modules.form.editors2.CursorEditor">
            <Color id="Cursor Por defecto"/>
          </Property>
          <Property name="gridColor" type="java.awt.Color"
editor="org.netbeans.beaninfo.editors.ColorEditor">
            <Color blue="99" green="99" red="99" type="rgb"/>
          </Property>
```

```
                <Property name="selectionModel" type="javax.swing.ListSelectionModel"
editor="org.netbeans.modules.form.editors2.JTableSelectionModelEditor">
                  <JTableSelectionModel selectionMode="0"/>
                </Property>
                <Property name="tableHeader" type="javax.swing.table.JTableHeader"
editor="org.netbeans.modules.form.editors2.JTableHeaderEditor">
                  <TableHeader reorderingAllowed="true" resizingAllowed="true"/>
                </Property>
              </Properties>
              <AccessibilityProperties>
                <Property name="AccessibleContext.accessibleParent"
type="javax.accessibility.Accessible"
editor="org.netbeans.modules.form.ComponentChooserEditor">
                  <ComponentRef name="input"/>
                </Property>
              </AccessibilityProperties>
              <Events>
                <EventHandler event="mouseClicked" listener="java.awt.event.MouseListener"
parameters="java.awt.event.MouseEvent" handler="hojaMouseClicked"/>
                <EventHandler event="keyPressed" listener="java.awt.event.KeyListener"
parameters="java.awt.event.KeyEvent" handler="hojaKeyPressed"/>
              </Events>
              <AuxValues>
                <AuxValue name="JavaCodeGenerator_SerializeTo" type="java.lang.String"
value="KaliExcel_jTable1"/>
              </AuxValues>
            </Component>
          </SubComponents>
        </Container>
      </SubComponents>
    </Container>
  </SubComponents>
</Form>
```

- **KaliExcel.java**

```
package Vista;

import java.io.File;
import java.io.IOException;
import java.io.PrintWriter;
import javax.swing.JFileChooser;
import javax.swing.JOptionPane;
import javax.swing.JPanel;
import javax.swing.JScrollPane;
import javax.swing.JTabbedPane;
import javax.swing.JTable;
import javax.swing.UIManager;
import javax.swing.UnsupportedLookAndFeelException;
import javax.swing.plaf.metal.MetalLookAndFeel;
```

```
import javax.swing.table.TableModel;


/*
 * To change this license header, choose License Headers in Project Properties.
 * To change this template file, choose Tools | Templates
 * and open the template in the editor.
 */
public class KaliExcel extends javax.swing.JFrame {

    int row = 0, col = 0, numeroHoja = 2;
    JTabbedPane pestañas;

    /**
     * Creates new form KaliExcel
     */
    public KaliExcel() {

        initComponents();
        setLocationRelativeTo(null);

        setTitle("KaliExcel");

        hoja.setModel(new javax.swing.table.DefaultTableModel(
                new Object[][]{
                    {"", "        1", "        2", "         3", "          4", null, null},
                    {"1", "", null, null, null, null, null},
                    {"2", null, null, null, null, null, null},
                    {"3", null, null, null, null, null, null},
                    {"4", null, null, null, null, null, null},
                    {"5", null, null, null, null, null, null},
                    {"6", null, null, null, null, null, null},
                    {"7", null, null, null, null, null, null},
                    {"8", null, null, null, null, null, null},
                    {"9", null, null, null, null, null, null},
                    {"10", null, null, null, null, null, null},
                    {"11", null, null, null, null, null, null},
                    {"12", null, null, null, null, null, null},
                    {"13", 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, null},
                    {null, null, null, null, null, null, null}
                },
                new String[]{
                    "A", "B", "C", "D", "E", "F", "G", "H", "I", "J", "K"
                }
        ));
```

```
        setTitle("Kali Excel");

        TableModel tableModel = hoja.getModel();
        for (int i = 0; i < tableModel.getRowCount(); i++) {
            for (int j = 0; j < tableModel.getColumnCount(); j++) {
                System.out.print("\t" + tableModel.getValueAt(i, j));
            }
            System.out.println("");
        }
    }

    /**
     * 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.
     */

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

        tabPanel = new javax.swing.JTabbedPane();
        ventana = new javax.swing.JPanel();
        funcion = new javax.swing.JLabel();
        input = new javax.swing.JTextField();
        aceptar = new javax.swing.JButton();
        rechazar = new javax.swing.JButton();
        jScrollPane = new javax.swing.JScrollPane();
        hoja = new javax.swing.JTable();
        menu = new javax.swing.JMenuBar();
        menuArchivo = new javax.swing.JMenu();
        abrir = new javax.swing.JMenuItem();
        guardar = new javax.swing.JMenuItem();
        menuInsertar = new javax.swing.JMenu();
        hojaCalculo = new javax.swing.JMenuItem();
        menuAyuda = new javax.swing.JMenu();
        jMenuItem1 = new javax.swing.JMenuItem();

        setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);
        setMinimumSize(new java.awt.Dimension(400, 400));

        tabPanel.setTabPlacement(javax.swing.JTabbedPane.BOTTOM);

        funcion.setFont(new java.awt.Font("Tahoma", 2, 11)); // NOI18N
        funcion.setText("f(x)");

        aceptar.setText("Aceptar");
        aceptar.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
```

```
            aceptarActionPerformed(evt);
        }
    });

    rechazar.setText("Rechazar");
    rechazar.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
            rechazarActionPerformed(evt);
        }
    });


jScrollPane.setHorizontalScrollBarPolicy(javax.swing.ScrollPaneConstants.HORIZONTAL_
SCROLLBAR_ALWAYS);

jScrollPane.setVerticalScrollBarPolicy(javax.swing.ScrollPaneConstants.VERTICAL_SCRO
LLBAR_ALWAYS);

    hoja.setBorder(javax.swing.BorderFactory.createTitledBorder(""));
    hoja.setModel(new javax.swing.table.DefaultTableModel(
        new Object [][] {

        },
        new String [] {

        }
    ));
    hoja.setAutoResizeMode(javax.swing.JTable.AUTO_RESIZE_ALL_COLUMNS);
    hoja.setCellSelectionEnabled(true);
    hoja.setCursor(new java.awt.Cursor(java.awt.Cursor.DEFAULT_CURSOR));
    hoja.setGridColor(new java.awt.Color(153, 153, 153));
    hoja.setSelectionMode(javax.swing.ListSelectionModel.SINGLE_SELECTION);
    hoja.addMouseListener(new java.awt.event.MouseAdapter() {
        public void mouseClicked(java.awt.event.MouseEvent evt) {
            hojaMouseClicked(evt);
        }
    });
    hoja.addKeyListener(new java.awt.event.KeyAdapter() {
        public void keyPressed(java.awt.event.KeyEvent evt) {
            hojaKeyPressed(evt);
        }
    });
    jScrollPane.setViewportView(hoja);

hoja.getColumnModel().getSelectionModel().setSelectionMode(javax.swing.ListSelectionM
odel.SINGLE_INTERVAL_SELECTION);
    hoja.getAccessibleContext().setAccessibleParent(input);

    javax.swing.GroupLayout ventanaLayout = new javax.swing.GroupLayout(ventana);
    ventana.setLayout(ventanaLayout);
```

```
        ventanaLayout.setHorizontalGroup(
            ventanaLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(ventanaLayout.createSequentialGroup()
                .addContainerGap()

.addGroup(ventanaLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADI
NG)
                    .addComponent(jScrollPane)
                    .addGroup(ventanaLayout.createSequentialGroup()
                        .addComponent(funcion, javax.swing.GroupLayout.PREFERRED_SIZE, 26,
javax.swing.GroupLayout.PREFERRED_SIZE)
                        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                        .addComponent(input, javax.swing.GroupLayout.PREFERRED_SIZE, 525,
javax.swing.GroupLayout.PREFERRED_SIZE)

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
                        .addComponent(aceptar)
                        .addGap(18, 18, 18)
                        .addComponent(rechazar)
                        .addGap(0, 4, Short.MAX_VALUE)))
                .addContainerGap())
        );
        ventanaLayout.setVerticalGroup(
            ventanaLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(ventanaLayout.createSequentialGroup()
                .addContainerGap()

.addGroup(ventanaLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASEL
INE)
                    .addComponent(funcion)
                    .addComponent(input, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addComponent(aceptar)
                    .addComponent(rechazar))
                .addGap(18, 18, 18)
                .addComponent(jScrollPane, javax.swing.GroupLayout.DEFAULT_SIZE, 394,
Short.MAX_VALUE)
                .addContainerGap())
        );

        tabPanel.addTab("Hoja 1", ventana);

        menuArchivo.setText("Archivo");

        abrir.setText("Abrir");
        abrir.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                abrirActionPerformed(evt);
            }
```

```
        });
        menuArchivo.add(abrir);

        guardar.setText("Guardar");
        guardar.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                guardarActionPerformed(evt);
            }
        });
        menuArchivo.add(guardar);

        menu.add(menuArchivo);

        menuInsertar.setText("Insertar");

        hojaCalculo.setText("Hoja de calculo");
        hojaCalculo.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                hojaCalculoActionPerformed(evt);
            }
        });
        menuInsertar.add(hojaCalculo);

        menu.add(menuInsertar);

        menuAyuda.setText("Ayuda");

        jMenuItem1.setText("Informacion");
        jMenuItem1.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                jMenuItem1ActionPerformed(evt);
            }
        });
        menuAyuda.add(jMenuItem1);

        menu.add(menuAyuda);

        setJMenuBar(menu);

        javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
        getContentPane().setLayout(layout);
        layout.setHorizontalGroup(
            layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addComponent(tabPanel, javax.swing.GroupLayout.Alignment.TRAILING)
        );
        layout.setVerticalGroup(
            layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(layout.createSequentialGroup()
                .addComponent(tabPanel, javax.swing.GroupLayout.PREFERRED_SIZE, 477,
javax.swing.GroupLayout.PREFERRED_SIZE)
```

```
                .addGap(0, 0, Short.MAX_VALUE))
        );

        pack();
    }// </editor-fold>//GEN-END:initComponents

    private void hojaCalculoActionPerformed(java.awt.event.ActionEvent evt) {//GEN-
FIRST:event_hojaCalculoActionPerformed
        JPanel panel = new Modelo.KaliPanel();
        tabPanel.add("Hoja " + numeroHoja, panel);
        numeroHoja++;
    }//GEN-LAST:event_hojaCalculoActionPerformed

    private void hojaKeyPressed(java.awt.event.KeyEvent evt) {//GEN-
FIRST:event_hojaKeyPressed
        // TODO add your handling code here:
        char key = evt.getKeyChar();
        System.out.println("key pressed: " + key);

        String texto = input.getText();
        if (hoja.getModel().getValueAt(row, col) != null) {
            texto = texto.concat(String.valueOf(key));
        } else {
            texto = "";
        }
        input.setText(texto);
    }//GEN-LAST:event_hojaKeyPressed

    private void hojaMouseClicked(java.awt.event.MouseEvent evt) {//GEN-
FIRST:event_hojaMouseClicked
        // TODO add your handling code here:
        row = hoja.rowAtPoint(evt.getPoint());
        col = hoja.columnAtPoint(evt.getPoint());

        System.out.println("\nRow: " + row + ". Col: " + col + ".");
        String texto;
        if (hoja.getModel().getValueAt(row, col) != null) {
            texto = hoja.getModel().getValueAt(row, col).toString();
        } else {
            texto = "";
        }
        input.setText(texto);
    }//GEN-LAST:event_hojaMouseClicked

    private void rechazarActionPerformed(java.awt.event.ActionEvent evt) {//GEN-
FIRST:event_rechazarActionPerformed
        // TODO add your handling code here:
        input.setText("");
        hoja.getModel().setValueAt(null, row, col);
        // Eliminar modelo y for, es solo para debug
```

```
        TableModel tableModel = hoja.getModel();
        for (int i = 0; i < tableModel.getRowCount(); i++) {
            for (int j = 0; j < tableModel.getColumnCount(); j++) {
                System.out.print("\t" + tableModel.getValueAt(i, j));
            }
            System.out.println("");
        }
    }//GEN-LAST:event_rechazarActionPerformed

    private void aceptarActionPerformed(java.awt.event.ActionEvent evt) {//GEN-
FIRST:event_aceptarActionPerformed
        // TODO add your handling code here:
        hoja.getModel().setValueAt(input.getText(), row, col);
    }//GEN-LAST:event_aceptarActionPerformed

    private void abrirActionPerformed(java.awt.event.ActionEvent evt) {//GEN-
FIRST:event_abrirActionPerformed
        // TODO add your handling code here:
    }//GEN-LAST:event_abrirActionPerformed

    private void guardarActionPerformed(java.awt.event.ActionEvent evt) {//GEN-
FIRST:event_guardarActionPerformed
        // TODO add your handling code here:
        JFileChooser fileChooser = new JFileChooser();
        int returnVal = fileChooser.showSaveDialog(this);
        if (returnVal == JFileChooser.APPROVE_OPTION) {
            try {
                File file = fileChooser.getSelectedFile();
                System.out.println(file.getAbsolutePath());
                PrintWriter os = new PrintWriter(file);
                os.println("");
                for (int col = 0; col < hoja.getColumnCount(); col++) {
                    os.print(hoja.getColumnName(col) + "\t");
                }

                os.println("");
                os.println("");

                for (int iRow = 0; iRow < hoja.getRowCount(); iRow++) {
                    for (int iColumn = 0; iColumn < hoja.getColumnCount(); iColumn++) {
                        String texto = "";
                        if (hoja.getValueAt(iRow, iColumn) != null) {
                            texto = hoja.getValueAt(iRow, iColumn).toString();
                        } else {
                            texto = "null";
                        }
                        os.print(texto + "\t");

                    }
                    os.println("");
```

```
            }
            os.close();
            System.out.println("Done!");
        } catch (IOException e) {
            // TODO Auto-generated catch block
            e.printStackTrace();
        }
    }
}//GEN-LAST:event_guardarActionPerformed

    private void jMenuItem1ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-
FIRST:event_jMenuItem1ActionPerformed
        // TODO add your handling code here:

        JOptionPane.showMessageDialog(null, "Integrantes\n"
                + "Vanii Alcantara\n"
                + "Kevin Cruz\n"
                + "Marco Lares\n"
                + "Gerson Escobar (el patrón del mal)");
    }//GEN-LAST:event_jMenuItem1ActionPerformed

    /**
     * @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(KaliExcel.class.getName()).log(java.util.logging.Level.S
EVERE, null, ex);
        } catch (InstantiationException ex) {

java.util.logging.Logger.getLogger(KaliExcel.class.getName()).log(java.util.logging.Level.S
EVERE, null, ex);
        } catch (IllegalAccessException ex) {
```

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

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

        /* Create and display the form */
        java.awt.EventQueue.invokeLater(new Runnable() {
            public void run() {
                try {
                    UIManager.setLookAndFeel(new MetalLookAndFeel());
                } catch (UnsupportedLookAndFeelException ex) {
                    System.err.println("Error de Look and Feel");
                }
                new KaliExcel().setVisible(true);
            }
        });
    }

    // Variables declaration - do not modify//GEN-BEGIN:variables
    private javax.swing.JMenuItem abrir;
    private javax.swing.JButton aceptar;
    private javax.swing.JLabel funcion;
    private javax.swing.JMenuItem guardar;
    private javax.swing.JTable hoja;
    private javax.swing.JMenuItem hojaCalculo;
    private javax.swing.JTextField input;
    private javax.swing.JMenuItem jMenuItem1;
    private javax.swing.JScrollPane jScrollPane;
    private javax.swing.JMenuBar menu;
    private javax.swing.JMenu menuArchivo;
    private javax.swing.JMenu menuAyuda;
    private javax.swing.JMenu menuInsertar;
    private javax.swing.JButton rechazar;
    private javax.swing.JTabbedPane tabPanel;
    private javax.swing.JPanel ventana;
    // End of variables declaration//GEN-END:variables
}
```