

```

package trabajo.pkgfinal;
import java.awt.*;
import java.awt.event.ActionEvent;
import java.awt.event.ActionListener;
import javax.swing.*;
import java.io.*;
public class trabfinal {

    public static void main(String[] args) {
        Acciones thing=new Acciones();
        thing.setVisible(true);
    }
}

```

```

package trabajo.pkgfinal;
import java.util.ArrayList;
import java.util.Arrays;
import java.util.List;
import java.util.Vector;
public class datalist {
    public Vector list;
    public datalist(){
        list=new Vector();
    }
    public void addList(contact a){
        list.add(a);
    }
    public void remove(int index){
        list.remove(index);
    }
    public String[][] matrix(){
        String data[][]=new String[list.size()][3];
        for(int i=0;i<list.size();i++){
            contact e=(contact) list.elementAt(i);
            data[i][0]=e.getNom();
            data[i][1]=e.getLastName();
            data[i][2]=e.getID();
        }
        return data;
    }
    public String convert(){
        String text="";
        for(int i=0;i<list.size();i++){
            contact e=(contact) list.elementAt(i);
            text=text+"Nombre: "+e.getNom()+"\n"+"Apellidos: "+e.getLastName()+"\n"+"Cédula: "+e.getID()+"\n---\n";
        }
        return text;
    }
}

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    }

}

package trabajo.pkgfinal;

import java.io.BufferedWriter;
import java.io.File;
import java.io.FileWriter;
import javax.swing.JFileChooser;
import javax.swing.JOptionPane;

/**
 *
 * @author Camilo
 */
public class Acciones extends javax.swing.JFrame {

    datalist contacts;
    public Acciones() {
        contacts=new datalist();
        initComponents();
    }

    /**
     * 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.
     */
    //@Override
    // <editor-fold defaultstate="collapsed" desc="Generated Code">
    public void initComponents() {

        jFileChooser1 = new javax.swing.JFileChooser();
        add = new javax.swing.JButton();
        del = new javax.swing.JButton();
        edit = new javax.swing.JButton();
        view = new javax.swing.JButton();
        savebtn = new javax.swing.JButton();

        setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);

        add.setText("Añadir datos");
        add.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                addActionPerformed(evt);
            }
        });
    }
}

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del.setText("Eliminar datos");
del.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        delActionPerformed(evt);
    }
});

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edit.setText("Editar datos");
edit.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        editActionPerformed(evt);
    }
});

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view.setText("Ver Datos");
view.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        viewActionPerformed(evt);
    }
});

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savebtn.setText("Guardar Datos");
savebtn.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        savebtnActionPerformed(evt);
    }
});

```

```

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

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                .add(layout.createSequentialGroup()
                    .add(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                        .add(layout.createSequentialGroup()
                            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.CENTER)
                                .addComponent(del)
                                .addComponent(view)
                                .addComponent(edit)
                                .addComponent(add)
                                .addComponent(savebtn)
                                .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))
                            .add(layout.createSequentialGroup()
                                .addContainerGap()

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        .addContainerGap()
        .addComponent(add)
        .addGap(18, 18, 18)
        .addComponent(edit)
        .addGap(18, 18, 18)
        .addComponent(del)
        .addGap(18, 18, 18)
        .addComponent(view)
        .addGap(18, 18, 18)
        .addComponent(savebtn)
        .addContainerGap(23, Short.MAX_VALUE))
    );

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

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

    Add add=new Add(contacts);

    add.setVisible(true);
}

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

    Edit edit=new Edit(contacts);
    edit.setVisible(true);
}

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

    Delete del=new Delete(contacts);
    del.setVisible(true); // TODO add your handling code here:
}

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

    // TODO add your handling code here:
    View view=new View(contacts);
    view.setVisible(true);
}

public void savebtnActionPerformed(java.awt.event.ActionEvent evt) {

    JFileChooser fc=new JFileChooser();
    fc.setFileSelectionMode(JFileChooser.DIRECTORIES_ONLY);
    int resp=fc.showOpenDialog(this);
    if(resp==JFileChooser.APPROVE_OPTION){

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File dir=fc.getSelectedFile();
String dirnom=dir.getName();
try{
String content=contacts.convert();
System.out.println(content);
File file=new File(dir+"\\ "+"I_Love_POO.txt");
file.createNewFile();
FileWriter fw=new FileWriter(file, true);
BufferedWriter bw=new BufferedWriter(fw);
bw.write(content);
bw.close();
String msg="El archivo se ha guardado exitosamente en: "+dirnom;
JOptionPane.showMessageDialog(this, msg, "Mensaje",
JOptionPane.INFORMATION_MESSAGE, null);
} catch(Exception e){
e.printStackTrace();
}
}

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

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

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        } catch (IllegalAccessException ex) {

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

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

// Variables declaration - do not modify
private javax.swing.JButton add;
private javax.swing.JButton del;
private javax.swing.JButton edit;
private javax.swing.JFileChooser jFileChooser1;
private javax.swing.JButton savebtn;
private javax.swing.JButton view;
// End of variables declaration
}

/*
 * Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to change
this license
 * Click nbfs://nbhost/SystemFileSystem/Templates/GuiForms/JFrame.java to edit this
template
 */
package trabajo.pkgfinal;

/**
 *
 * @author Camilo
 */
public class View extends javax.swing.JFrame {
    datalist list;
    public View(datalist list) {
        this.list=list;
        initComponents();
    }

```

```

/**
 * 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() {

    pane = new javax.swing.JScrollPane();
    text = new javax.swing.JTextArea();
    check = new javax.swing.JButton();

    setDefaultCloseOperation(javax.swing.WindowConstants.DISPOSE_ON_CLOSE);

    text.setEditable(false);
    text.setColumns(20);
    text.setRows(5);
    pane.setViewportView(text);

    check.setText("Consultar datos actuales");
    check.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
            checkActionPerformed(evt);
        }
    });

    javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
    getContentPane().setLayout(layout);
    layout.setHorizontalGroup(
        layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

        .addGroup(layout.createSequentialGroup()
            .addContainerGap()
            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addGroup(layout.createSequentialGroup()
                    .addComponent(pane, javax.swing.GroupLayout.PREFERRED_SIZE, 315,
                        javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addComponent(check))
                .addGroup(layout.createSequentialGroup()
                    .addComponent(pane, javax.swing.GroupLayout.PREFERRED_SIZE, 340,
                        javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,
                        37, Short.MAX_VALUE)
                    .addComponent(check)
                    .addGap(33, 33, 33))
            )
        );

```

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

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

    text.setText(list.convert());
}

// Variables declaration - do not modify
private javax.swing.JButton check;
private javax.swing.JScrollPane pane;
private javax.swing.JTextArea text;
// End of variables declaration
}

/*
 * Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to change
this license
 * Click nbfs://nbhost/SystemFileSystem/Templates/GUIForms/JFrame.java to edit this
template
 */
package trabajo.pkgfinal;

import javax.swing.JOptionPane;

/**
 *
 * @author Camilo
 */
public class Delete extends javax.swing.JFrame {

    datalist list;
    public Delete(datalist list) {
        this.list=list;
        initComponents();
    }

    /**
     * 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() {

        lblname = new javax.swing.JLabel();
        lbllastname = new javax.swing.JLabel();

```



```
del = new javax.swing.JButton();
index = new javax.swing.JTextField();
data = new javax.swing.JTextField();
exit = new javax.swing.JButton();
showbtn = new javax.swing.JButton();
```

```
setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);
```

```
lblname.setText("Índice");
```

```
lbllastname.setText("Dato");
```

```
del.setText("¿Borrar realmente?");
del.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        delActionPerformed(evt);
    }
});
```

```
data.setEditable(false);
```

```
exit.setText("Cerrar");
exit.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        exitActionPerformed(evt);
    }
});
```

```
showbtn.setText("Mostrar Dato");
showbtn.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        showbtnActionPerformed(evt);
    }
});
```

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

```
.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(layout.createSequentialGroup()
        .addComponent(lblname)
```

```
.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
```

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        .addComponent(index, javax.swing.GroupLayout.PREFERRED_SIZE, 304,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addGroup(layout.createSequentialGroup())
        .addComponent(lbllastname)
        .addGap(18, 18, 18)

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

        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
            .addComponent(showbtn,
javax.swing.GroupLayout.PREFERRED_SIZE, 81,
javax.swing.GroupLayout.PREFERRED_SIZE)

        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
            .addComponent(exit))
            .addComponent(data, javax.swing.GroupLayout.PREFERRED_SIZE,
303, javax.swing.GroupLayout.PREFERRED_SIZE))))
        .addContainerGap(14, Short.MAX_VALUE))
    );
    layout.setVerticalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(layout.createSequentialGroup()
            .addContainerGap()

        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
            .addComponent(lblname)
            .addComponent(index, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))
            .addGap(18, 18, 18)

        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
            .addComponent(lbllastname)
            .addComponent(data, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))

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

        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
            .addComponent(del)
            .addComponent(exit)
            .addComponent(showbtn))
            .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))
    );

```

```

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

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

this.dispose();
}

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

try{
int cock=Integer.parseInt(index.getText())-1;
list.remove(cock);
JOptionPane.showMessageDialog(this,"El contacto ha sido
eliminado","Mensaje",JOptionPane.INFORMATION_MESSAGE,null);

} catch(NumberFormatException e){
JOptionPane.showMessageDialog(null,"Campo nulo o error en formato de numero",
"Error",JOptionPane.ERROR_MESSAGE);
}
}

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

String[][] matrix=list.matrix();
try{
int cock=Integer.parseInt(index.getText())-1;
String v1=matrix[cock][0];
String v2=matrix[cock][1];
String v3=matrix[cock][2];
data.setText(v1+"-"+v2+"-"+v3);

} catch(NumberFormatException e){
JOptionPane.showMessageDialog(null,"Campo nulo o error en formato de numero",
"Error",JOptionPane.ERROR_MESSAGE);
}
}

// Variables declaration - do not modify
private javax.swing.JTextField data;
private javax.swing.JButton del;
private javax.swing.JButton exit;
private javax.swing.JTextField index;
private javax.swing.JLabel lbllastname;
private javax.swing.JLabel lblname;
private javax.swing.JButton showbtn;

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        // End of variables declaration
    }
    /*
     * Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to change
     this license
     * Click nbfs://nbhost/SystemFileSystem/Templates/GUIForms/JFrame.java to edit this
     template
     */
package trabajo.pkgfinal;

import javax.swing.JOptionPane;

/**
 *
 * @author Camilo
 */
public class Edit extends javax.swing.JFrame {

    datalist list;
    public Edit(datalist list) {
        this.list=list;
        initComponents();
    }

    /**
     * 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() {

        lblname = new javax.swing.JLabel();
        lbllastname = new javax.swing.JLabel();
        lblid = new javax.swing.JLabel();
        lblindex = new javax.swing.JLabel();
        add = new javax.swing.JButton();
        exit = new javax.swing.JButton();
        check = new javax.swing.JButton();
        name = new javax.swing.JTextField();
        lastname = new javax.swing.JTextField();
        id = new javax.swing.JTextField();
        index = new javax.swing.JTextField();

        setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);

        lblname.setText("Nombre");

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lbllastname.setText("Apellido");

lblid.setText("Cédula");

lblindex.setText("Índice");

add.setText("Modificar");
add.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        addActionPerformed(evt);
    }
});

exit.setText("Cerrar");
exit.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        exitActionPerformed(evt);
    }
});

check.setText("Consultar");
check.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        checkActionPerformed(evt);
    }
});

javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
getContentPane().setLayout(layout);
layout.setHorizontalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(layout.createSequentialGroup()
            .addComponent(lbllastname)
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
            .addComponent(lblid)
            .addGap(18, 18, 18)
            .addComponent(lblindex)
            .addContainerGap(107, Short.MAX_VALUE))
        .addGroup(layout.createSequentialGroup()
            .addComponent(add)
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
            .addComponent(exit)
            .addContainerGap(107, Short.MAX_VALUE))
        .addGroup(layout.createSequentialGroup()
            .addComponent(check)
            .addContainerGap(107, Short.MAX_VALUE))
);


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        .addComponent(id, javax.swing.GroupLayout.PREFERRED_SIZE,
140, javax.swing.GroupLayout.PREFERRED_SIZE)))
        .addGroup(layout.createSequentialGroup())
        .addGap(13, 13, 13)
        .addComponent(add)
        .addGap(18, 18, 18)
        .addComponent(exit))
        .addGroup(layout.createSequentialGroup())

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addComponent(lblname)
        .addComponent(lblindex))
        .addGap(18, 18, 18)

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

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)
        .addComponent(name)
        .addComponent(index, javax.swing.GroupLayout.PREFERRED_SIZE,
140, javax.swing.GroupLayout.PREFERRED_SIZE))))
        .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))
    );
    layout.setVerticalGroup(
        layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(layout.createSequentialGroup())
        .addContainerGap()

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
        .addComponent(lblindex)
        .addComponent(index, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
        .addComponent(check)
        .addGap(18, 18, 18)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
        .addComponent(lblname)
        .addComponent(name, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))
        .addGap(18, 18, 18)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
        .addComponent(lbllastname)
        .addComponent(lastname, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))

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```

        .addGap(18, 18, 18)

        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
            .addComponent(lblid)
            .addComponent(id, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))
        .addGap(18, 18, 18)

        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
            .addComponent(add)
            .addComponent(exit))
        .addGap(10, 10, 10)
    );

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

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```

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

    this.dispose();
}

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

    String[][] matrix=list.matrix();
    try{
        int cock=Integer.parseInt(index.getText())-1;
        String v1=matrix[cock][0];
        String v2=matrix[cock][1];
        String v3=matrix[cock][2];
        name.setText(v1);
        lastname.setText(v2);
        id.setText(v3);

    } catch(NumberFormatException e){
        JOptionPane.showMessageDialog(null,"Campo nulo o error en formato de numero",
"Error",JOptionPane.ERROR_MESSAGE);
    }
}

```

```

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

    String[][] matrix=list.matrix();
    try{
        int cock=Integer.parseInt(index.getText())-1;
        String v1=name.getText();
        String v2=lastname.getText();
        String v3=id.getText();
    }
}

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        contact e=new contact(v1,v2,v3);
        list.remove(cock);
        list.addList(e);
        JOptionPane.showMessageDialog(this,"El contacto ha sido agregado en la posición:
"+(cock+1),"Mensaje",JOptionPane.INFORMATION_MESSAGE,null);

    } catch(NumberFormatException e){
        JOptionPane.showMessageDialog(null,"Campo nulo o error en formato de numero",
"Error",JOptionPane.ERROR_MESSAGE);
    }
}

```

```

// Variables declaration - do not modify
private javax.swing.JButton add;
private javax.swing.JButton check;
private javax.swing.JButton exit;
private javax.swing.JTextField id;
private javax.swing.JTextField index;
private javax.swing.JTextField lastname;
private javax.swing.JLabel lblid;
private javax.swing.JLabel lblindex;
private javax.swing.JLabel lbllastname;
private javax.swing.JLabel lblname;
private javax.swing.JTextField name;
// End of variables declaration
}
/*
 * Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to change
this license
 * Click nbfs://nbhost/SystemFileSystem/Templates/GuiForms/JFrame.java to edit this
template
 */
package trabajo.pkgfinal;

import javax.swing.JOptionPane;

/**
 *
 * @author Camilo
 */
public class Add extends javax.swing.JFrame {

    datalist list;

    public Add(datalist list) {
        this.list=list;
    }
}

```



```

initComponents();
}

/**
 * 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">
public void initComponents() {

    lblname = new javax.swing.JLabel();
    lbllastname = new javax.swing.JLabel();
    lblid = new javax.swing.JLabel();
    add = new javax.swing.JButton();
    name = new javax.swing.JTextField();
    lastname = new javax.swing.JTextField();
    id = new javax.swing.JTextField();
    exit = new javax.swing.JButton();

    setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);

    lblname.setText("Nombre");

    lbllastname.setText("Apellido");

    lblid.setText("Cédula");

    add.setText("Añadir");
    add.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
            addActionPerformed(evt);
        }
    });

    exit.setText("Cerrar");
    exit.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
            exitActionPerformed(evt);
        }
    });

    javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
    getContentPane().setLayout(layout);
    layout.setHorizontalGroup(
        layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(layout.createSequentialGroup()
            .addContainerGap()
            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addComponent(lblname)
                .addComponent(lbllastname)
                .addComponent(lblid)
                .addComponent(add)
                .addComponent(name)
                .addComponent(lastname)
                .addComponent(id)
                .addComponent(exit))
            .addContainerGap(15, Short.MAX_VALUE))
    );
}

```

```

        .addContainerGap()

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

    .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)
        .addGroup(layout.createSequentialGroup()
            .addComponent(lblname)
            .addGap(18, 18, 18)
            .addComponent(name,
javax.swing.GroupLayout.PREFERRED_SIZE, 140,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addGroup(layout.createSequentialGroup()

    .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addComponent(lbllastname)
        .addComponent(lblid))
        .addGap(18, 18, 18)

    .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addComponent(lastname)
        .addComponent(id, javax.swing.GroupLayout.PREFERRED_SIZE,
140, javax.swing.GroupLayout.PREFERRED_SIZE))))
        .addGroup(layout.createSequentialGroup()
            .addGap(17, 17, 17)
            .addComponent(add)
            .addGap(18, 18, 18)
            .addComponent(exit)))
        .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))
    );
    layout.setVerticalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(layout.createSequentialGroup()
            .addContainerGap()

    .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
        .addComponent(lblname)
        .addComponent(name, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))
        .addGap(18, 18, 18)

    .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
        .addComponent(lbllastname)
        .addComponent(lastname, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))
        .addGap(18, 18, 18)

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

```

```

        .addComponent(lblid)
        .addComponent(id, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))
        .addGap(18, 18, 18)

    .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
        .addComponent(add)
        .addComponent(exit))
        .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))
    );

```

```

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

```

```

    public void exitActionPerformed(java.awt.event.ActionEvent evt) {

        this.dispose();

    }

```

```

    public void addActionPerformed(java.awt.event.ActionEvent evt) {

        addContact();
    }
    public void addContact(){
        try{

            String v1=name.getText();
            String v2=lastname.getText();
            String v3=id.getText();
            contact e=new contact(v1, v2, v3);
            list.addList(e);
            System.out.println(list.convert());
            String [][] data=list.matrix();
            //System.out.println(data[0][1]);
            JOptionPane.showMessageDialog(this,"El contacto ha sido
agregado","Mensaje",JOptionPane.INFORMATION_MESSAGE,null);
        } catch(NumberFormatException e){
            JOptionPane.showMessageDialog(null,"Campo nulo o error en formato de numero",
"Error",JOptionPane.ERROR_MESSAGE);
        }
    }
}

```

```

// Variables declaration - do not modify
private javax.swing.JButton add;
private javax.swing.JButton exit;
private javax.swing.JTextField id;

```

```
private javax.swing.JTextField lastname;  
private javax.swing.JLabel lblid;  
private javax.swing.JLabel lbllastname;  
private javax.swing.JLabel lblname;  
private javax.swing.JTextField name;  
// End of variables declaration  
}
```