TRABAJO: AUTÓNOMO **COLABORATIVO**

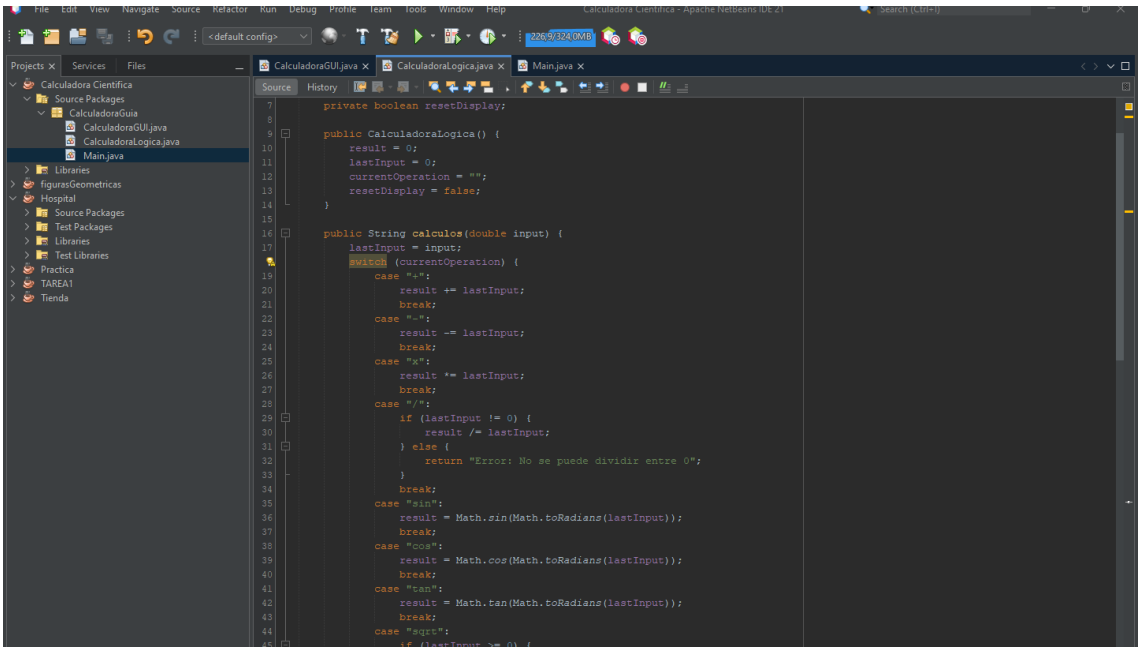
TEMA: Calculadora Científica usando NeatBeans

ASIGNATURA: Programación Orientada a Objetos

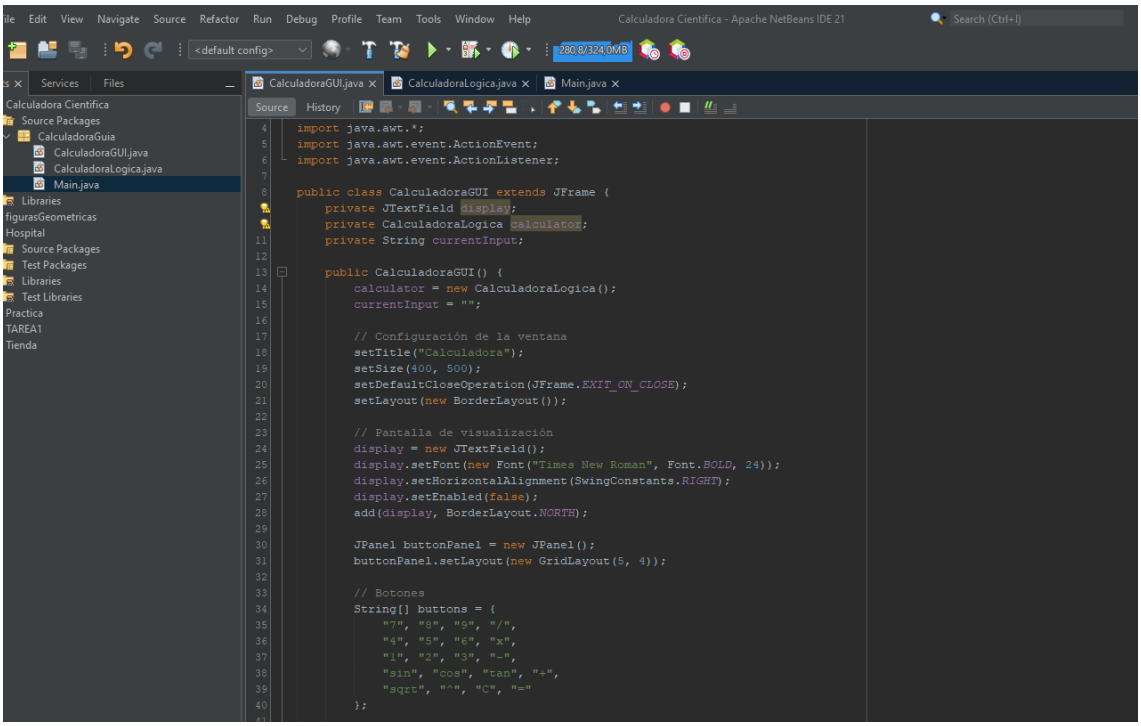
Nombre: Carlos Garces	Nivel: 3 Semestre
Carrera: Desarrollo de Software	Jornada: Matutina
Docente: Mg. Darwin Arias	Código: 2425311
Fecha: 06/11/2023	Calificación: _____

Crear una Calculadora Científica en base al código empleado en clase:

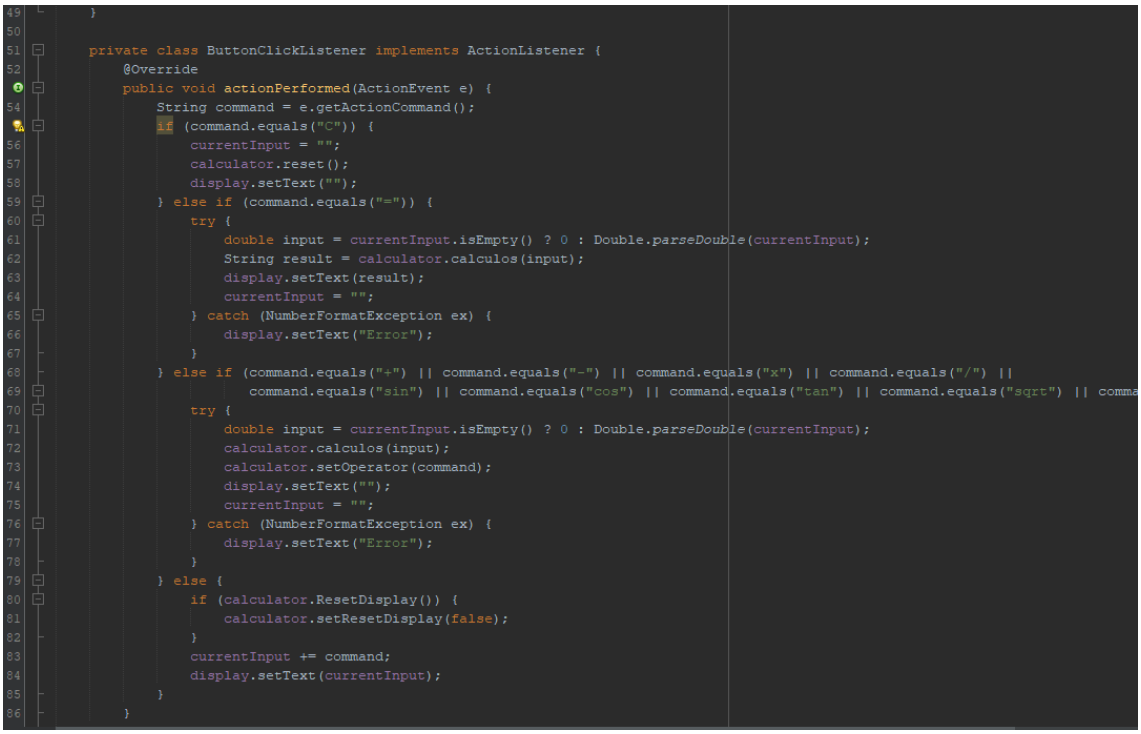
Clase Logica:



Clase Calculadora Guia:

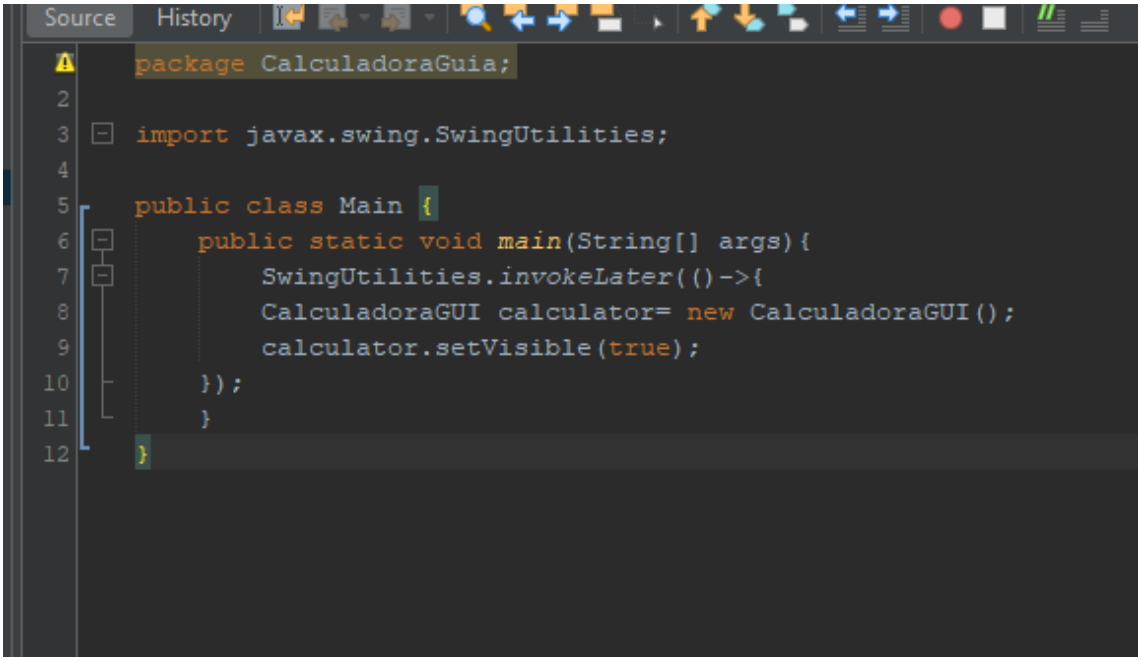


```java
import java.awt.*;
import java.awt.event.ActionEvent;
import java.awt.event.ActionListener;

public class CalculadoraGUI extends JFrame {
    private JTextField display;
    private CalculadoraLogica calculator;
    private String currentInput;

    public CalculadoraGUI() {
        calculator = new CalculadoraLogica();
        currentInput = "";

        // Configuración de la ventana
        setTitle("Calculadora");
        setSize(400, 500);
        setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
        setLayout(new BorderLayout());

        // Pantalla de visualización
        display = new JTextField();
        display.setFont(new Font("Times New Roman", Font.BOLD, 24));
        display.setHorizontalAlignment(SwingConstants.RIGHT);
        display.setEnabled(false);
        add(display, BorderLayout.NORTH);

        JPanel buttonPanel = new JPanel();
        buttonPanel.setLayout(new GridLayout(5, 4));

        // Botones
        String[] buttons = {
            "7", "8", "9", "/",
            "4", "5", "6", "x",
            "1", "2", "3", "-",
            "sin", "cos", "tan", "+",
            "sqrt", "^", "C", "="
        };
```

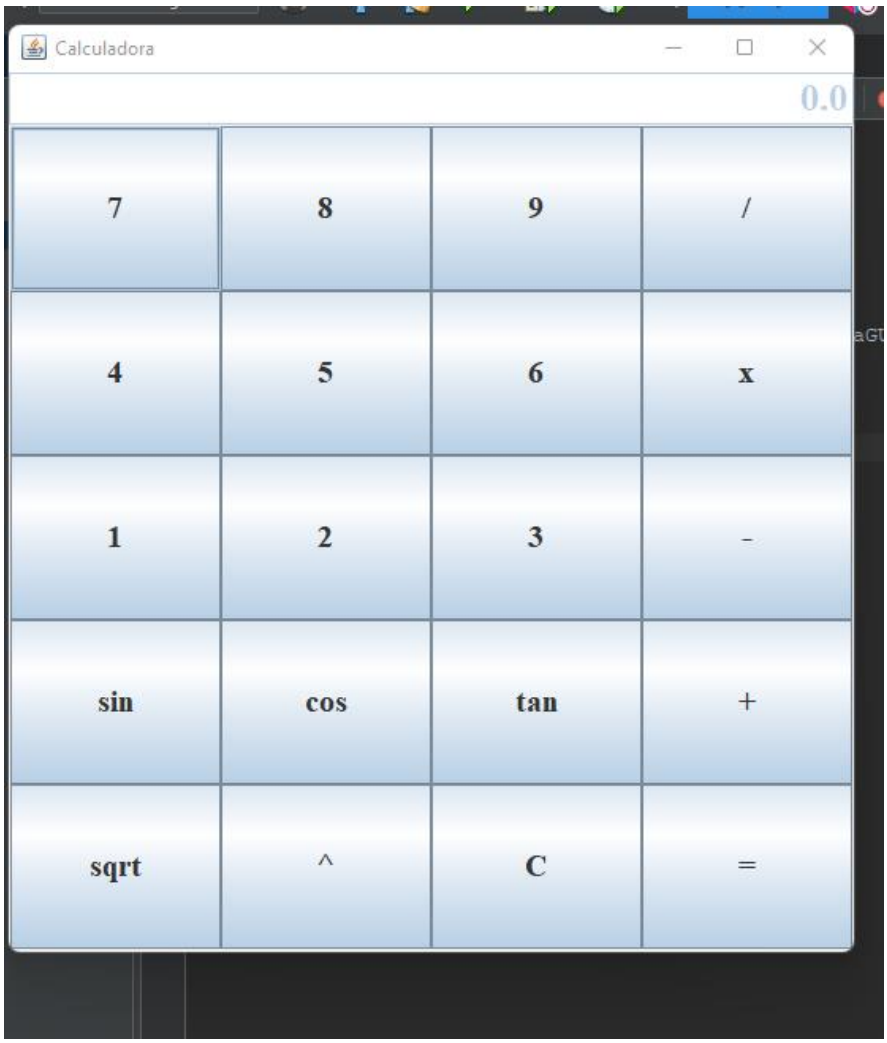


```java
    }

    private class ButtonClickListener implements ActionListener {
        @Override
        public void actionPerformed(ActionEvent e) {
            String command = e.getActionCommand();
            if (command.equals("C")) {
                currentInput = "";
                calculator.reset();
                display.setText("");
            } else if (command.equals("=")) {
                try {
                    double input = currentInput.isEmpty() ? 0 : Double.parseDouble(currentInput);
                    String result = calculator.calculos(input);
                    display.setText(result);
                    currentInput = "";
                } catch (NumberFormatException ex) {
                    display.setText("Error");
                }
            } else if (command.equals("+") || command.equals("-") || command.equals("x") || command.equals("/") ||
                    command.equals("sin") || command.equals("cos") || command.equals("tan") || command.equals("sqrt") || comma
                try {
                    double input = currentInput.isEmpty() ? 0 : Double.parseDouble(currentInput);
                    calculator.calculos(input);
                    calculator.setOperator(command);
                    display.setText("");
                    currentInput = "";
                } catch (NumberFormatException ex) {
                    display.setText("Error");
                }
            } else {
                if (calculator.ResetDisplay()) {
                    calculator.setResetDisplay(false);
                }
                currentInput += command;
                display.setText(currentInput);
            }
        }
```

Clase Main


Source
History
package CalculadoraGuia;
import javax.swing.SwingUtilities;
public class Main {
public static void main(String[] args){
SwingUtilities.invokeLater(()->{
CalculadoraGUI calculator= new CalculadoraGUI();
calculator.setVisible(true);
});
}
}

Resultados Obtenidos:




Calculadora
7
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C
=